

The Capstone Experience

Dr. Wayne Dyksen

Department of Computer Science and Engineering
Michigan State University
Spring 2016



*From Students...
...to Professionals*

Course Goals

- Build a Significant Software System
- Work in a Team Environment
- Learn New Tools and Environments
- Build and Administer Systems
- Develop Communication Skills
- Develop Interview Talking Points
- Consider Issues of Ethics and Professionalism



Course Goals

- Teams of Students
- Build Significant Software System
 - Design
 - Develop
 - Debug
 - Document
 - Deliver
- For Corporate Clients
- In 15 (Short) Weeks



Project Deliverables

- Project Plan Document & Presentation
- Alpha Presentation
- Beta Presentation
- Project Software & Documentation
- Project Video
- Design Day

See [Major Milestones](#).



All-Hands Meetings

- MW, 3:00-3:50pm, 2243Engineering Building
- Presentations By
 - Professor
 - Teams
 - Status Reports
 - Formal Presentations
 - Project Plan
 - Alpha
 - Beta
 - Project Videos
 - Guest Speakers



All-Hands Meetings

01/11: Capstone Overview
01/13: Project Plan
01/18: (Martin Luther King Day, No Meeting)
01/20: Risks and Prototypes
01/25: Team [Status Report Presentations](#)
01/27: Schedule and Teamwork
02/01: Team [Project Plan Presentations](#)
02/03: Team [Project Plan Presentations](#)
02/08: Team [Project Plan Presentations](#)
02/10: Team [Project Plan Presentations](#)
02/15: Resume Writing and Interviewing
02/17: Creating and Giving Presentations
02/22: Team [Alpha Presentations](#)
02/24: Team [Alpha Presentations](#)
02/29: Team [Alpha Presentations](#)
03/02: Team [Alpha Presentations](#)
03/07: (Spring Break, No Meeting)
03/09: (Spring Break, No Meeting)

03/14: Team Status Reports
03/16: Team Status Reports
03/21: [Design Day](#) and the [Project Videos](#)
03/23: Camtasia Demo
03/28: Intellectual Property
03/30: Ethics and Professionalism
04/04: Team [Beta Presentations](#)
04/06: Team [Beta Presentations](#)
04/11: Team [Beta Presentations](#)
04/13: Team [Beta Presentations](#)
04/18: Status Reports
04/20: Status Reports
04/25: [Project Videos](#)
04/27: [Project Videos](#) and [All Deliverables](#)
04/28: [Design Day Setup](#)
04/29: [Design Day](#)
05/04: [Project Videos](#)



The Capstone Experience

Team Amazon

Department of Computer Science and Engineering
Michigan State University
Spring 2016



From Students...
...to Professionals

amazon





All [search bar] [search icon]



Back-to-School Savings
Sponsored by Lysol

Shop by
Department ▾

Your Amazon.com

Today's Deals

Gift Cards

Sell

Help

Hello. Sign in
Your Account ▾

Try
Prime ▾

Wish
List ▾

0 Cart

fireTV stick

Netflix, HBO GO, Amazon Instant Video,
and more—just plug and play

\$39



Movies Included with Prime Membership at No Additional Cost

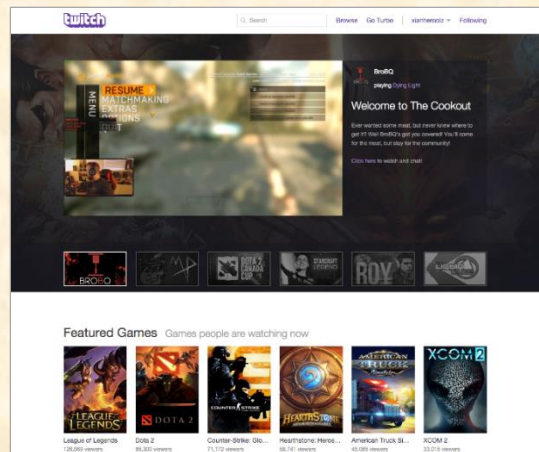
[See more](#)

Unlimited instant streaming
of movies & TV shows

Team Amazon Project Overview

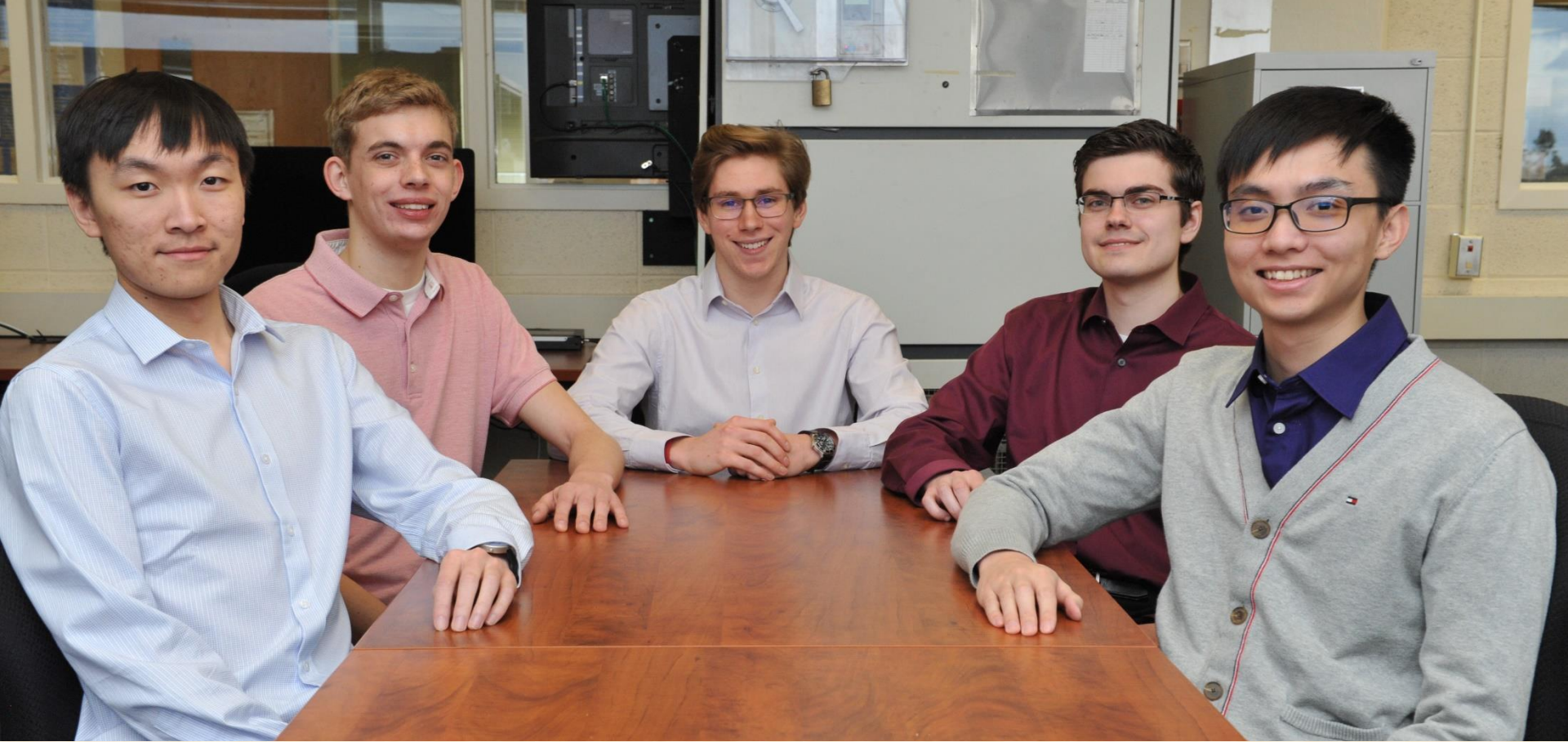
Twitch.tv Comment Ranking and Smart Advertisements

- Functionalities
 - Provide Comment Ranking and Smart Advertisements
 - For Twitch.tv
 - Via Web browser extension
- Features
 - Analyze Chat and Audio Stream
 - View Top Comments in a Stream
 - Up-Vote Liked Comments
 - Link to Amazon Products
 - Pause Scrolling Chat on Hover
- Technologies
 - Amazon Web Services RDS
 - AWS EC2 Xen HVM domU (18 cores, 60GB RAM)
 - CMU Sphinx
 - C++ / PHP / JavaScript / HTML / SQL / CSS / JSON



amazon
Seattle, Washington



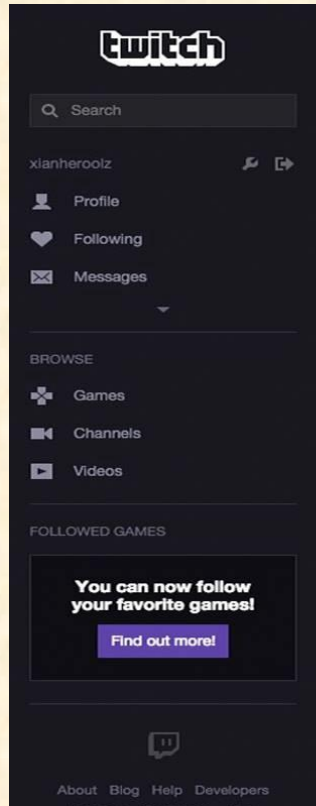


Team Amazon

Michael Chen, Max Reuter, Cash Compton, Chaz Schooler, Po-An Tsai

Team Amazon Project Plan Presentation

Screen Mockup



League of Legends Stream

Valkrin playing League of Legends





Follow Subscribe \$4.99 Share

9,524 2,158,466 104,444



1. **GitPwned931** you dead son!
2. **XianheRoolz**   
3. **RichHomyCa\$h** ouch... 

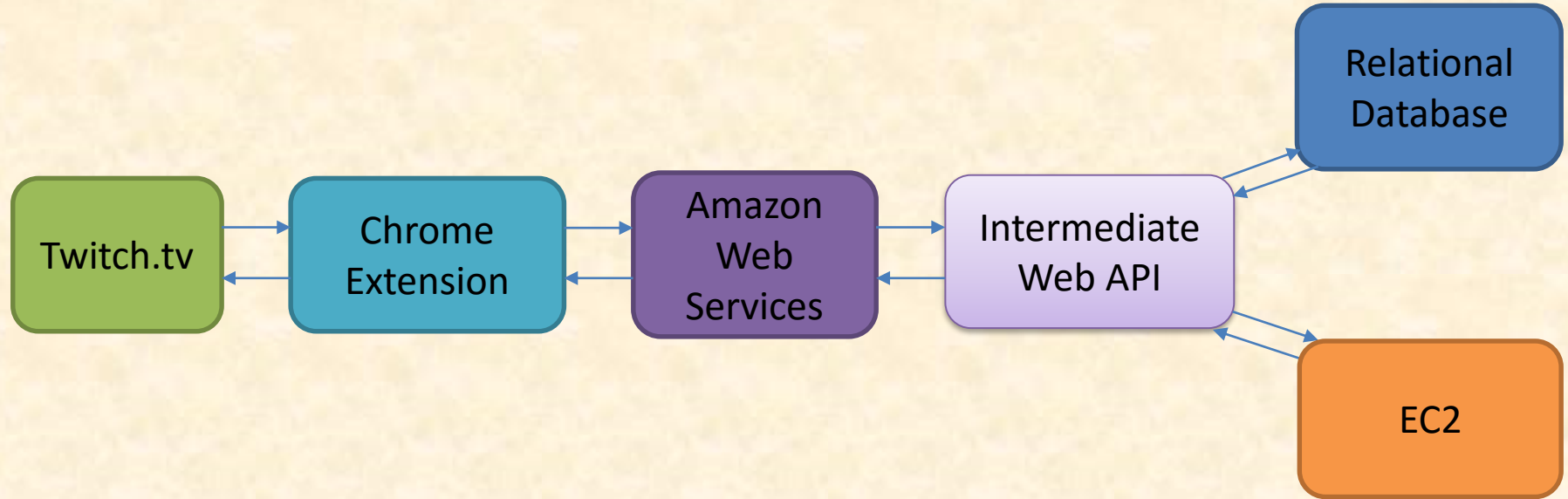


- ^ **Kickass1991**: did Viktor get Nerfed ?
- ^ **mrholzi**: !sup
- ^ **Counwouy**: @Shyncube359 Report for not attacking teamcomp 
- ^ **Sobethon**: !support
- ^ **Valk_Bot**: Valkrin recommends these champions for Support: Thresh, Poppy, Trundle, Tahm Kench (Updated as of patch 5.24 01/10/16)
- ^ **redwalle11**: go valkrin
- ^ **vikms95**: hello valk, what are your thoughts about vman??? @valkrin
- ^ **k7ameet**: You are JUNGLE
- ^ **DasBacon**: brand jungle?
- ^ **k7ameet**: 
- ^ **7ReVeRt**: @Valkrin why do you recommend wukong jungle?
- ^ **YoloMoonSender**: @valkrin udyr jng with devo or ap?
- ^ **vikms95**: hello valk, what are your thoughts about vman??? @valkrin

send a message 



Team Amazon Project Plan Presentation

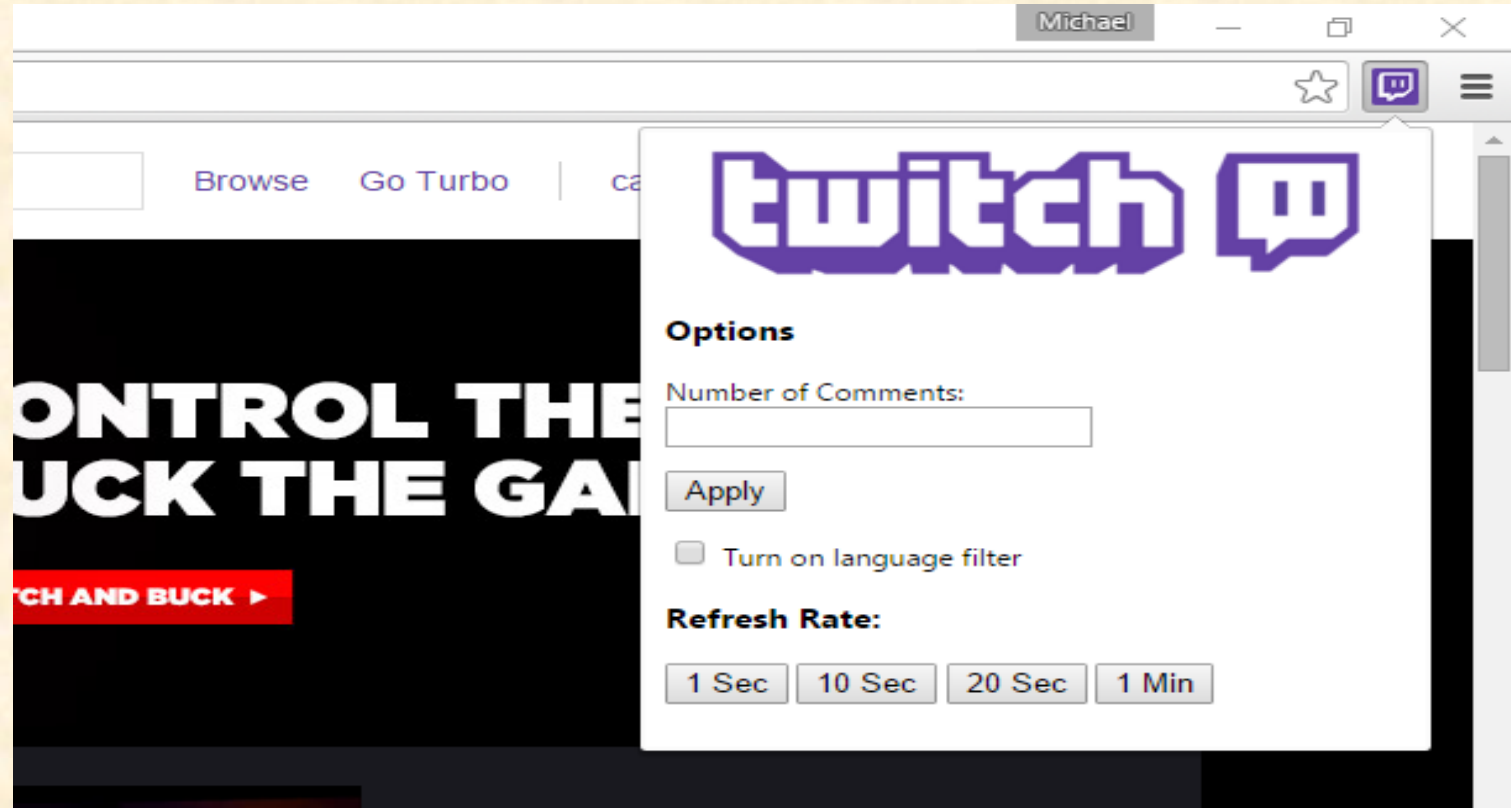




Team Amazon Project Plan Presentation

Team Amazon Project Plan Presentation

Screen Mockup

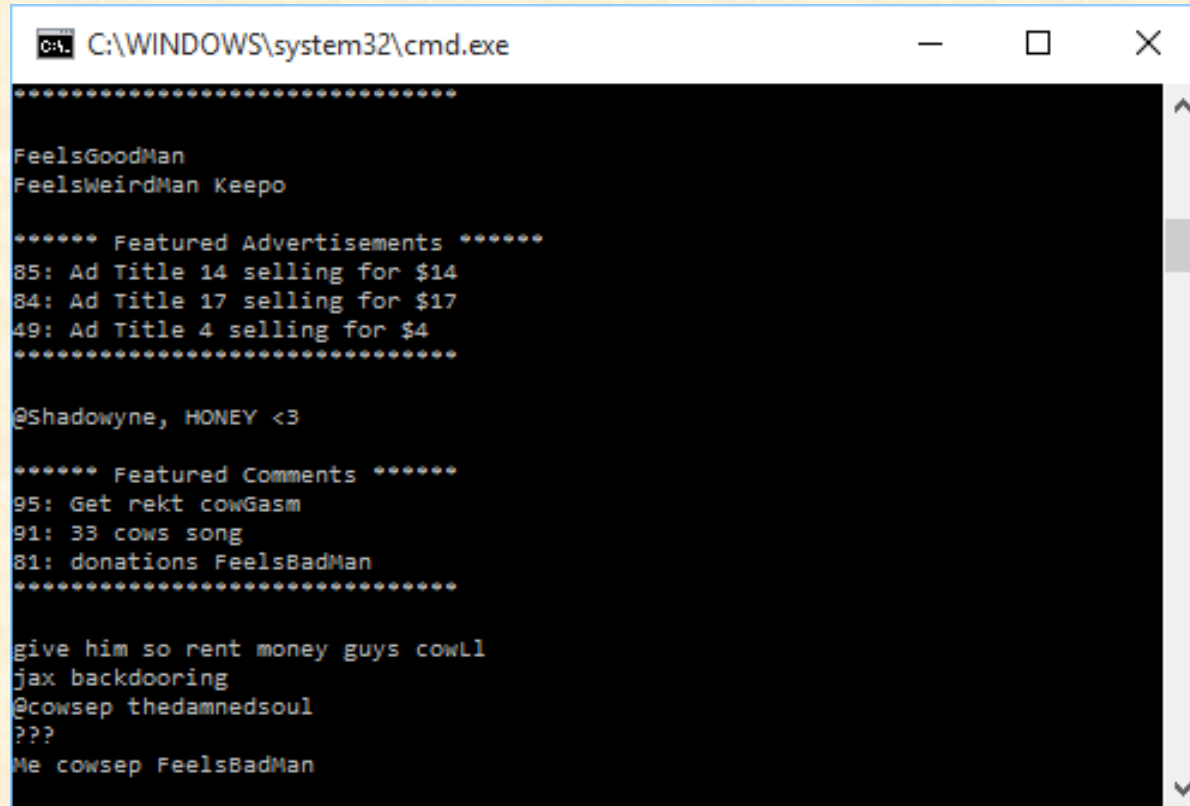




Team Amazon Alpha Presentation

Team Amazon Alpha Presentation

Chat Ranking Algorithm



```
C:\WINDOWS\system32\cmd.exe

FeelsGoodMan
FeelsWeirdMan Keepo

***** Featured Advertisements *****
85: Ad Title 14 selling for $14
84: Ad Title 17 selling for $17
49: Ad Title 4 selling for $4
*****

@Shadowyne, HONEY <3

***** Featured Comments *****
95: Get rekt cowGasm
91: 33 cows song
81: donations FeelsBadMan
*****

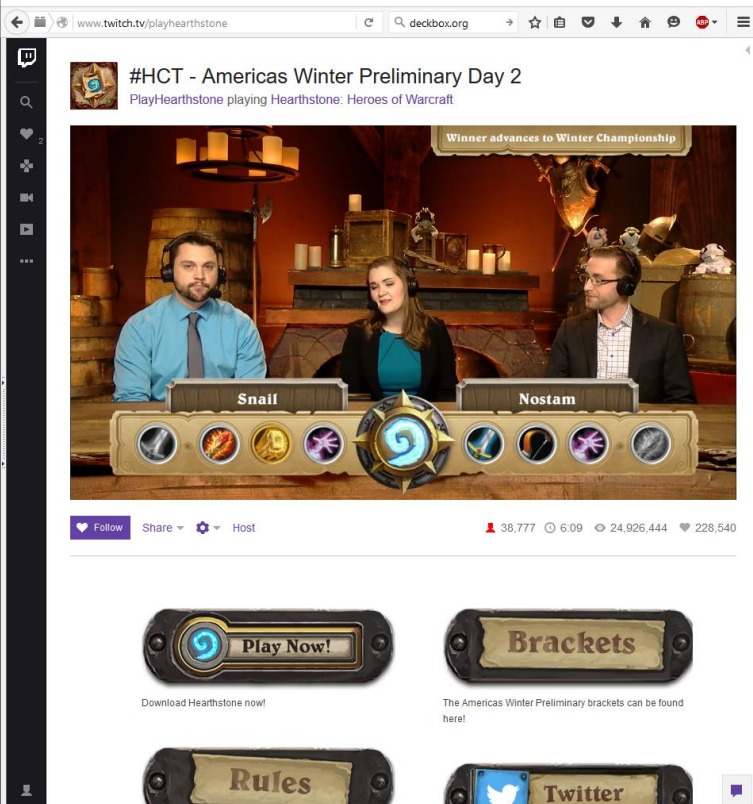
give him so rent money guys cowll
jax backdooring
@cowsep thedamned soul
???
Me cowsep FeelsBadMan
```

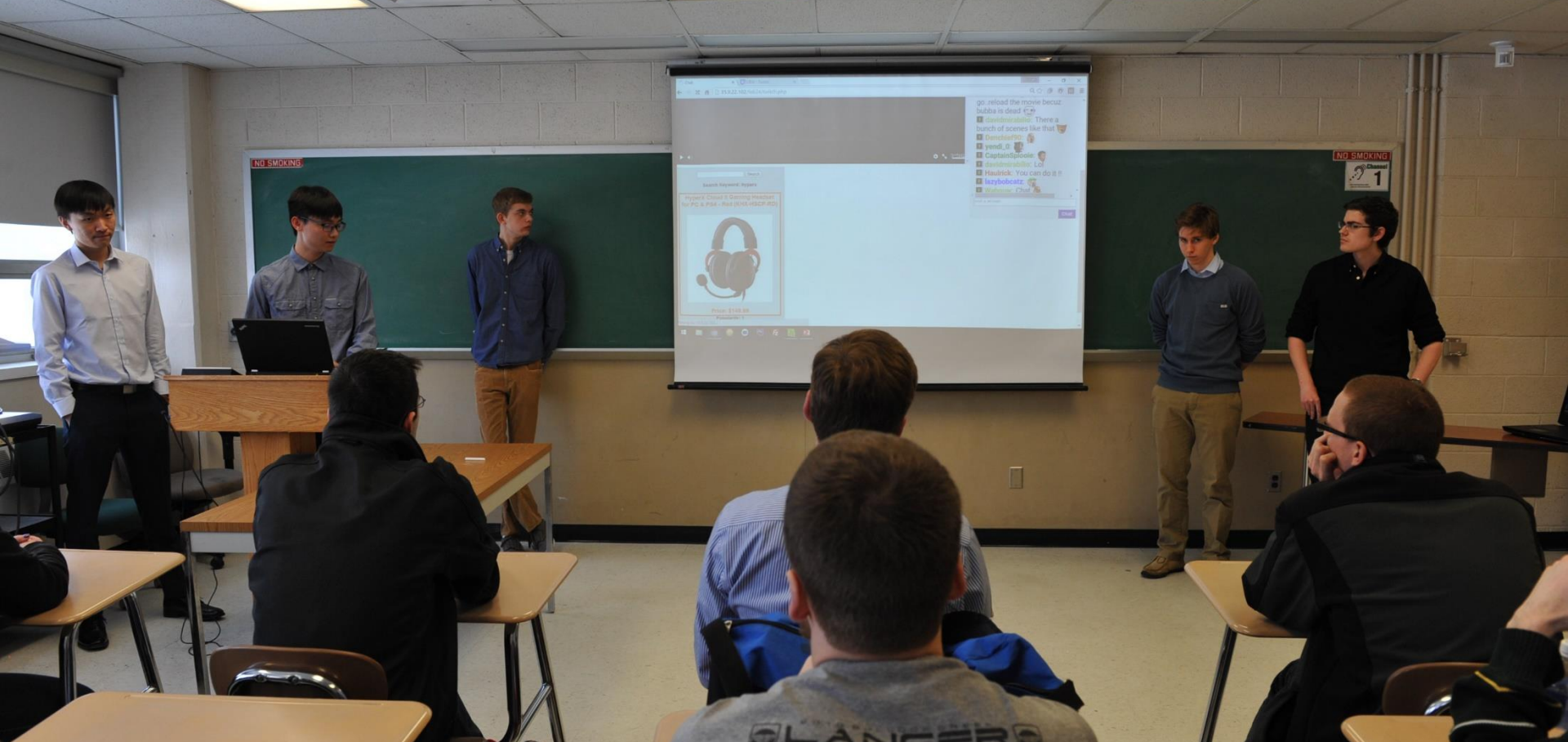


Team Amazon Alpha Presentation

Stream Audio Transcription

```
File Edit View Navigate Code Refactor Run Tools VCS Window Help
Capstone-Audio2Text AudioChunkFactory.cpp
Debug Build All
Debugger Console
Confidence: 2.57776e-06
Guess: who just showed up and saddam to play of fireside gathering in see what i can do
Confidence: 8.8786e-05
Guess: i mean that's incredible opportunity again this is the know all the mattison
Confidence: 2.69934e-05
Guess: it should next month at how cool would it be for those requires to be someone
Confidence: 2.57776e-06
Guess: who just showed up and saddam to play of fireside gathering in see what i can do
Confidence: 8.8786e-05
Guess: i mean that's incredible opportunity again this is the know all the mattison
Confidence: 2.69934e-05
Guess: now whether that they are low were bracket matches which makes its way
Confidence: 0.000168377
Guess: e. or go home so that the loser this series has to try
Confidence: 2.41523e-05
Guess: who just showed up and saddam to play of fireside gathering in see what i can do
Confidence: 8.8786e-05
Guess: i mean that's incredible opportunity again this is the know all the mattison
Confidence: 2.69934e-05
Guess: now whether that they are low were bracket matches which makes its way
Confidence: 0.000168377
Guess: e. or go home so that the loser this series has to try
Confidence: 2.41523e-05
Guess: again in the spring dance until he appointed adjourned early on the street but it's
Confidence: 1.57841e-09
Guess: the fact that laudable don't know for finishing highly
Confidence: 0.000222791
Guess: in the winter preliminary actually secure quite a few points moving
Confidence: 0.00257916
Guess: again in the spring dance until he appointed adjourned early on the street but it's
Confidence: 1.57841e-09
Guess: the fact that laudable don't know for finishing highly
Confidence: 0.000222791
Guess: in the winter preliminary actually secure quite a few points moving
Confidence: 0.00257916
Guess: what's the sprinkler nurse awards the people that you will ruin the year
Confidence: 0.000196335
Guess: okay and if more of these players loses they they still put themselves
Confidence: 8.29185e-07
Guess: the good spot to come back and tried in the spring with that thing is a great thing yeah
Confidence: 3.11676e-09
Guess: what's the sprinkler nurse awards the people that you will ruin the year
Confidence: 0.000196335
Guess: okay and if more of these players loses they they still put themselves
Confidence: 8.29185e-07
Guess: the good spot to come back and tried in the spring with that thing is a great thing yeah
Confidence: 3.11676e-09
Guess: worsening actually asking themselves along the prize money said they didn't happen nothing
Confidence: 8.62738e-05
Build finished in 1s 997ms (13 minutes ago)
```

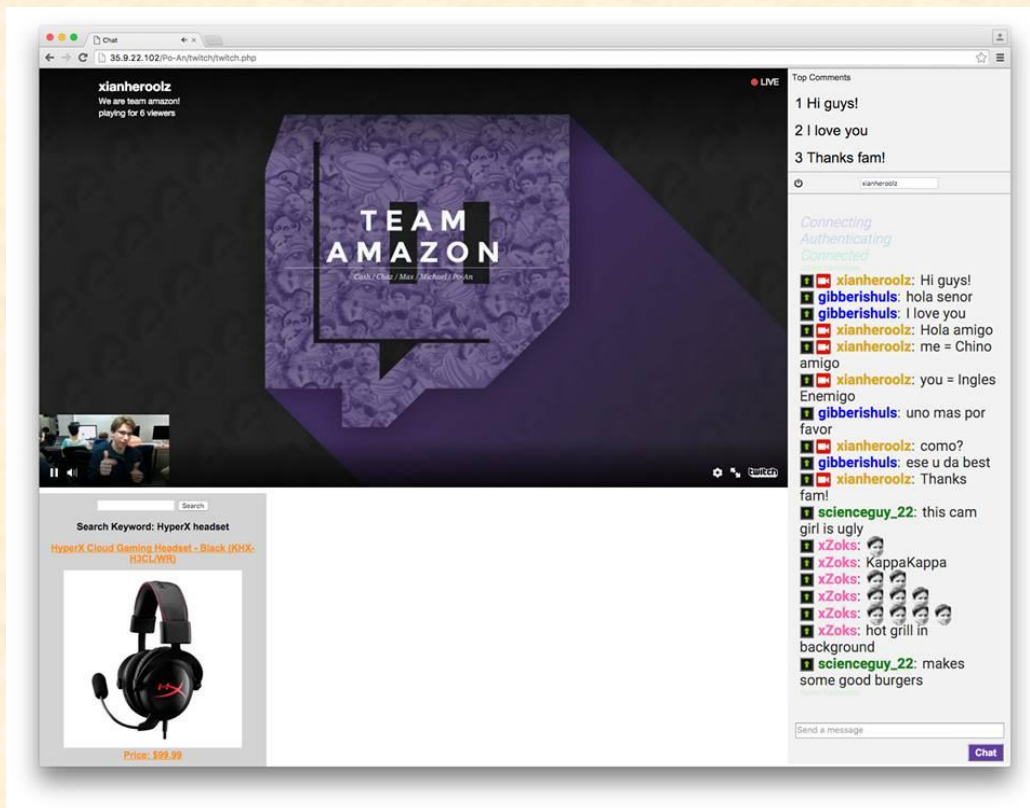




Team Amazon Alpha Presentation

Team Amazon Alpha Presentation

User Interface

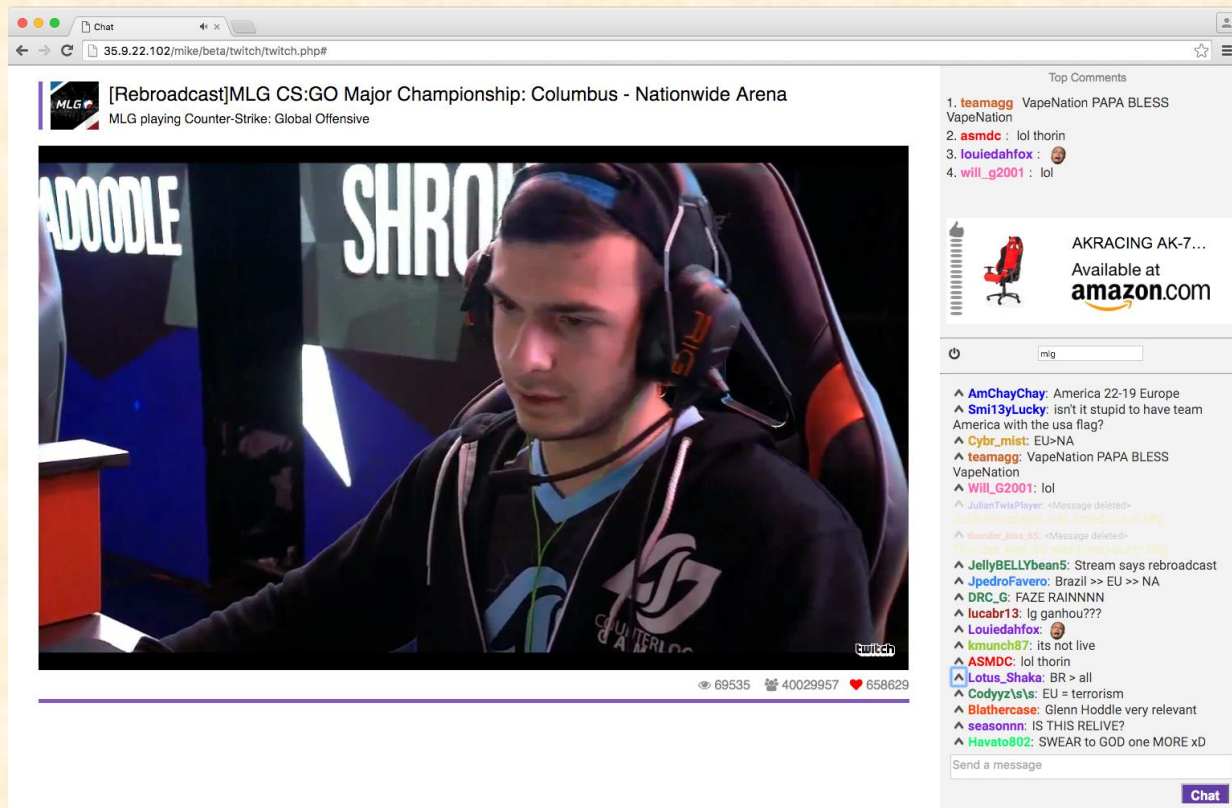




Team Amazon Beta Presentation

Team Amazon Beta Presentation

Chat Embedded in Twitch



The screenshot shows a web browser window displaying a Twitch broadcast. The video player shows a player wearing a headset and a black hoodie with a white logo, sitting in a gaming chair. The background has large text that reads "ADOOOLE" and "SHRO". The Twitch interface includes a title "[Rebroadcast]MLG CS:GO Major Championship: Columbus - Nationwide Arena" and a subtitle "MLG playing Counter-Strike: Global Offensive". Below the video player, there are statistics: 69535 viewers, 40029957 followers, and 658629 likes. To the right of the video player is a chat window titled "Chat" with a list of top comments and a search bar. The chat window also features an advertisement for AKRACING AK-7... available at amazon.com.

Top Comments

1. **teamagg** : VapeNation PAPA BLESS
2. **asmdc** : lol thorin
3. **louiedahfox** : 🤔
4. **will_g2001** : lol

AKRACING AK-7...
Available at
amazon.com

Search: mig

AmChayChay: America 22:19 Europe
Smi13yLucky: isn't it stupid to have team America with the usa flag?
Cybr_mist: EU>NA
teamagg: VapeNation PAPA BLESS
Will_G2001: lol
JulianTwisPlayer: <Message deleted>
Thunder_XXX_85: <Message deleted>
JellyBellybean5: Stream says rebroadcast
JpedroFavero: Brazil >> EU >> NA
DRC_G: FAZE RAINNNN
lucabr13: lg ganhou??
Louiedahfox: 🤔
kmunch87: its not live
ASMDc: lol thorin
Lotus_Shaka: BR > all
Codyyz1s1s: EU = terrorism
Blathercase: Glenn Hoddle very relevant
seasonnn: IS THIS RELIVE?
Havato802: SWEAR to GOD one MORE xD

Send a message


Chat

Team Amazon Beta Presentation

Chat

Top Comments

1. **arroti** LOL
2. **johnnyjello** : Go MURICA!!!!
3. **vhailorseraph** : EU losing 🤖
4. **curryuh** : lol nice shot 🤖



AKRACING AK-7...
Available at
amazon.com

🔌

^ **shamelesstroll11**: csgodiamonds code: A1S2D3

^ **feryatgoekcen**: biji biji kurdistan

^ **ebayboss57**: Victoria's Secret wtf 🤖🤖🤖

^ **PresidentChoice**: 🤖

^ **Galaxy_plays**: 🤖

^ **strawberryfetus**: <Message deleted>
Strawberryfetus was timed-out in Mlg

^ **deosen**: -Star match -Faze members PICK ONE. Seriously, could've picked someone better, especially instead of Mikaelele

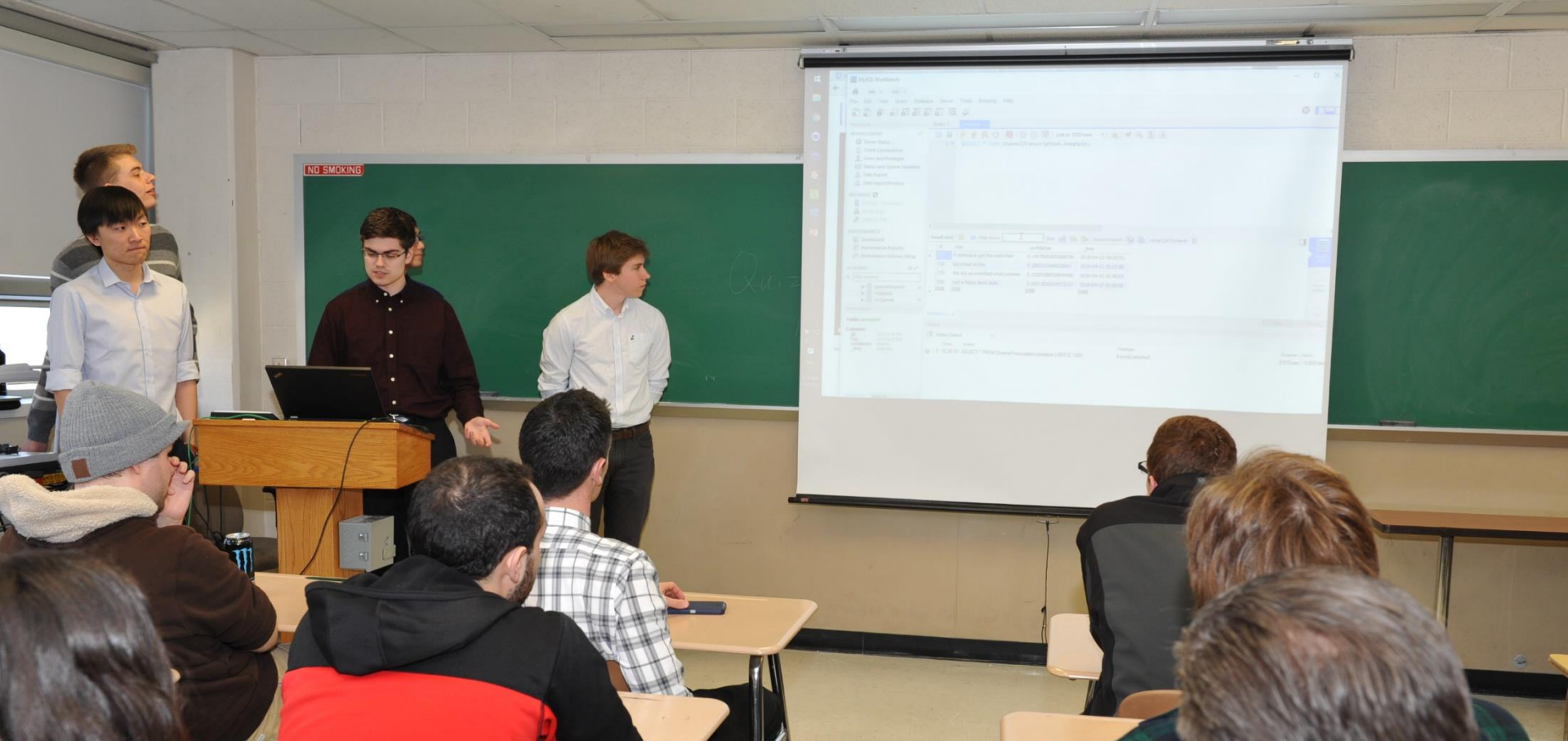
^ **karobkabolshaya**: KURDISTAN

^ **Preflopfoldu**: lol

^ **Fuzles**: <Message deleted>
Fuzles was timed-out in Mlg

^ **theantihero0**: Professionalism
Fuzles was timed-out in Mlg

Chat



Team Amazon Beta Presentation

Team Amazon Beta Presentation

Advertisement



ROCCAT LUA Tri...

Available at
amazon.com





Team Amazon
Design Day

The Capstone Experience

Team Auto-Owners

Department of Computer Science and Engineering
Michigan State University
Spring 2016



*From Students...
...to Professionals*



Auto-Owners Insurance

Life Home Car Business

The "No Problem" People®

Auto-Owners Insurance[Customer Center](#) | [Find a Career with Us](#)[OUR PRODUCTS](#)[CORPORATE INFORMATION](#)[CUSTOMER CLAIMS](#)[Find](#)**▼ Find a Local Agency**[Find](#)

or Search by Address



Quality Coverage in 26 States

► Customer Log In**SCOTT**
MOTORSPORTS
OFFICIAL SPONSOR**Life Insurance**

Protecting your family

Home Insurance

Property and liability

Car Insurance

Security while on the road

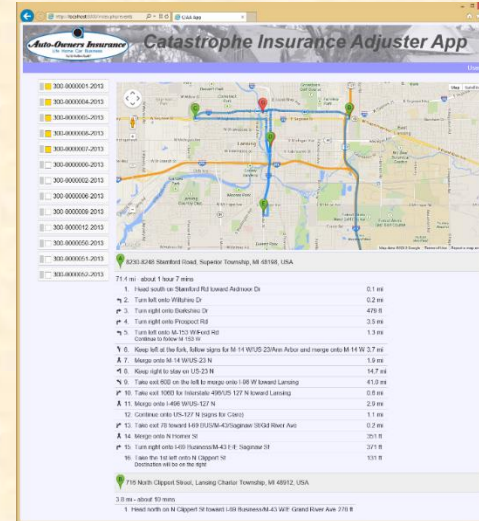
Business Insurance

Guarding your investment

Team Auto-Owners Project Overview

Catastrophic Claims Unit Mobilization

- Functionalities
 - Manage Cluster of Insurance Claims
 - After Catastrophic Weather Event
 - On Location
- Features
 - Support Remote Use by Mobile Claims Units
 - Provide Spatial Mapping Tools
 - Plot Locations of Actual Claims
 - Predict Locations of Potential Claims
 - Categorize Areas for Probability of Severe Damage
 - Visualize Weather Data
 - Gather from NOAA
 - Integrate with Locations of Policy Holders
 - Filter Locations Interactively
 - Include Administrative Web App
 - View Claims Summaries
 - Generate Reports
- Technologies
 - Apple iPads and iPhones (iOS) / Swift or Objective-C
 - Google Android Tablets and Phones / Java
 - CSS / HTML / JavaScript
 - NOAA Weather Events Service
 - Database Technologies



Lansing, Michigan

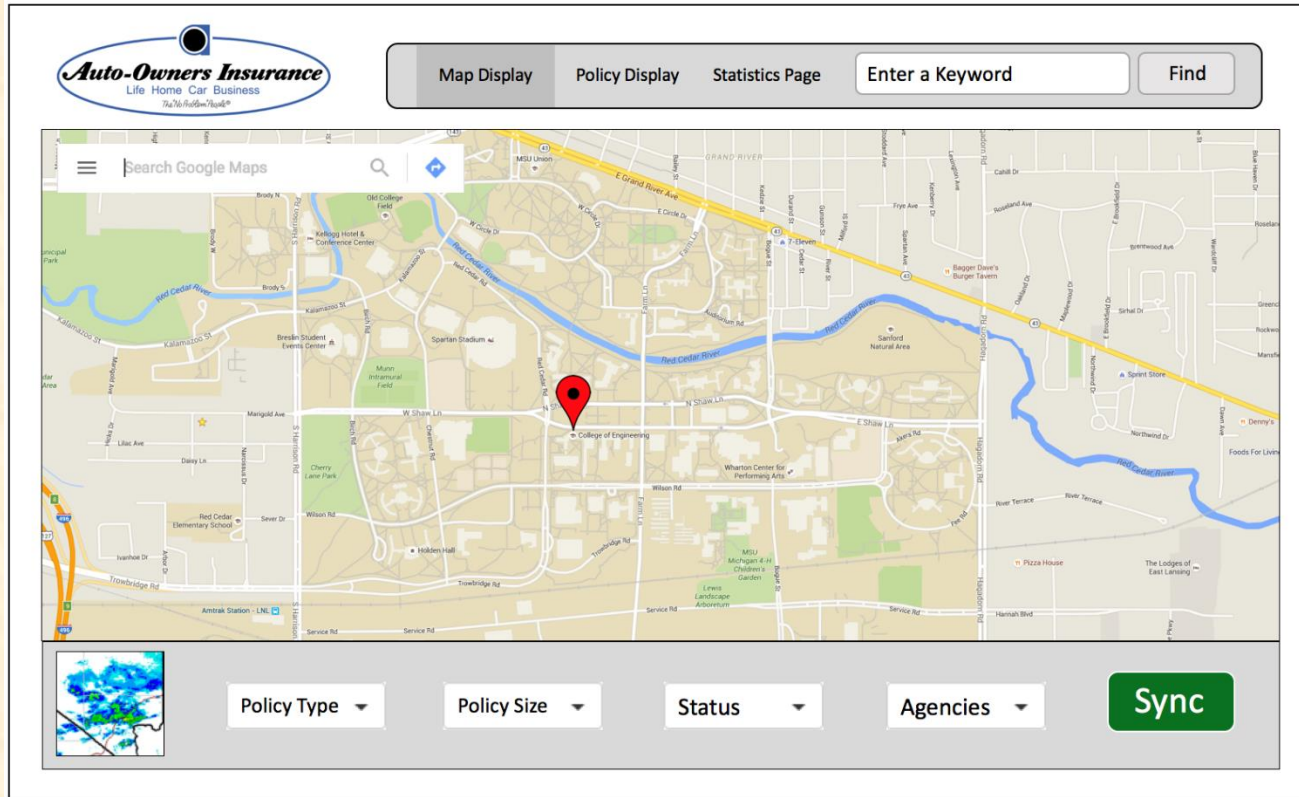


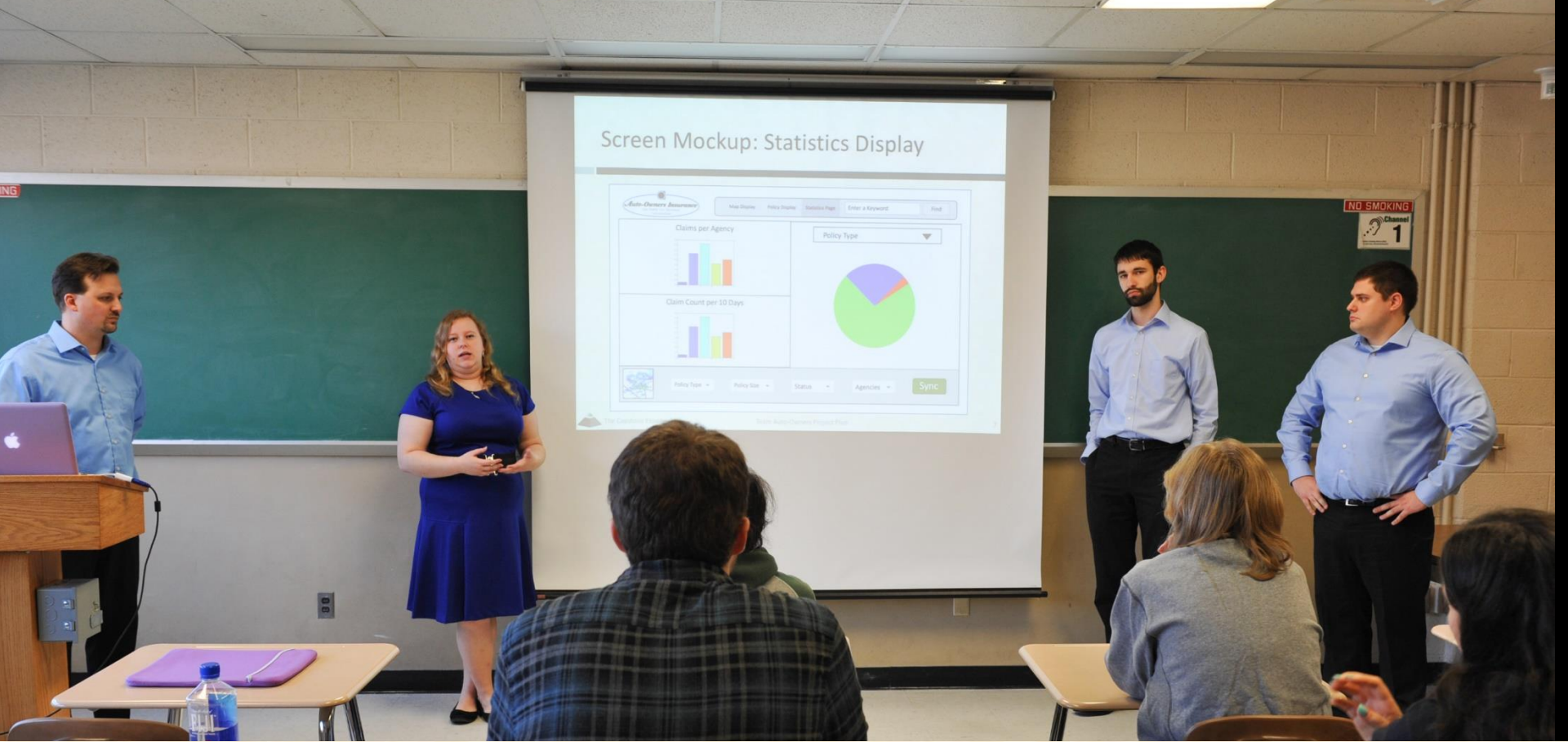
Team Auto-Owners

Matt Wiechec, Nick Reuter, Jason Steele, Nicole Lawrence

Team Auto-Owners Project Plan Presentation

Screen Mockup

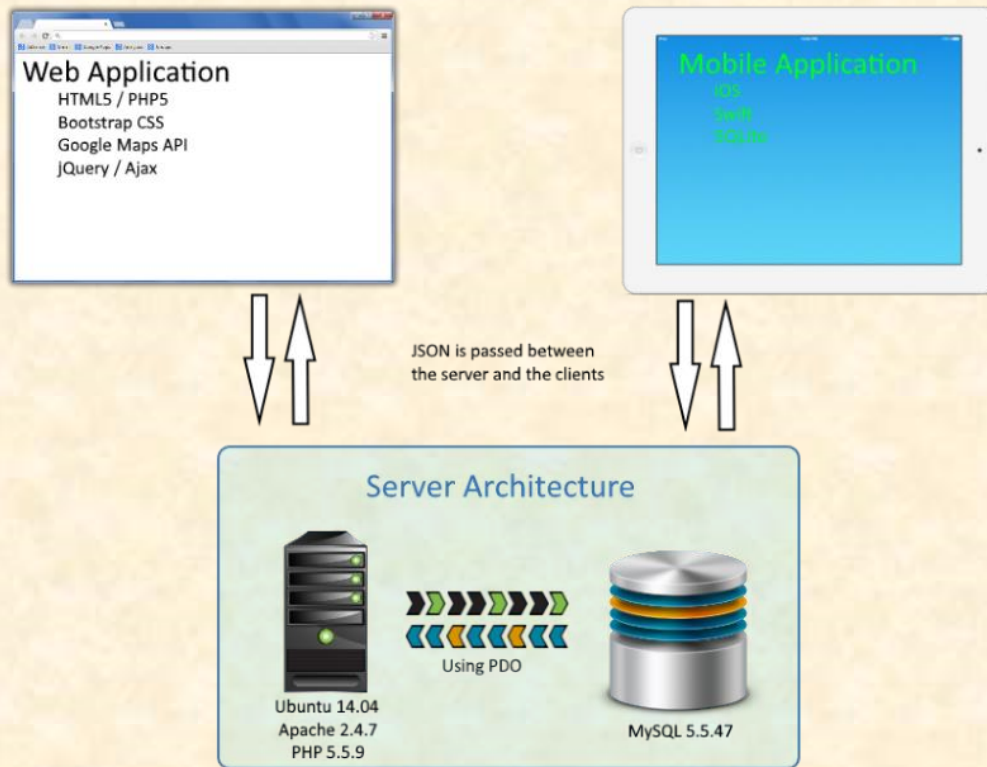




Team Auto-Owners Project Plan Presentation

Team Auto-Owners Project Plan Presentation

Architecture Diagram

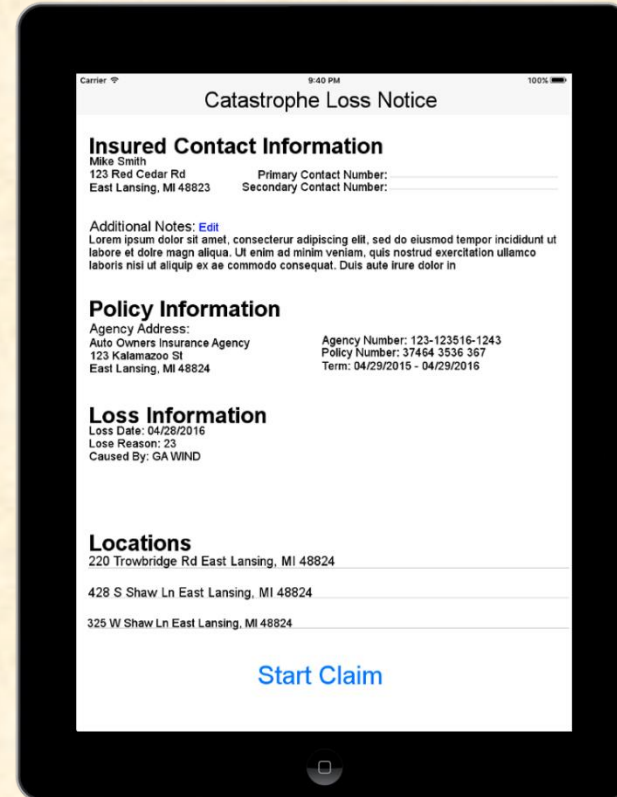
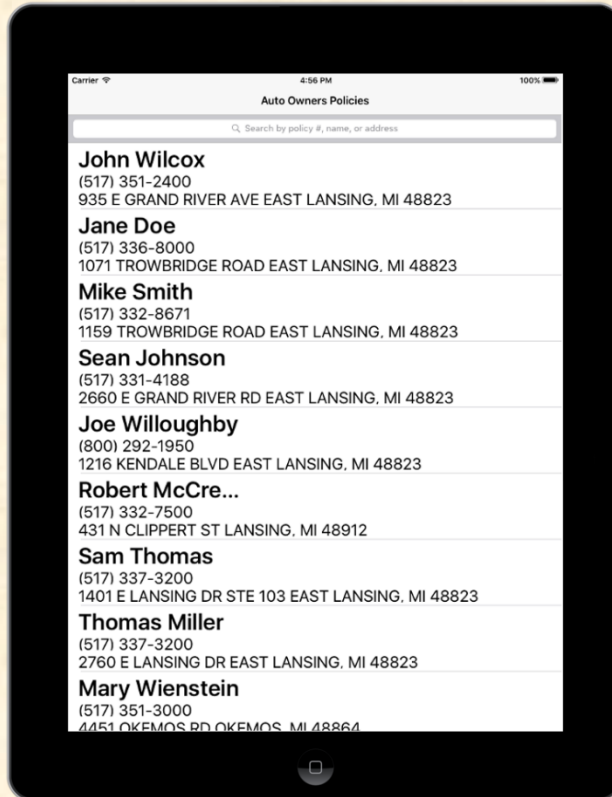




Team Auto-Owners Project Plan Presentation

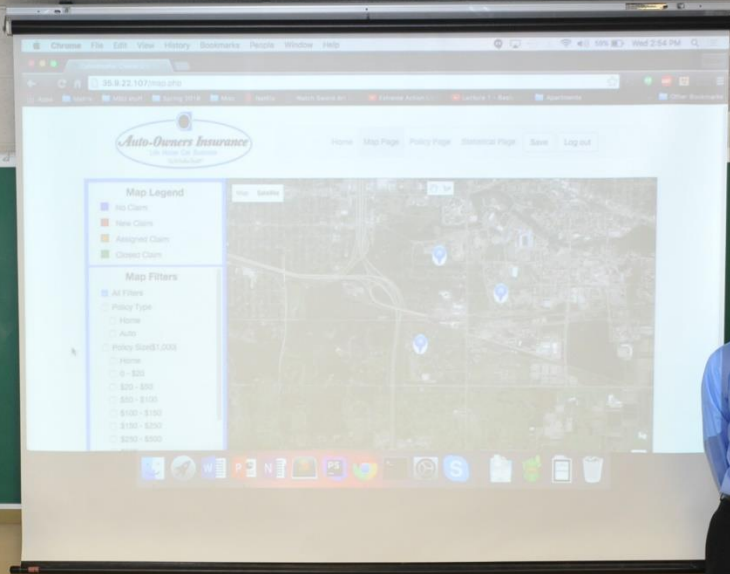
Team Auto-Owners Project Plan Presentation

Screen Mockup



SMOKING

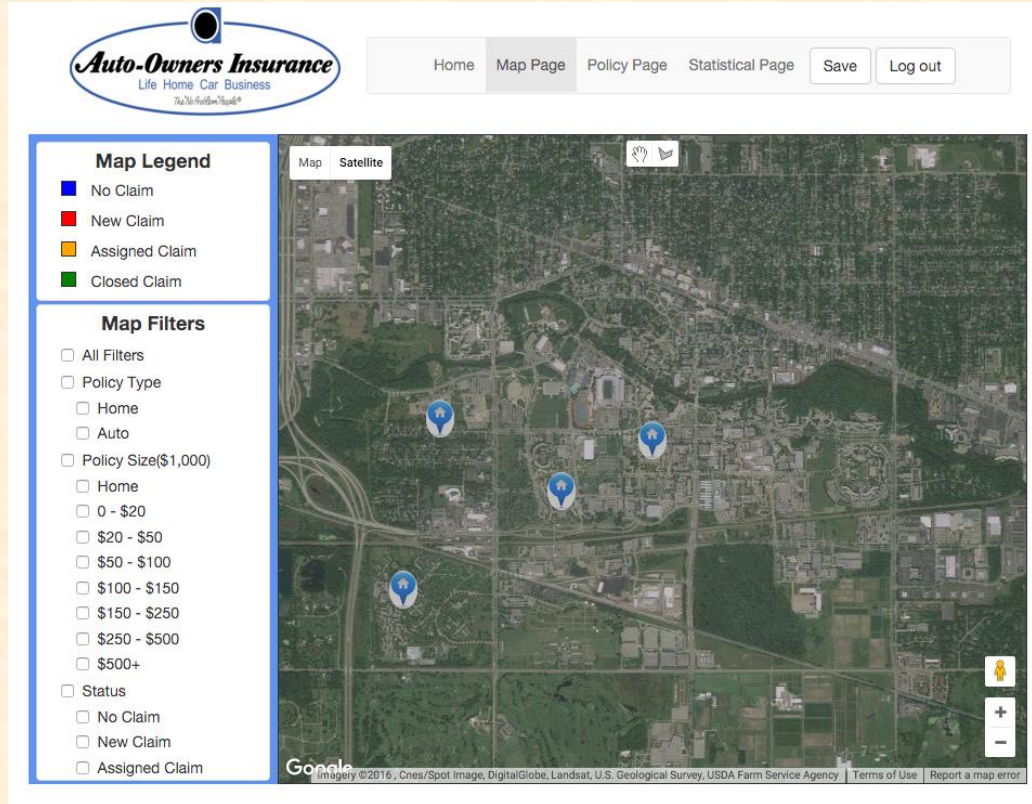
NO SMOKING



Team Auto-Owners Alpha Presentation

Team Auto-Owners Alpha Presentation

Map Page – All Policies



Auto-Owners Insurance
Life Home Car Business
The Capstone Experience®

Home Map Page Policy Page Statistical Page Save Log out

Map Legend

- No Claim
- New Claim
- Assigned Claim
- Closed Claim

Map Filters

- ☐ All Filters
- ☐ Policy Type
 - ☐ Home
 - ☐ Auto
- ☐ Policy Size(\$1,000)
 - ☐ Home
 - ☐ 0 - \$20
 - ☐ \$20 - \$50
 - ☐ \$50 - \$100
 - ☐ \$100 - \$150
 - ☐ \$150 - \$250
 - ☐ \$250 - \$500
 - ☐ \$500+
- ☐ Status
 - ☐ No Claim
 - ☐ New Claim
 - ☐ Assigned Claim

Map Satellite

Google

Imagery ©2016, Cnes/Spot Image, DigitalGlobe, Landsat, U.S. Geological Survey, USDA Farm Service Agency | Terms of Use | Report a map error

Team Auto-Owners Alpha Presentation

Map Page – Weather Overlay

The screenshot displays the 'Auto-Owners Insurance' web application interface. At the top left is the company logo with the tagline 'Life Home Car Business'. To the right is a navigation bar with links for 'Home', 'Map Page' (which is highlighted), 'Policy Page', and 'Statistical Page'. Further right are 'Save' and 'Log out' buttons. On the left side, there is a 'Map Legend' section with four categories: 'No Claim' (blue square), 'New Claim' (red square), 'Assigned Claim' (orange square), and 'Closed Claim' (green square). Below this is a 'Map Filters' section with checkboxes for 'All Filters', 'Policy Type' (Home, Auto), 'Policy Size(\$1,000)' (Home, 0 - \$20, \$20 - \$50, \$50 - \$100, \$100 - \$150, \$150 - \$250, \$250 - \$500, \$500+), and 'Status' (No Claim, New Claim, Assigned Claim). The main area is a map of the Great Lakes region with a weather overlay showing various colored areas representing different weather conditions. A blue location pin is visible on the map. At the bottom of the map, there is a 'Google' logo and a small text line: 'Imagery ©2016 TerraMetrics Terms of Use Report a map error'. The right side of the map has a vertical toolbar with a 'Map' button, a 'Satellite' button, and zoom controls.



Team Auto-Owners Alpha Presentation

Team Auto-Owners Alpha Presentation

Statistics Page

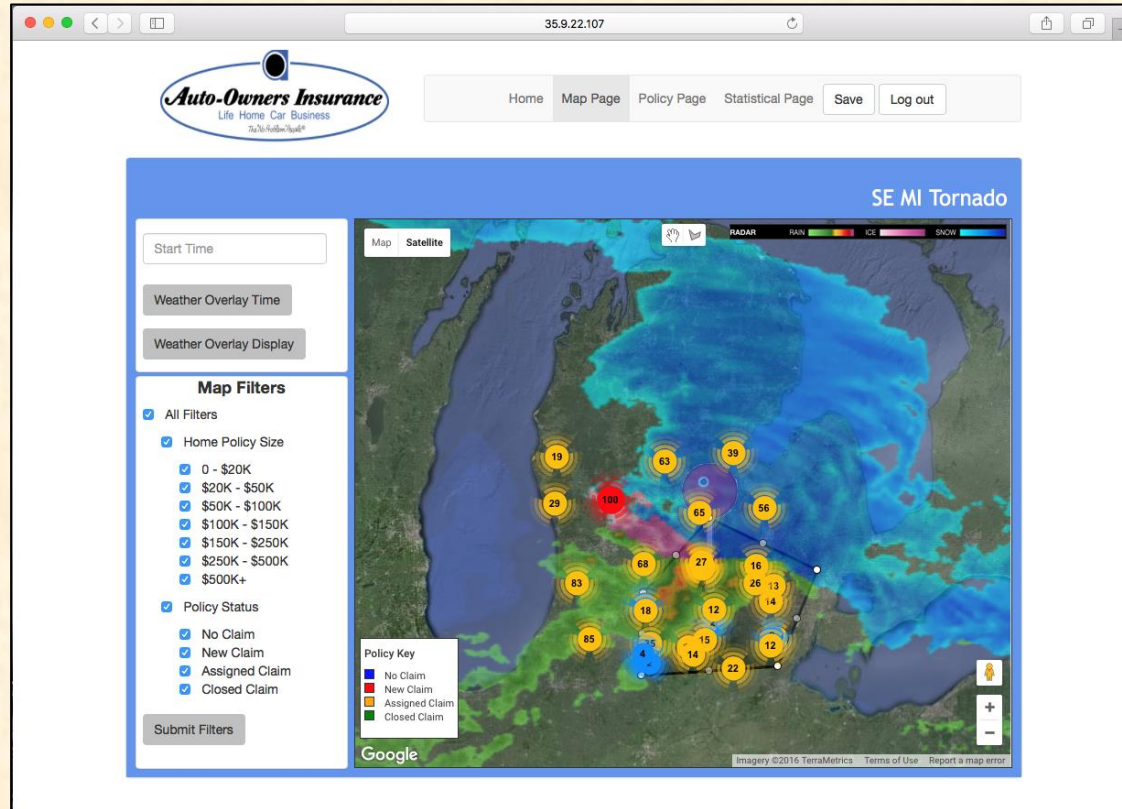




Team Auto-Owners Beta Presentation

Team Auto-Owners Beta Presentation

Map Page



Team Auto-Owners Beta Presentation

Statistical Page





Team Auto-Owners Beta Presentation

Team Auto-Owners Beta Presentation

Disasters On Device





Team Auto-Owners
Design Day

MICHIGAN STATE
UNIVERSITY

The Capstone Experience

Team GE

Department of Computer Science and Engineering
Michigan State University
Spring 2016



*From Students...
...to Professionals*





RSNA 2015



Guest



www3.gehealthcare.com/en



GE Healthcare

Enter search term(s)



PRODUCTS

SPECIALTIES

EDUCATION

INSIGHTS

NEWS CENTER

SERVICES

SUPPORT

INITIATIVES

United States



Login/Register



HOME

RSNA 2015



BEAUTIFUL INSIDE AND OUT

SIGNA™ Pioneer

Envision what you've always wished MR could do.

[Learn more >](#)



Welcome to RSNA 2015!

GE Healthcare is proud to welcome visitors to this year's event.

We hope to see you at McCormick Place, South Hall, Booth #1929 in Chicago Nov 29 through

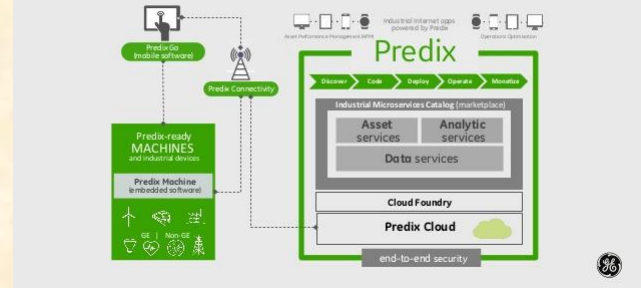


Team GE Project Overview

Cloud Management Portal

- Functionalities
 - Provide Simple Cloud Management Portal
 - For Big Data and Analytics
 - Accessible to All GE Businesses
- Features
 - Provide Dashboard Views
 - Operational
 - Cost
 - Utilize Existing APIs from Multiple Cloud Vendors
 - Leverage GE's
 - Predix Big Data and Analytics Framework
 - IIDx, Industrial Internet Design Framework
 - Ensure Responsive Web Design
- Technologies
 - Scalr Cloud Management Platform
 - CHEF / CHEF Server
 - GE's Predix and IIDX
 - CSS / HTML / JavaScript / AngularJS
 - Ruby

GE Predix Platform



Milwaukee, Wisconsin
Detroit, Michigan



Team GE

Lyle Fann, Vincent Ma, Nick Rutowski, Aaron Rosenwinkel, Will McPeck

Team GE Project Plan Presentation

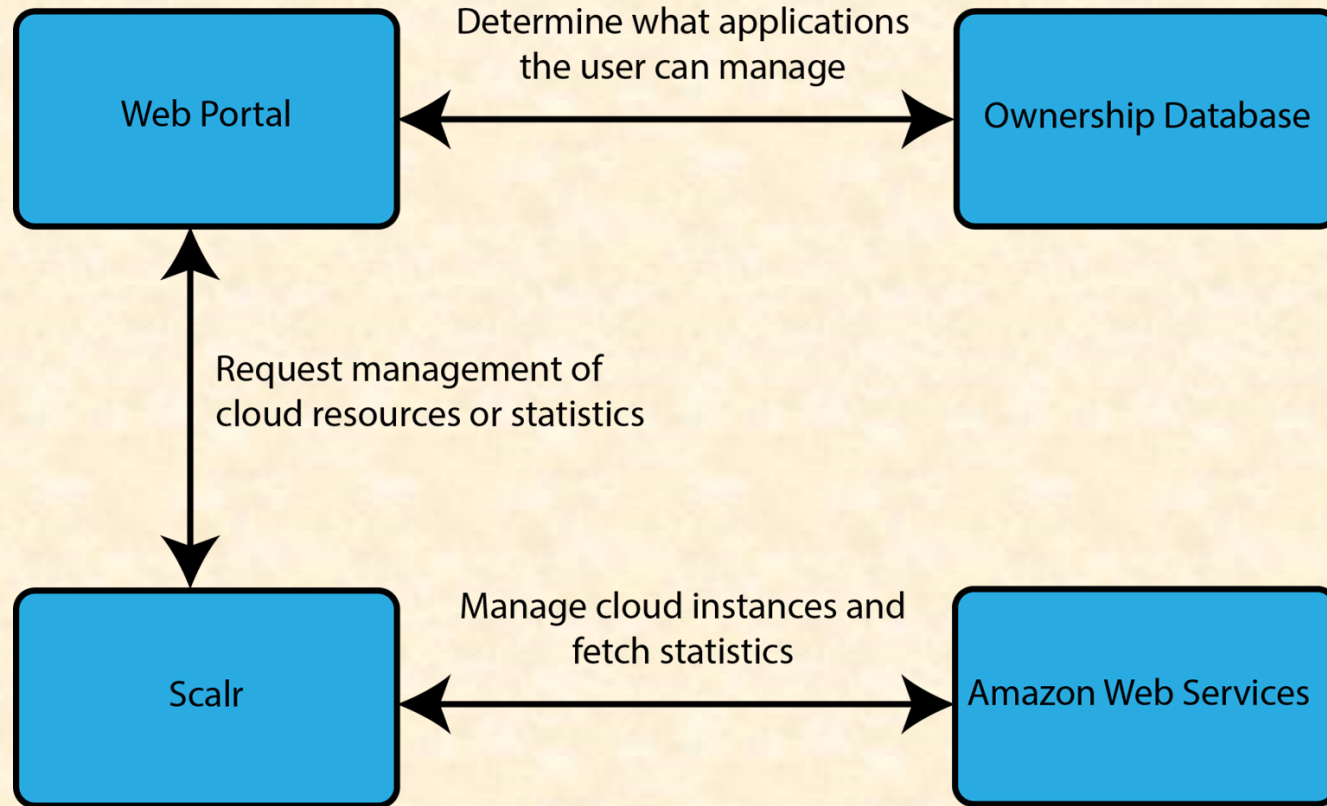
Screen Mockup

Server	Project: LaserCutter ▼	Farm: CutterDash ▼	Server: CTD-prd1 ▼
	Total Cost	Uptime	Suspend or Delete
	Usage		





Team GE Project Plan Presentation





Team GE Project Plan Presentation

Team GE Project Plan Presentation

Screen Mockup










Team GE Alpha Presentation

Team GE Alpha Presentation











































Farms Overview



-  Overview
-  New Farm
-  Scheduler
-  Security

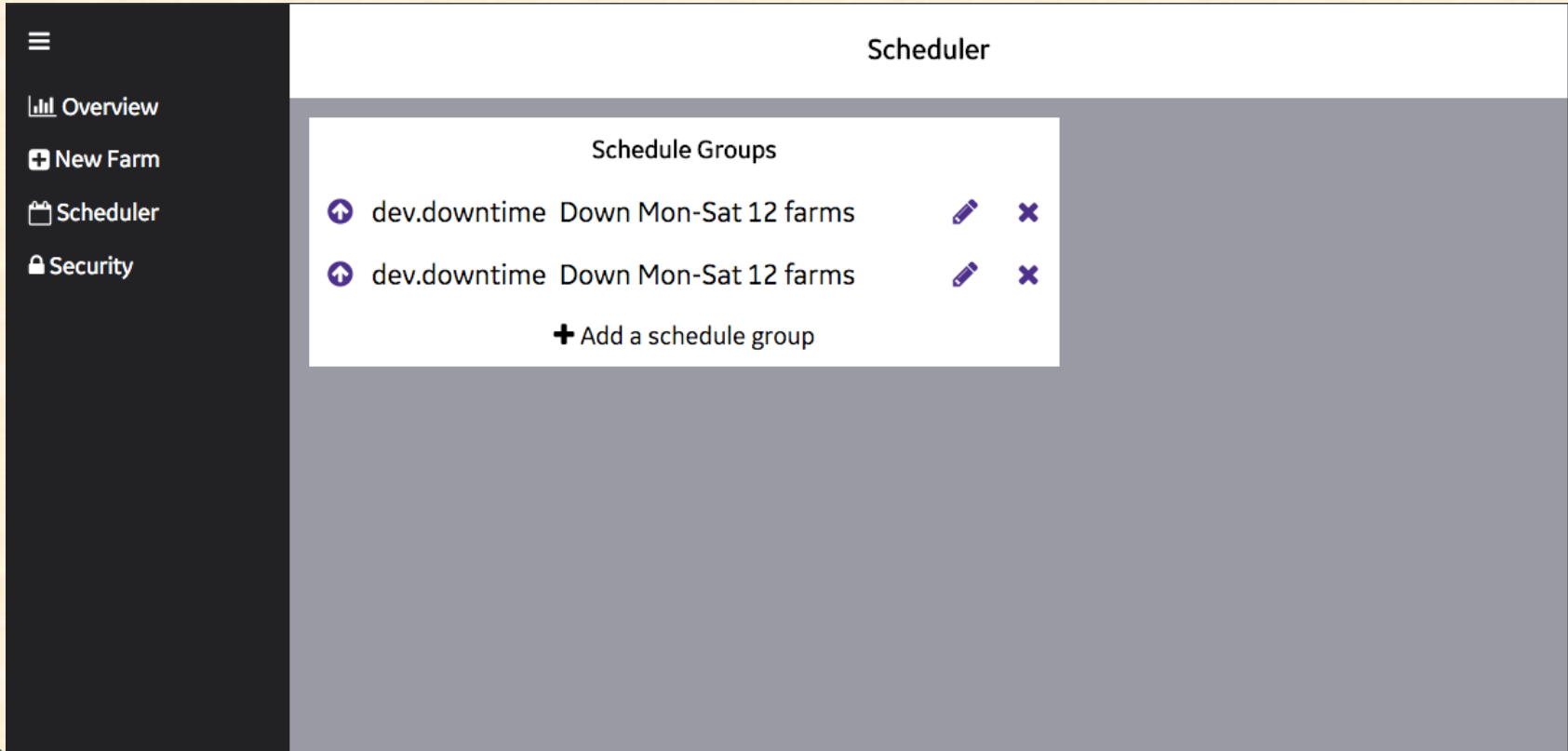
Overview

Farms





 Name						
 Name						
 Name						
 Name						
 Name						
 Name						

Team GE Alpha Presentation

Scheduler



The screenshot displays a web application interface for a 'Scheduler'. On the left is a dark sidebar with a menu containing: a hamburger icon, 'Overview' (with a bar chart icon), 'New Farm' (with a plus icon), 'Scheduler' (with a calendar icon), and 'Security' (with a lock icon). The main content area has a white header 'Scheduler' and a light gray body. A white modal box titled 'Schedule Groups' is centered, showing two identical entries: 'dev.downtime Down Mon-Sat 12 farms'. Each entry has a purple up arrow icon on the left, a purple pencil icon for editing, and a purple 'X' icon for deletion. Below the list is a '+ Add a schedule group' button.

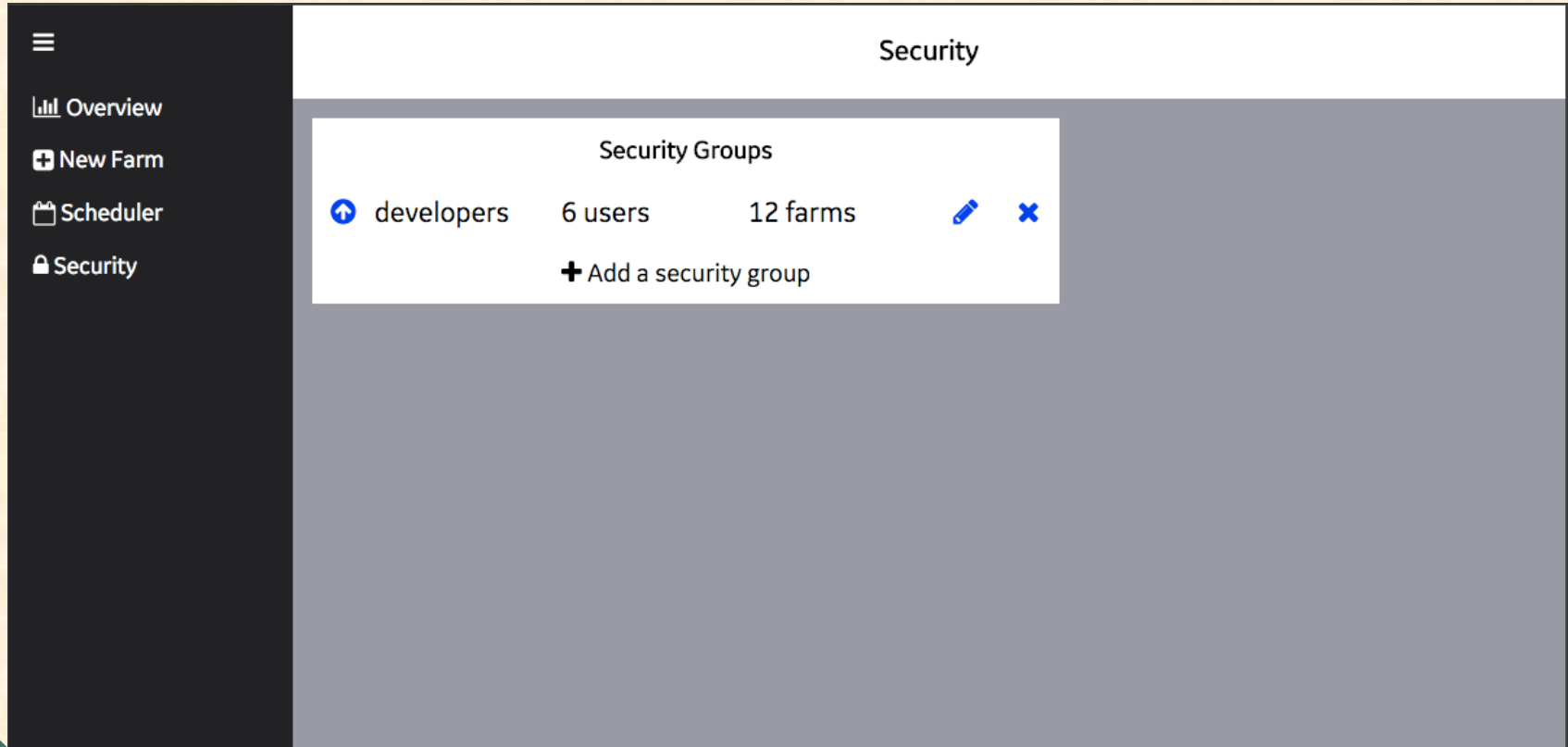
Schedule Groups		
↑	dev.downtime Down Mon-Sat 12 farms	 
↑	dev.downtime Down Mon-Sat 12 farms	 
+ Add a schedule group		






Team GE Alpha Presentation

Team GE Alpha Presentation

Security



The screenshot displays a web application interface for managing security groups. On the left is a dark sidebar with a menu containing: Overview (with a bar chart icon), New Farm (with a plus icon), Scheduler (with a calendar icon), and Security (with a lock icon). The main content area has a white header labeled "Security". Below this, a white box titled "Security Groups" contains a table with one row for a group named "developers". The table shows "6 users" and "12 farms" for this group, along with edit and delete icons. Below the table is a link to "Add a security group".

Security Groups					
	developers	6 users	12 farms		

[+ Add a security group](#)



Team GE Beta Presentation

Team GE Beta Presentation

Overview of Interface

The screenshot displays the 'Scheduler' section of the GE Cloud Management Platform. The top navigation bar includes the GE logo, 'Cloud Management Platform', and user information: 'Environment: GE' and 'nick'. Below this, a secondary navigation bar shows 'Overview', 'New Farm', 'Scheduler' (highlighted), 'Access Control', and 'Options'. The main content area is titled 'Scheduler' and 'Schedule Policies'. On the left, there is an 'Add Policy' button. Four policy cards are shown, each with a status indicator (Inactive or Active), a name, and a 'Destroy' button. The first card, 'John Proctor' (Inactive), has tabs for 'Events' and 'Farms', an 'Add Farm' button, and two error messages: '{ \$getFarmNameById(farm); \$ }'. The second card, 'Django Reinhardt' (Active), has tabs for 'Events' and 'Farms', an 'Add Event' button, and two scheduled events: 'Wednesday @ 12:00 PM' and 'Wednesday @ 1:00 PM'. The third card, 'First real new policy' (Active), has tabs for 'Events' and 'Farms' and an 'Add Event' button. The fourth card, 'sdasfdasfdasfd' (Active), has tabs for 'Events' and 'Farms' and an 'Add Event' button. The bottom of the interface features a footer with links for 'Privacy', 'Terms', 'Contact', 'Accessibility', and 'Cookies'.

GE Cloud Management Platform

Environment: GE nick

Overview New Farm Scheduler Access Control Options

Scheduler

Schedule Policies

+ Add Policy

Inactive John Proctor

Events Farms

+ Add Farm

{ \$getFarmNameById(farm); \$ }

{ \$getFarmNameById(farm); \$ }

Active Django Reinhardt

Events Farms

+ Add Event

Wednesday @ 12:00 PM

Wednesday @ 1:00 PM

Active First real new policy

Events Farms

+ Add Event

Active sdasfdasfdasfd

Events Farms

+ Add Event

Privacy Terms Contact Accessibility Cookies

Team GE Beta Presentation

Permission Management

Manage Accounts

Current User: nick [profile](#)

User Permissions

Username	Clone Perm	Delete Perm	Launch Perm	Schedule Perm
admin	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
kate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
vincent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
lauren	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
mcpeekwi	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
rosenwin	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
nick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Save







Team GE Beta Presentation

Team GE Beta Presentation

Scheduling Policies



Inactive

John Proctor



Destroy

Events


Farms



`{ $ getFarmNameById(farm); $ }`



`{ $ getFarmNameById(farm); $ }`




Active

Django Reinhardt


Destroy

Events

Farms



 Wednesday @ 12:00 PM



 Wednesday @ 1:00 PM





Team GE
Design Day

MICHIGAN STATE
UNIVERSITY

The Capstone Experience

Team GM

Department of Computer Science and Engineering
Michigan State University
Spring 2016



*From Students...
...to Professionals*



Find the GM vehicle
that's right for you.

EXPLORE ALL GM VEHICLES



SHOP CHEVY.COM



SHOP BUICK.COM

GMC

SHOP GMC.COM



SHOP CADILLAC.COM

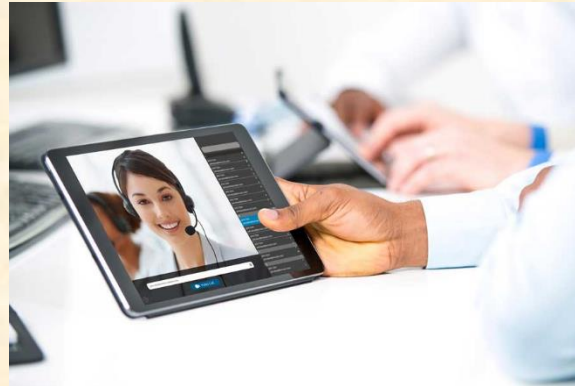


Team GM

Project Overview

IT Expert Live Help

- Functionalities
 - Connect GM Technology Experts
 - With GM Employees Seeking Help
 - Via Live Chat Technologies
- Features
 - Ensure Excellent User Experience
 - Gather Problem Information
 - Offer Self-Help Resources to Help-Seekers
 - Match Help-Seeker with Nearest Expert
 - Provide Self-Management for Experts
 - Create and Edit Own Profile
 - Specify Skills and Location
 - Indicate Available Methods of Chatting
 - Handle Various Chat Technologies
 - Skype for Business
 - Both Voice and Video Phone Calls
- Technologies
 - Apple iPads and iPhones (iOS)
 - Google Android Tablets and Phones
 - Java /Swift / Objective C or Xamarin / .NET
 - Microsoft SQL Server
 - Microsoft Active Directory / Exchange
 - RESTful Web Services



Detroit, Michigan





Team GM

Joe Dinkha, Jenna Sanocki, Jake Price, Zack Keith, Shuhao Zhang

Team GM Project Plan Presentation

Screen Mockup

WELCOME TO THE
Global Service Desk
by



user@gm.com

.....

Login

Sprint 10:59 AM 74%

My Tickets Live

What issue are you having?

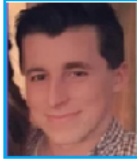
- ☐ SharePoint
- ☐ PowerPoint
- ☐ Excel
- ☒ Outlook
- ☐ Word
- ☐ Internet Explorer
- ☐ Other

Connect with Expert

Sprint 10:59 AM 74%

My Tickets Live

Expert: Jacob Price



Skills: Microsoft Office, Outlook, SharePoint

Location: Warren, MI

Building: Innovation Center

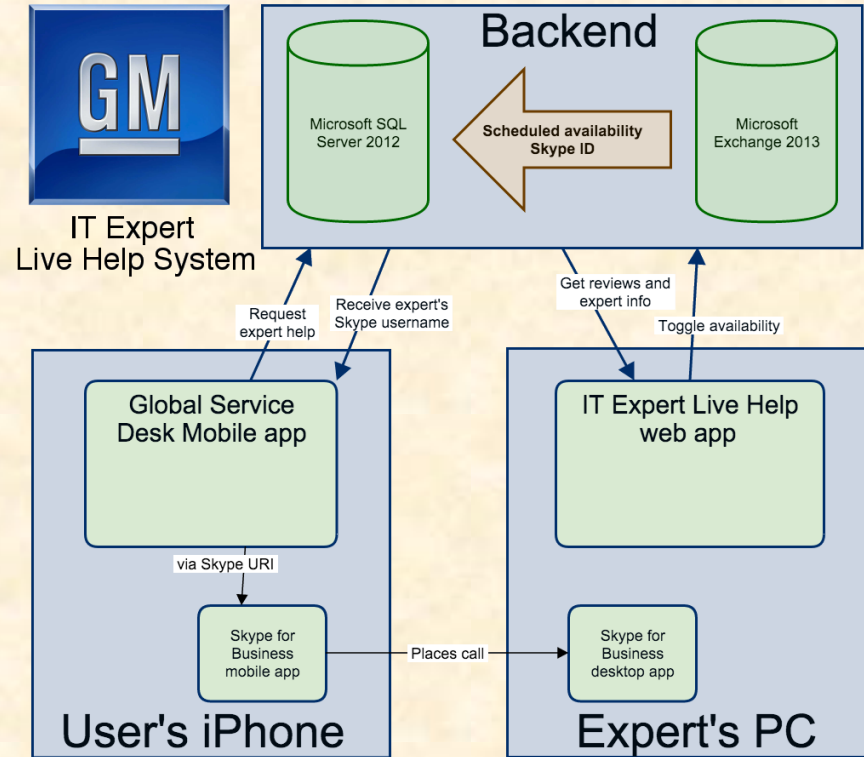
Average Rating: ★★★★★

Preferred Name: Jake

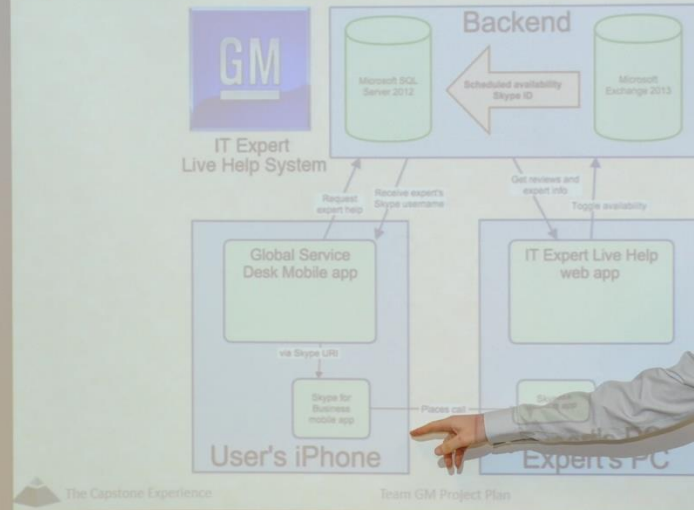
Skip **Call**



Team GM Project Plan Presentation




System Architecture

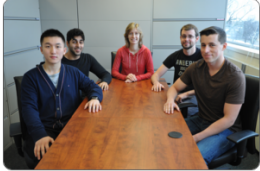


Team GM
Project Plan Presentation

Team GM Project Plan Presentation

Screen Mockup

**IT Expert Live Help**



Team GM | Expert Profile

Online

Calendar Sync

Mon 7/20	Tue 7/21	Wed 7/22	Thu 7/23	Fri 7/24
8:00 AM [Event]	8:00 AM [Event]	8:00 AM [Event]	8:00 AM [Event]	8:00 AM [Event]
9:00 AM [Event]	9:00 AM [Event]	9:00 AM [Event]	9:00 AM [Event]	9:00 AM [Event]
10:00 AM [Event]	10:00 AM [Event]	10:00 AM [Event]	10:00 AM [Event]	10:00 AM [Event]
11:00 AM [Event]	11:00 AM [Event]	11:00 AM [Event]	11:00 AM [Event]	11:00 AM [Event]
12:00 PM [Event]	12:00 PM [Event]	12:00 PM [Event]	12:00 PM [Event]	12:00 PM [Event]
1:00 PM [Event]	1:00 PM [Event]	1:00 PM [Event]	1:00 PM [Event]	1:00 PM [Event]
2:00 PM [Event]	2:00 PM [Event]	2:00 PM [Event]	2:00 PM [Event]	2:00 PM [Event]
3:00 PM [Event]	3:00 PM [Event]	3:00 PM [Event]	3:00 PM [Event]	3:00 PM [Event]
4:00 PM [Event]	4:00 PM [Event]	4:00 PM [Event]	4:00 PM [Event]	4:00 PM [Event]
5:00 PM [Event]	5:00 PM [Event]	5:00 PM [Event]	5:00 PM [Event]	5:00 PM [Event]

Current Rating

★★★★★

Skills

- ☐ Microsoft Office
- ☐ Internet Explorer
- ☐ Skype for Business

Save

Feedback

★★★★★
Joe Dinkha (1/27/2016 - 3:16PM):
Thanks for helping me with my browser display issues!

★★★★★
Jenna Sanocki (1/15/2016 - 10:02AM):
I appreciate you helping me set up my Outlook signature settings.


[More Reviews](#)




Team GM Alpha Presentation

Team GM Alpha Presentation

Web App - Expert Dashboard

 IT Expert Live Help



dinkhajo

★★★★★

Online

Skills

Microsoft Word

Microsoft Outlook

Microsoft PowerPoint

Skype for Business

Save

Leaderboards

Log Out

Calendar

Add Office Hours

Best Feedback

★★★★★

dinkhajo (Jan 27, 2016)

Thanks for helping me with my browser display issues! That was fast.

★★★★★

Jenna Sanocki (Jan. 15, 2016)

I appreciate you helping me set up my Outlook signature settings.

★★★★★

Zack Keith (Jan. 15, 2016)

Quick and simple help towards fixing my Skype issues! Thanks again.

Show More Feedback

Worst Feedback

★★★★

Shuhao Zhang (Feb. 1, 2016)

You weren't as knowledgeable with Skype as I thought you'd be...

★★★

Jake Price (Jan. 6, 2016)

You weren't able to help me fix the issue I was having with Microsoft Word.

★

UofM Fan (Jan. 30, 2016)

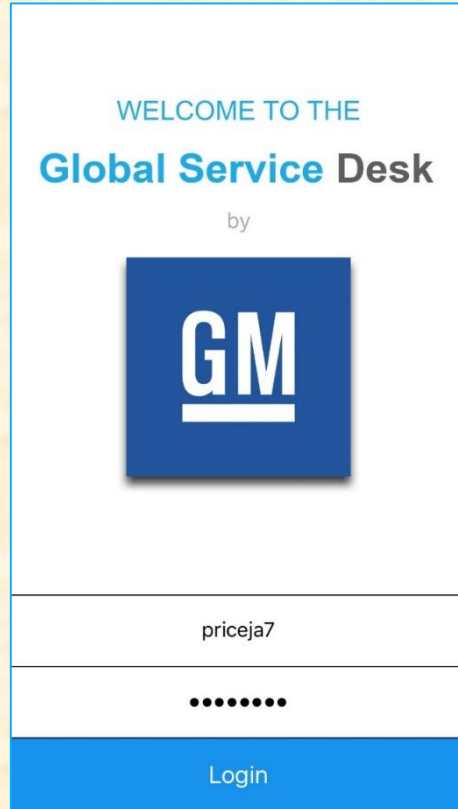
I'm mad that MSU is better at literally everything.

Show More Feedback




Team GM Alpha Presentation

Mobile Login / Home Screen



WELCOME TO THE
Global Service Desk

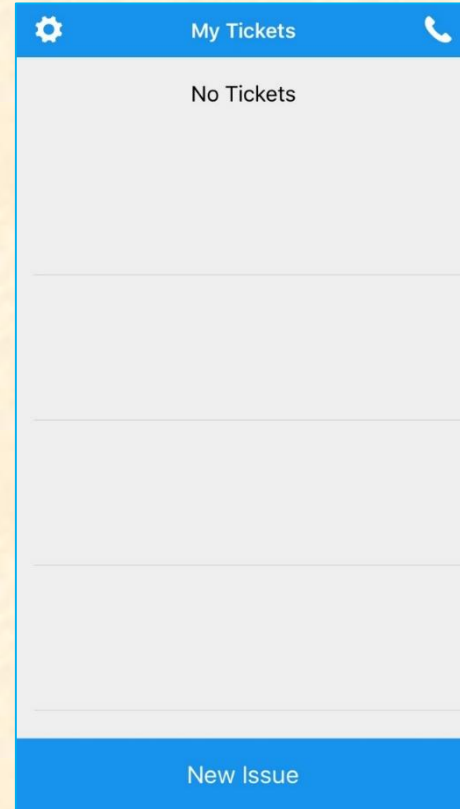
by



priceja7

••••••••

Login



My Tickets

No Tickets

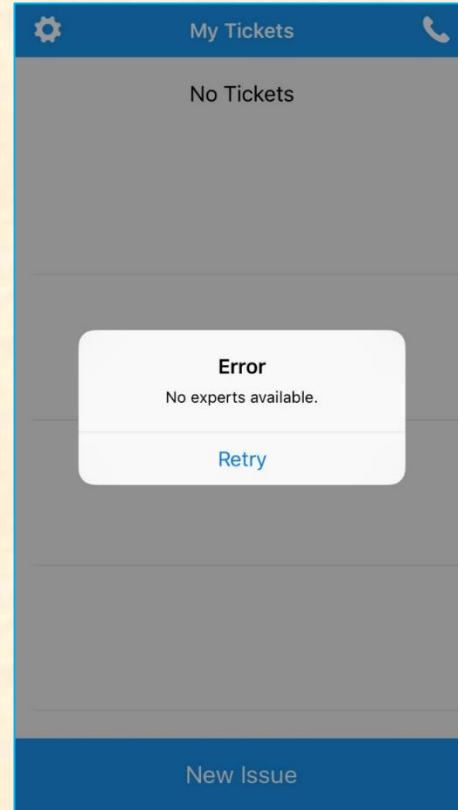
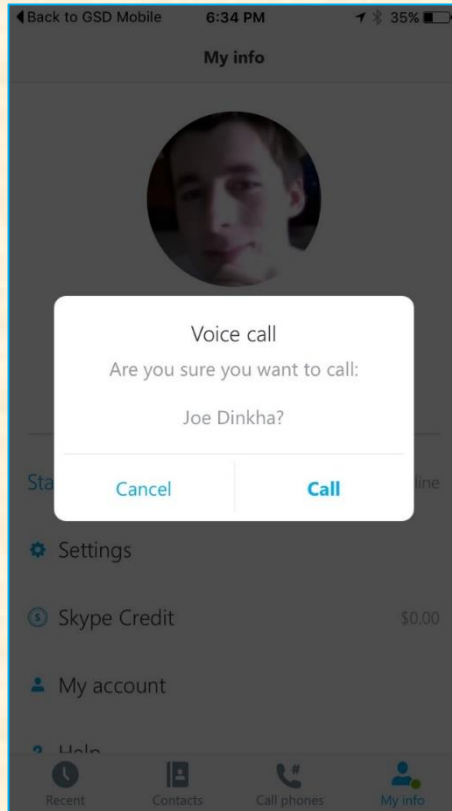
New Issue



Team GM Alpha Presentation

Team GM Alpha Presentation

Mobile Help Request Match







Team GM Beta Presentation

Team GM Beta Presentation

Web App Expert Dashboard

 IT Expert Live Help



Joe Dinkha

★★★★

Online

Skills

- Microsoft Word
- Microsoft Outlook
- Microsoft PowerPoint
- Desktop
- SharePoint

Save

Leaderboards

Log Out

Calendar

Set Office Hours

Best Feedback

★★★★★
Michael Chen Mar 30, 2016
Thank you for all of your help. You're the man!

★★★★★
Shuhao Zhang Mar 28, 2016
Problem not resolved.

★★★★★
Jenna Sanocki Mar 26, 2016
AWESOME!

Show More Feedback

Worst Feedback

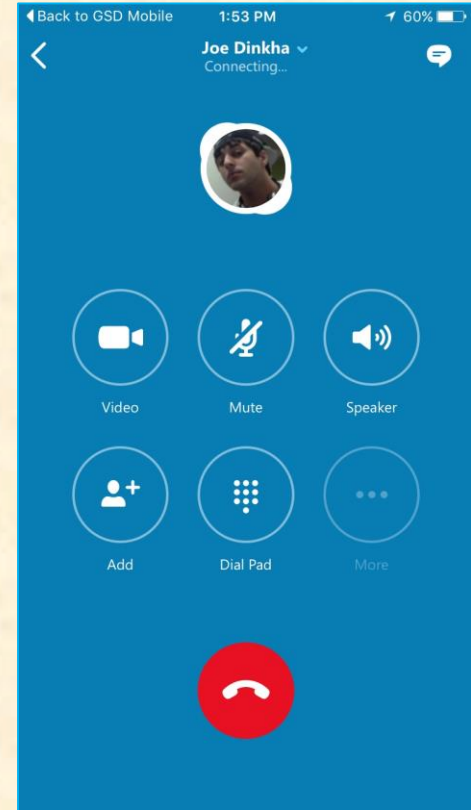
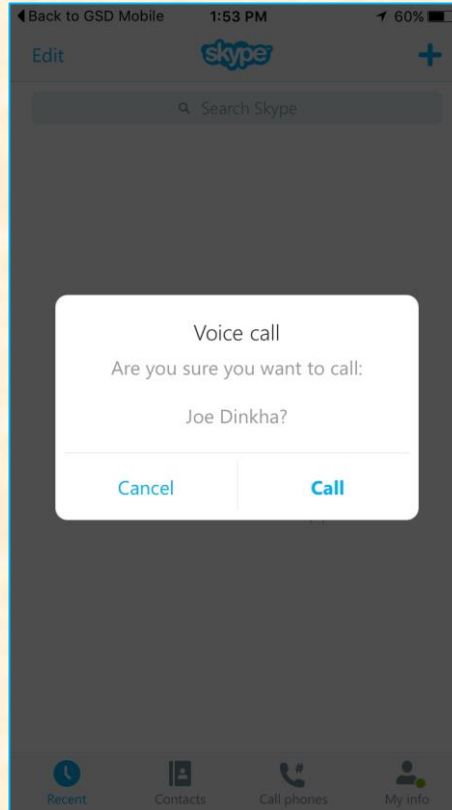
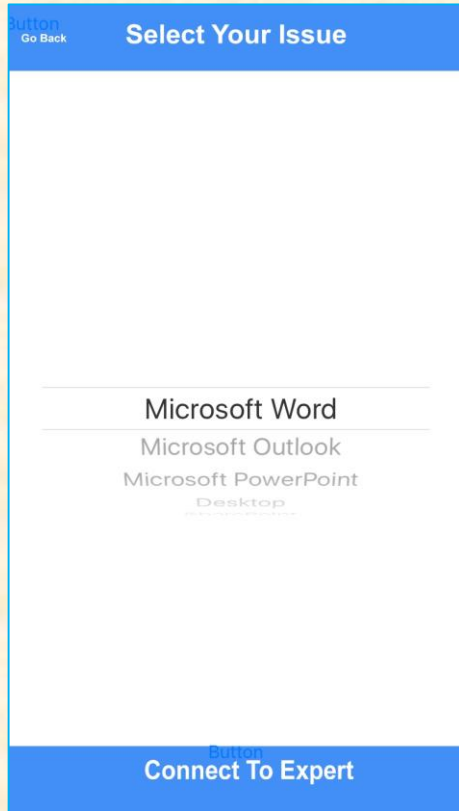
★
Jacob Price Mar 28, 2016
Sorry joey, looks like you couldn't get it done.

★★
Jacob Price Mar 28, 2016
Thank you for your effort but you were unable to help me solve my issue Mr. Dinkha.

Show More Feedback

Team GM Beta Presentation

Mobile App Help Request Match






Team GM Beta Presentation

Team GM Beta Presentation

Mobile App Experience Feedback

Rate Your Experience



Comments

Thank you for all of your help

110

Decline

Submit





Team GM
Design Day

MICHIGAN STATE
UNIVERSITY

The Capstone Experience

Team MSUFCU

Department of Computer Science and Engineering
Michigan State University
Spring 2016



*From Students...
...to Professionals*



F E D E R A L C R E D I T U N I O N

Building Dreams *Together*



Like 13,816 people like this. Sign Up to see what your friends like.

[Personal](#)[Business](#)[Account Services](#)[Join MSUFCU](#)

Welcome, MSU Students!

Open your MSUFCU account, receive a FREE Spartan T-Shirt! *Plus*, when you open your account online, you could win 1 of 100 prizes!

[Open Your Account](#)

What's New @ MSUFCU

Receiving a website security error? Click here.

Bill Payment Now Available on MSUFCU Mobile App

Help Support The Sparrow Children's Center Toy Drive

Discounted Cedar Point & Michigan's Adventure Tickets Available

Upcoming Events

Financial U - Earn & Learn
Tuesday, September 15

[View all events >>](#)

Search

Search Site or Find ATMs by City, State or Zip

MSUFCU Routing Number: 272479663
MSUFCU SWIFT Code: MSUCUS44

ComputerLine - Protected by TrulyU®

Login

Password

[Login Help](#)

[Login](#)



Online Chat
with a credit union
representative



Send Us a
Secure Email

800-678-4968 • 517-333-2424
Mon-Fri: 7:00 a.m. - 9:00 p.m. ET
Sat: 9:00 a.m. - 3:00 p.m. ET



Current Rates

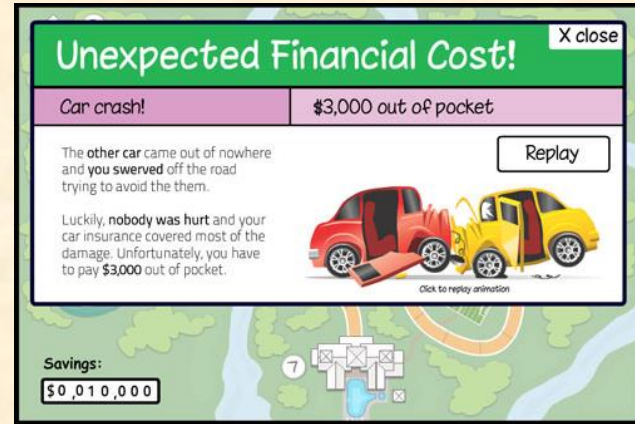
Loans	Home Loans	Savings	Business
Auto Loan		as low as 2.450% APR	
Platinum Visa		as low as 8.900% APR	
Motorcycle Loan		as low as 2.700% APR	

Team MSUFCU

Project Overview

Money Smash Chronicle

- Functionalities
 - Educate Customers About Basic Financial Information
 - By Playing an Online Game
 - Appealing to Wide Range of Ages
- Features
 - Model After Candy Crush
 - Candy → Denominations of Currency
 - Obstacles → Bills with Due Dates
 - Score → Money Saved
 - Life Events → Car Repair, Medical Expense, Etc.
 - Design UX so Easy-to-Learn But Difficult-to-Master
 - Support Apple and Android Devices Natively
 - Provide Administrative Website
- Technologies
 - Apple iPads and iPhones (iOS) / Swift or Objective-C
 - Google Android Tablets and Phones / Java
 - CSS / HTML / JavaScript / JQuery / PHP
 - WebGL (Web Graphics Library)
 - MySQL with Encryption



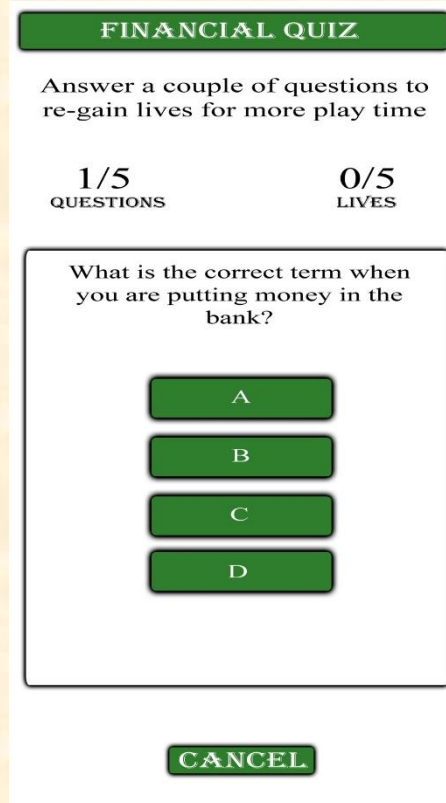


Team MSUFCU

Yuming Zhang, Cory Madaj, Wyatt Hillman, Brandon Max, Amy Leung

Team MSUFCU Project Plan Presentation

Screen Mockup

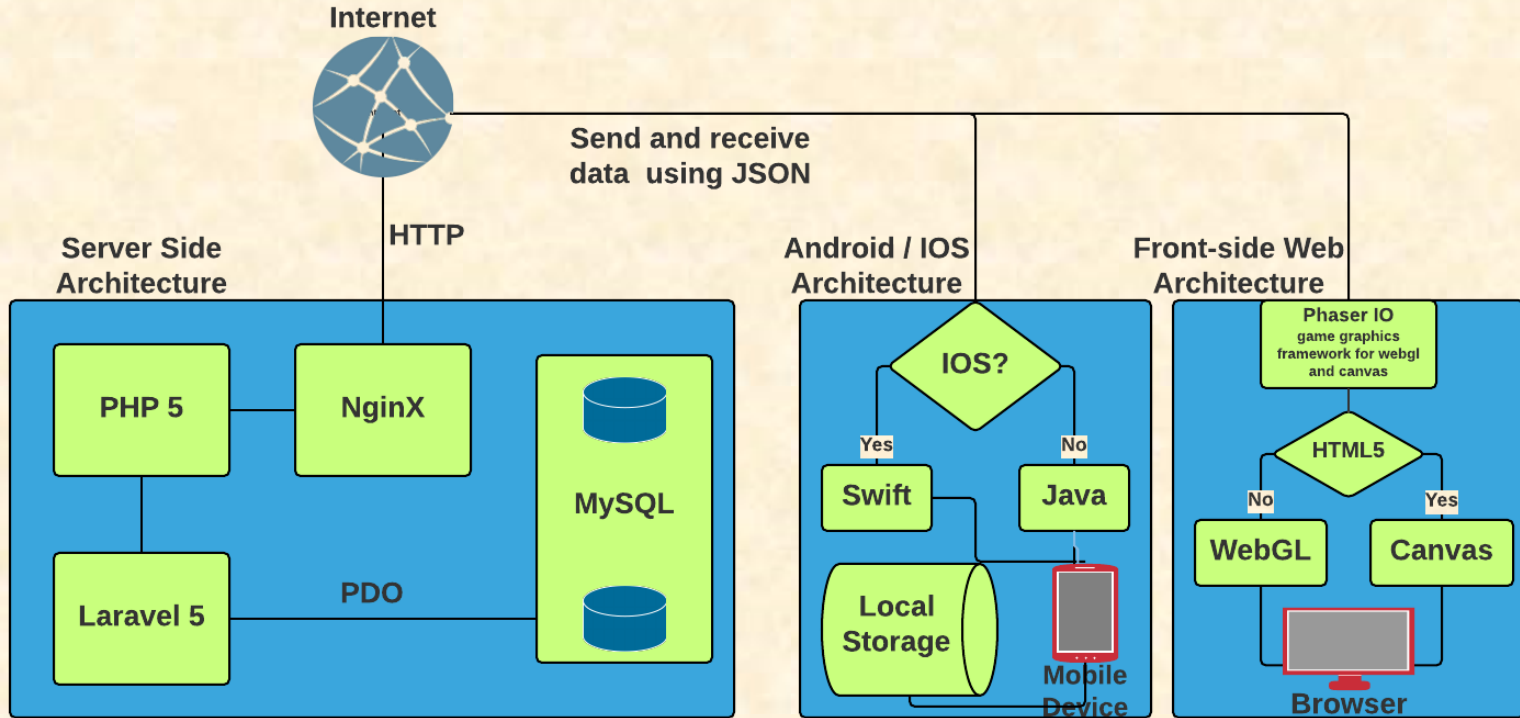




Team MSUFCU Project Plan Presentation

Team MSUFCU Project Plan Presentation

Architecture Diagram





Risks


- Gameplay Issues
 - Figuring out how realistic the game should be – the amount each puzzle piece is worth
 - A few ideas are in development, working with clients
- No iOS or WebGL experience
 - Currently looking over tutorials and using them as guidance for the basic implementation
- Resource Issues
 - Project is asset heavy, currently have rough images in use
 - Talking with client and working with their designer
- Cross-platform and cross-version issues
 - Created mockups as guidelines in making the game look and feel similar across the platforms

Team MSUFCU
Project Plan Presentation

Team MSUFCU Project Plan Presentation

Screen Mockup

*This is overall score - earnings from the level *+ money earned & - money spent on events

**MOVES**

SCORE

TIMER

MONEY BALANCE

Rank Meter?

Keeps track of life events
List of ones that come out
are they completed or not

Power ups

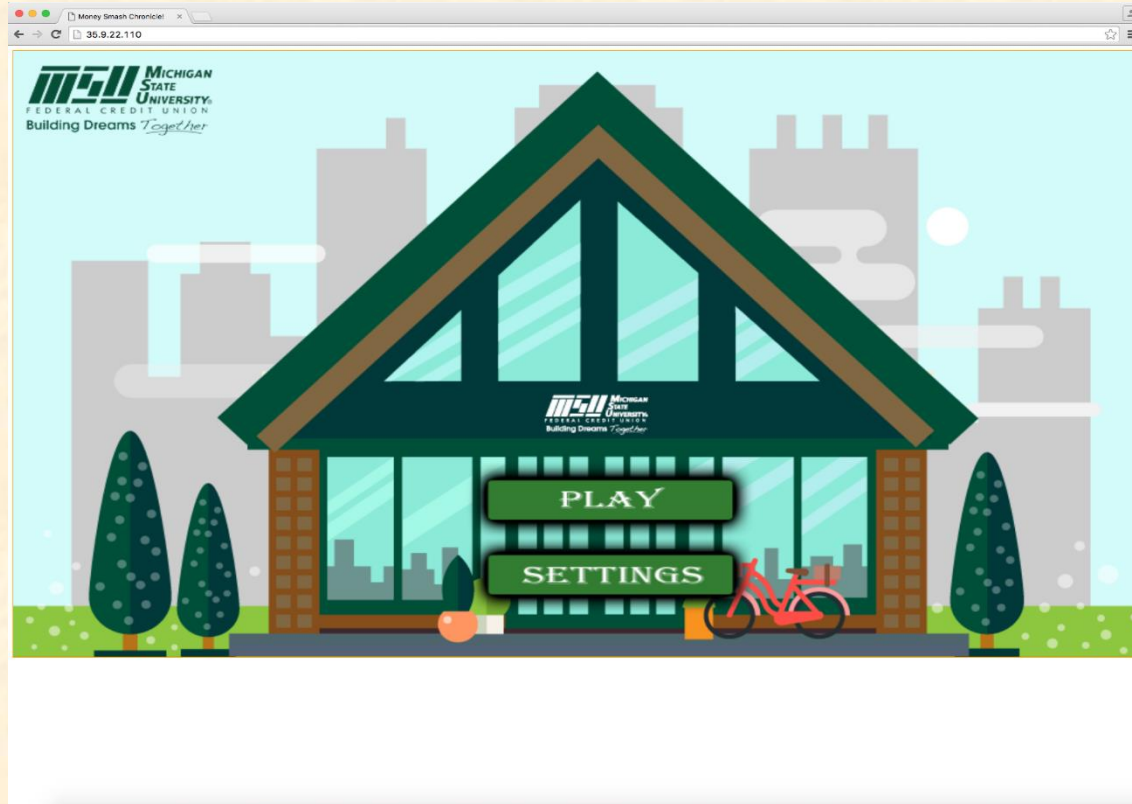




Team MSUFCU Alpha Presentation

Team MSUFCU Alpha Presentation

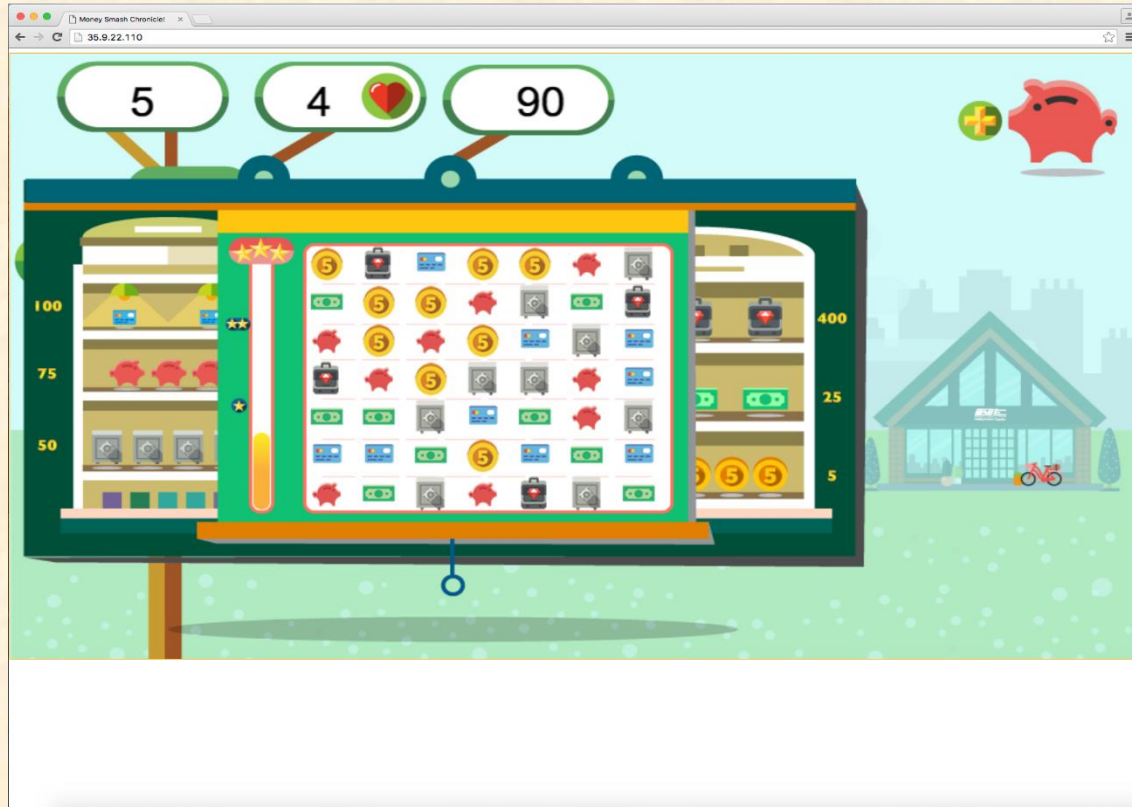
Home Screen



The Capstone Experience

Team MSUFCU Alpha Presentation

Game Screen

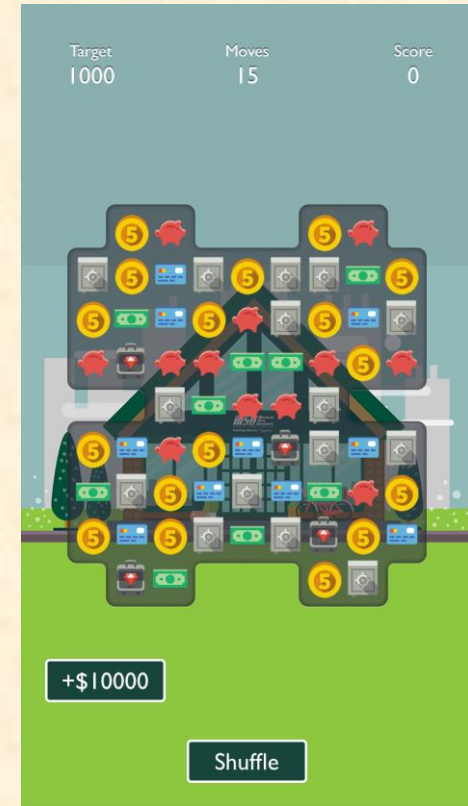
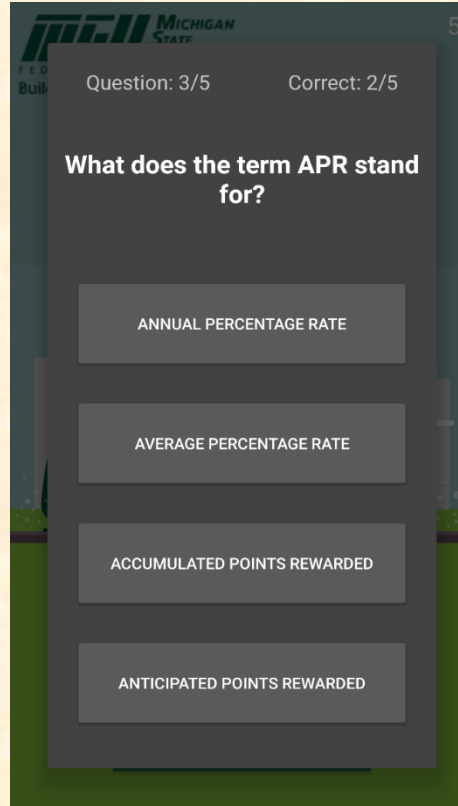




Team MSUFCU Alpha Presentation

Team MSUFCU Alpha Presentation

Mobile Version

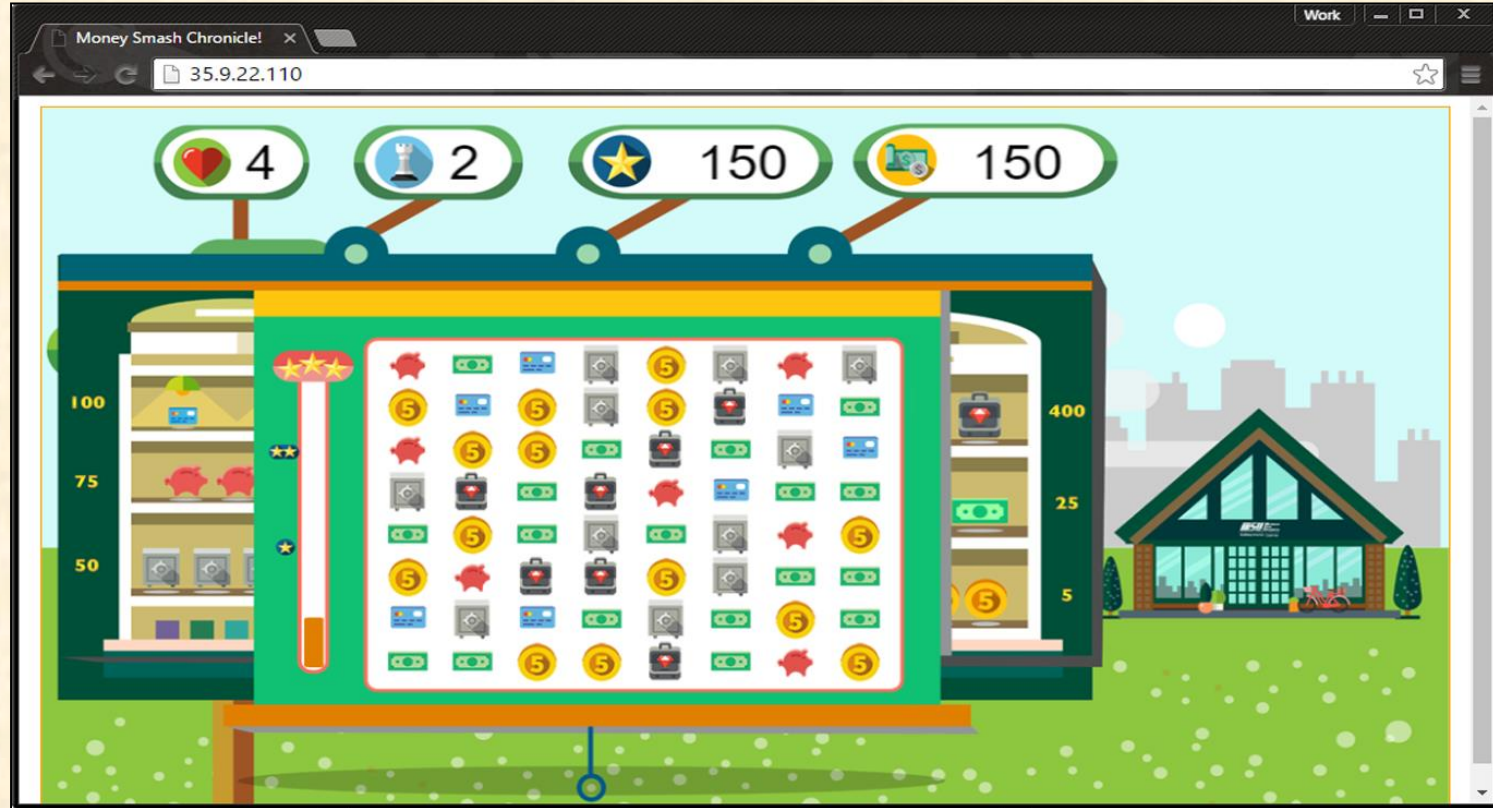




Team MSUFCU Beta Presentation

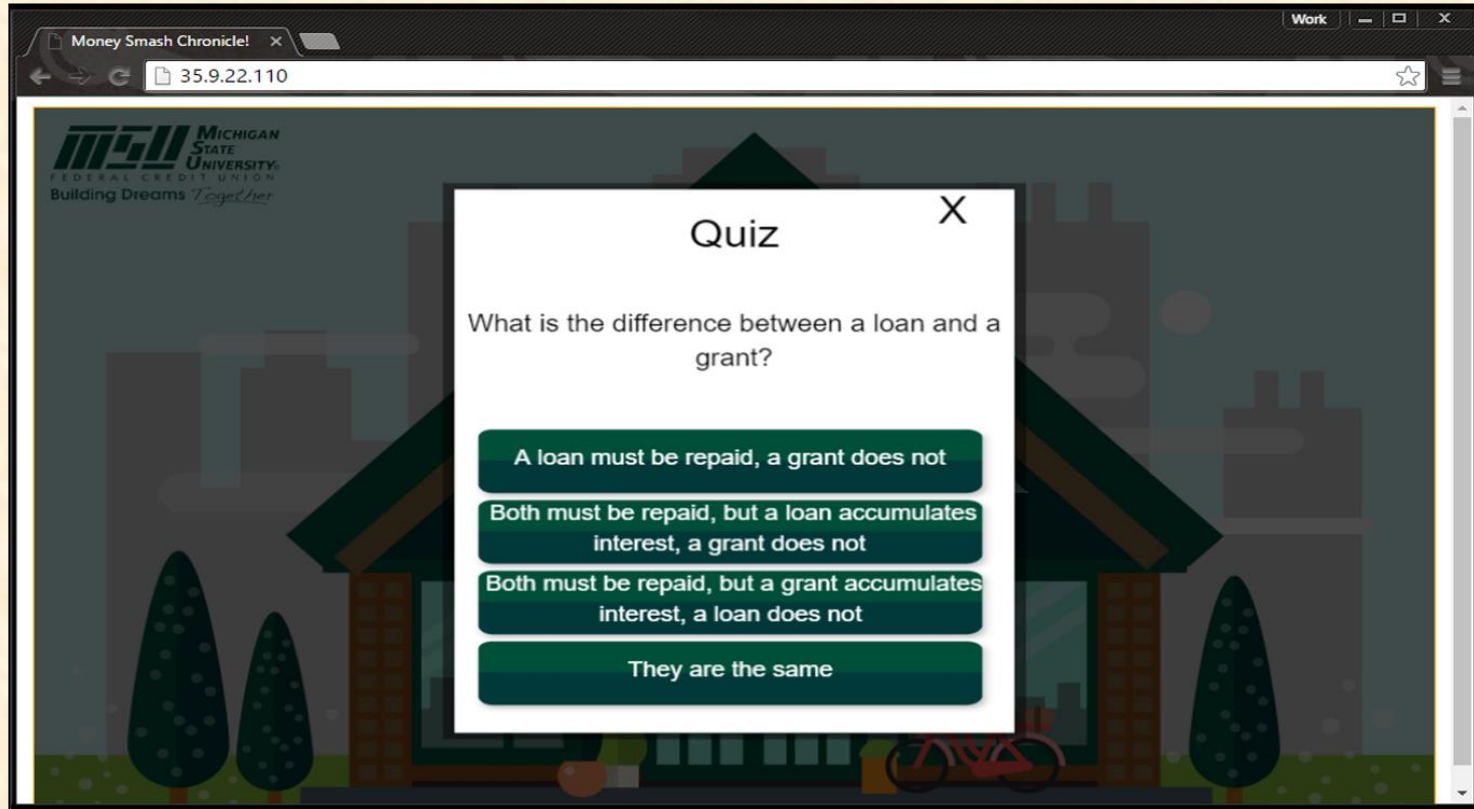
Team MSUFCU Beta Presentation

Web App Gameplay



Team MSUFCU Beta Presentation

Web App Quiz

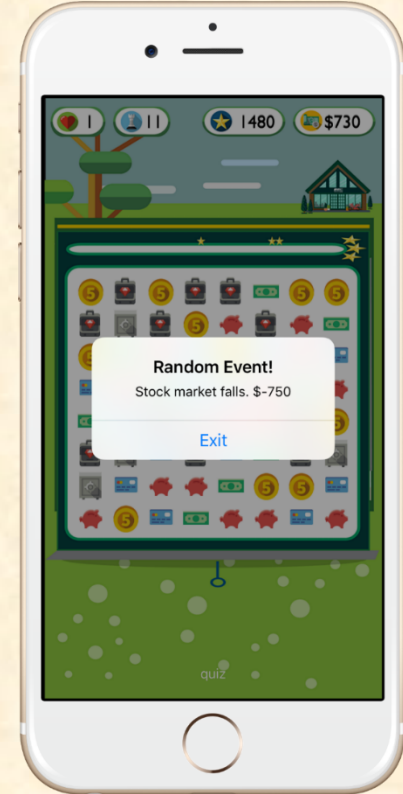
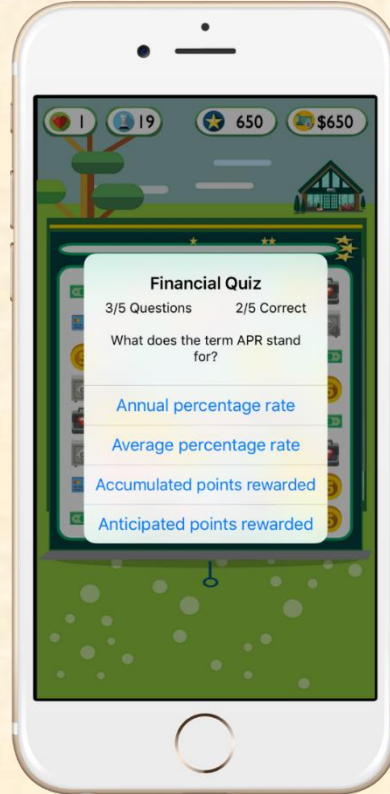
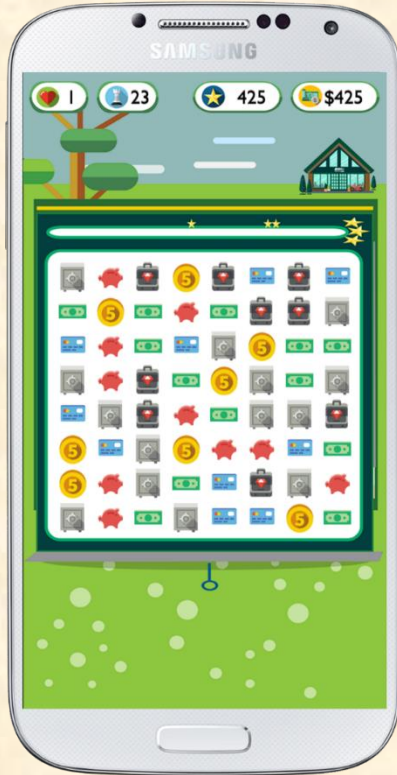




Team MSUFCU Beta Presentation

Team MSUFCU Beta Presentation

Mobile App





Team MSUFCU
Design Day

The Capstone Experience

Team Quicken Loans

Department of Computer Science and Engineering
Michigan State University
Spring 2016



*From Students...
...to Professionals*

Quicken® Loans®

Engineered to **AmazeSM**

Quicken Loans
Engineered to Amaze

[Feedback](#) | [Apply Now](#) | [Homes for Sale](#) | [Real Estate Agent Site](#) | [Sign up for Email and Texts](#) | [MyQL Sign In](#)

Need help? [Chat](#) or Call (800) 251-9080

Search



[Refinance](#) ▾

[Buy a House](#) ▾

[Loan Options](#) ▾

[Mortgage Rates](#) ▾

[Calculators](#) ▾

[About Us](#) ▾

ZING! [Blog](#) ▾



BUY IN.
HOME BUY.
REFI.
POWER.

START HERE

Purchase

Refinance

Team Quicken Loans Project Overview

Game of Loans

- Functionalities
 - Educate Customers on the Loan Process
 - By Playing an Online Game
- Features
 - Implement as Web-Based Single Player Game
 - Take Player Through Mock Mortgage Process
 - Pursue Goal of Closing As Many Mortgages as Possible
 - Handle Three Main Actions
 - Opportunity Knocks
 - Property Hunt
 - Loan-in-Progress
 - Track Three Statistics
 - Income
 - Assets
 - Credit
- Technologies
 - Game Design
 - CSS / HTML / JavaScript
 - Database Technologies (MongoDB or NoSQL or SQL Server)



Quicken® Loans®
Engineered to **Amaze™**
Detroit, Michigan





Team Quicken Loans

Art Barajas, Tim Taviano, Andrew Barnett, Shane McCloskey, David Rulestead

Team Quicken Loans Project Plan Presentation

Screen Mockup

Score: 12,500 **Income: \$68,250** **Assets: \$22,550** **Credit: 725** **Turns Left: 32**

Home

237 Spatan Ave
East Lansing, MI 48823

Image

\$115,000

Beds: 3 **Square Feet:** 970 ft
Baths: 2 **Lot Square Feet:** 1,235 ft
Type: Single Family Home
Difficulty: Easy
Combined Roll Value to Close: 14

Select Property 1

320 M.A.C. Ave
East Lansing, MI 48823

Image

\$242,000

Beds: 5 **Square Feet:** 2,225 ft
Baths: 4 **Lot Square Feet:** 3,840 ft
Type: Single Family Home
Difficulty: Medium
Combined Roll Value to Close: 32

Select Property 2

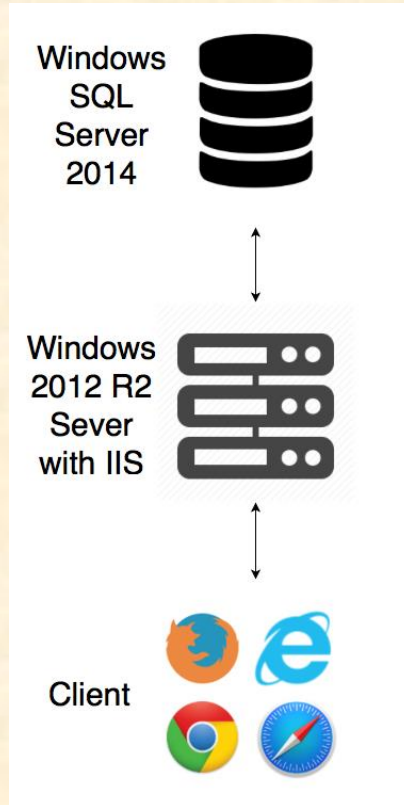




Team Quicken Loans Project Plan Presentation

Team Quicken Loans Project Plan Presentation

Architecture Diagram

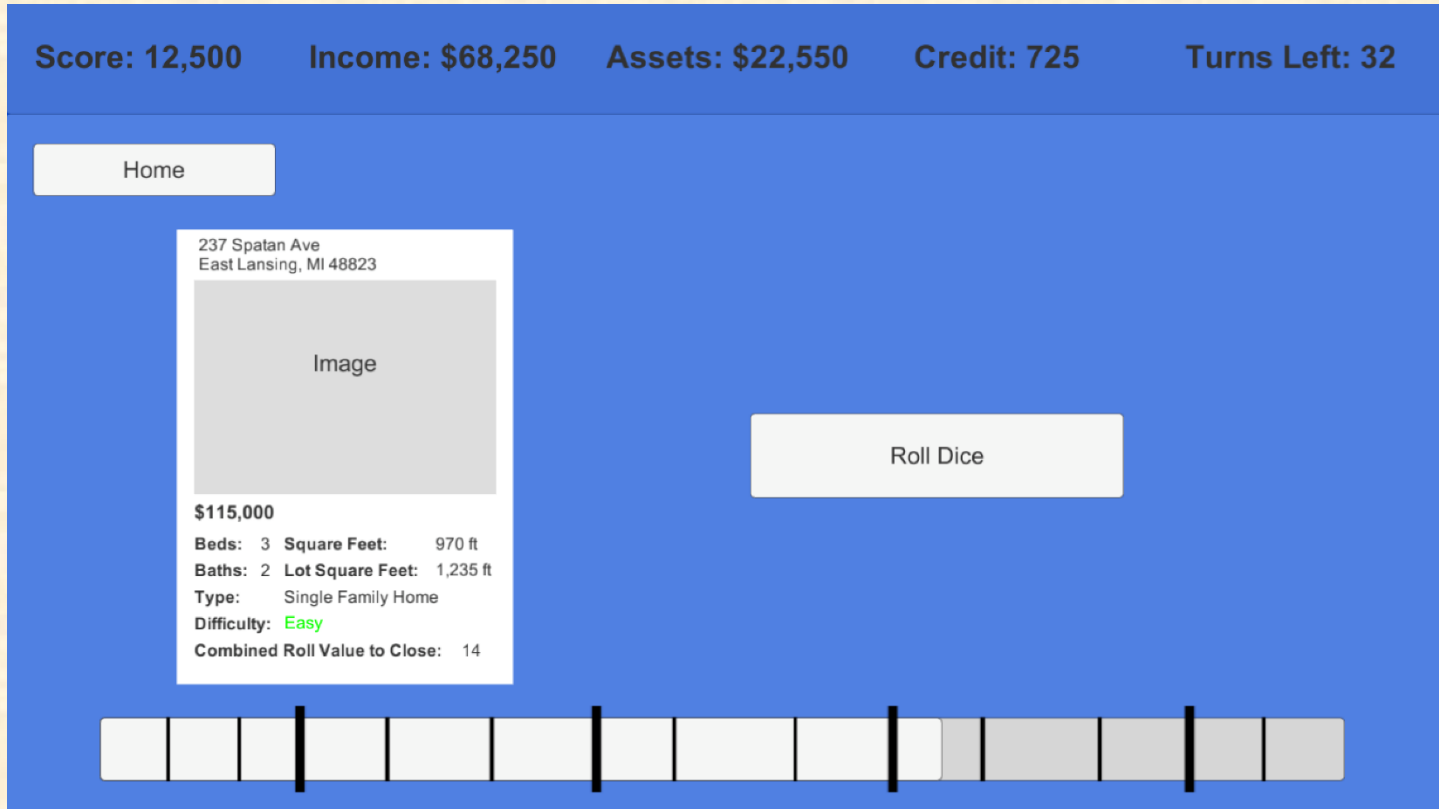




Team Quicken Loans Project Plan Presentation

Team Quicken Loans Project Plan Presentation

Screen Mockup





Team Quicken Loans Alpha Presentation


Team Quicken Loans Alpha Presentation

Property Hunt

Score: 0	Income: 0	Assets: 0	Credit: 0	Turns Left: 40
----------	-----------	-----------	-----------	----------------

Opportunity Knocks	Property Hunt	Loan In Progress
--------------------	---------------	------------------

Address 13




100

Square Feet: 1000

Difficulty: Easy

Address 26




200

Square Feet: 2000

Difficulty: Medium

Address 21



300

Square Feet: 3000

Difficulty: Hard



Team Quicken Loans Alpha Presentation

Loan in Progress

Score: 0

Income: 0

Assets: 0

Credit: 0

Turns Left: 40

Opportunity Knocks

Property Hunt

Loan In Progress

Change Property

Cancel Loan

237 Spatan Ave
East Lansing, MI 48823

Image

\$115,000

Square Feet: 970 ft

Difficulty: Easy

Roll Dice





Team Quicken Loans
Alpha Presentation

Team Quicken Loans Alpha Presentation

High Scores

High Scores

Rank	Name	Team	Score	Loans
1	James	Team2	10000000	100
2	Sue Smith	HR TEAM	9909800	40
3	Jon Smith	Executive Board	5000000	4
4	Tim	Team1	5000000	20
5	draymond	msu	5000000	30
6	Oliver Thomas	Test Team100	1953420	2
7	Edwin	Team3	1000500	50
8	Andrew	Team1	1000000	10
9	Chris Dachsund	Security	159039	4
10	Derek Hampton	Credit	98345	8
11	harley	team w	59060	2
12	Al Green	team 150	34908	30
13	john	credit	23490	15
14	brett	team 15	17000	18
15	trevor	team cc	13439	20
16	david	team 98	9890	13
17	shane	teamql	2309	25
18	stephen	team82	1111	15
19	Alex Poole	IT	1000	1
20	shane	red wings	1000	2
21	TEST2	TEST2	500	2
22	jenn	team7	150	1234
23	archie	team2	100	52
24	bill	team4	90	87
25	Chase Johnson	Public Relations	52	1

Prev

Next





Team Quicken Loans Beta Presentation

Team Quicken Loans Beta Presentation

Opportunity Knocks

The screenshot shows a web browser window titled "Game Of Loans" with the address "35.9.22.106/Game". The page features the "Quicken Loans" logo at the top. Below the logo, it says "Unity WebGL Player | Beta". The main interface has three buttons: "OPPORTUNITY KNOCKS", "PROPERTY HUNT", and "LOAN IN PROGRESS". Below these buttons, a prompt says "Choose 4 more cards to increase your stats". In the center, there are three cards: two red cards with the "QL" logo and one white card with a red border. The white card is titled "Credit Card" and shows a credit card icon with the text "xxxxx xxxxx xxxxx xxxxx". Below the icon, it says "You make a payment towards your mortgage." and "+10 Credit". To the right of the cards is a vertical list of stats: "TURNS LEFT" (40), "NET INCOME" (500), "ASSETS" (7750), "CREDIT" (30), and "SCORE" (0).

Quicken Loans

Unity WebGL Player | Beta

OPPORTUNITY KNOCKS PROPERTY HUNT LOAN IN PROGRESS

Choose 4 more cards to increase your stats

QL Credit Card

xxxxx xxxxx xxxxx xxxxx

You make a payment towards your mortgage.

+10 Credit

QL

QL

TURNS LEFT 40

NET INCOME 500

ASSETS 7750

CREDIT 30

SCORE 0

Team Quicken Loans Beta Presentation

Property Hunt

Game Of Loans

35.9.22.106/Game

Quicken Loans

Unity WebGL Player | Beta


OPPORTUNITY KNOCKS

PROPERTY HUNT

LOAN IN PROGRESS

Choose a property to purchase

Restaurant Building




880000

1456 Woodward Ave
Detroit, MI 48226

Difficulty: Easy

Globe Tobacco




1900000

407 East Fort Street
Detroit, Michigan

Difficulty: Medium

Retail Strip



2740000

1416-1420 Woodward Ave
Detroit, MI 48226

Difficulty: Hard

TURNS LEFT

40

NET INCOME

1250

ASSETS

3875

CREDIT

65

SCORE

0



Team Quicken Loans Beta Presentation

Team Quicken Loans Beta Presentation

Loan in Progress

Game Of Loans

35.9.22.106/Game

Quicken Loans

Unity WebGL Player | Beta

OPPORTUNITY KNOCKS


PROPERTY HUNT

LOAN IN PROGRESS

PROPERTY PACK

ROLL DICE

Restaurant Building



880000

1456 Woodward Ave
Detroit, MI 48226

Difficulty: Easy

Turns Left

40

Net Income

1250

Assets

3875

Credit

65

Score

0

Steps to Closing a Loan

1. Initial Contact

2. Application

3. Loan Set Up Complete

4. Folder Received

5. Conditionally Approved

6. Final Signoff

7. Closing Signing Has Been Scheduled

8. Docs Out To Settlement Agent

Initial Contact

Client e-signs the application and send in supporting documents for review (pay stub, W2, etc.)



Team Quicken Loans
Design Day

The Capstone Experience

Team Spectrum Health

Department of Computer Science and Engineering
Michigan State University
Spring 2016



*From Students...
...to Professionals*

SPECTRUM HEALTH



FOR
CLINICIANSFOR THE
MEDIAFOR
VENDORSFOR JOB
SEEKERSRESEARCH &
CLINICAL TRIALS

MyHealth Log In

SPECTRUM HEALTH



Search



Advanced Search



Who We Are

Patients & Visitors

Medical Services

Quality

Locations

Online Services

Health Information

Find a Physician

Among the Nation's Best

Spectrum Health ranked nationally in pulmonology, high performing in eight other specialties [▶](#)



Award

Free Sports Medicine
Seminars

One call. New hope.

MyHealth

Manage your health information
from a secure online account.

Enroll

Sign-in

[Looking for MySpectrum?](#)

Locations

Select Type of Location



Team Spectrum Health Project Overview

Mobile Rounding App

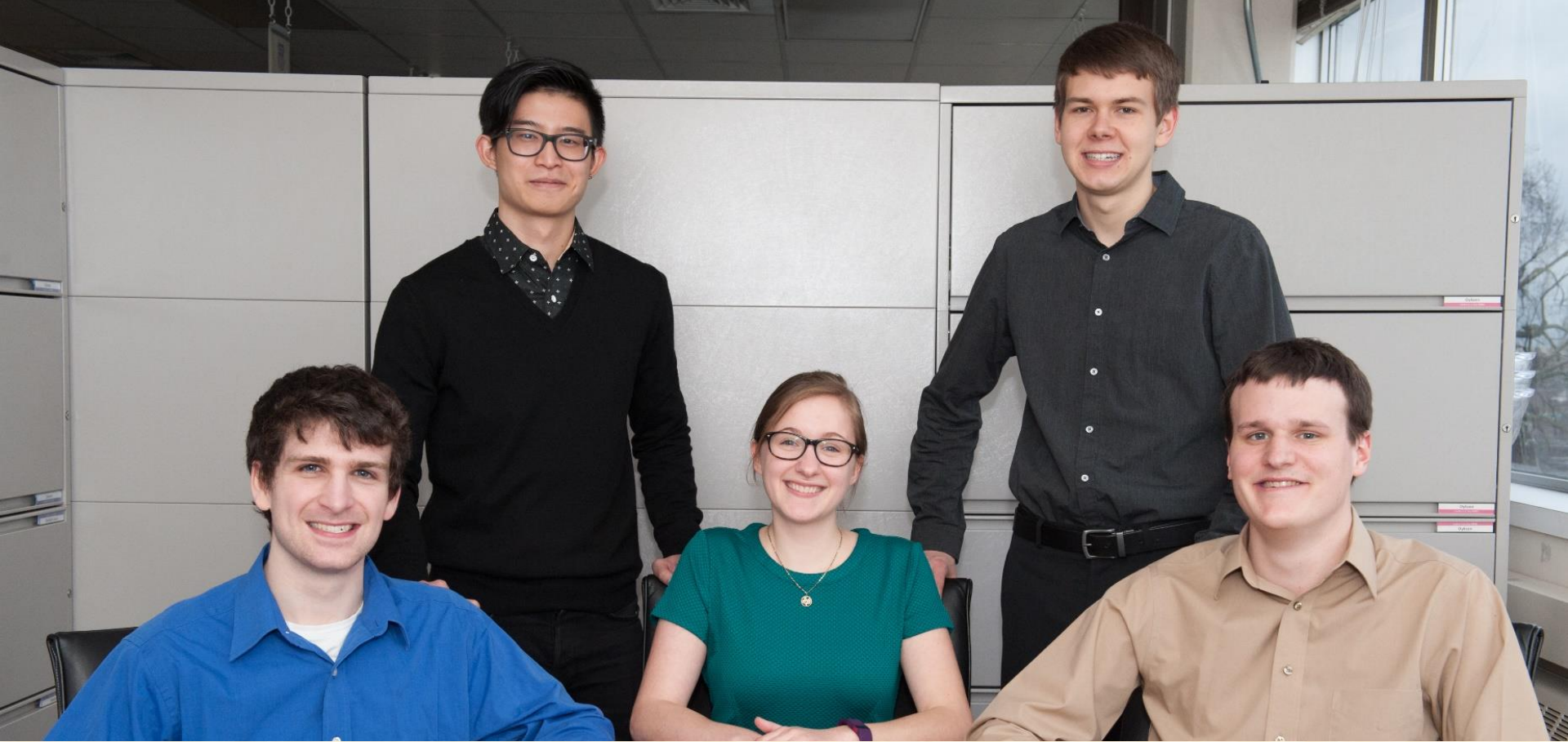
- Functionalities
 - Improve Patient's Hospital Experience
 - Maximize Use of Provider's Time
 - Via Mobile App
- Features
 - Implement Secure Provider/Patient Messaging
 - View and Track Patient Care Plan
 - Offer Educational Materials
 - Provide Administrative Web App
 - Manage Patients and Providers
 - Create and Edit Care Plans
 - View and Respond to Messages
- Technologies
 - CSS / HTML / JavaScript / AngularJS
 - Microsoft ASP.NET / C#
 - Microsoft IIS 7.5
 - RESTful Web Services



SPECTRUM HEALTH

Grand Rapids, Michigan



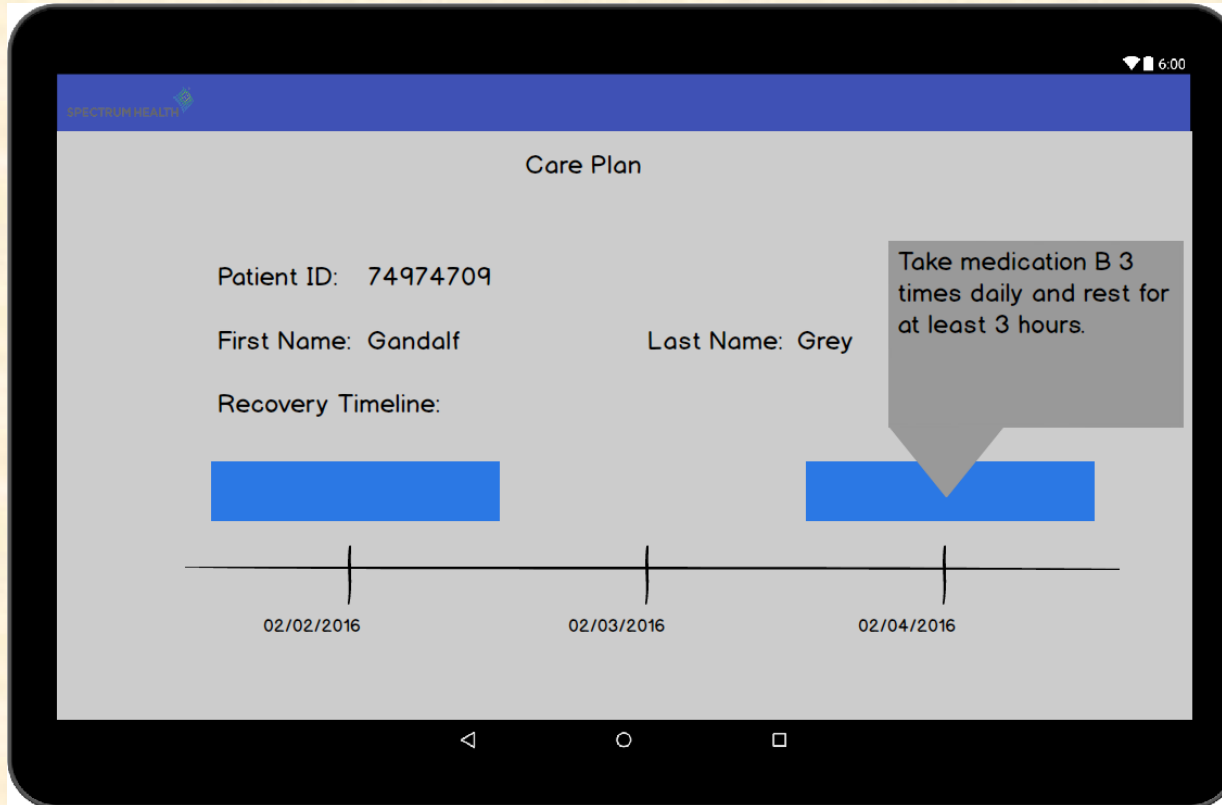


Team Spectrum Health

Andrew Kellams, Jinguang Li, Anna Pucel, Alex Hill, Ben Tiefenbach

Team Spectrum Health Project Plan Presentation

Screen Mockup

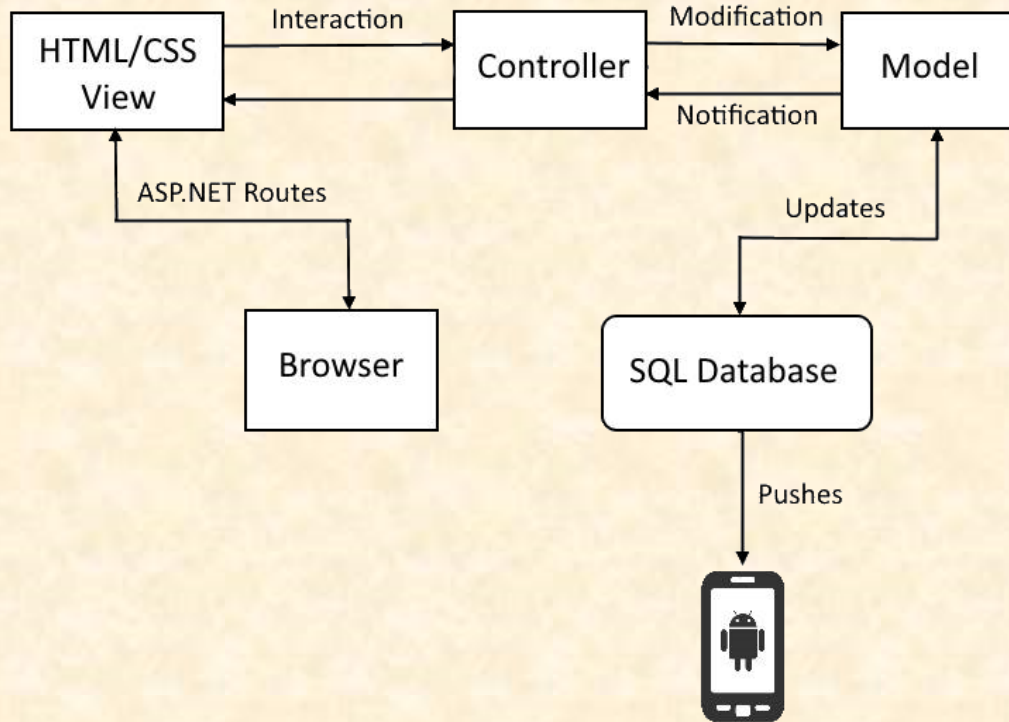




Team Spectrum Health Project Plan Presentation

Team Spectrum Health Project Plan Presentation

Architecture Diagram

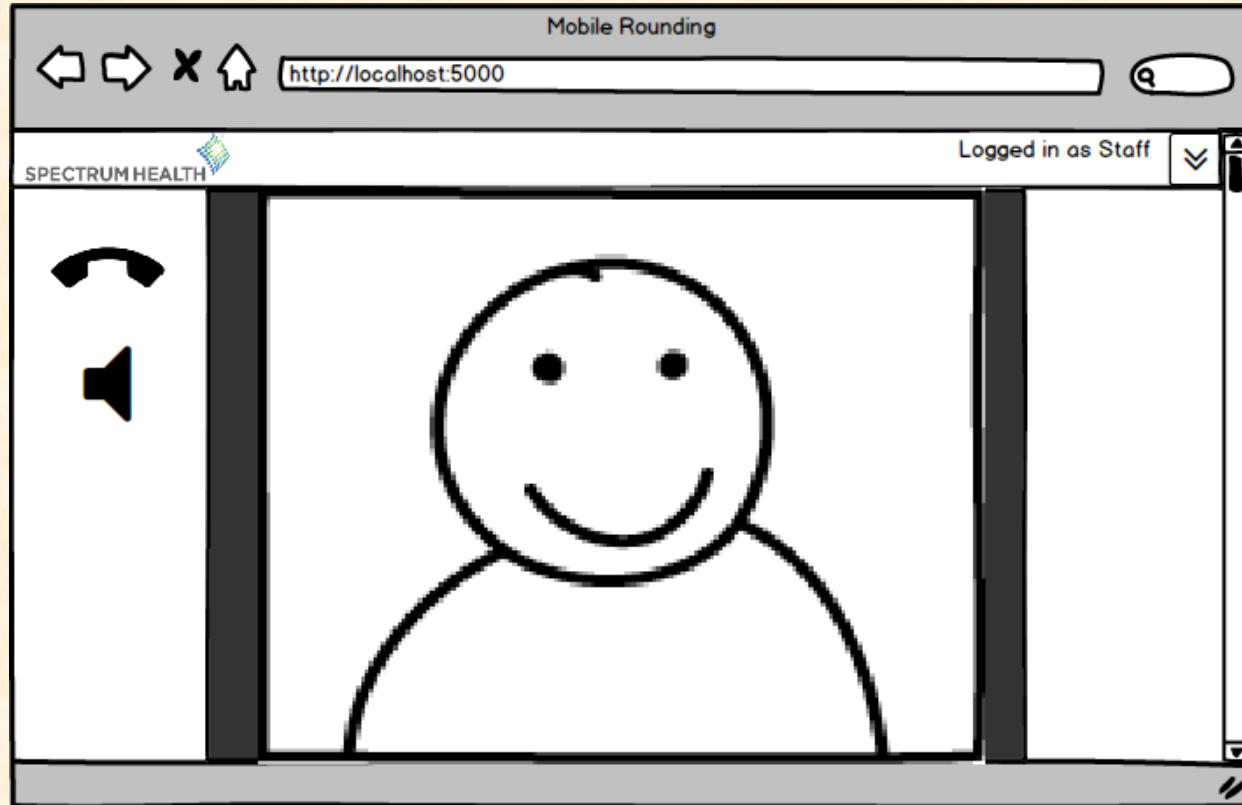


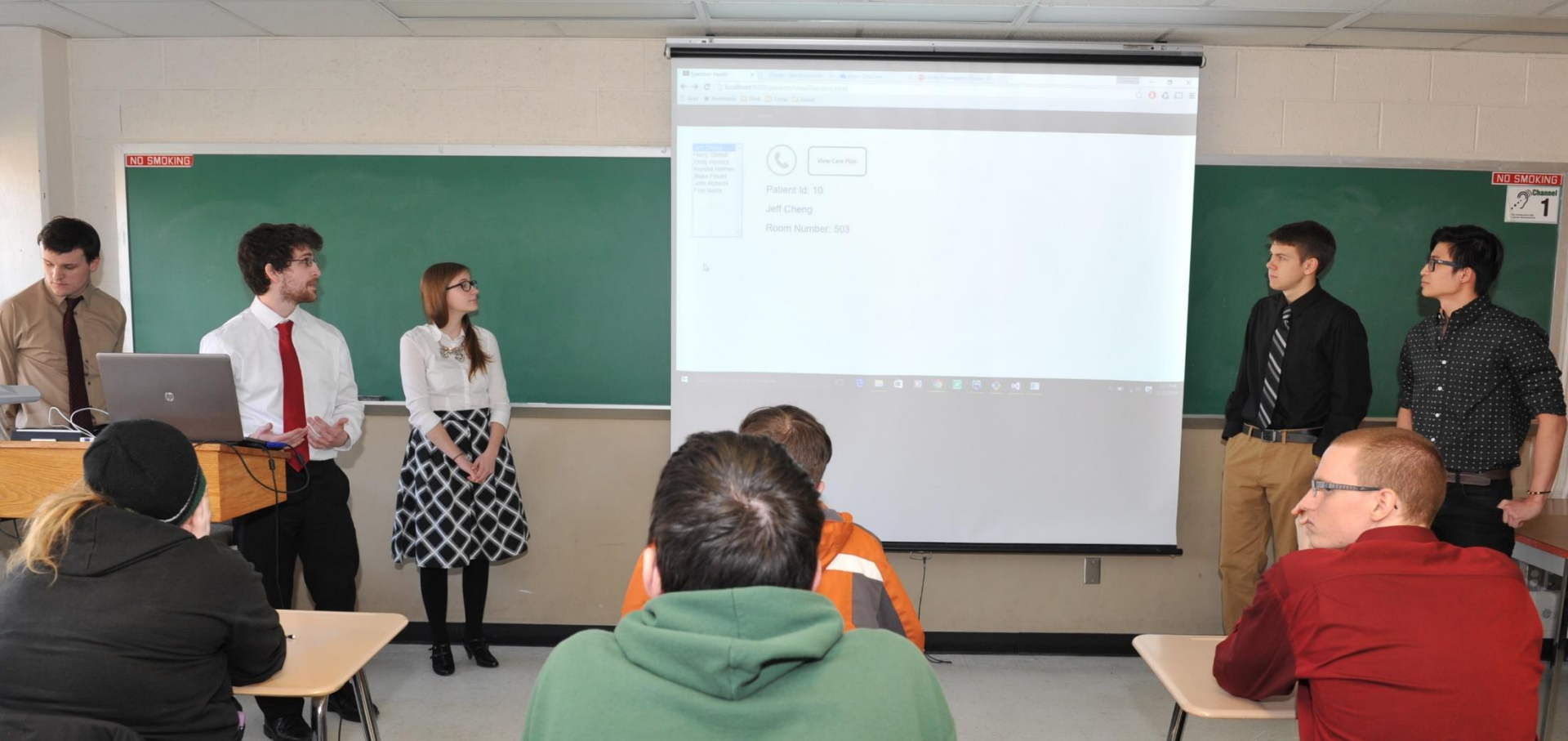


Team Spectrum Health
Project Plan Presentation

Team Spectrum Health Project Plan Presentation

Screen Mockup

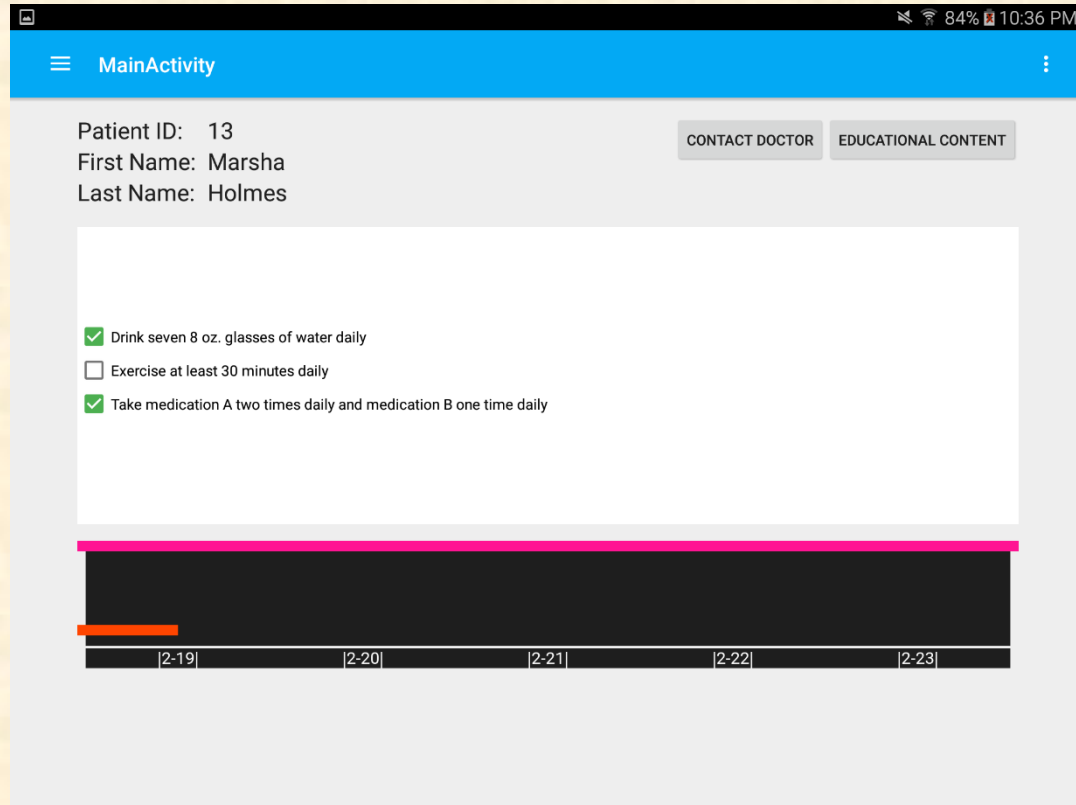




Team Spectrum Health Alpha Presentation

Team Spectrum Health Alpha Presentation

Patient Plan

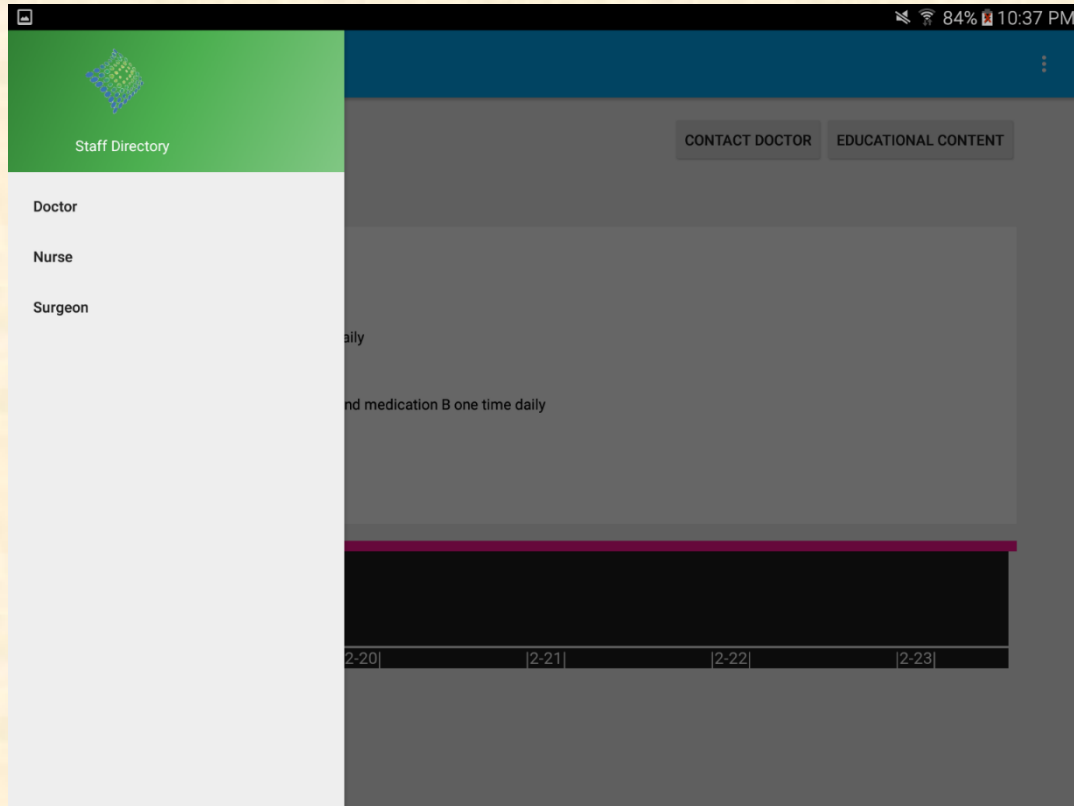


The image shows a mobile application interface for a 'Patient Plan'. At the top, there is a blue header bar with a hamburger menu icon on the left, the text 'MainActivity' in the center, and a vertical ellipsis icon on the right. Below the header, the patient information is displayed: 'Patient ID: 13', 'First Name: Marsha', and 'Last Name: Holmes'. To the right of this information are two buttons: 'CONTACT DOCTOR' and 'EDUCATIONAL CONTENT'. Below the patient information is a large white rectangular area containing three checklist items, each with a green checkmark icon: 'Drink seven 8 oz. glasses of water daily', 'Exercise at least 30 minutes daily', and 'Take medication A two times daily and medication B one time daily'. At the bottom of the screen is a dark grey timeline bar with a pink horizontal line above it. The timeline bar has five segments labeled with dates: '[2-19]', '[2-20]', '[2-21]', '[2-22]', and '[2-23]'. An orange vertical line is positioned at the start of the '[2-19]' segment.



Team Spectrum Health Alpha Presentation

Staff Directory





Team Spectrum Health Alpha Presentation

Team Spectrum Health Alpha Presentation

Video Call



The Capstone Experience

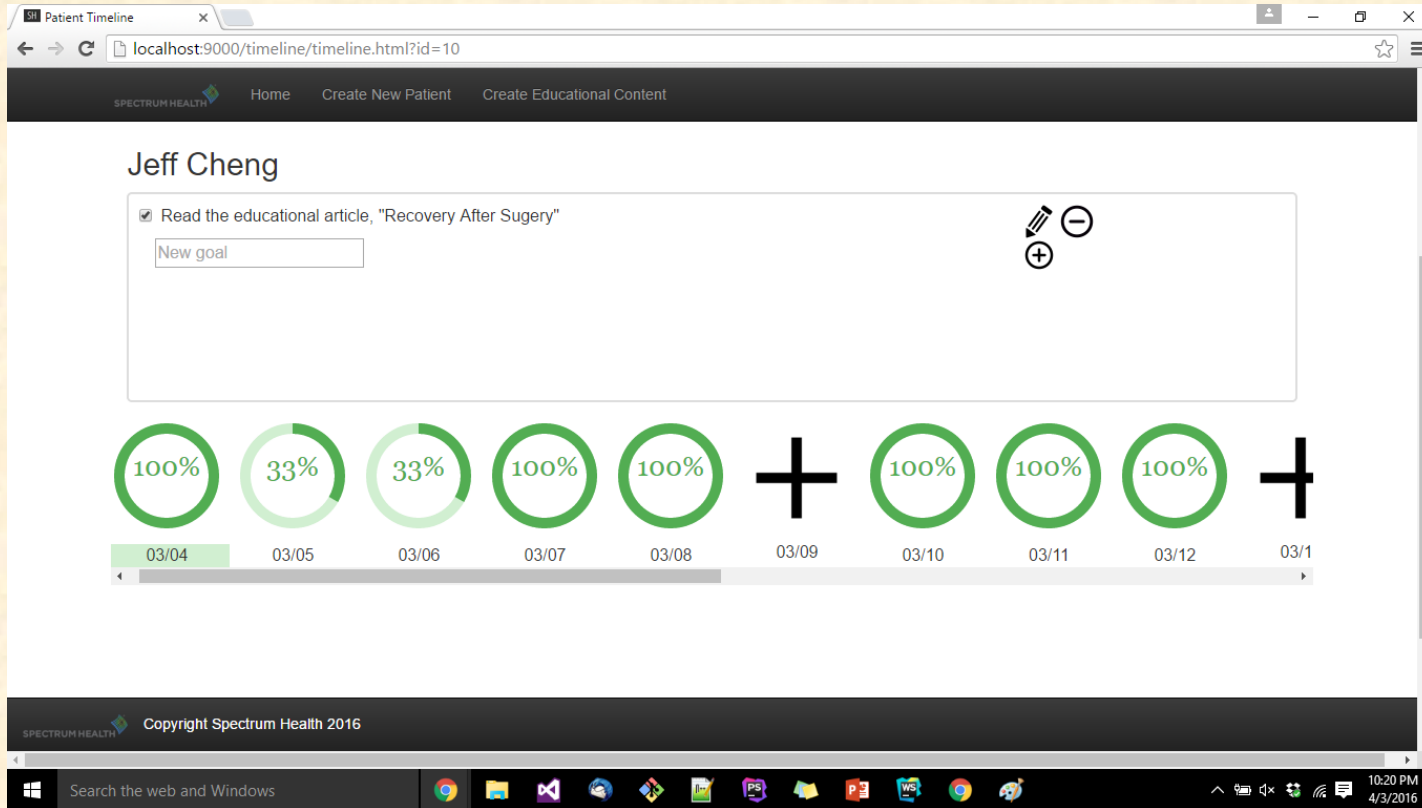




Team Spectrum Health Beta Presentation

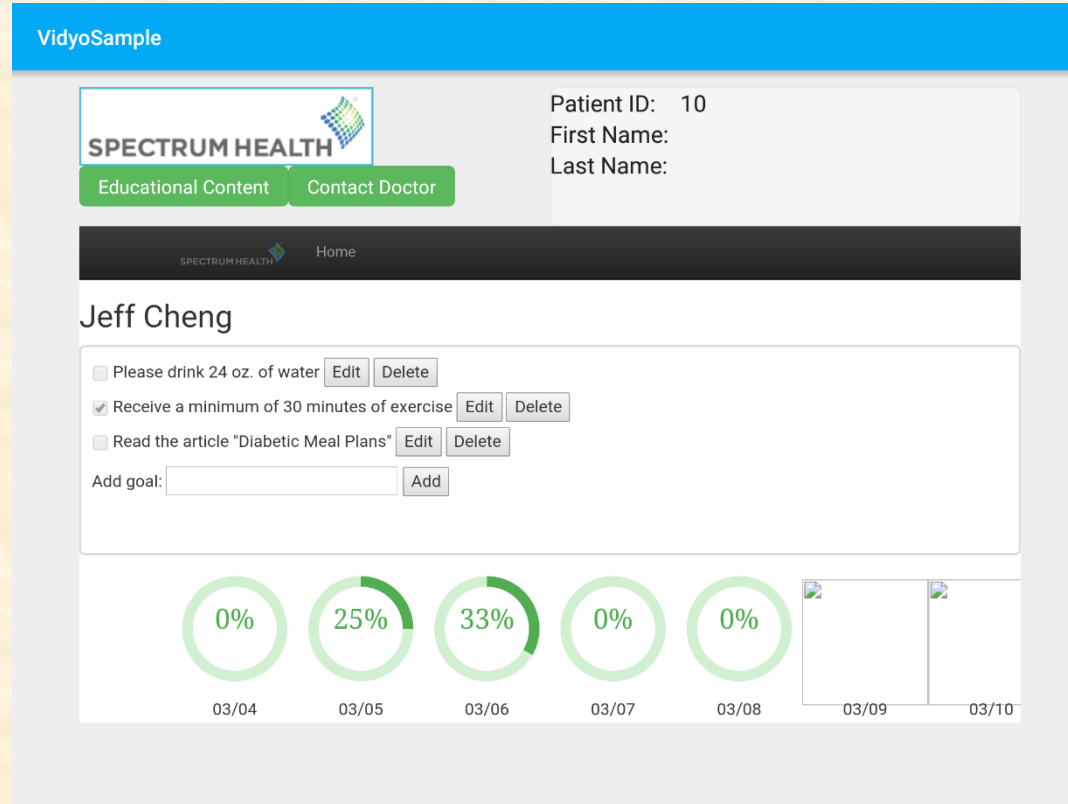
Team Spectrum Health Beta Presentation

Web App Timeline View



Team Spectrum Health Beta Presentation

Mobile App Timeline View





Team Spectrum Health Beta Presentation

Team Spectrum Health Beta Presentation

Mobile App Video Call



The Capstone Experience





Team Spectrum Health
Design Day

MICHIGAN STATE
UNIVERSITY

The Capstone Experience

Team TechSmith

Department of Computer Science and Engineering
Michigan State University
Spring 2016



*From Students...
...to Professionals*



TechSmith®

Screen Recording & Video Editing

A powerful, yet easy-to-use screen recorder, Camtasia helps you create professional videos without having to be a video pro. Easily record your screen movements and actions, or import HD video from a camera or other source. Customize and edit content on both Mac and Windows platforms, and share your videos with viewers on nearly any device.

Team TechSmith Project Overview

Cloud Based Video Face Tracking

- Functionalities
 - Track Faces in Video
 - Applying Effects (Like Blurring)
 - Using Cloud Computing
- Features
 - Support Login, Identity and Access Control
 - Provide Web-Based Video Editing
 - Support Both Automatic and Manual Detection
 - Control Effects
 - Specify on Per Face Basis
 - Adjust Size, Location and Duration
 - Render New Video with Effects Applied
 - Include
 - Quick Previewing
 - Trimming and Editing Segments Out
 - Silencing Audio
 - Enable Uploading to YouTube
 - Build on Microsoft Azure Cloud Platform
- Technologies
 - FaceTracker
 - OpenCV
 - ModernCPP
 - CSS / HTML / JavaScript
 - RESTful Web Services
 - Microsoft C#/.NET
 - Microsoft Azure
 - Microsoft Azure Active Directory



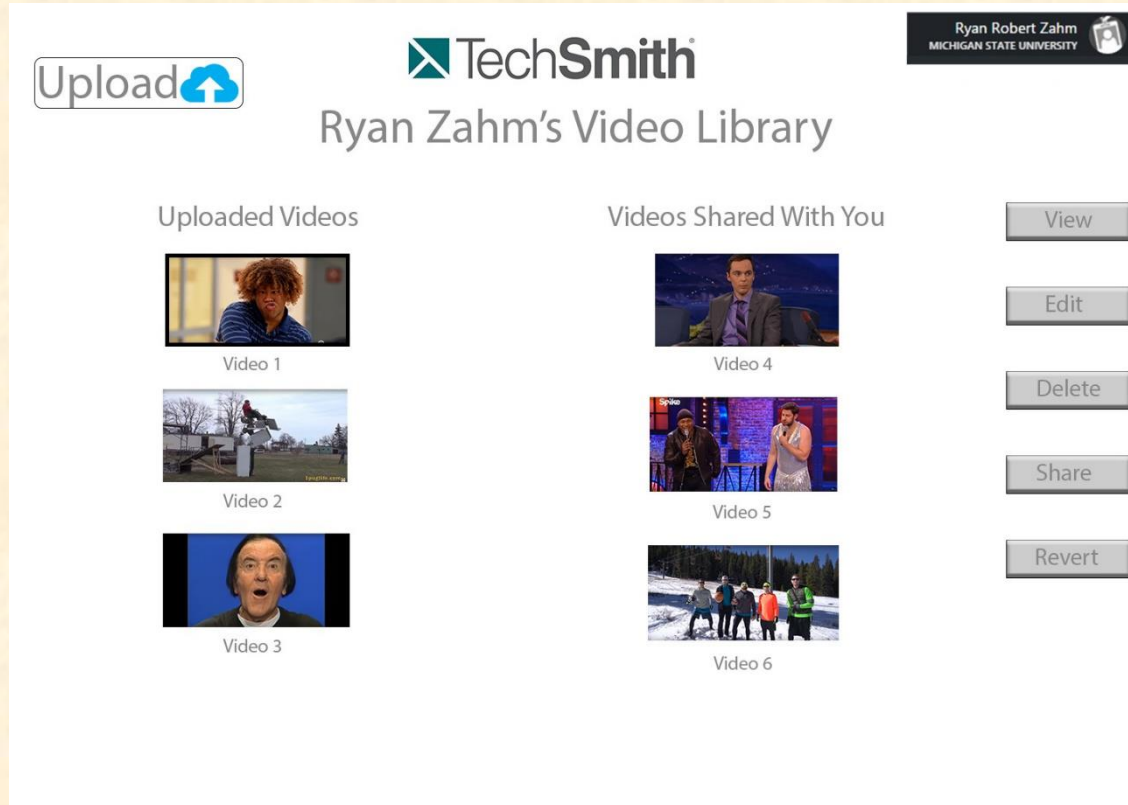


Team TechSmith

Eric Newman, Alyssa Werner, Alex Cramer, Kayla Grotzky, Ryan Zahm

Team TechSmith Project Plan Presentation

Screen Mockup

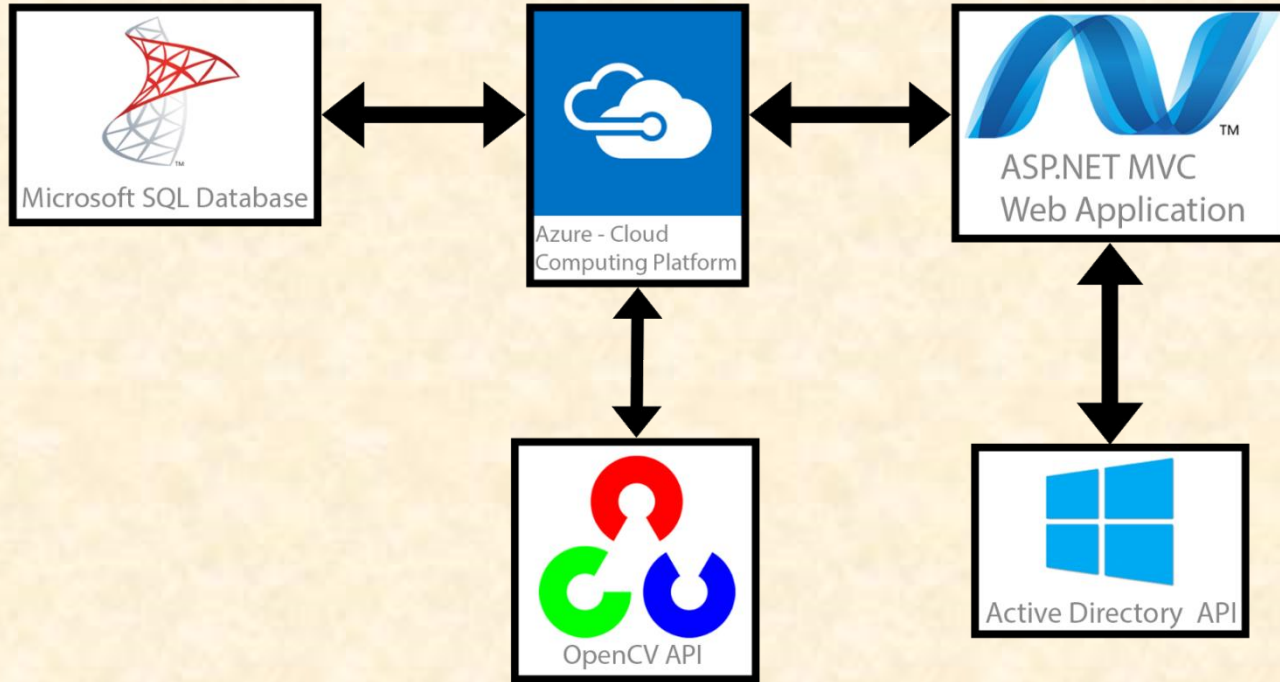


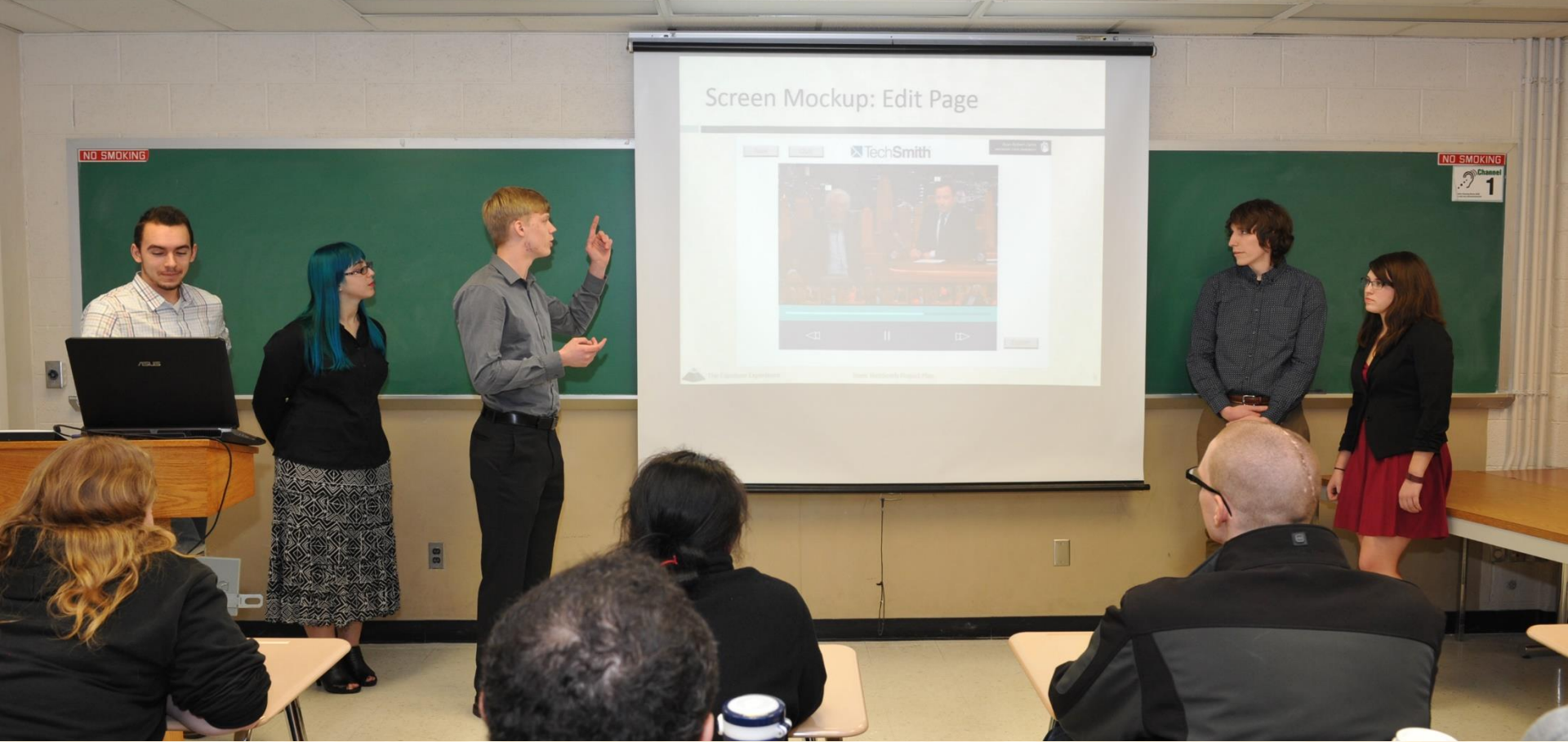


Team TechSmith Project Plan Presentation

Team TechSmith Project Plan Presentation

Architecture Diagram





Team TechSmith Project Plan Presentation

Team TechSmith Project Plan Presentation

Screen Mockup

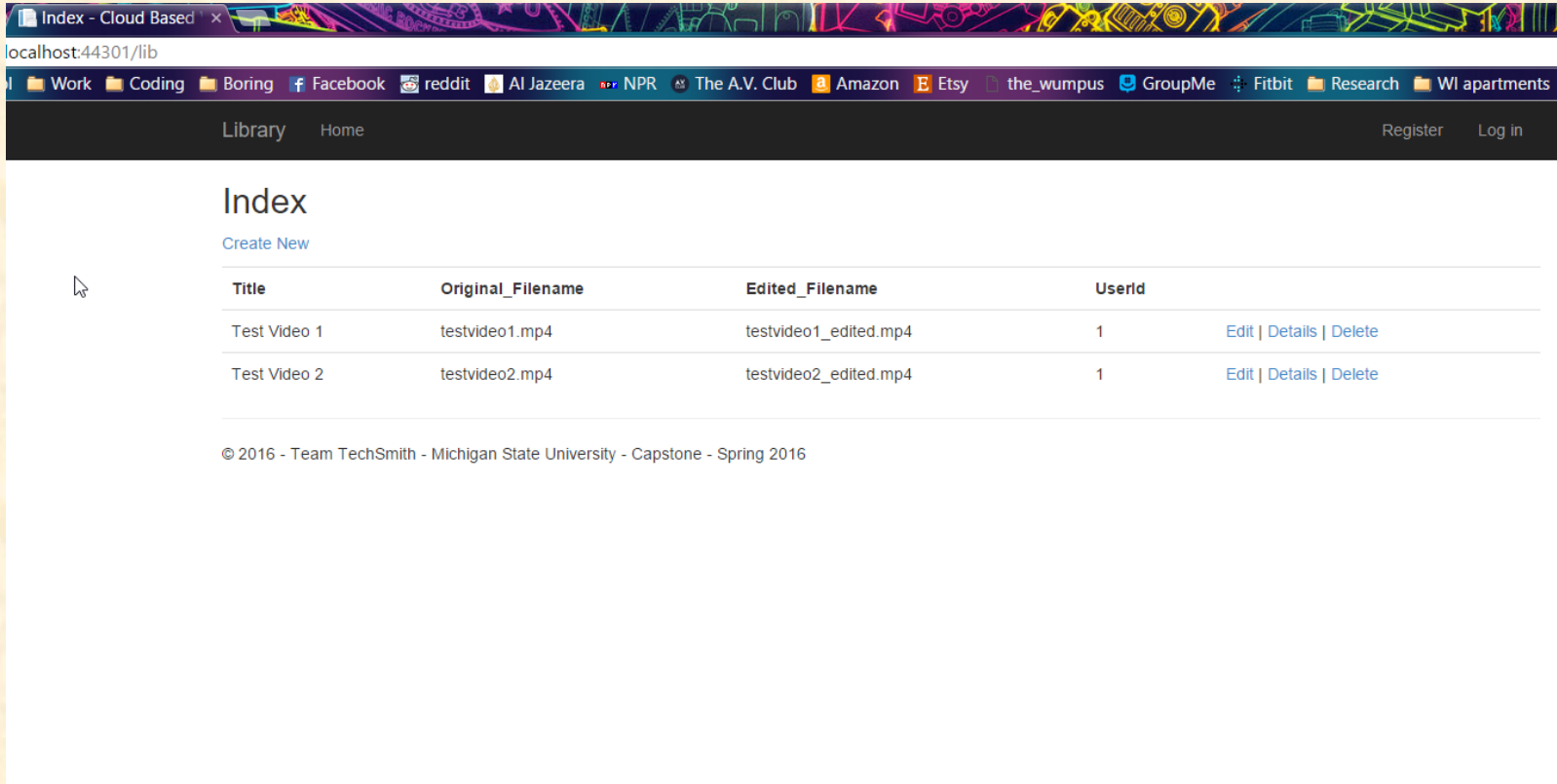




Team TechSmith Alpha Presentation

Team TechSmith Alpha Presentation

Video Library



The screenshot shows a web browser window with the address bar displaying 'localhost:44301/lib'. The browser's bookmark bar contains various links including 'Work', 'Coding', 'Boring', 'Facebook', 'reddit', 'Al Jazeera', 'NPR', 'The A.V. Club', 'Amazon', 'Etsy', 'the_wumpus', 'GroupMe', 'Fitbit', 'Research', and 'WI apartments'. The web application has a dark header with 'Library' and 'Home' links, and 'Register' and 'Log in' buttons. The main content area is titled 'Index' and includes a 'Create New' link. Below this is a table with two rows of video data. At the bottom, a copyright notice reads '© 2016 - Team TechSmith - Michigan State University - Capstone - Spring 2016'.

Index - Cloud Based

localhost:44301/lib

Work Coding Boring Facebook reddit Al Jazeera NPR The A.V. Club Amazon Etsy the_wumpus GroupMe Fitbit Research WI apartments

Library Home Register Log in

Index

[Create New](#)

Title	Original_Filename	Edited_Filename	UserId	
Test Video 1	testvideo1.mp4	testvideo1_edited.mp4	1	Edit Details Delete
Test Video 2	testvideo2.mp4	testvideo2_edited.mp4	1	Edit Details Delete

© 2016 - Team TechSmith - Michigan State University - Capstone - Spring 2016

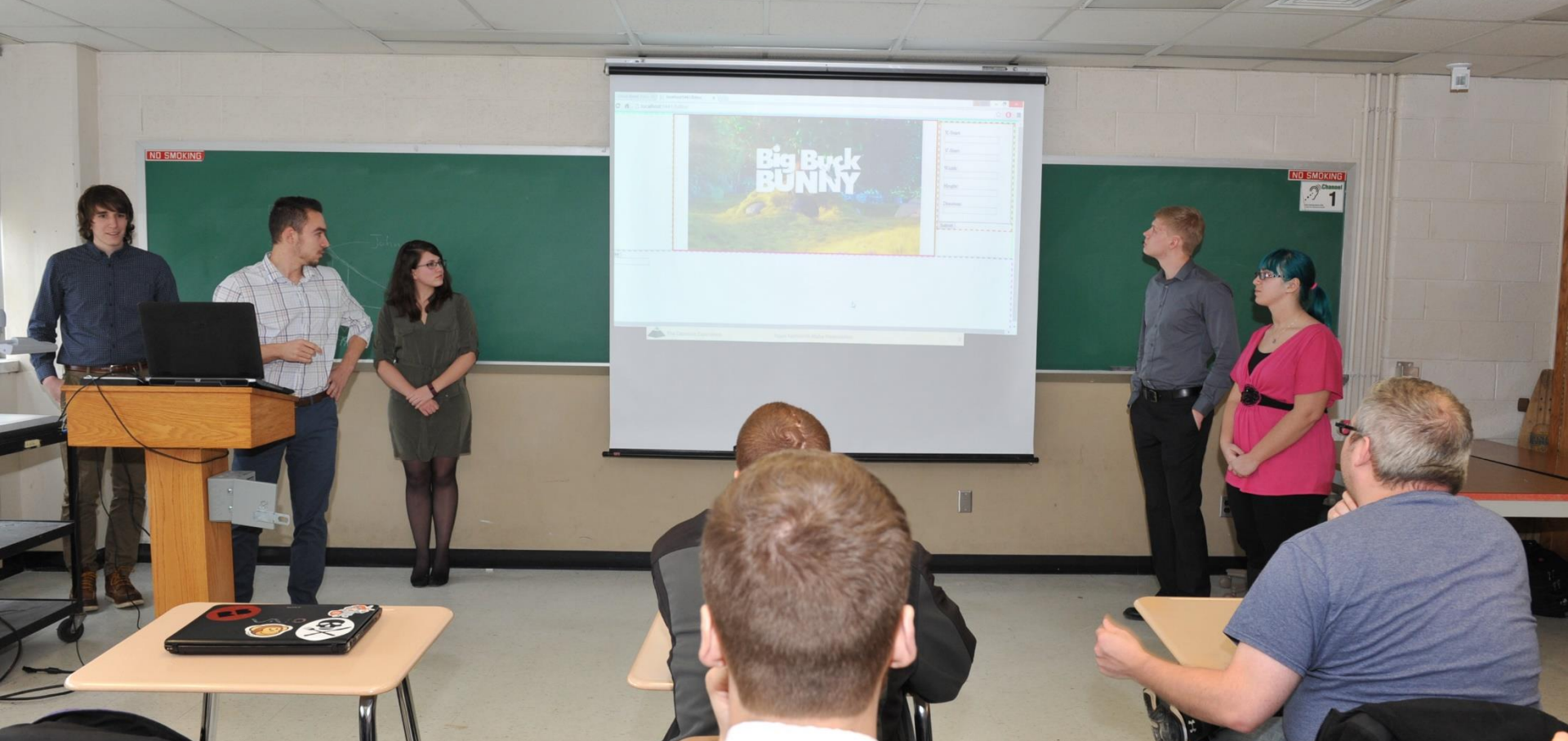
Team TechSmith Alpha Presentation

Face Tracking



The Capstone Experience

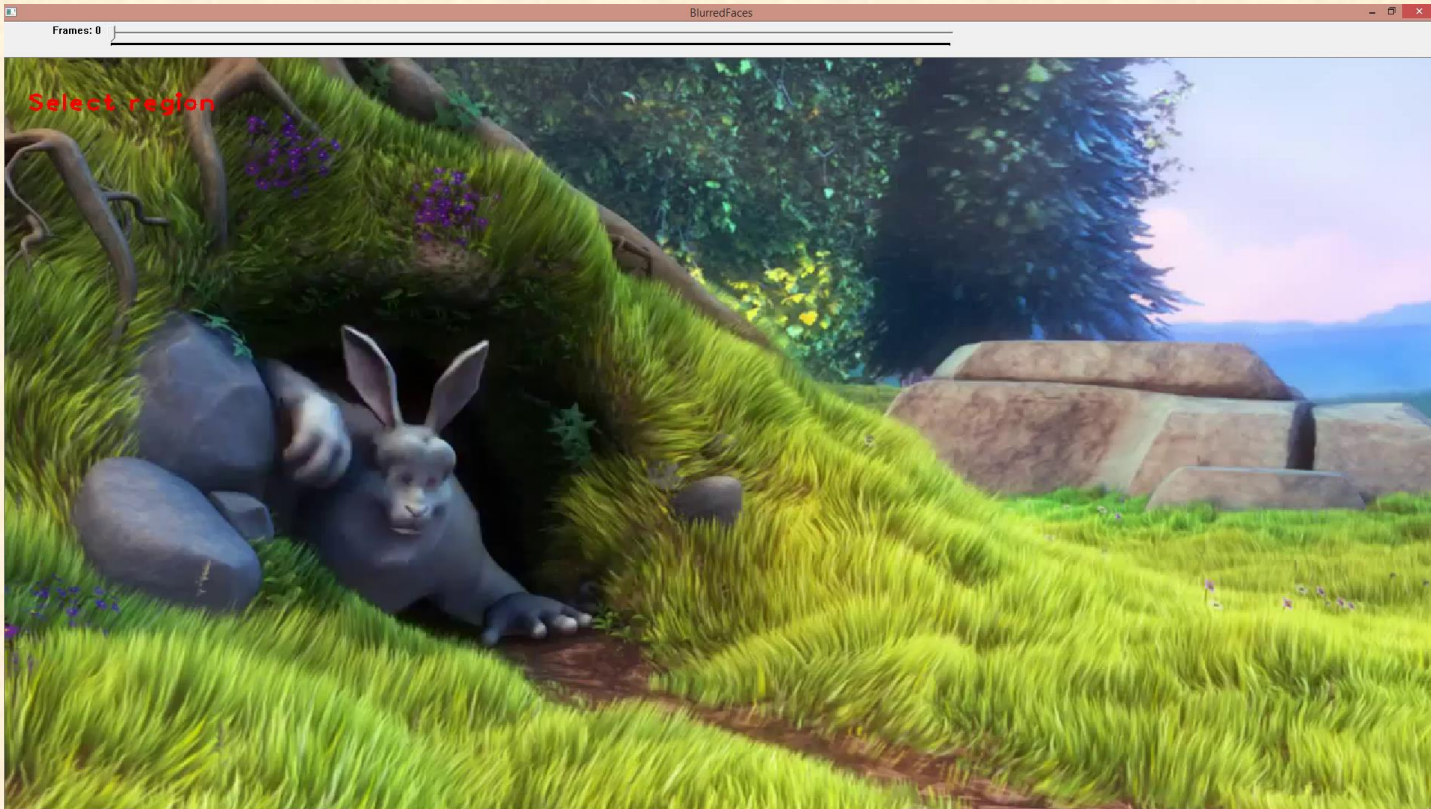




Team TechSmith Alpha Presentation

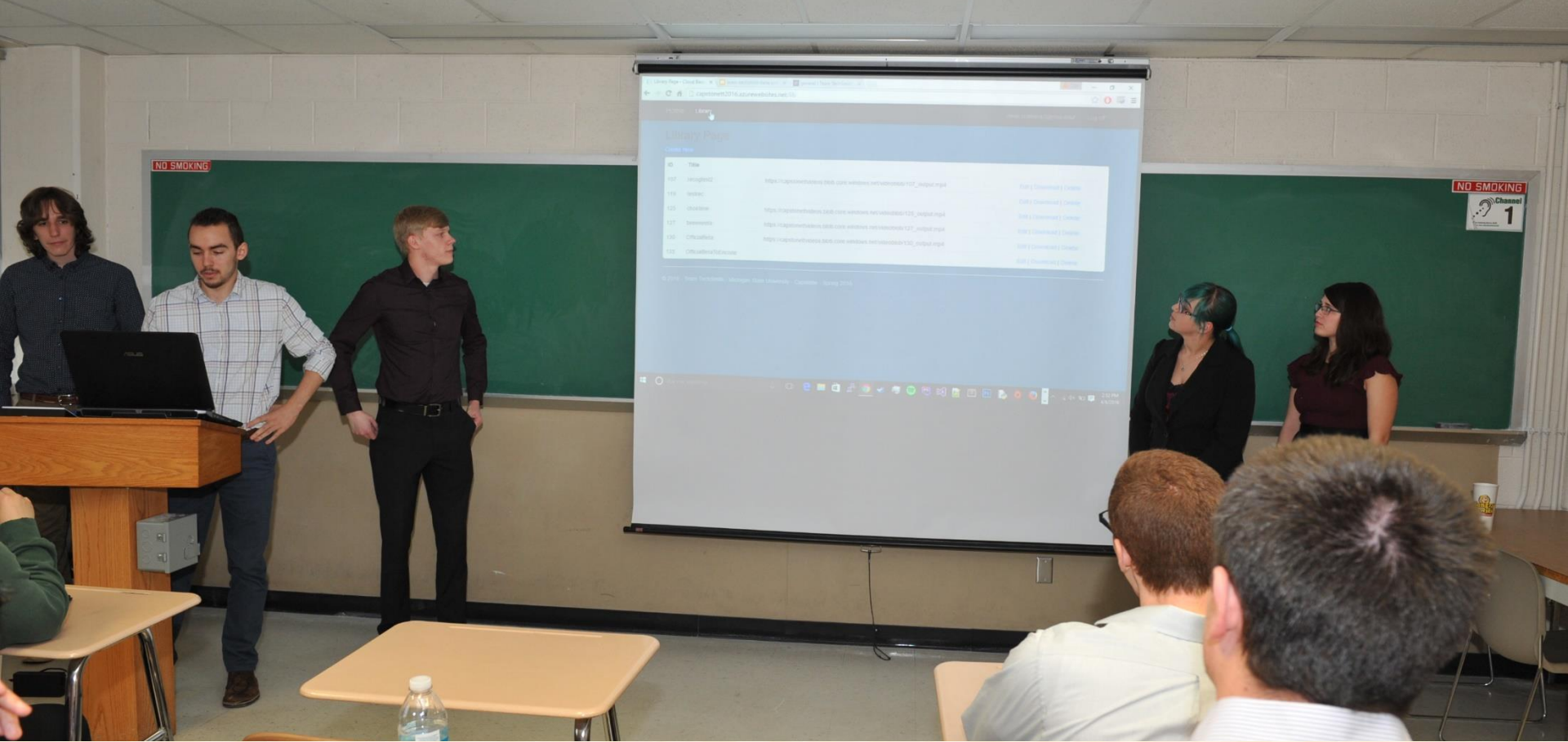
Team TechSmith Alpha Presentation

Video Parsing



The Capstone Experience





Team TechSmith Beta Presentation

Team TechSmith Beta Presentation

Register Page

[Home](#) [Library](#) [Register](#) [Log in](#)

Register.

Create a new account.

Email

Password

Confirm password

© 2016 - Team TechSmith - Michigan State University - Capstone - Spring 2016



Team TechSmith Beta Presentation

Library Page

[Home](#) [Library](#) Hello cramera3@msu.edu | [Log off](#)

Index

[Create New](#)

		Title			
test2	0	0	https://capstonetechsmith.com/windows-netvideoblob/test2ZCQV7.mp4	489021e-2a3c-43ba-bb71-77a9a35c8d7	Edit Download Delete
testdownloadaxe	100	100	https://capstonetechsmith.com/windows-netvideoblob/testaxed7HMS.mp4		Edit Download Delete
editednewweel	100	100	https://capstonetechsmith.com/windows-netvideoblob/testaxed8P9WQ.mpg		Edit Download Delete

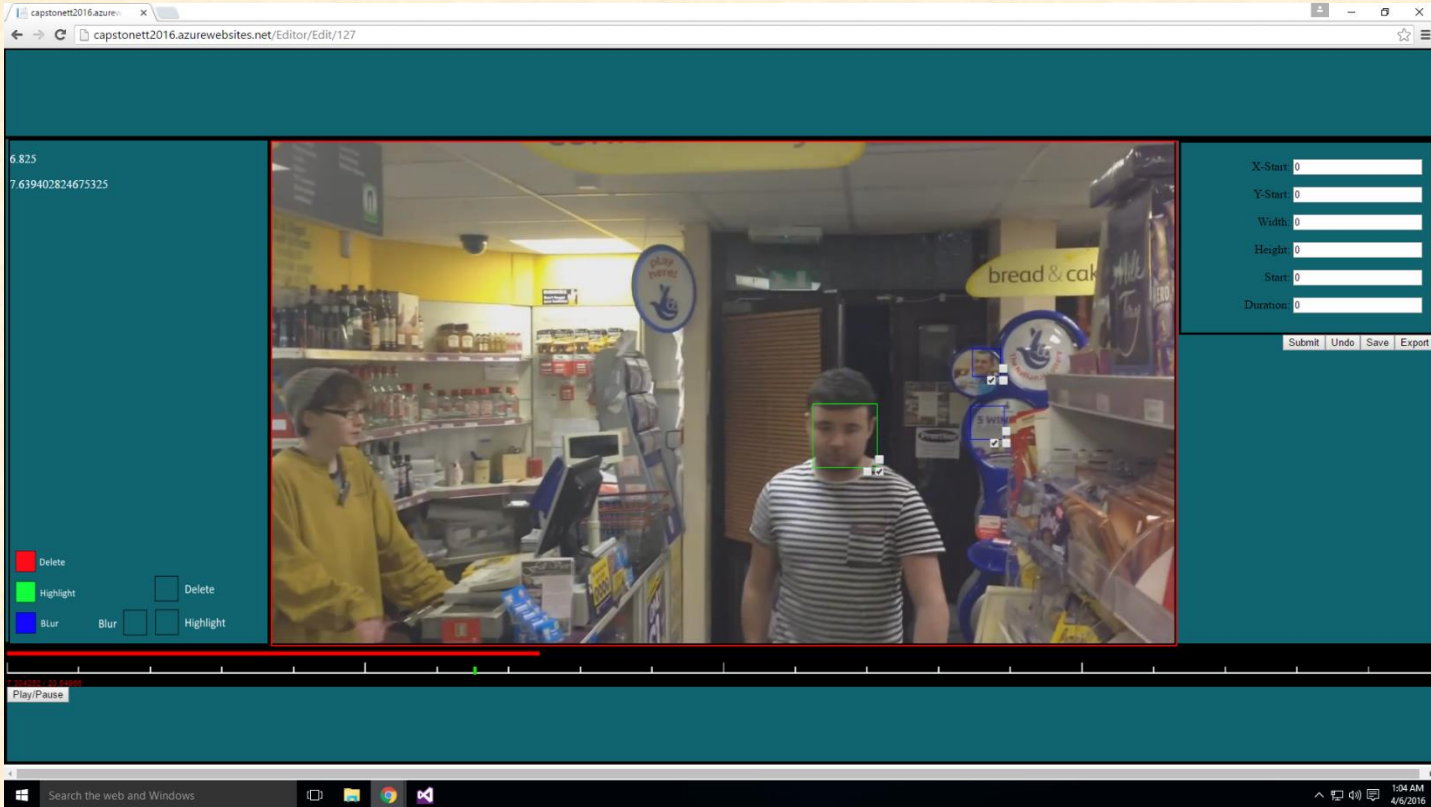
© 2016 - Team TechSmith - Michigan State University - Capstone - Spring 2016



Team TechSmith Beta Presentation

Team TechSmith Beta Presentation

Editor Page





Team TechSmith
Design Day

MICHIGAN STATE
UNIVERSITY

The Capstone Experience

Team Union Pacific

Department of Computer Science and Engineering
Michigan State University
Spring 2016



*From Students...
...to Professionals*



BUILDING AMERICA[®]



Union Pacific



Guest



www.up.com



BUILDING AMERICA®

MyUPRR Login

CUSTOMERS

EMPLOYEES

SUPPLIERS

INVESTORS

MEDIA

ABOUT US

SEARCH

Union Pacific bridges are safe for the freight traffic they carry, as well as motorists and pedestrians. Our safety focus starts with more than 38,000 inspections annually to ensure the structural integrity for each bridge. For our employees, these inspections are more than just a job. **Learn more about UP's detailed inspection process.**

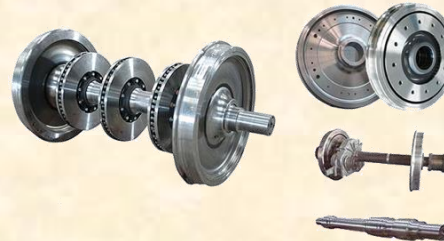


Steel Giants Promise Safe Passage

Team Union Pacific Project Overview

Oculus Rift Inspection and Training Tool

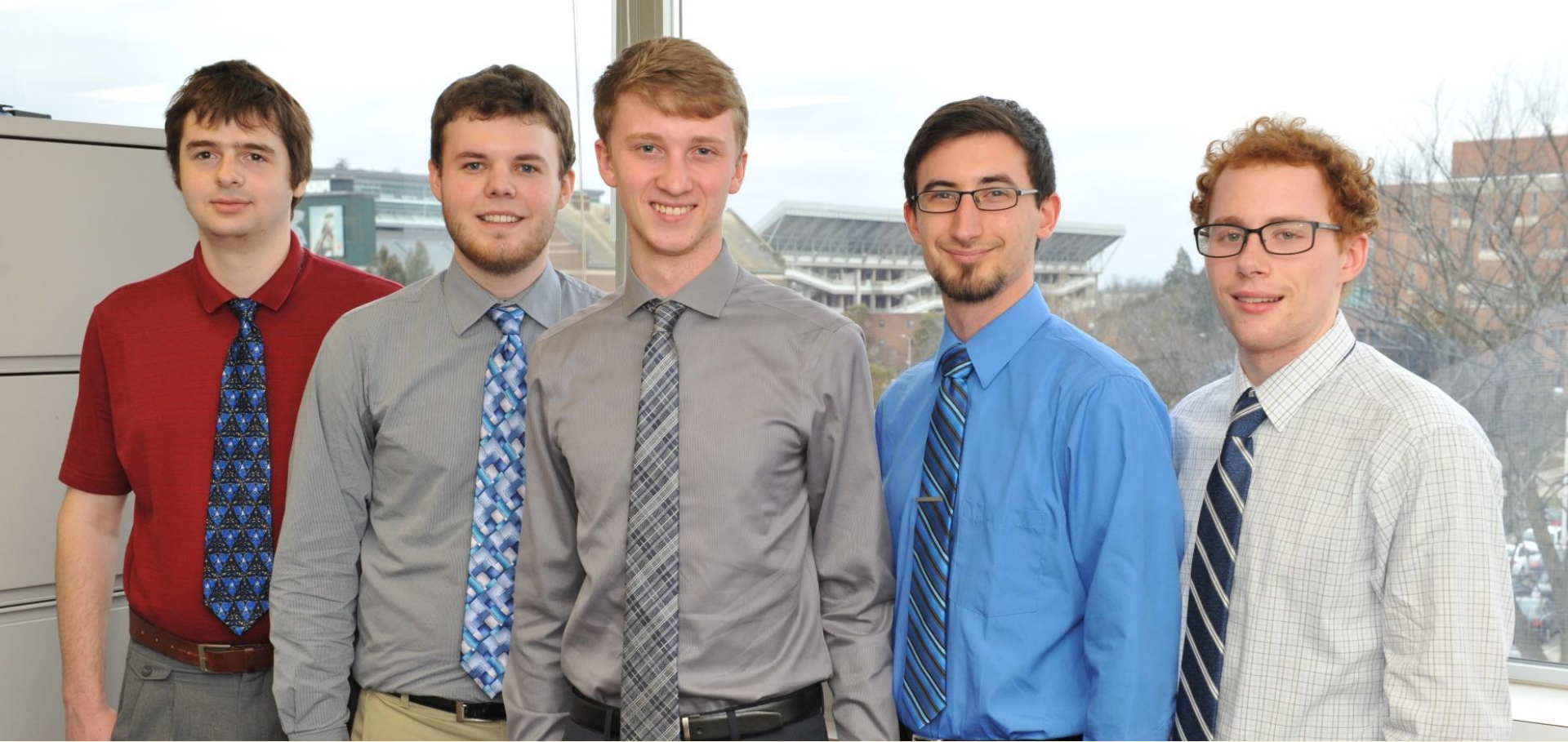
- Functionalities
 - Inspect and Learn About
 - Virtual 3D Objects
 - Using Oculus Rift
- Features
 - Provide Three Modes
 - Free-Form Inspection
 - Scripted Movie
 - Task-Oriented / Scenario-Based
 - Support
 - Move, Rotate and Zoom
 - Sub-Component Viewing
 - Exploded View
 - Play Animations of Object's Functionality
 - Handle Multimedia Overlays
 - Focus on Railroad Objects (but Handle Any)
- Technologies
 - Oculus Rift
 - Unity 3D



BUILDING AMERICA®

Omaha, Nebraska
Okemos, Michigan



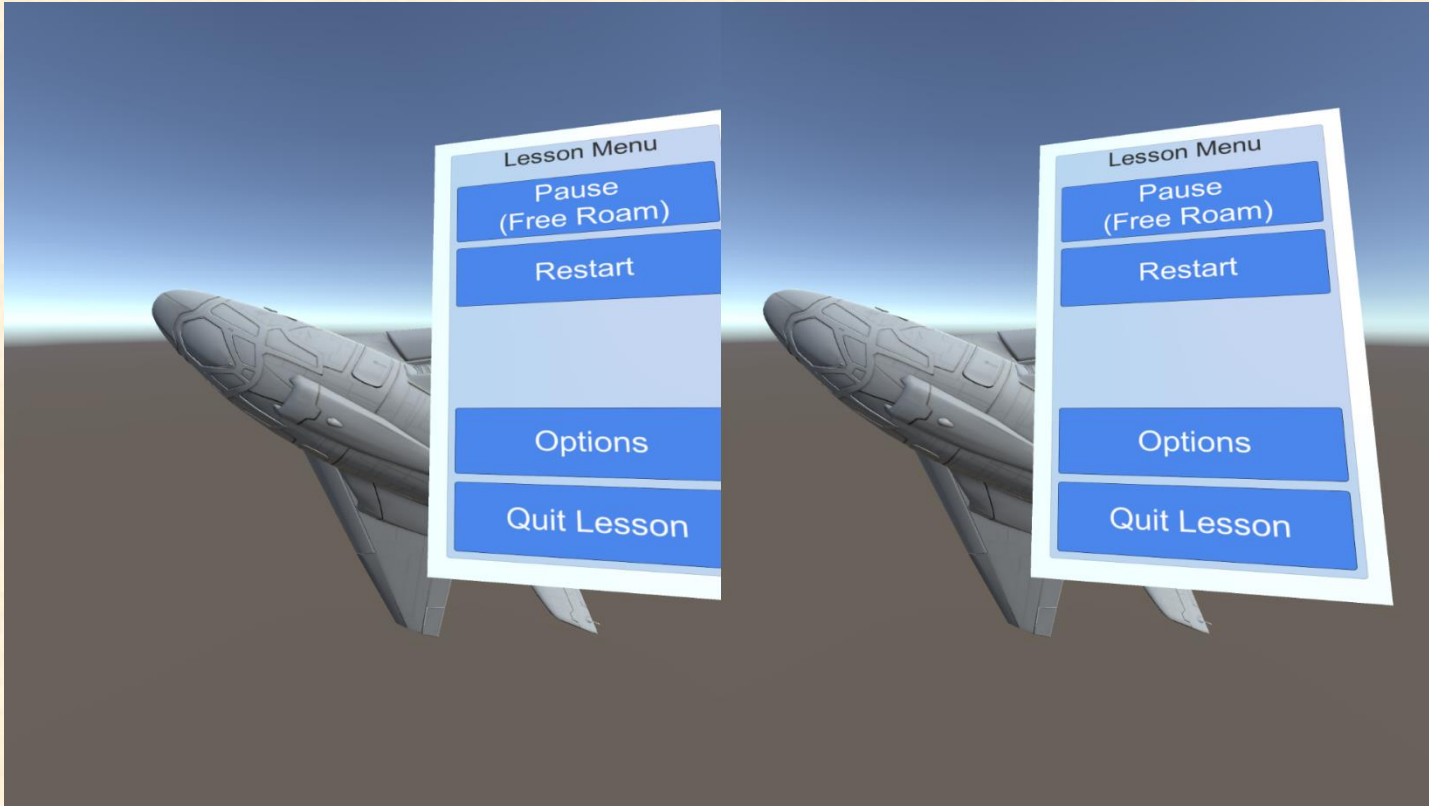


Team Union Pacific

William Norman, Michael Aughton, Sam Berndt, Grant King, Mitch Leinbach

Team Union Pacific Project Plan Presentation

Screen Mockup

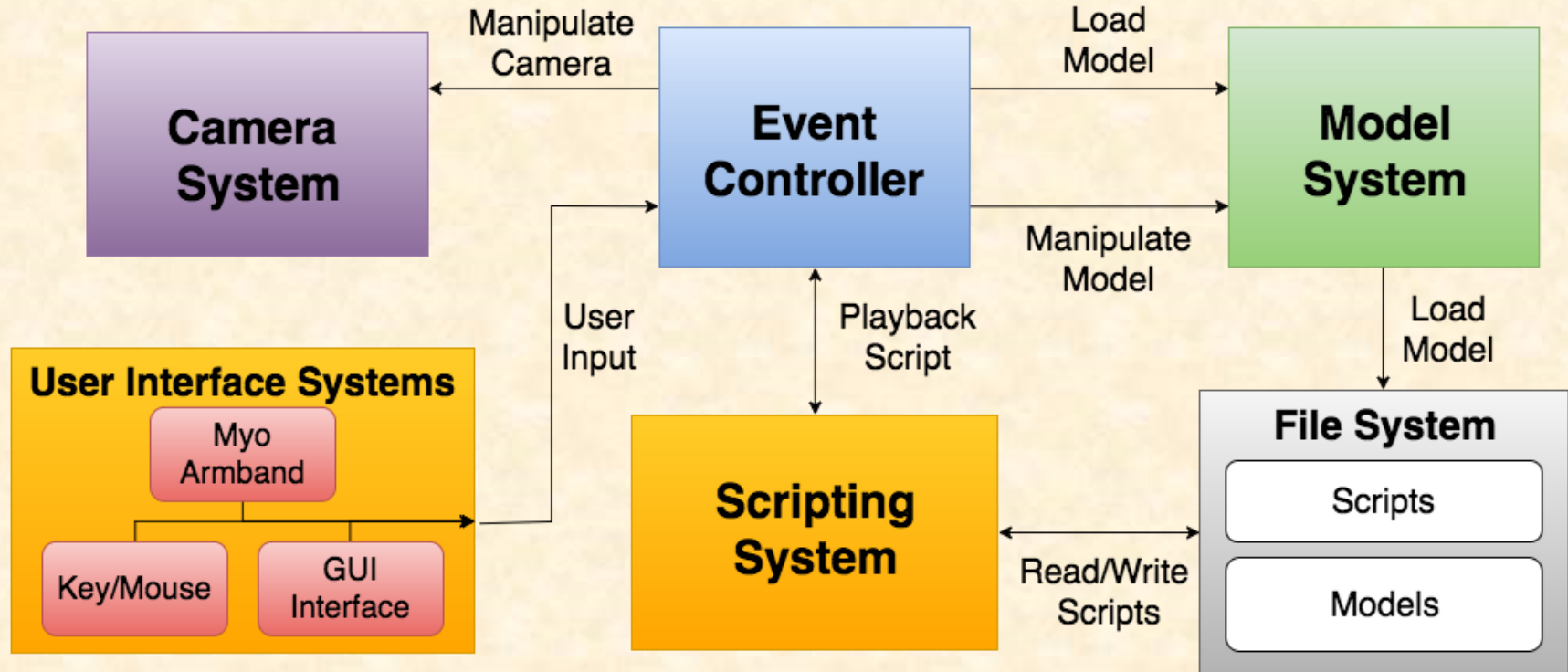




Team Union Pacific Project Plan Presentation

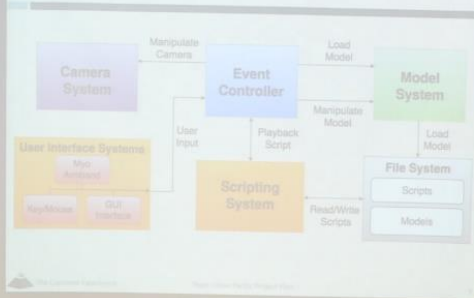
Team Union Pacific Project Plan Presentation

Architecture Diagram





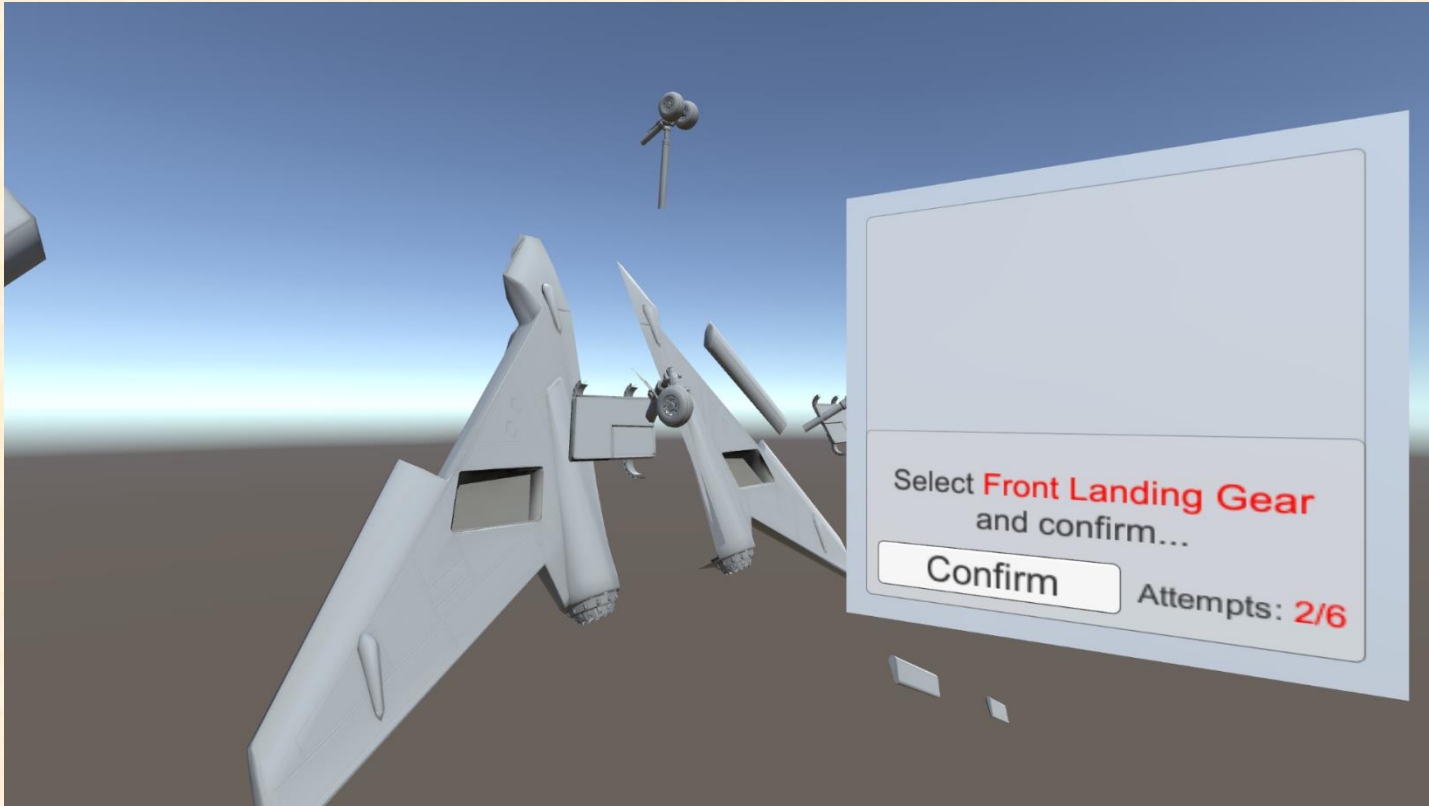
System Architecture



Team Union Pacific
Project Plan Presentation

Team Union Pacific Project Plan Presentation

Screen Mockup

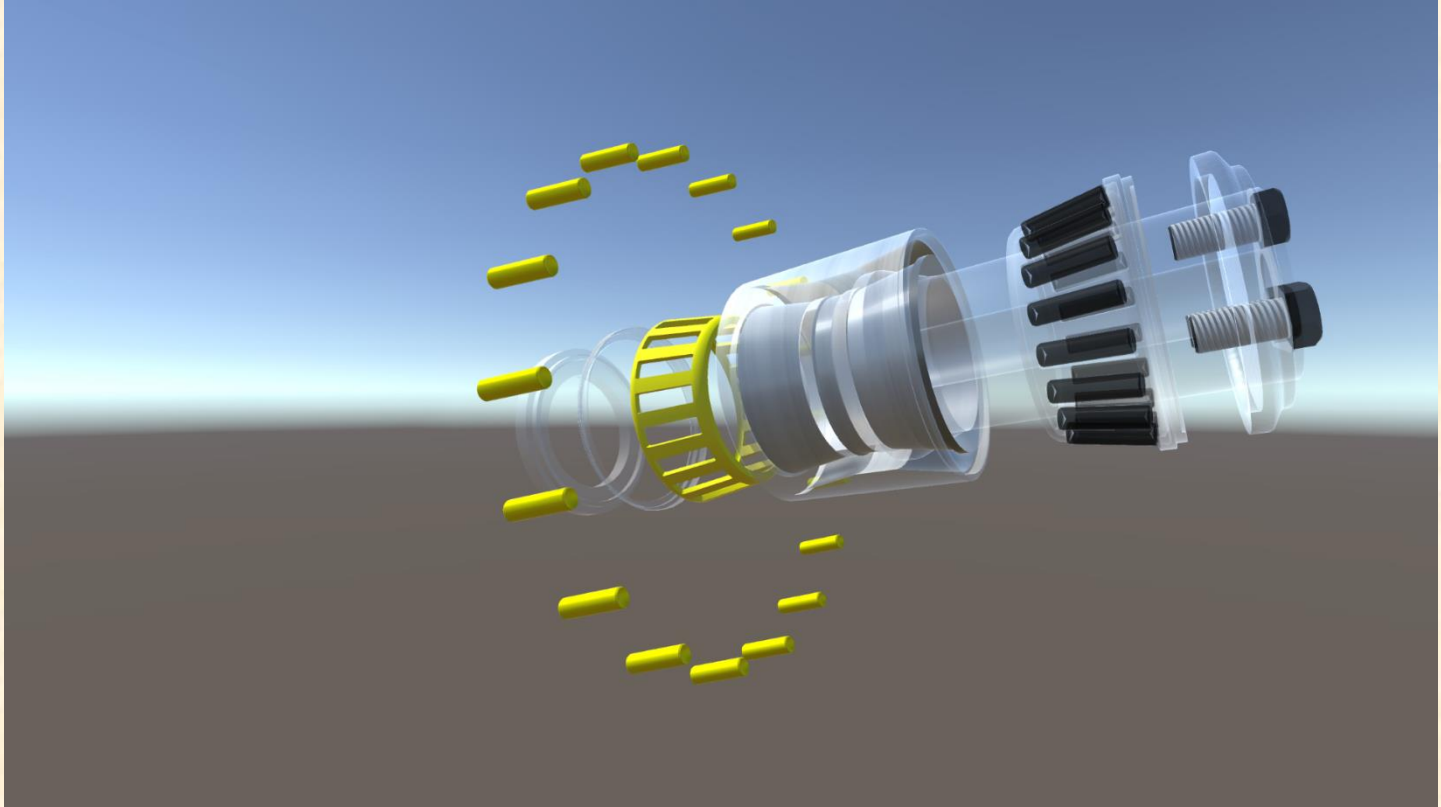




Team Union Pacific Alpha Presentation

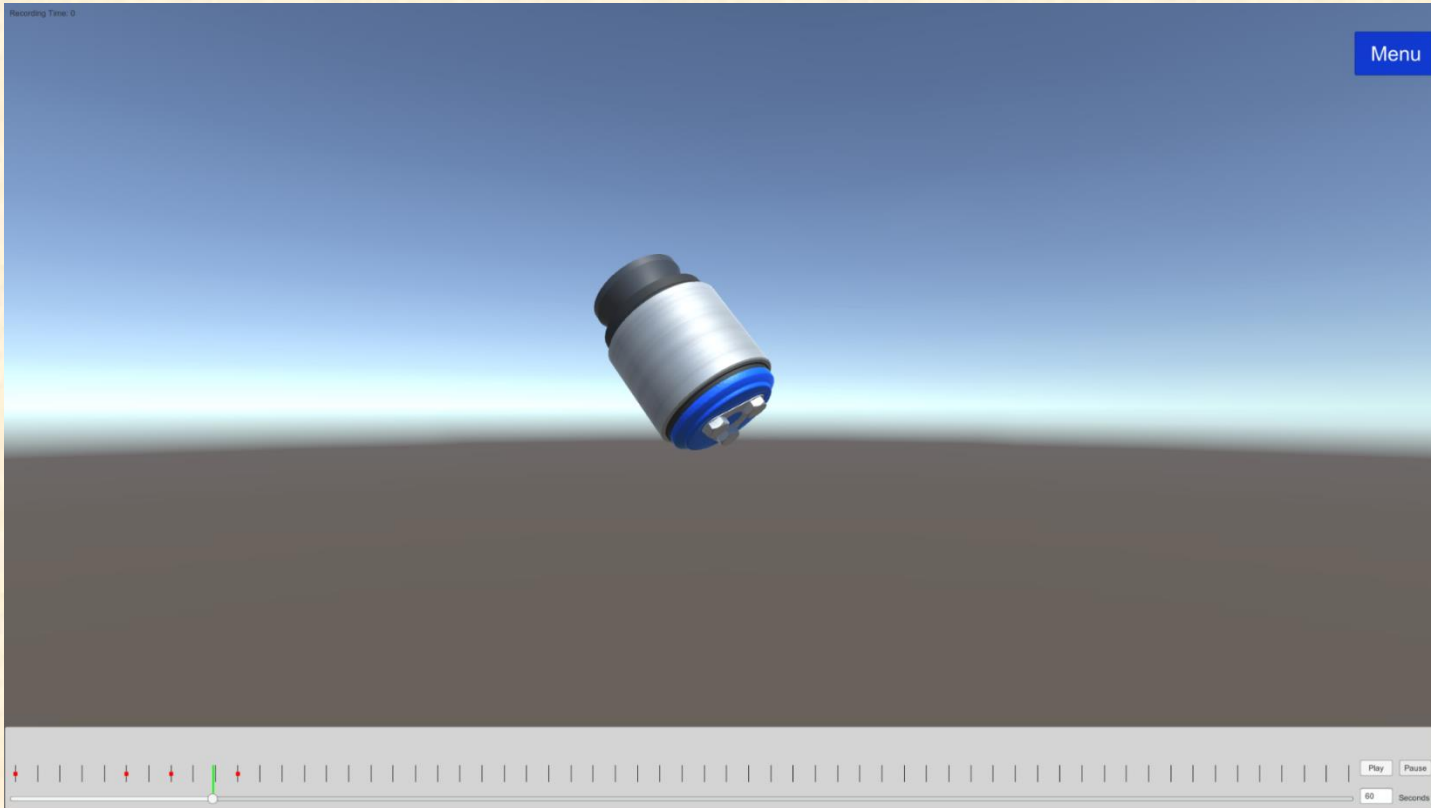
Team Union Pacific Alpha Presentation

Axel Bearing – Exploded View



Team Union Pacific Alpha Presentation

Lesson Timeline



The Capstone Experience

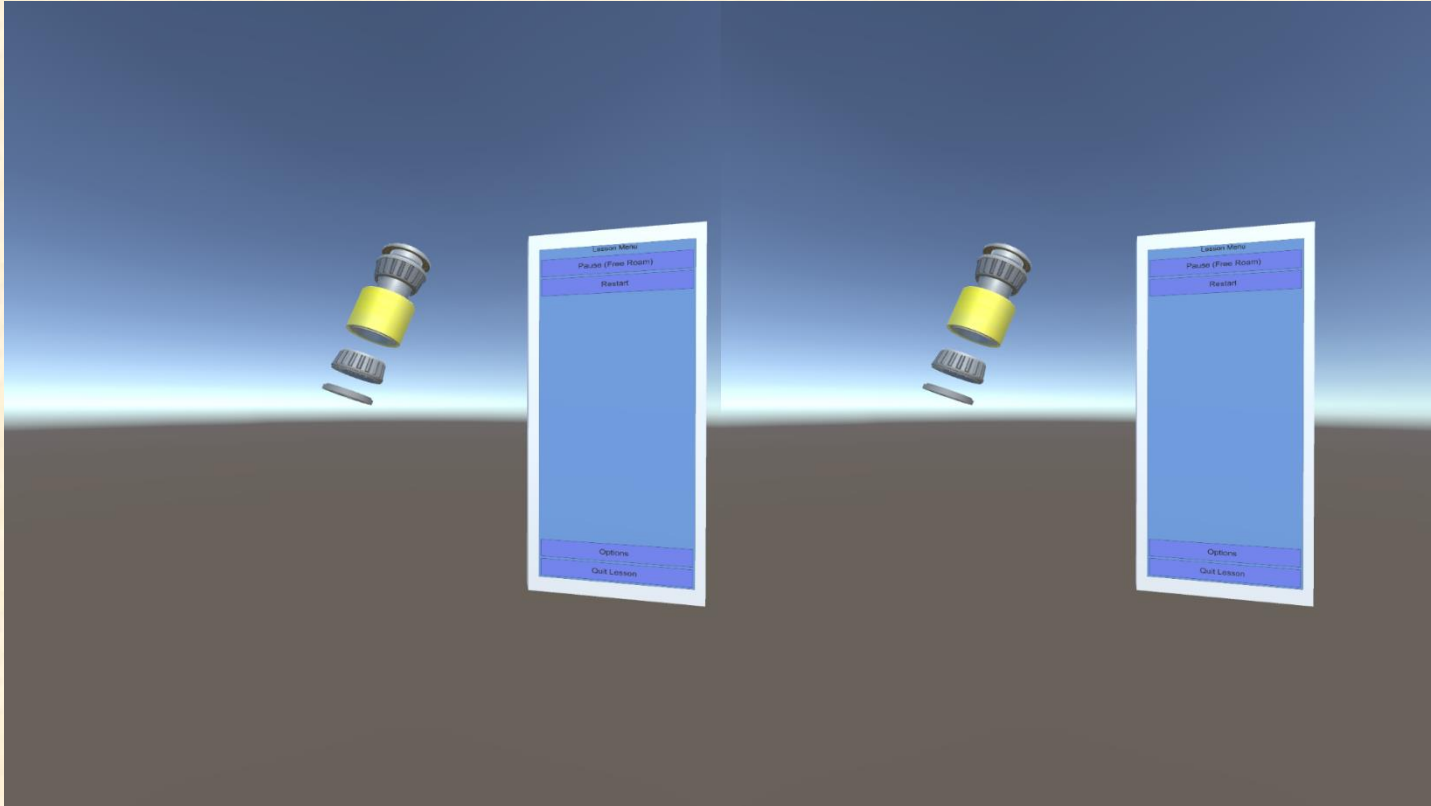


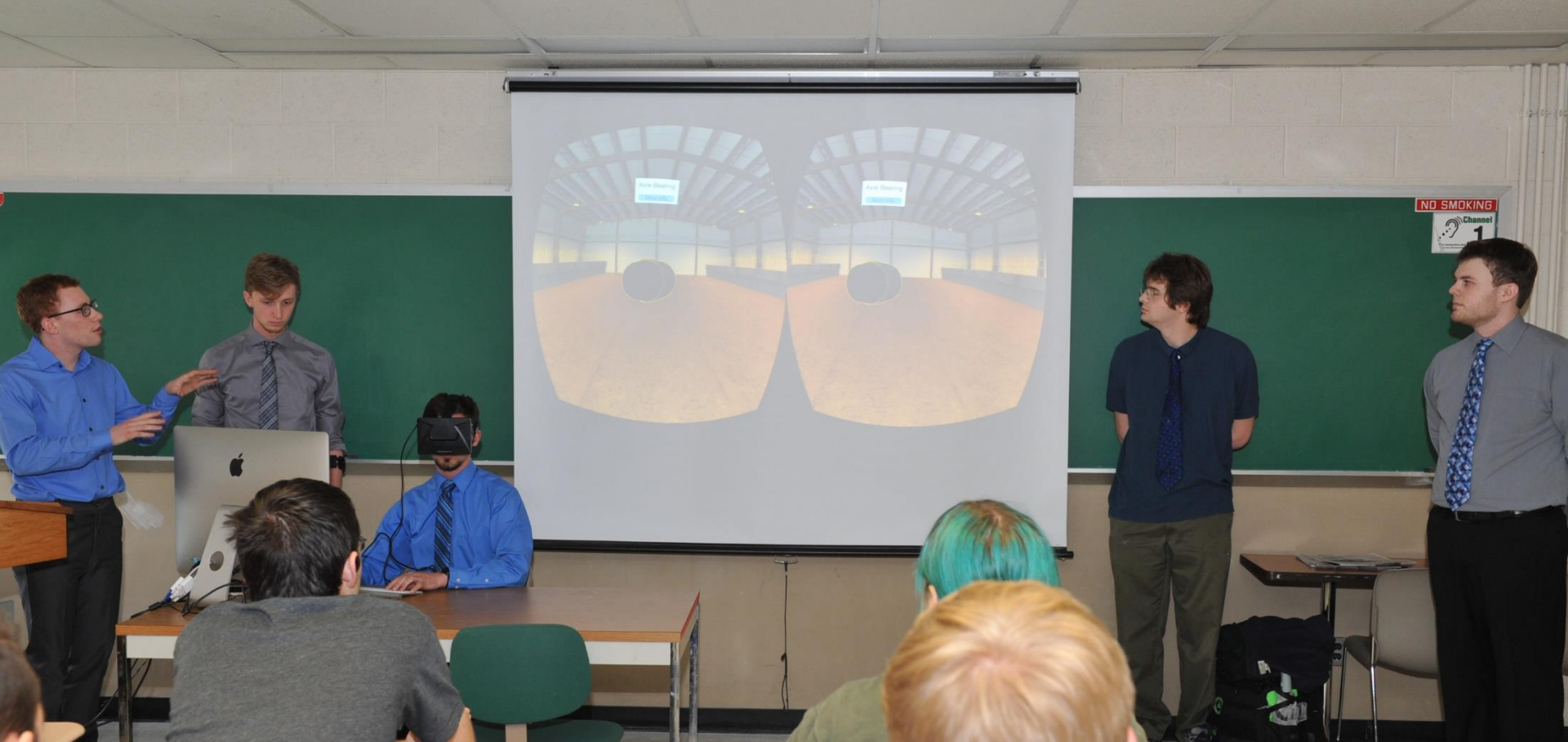


Team Union Pacific Alpha Presentation

Team Union Pacific Alpha Presentation

Oculus Dual Camera View





Team Union Pacific Beta Presentation

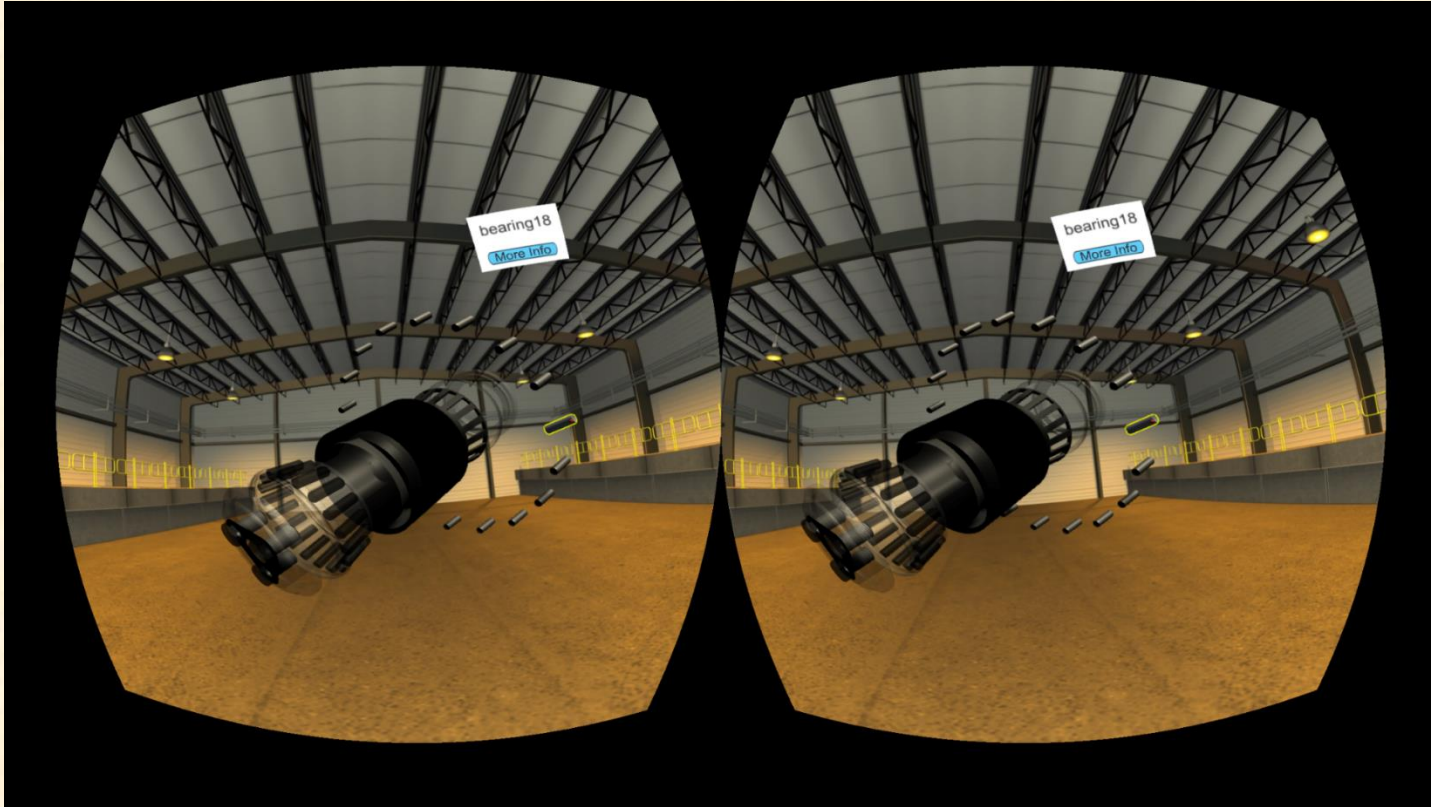
Team Union Pacific Beta Presentation

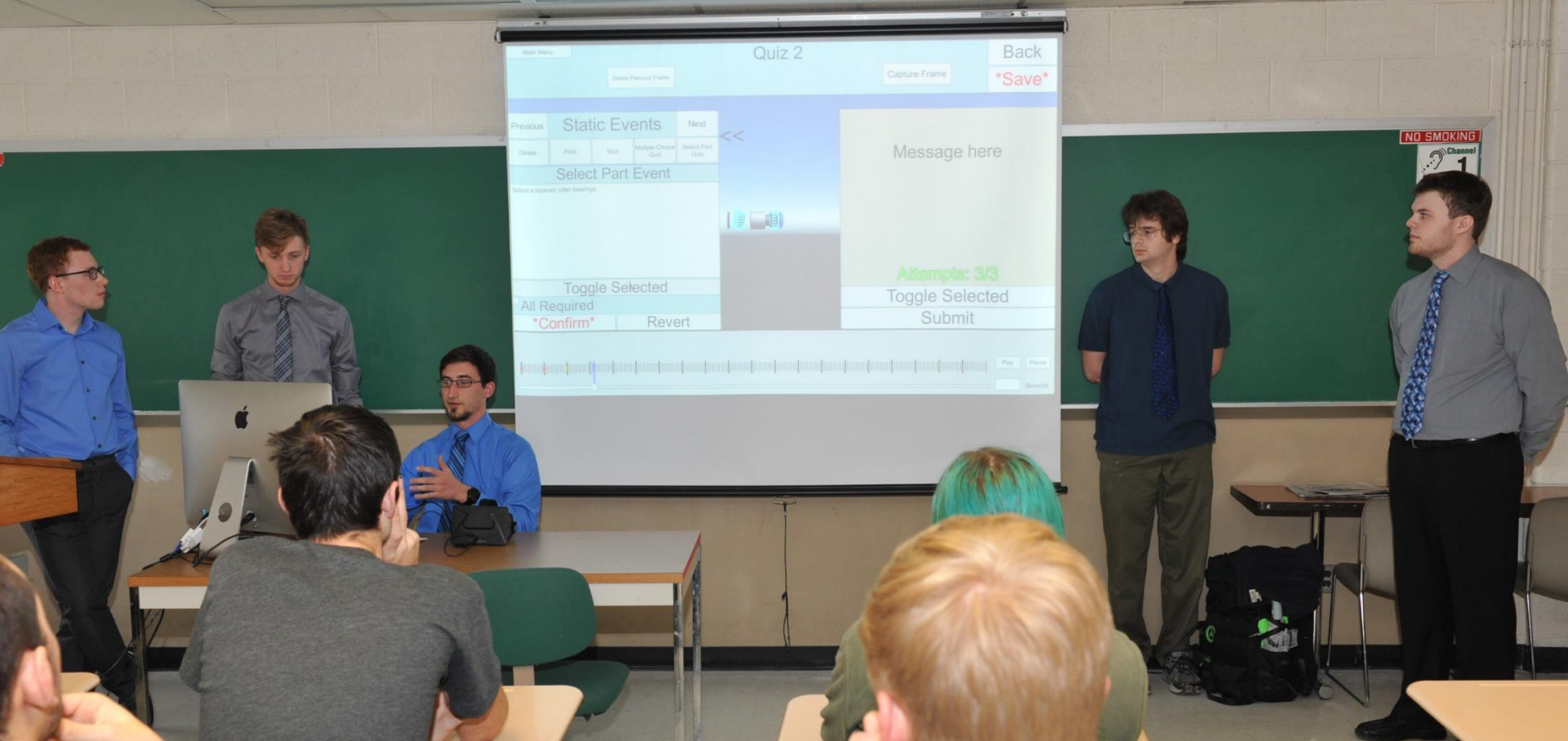
Subsystem of Locomotive



Team Union Pacific Beta Presentation

Oculus View of Axle Bearing

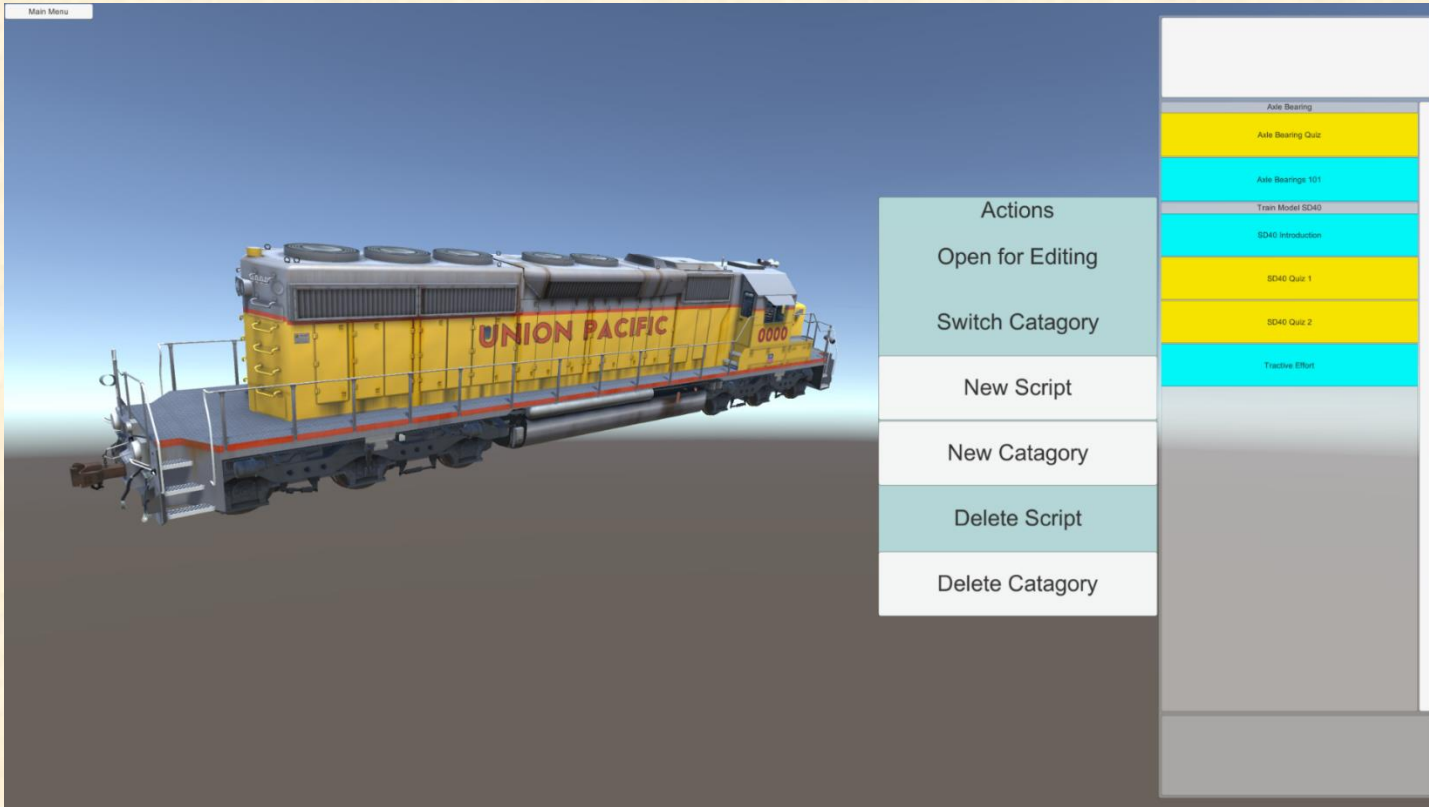




Team Union Pacific
Beta Presentation

Team Union Pacific Beta Presentation

Script Editor Menu





Team Union Pacific
Design Day

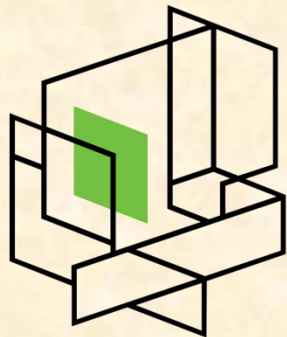
The Capstone Experience

Team Urban Science

Department of Computer Science and Engineering
Michigan State University
Spring 2016



*From Students...
...to Professionals*



URBAN SCIENCE™



URBAN SCIENCE

CAREERS LIBRARY ABOUT US CONTACT US UNITED STATES

Develop Dealer Network

Improve Dealer Performance

Manage Leads

Optimize Marketing

The Power of 4™

THE POWER OF 4™

Team Urban Science Project Overview

Dealership Inventory Optimization System

- Functionalities
 - For Dealers
 - Maintain Inventory of Most Desired Makes and Models
 - Via Web App
 - For Customers
 - Shop for Desired Make and Model
 - Via Mobile App
- Features
 - For Dealers
 - Accept Various Inputs and Constraints
 - Determine Optimal Dealership Inventory
 - Support All Modern Web Browsers
 - For Customers
 - Browse Dealer's Inventory
 - Locate and Purchase Desired Make and Model
 - Support Both Apple iOS and Google Android Devices
- Technologies
 - Apple iPads and iPhones (iOS) / Swift or Objective-C
 - Google Android Tablets and Phones / Java
 - CSS / HTML / JavaScript / PHP
 - Microsoft SQL Server
 - Microsoft Visual Studio



URBAN SCIENCE

Detroit, Michigan



Team Urban Science

Anthony Santoro, Justin Girard, Joey Norwood, Tyler Huttenga, Hannah White

Team Urban Science Project Plan Presentation

Screen Mockup

Urban Science Web App

DashboardSettingsAboutLog Out

Dashboard

Calculator

Recommendations

Inventory

CurrentIncommingPlanned

Q Search

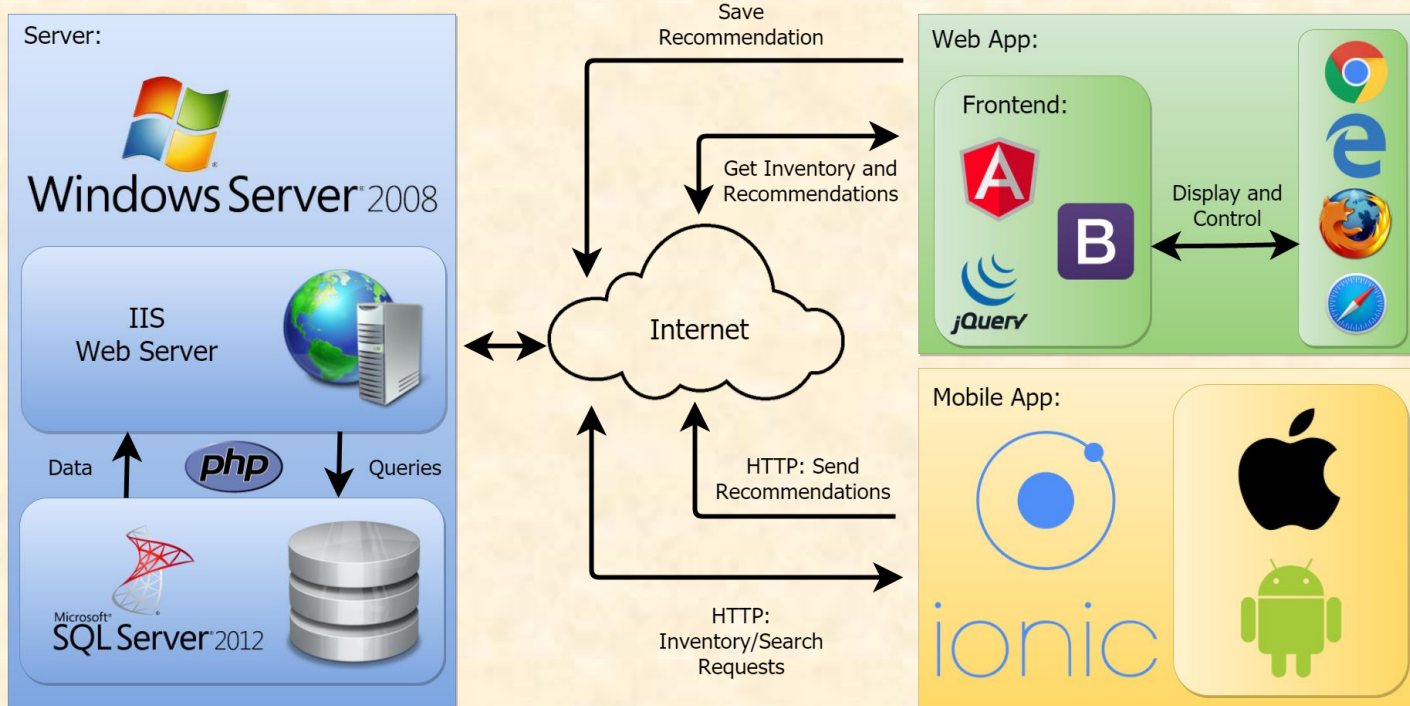
#	Make	Model	Year	ID Number
25	Ford	F-150	2016	359812
<div><div>Information about the vehicle:</div><div><div>Info...</div><div>Info...</div></div><div><div>Included Vehicle Options:</div><div><div>Option 1</div><div>Option 2</div><div>Option 3</div><div>Option 4</div><div>Option 5</div><div>Option 6</div><div>Option 7</div><div>Option 8</div><div>Option 9</div></div></div></div>				
26	Ford	F-150	2016	125689
27	Ford	F-150	2016	763476
28	Ford	F-150	2016	127654
29	Ford	F-150	2016	234568
30	Ford	F-150	2016	343467
31	Ford	F-150	2016	945736
32	Ford	F-150	2016	334742
33	Ford	F-150	2016	112527
34	Ford	F-150	2016	214783
35	Ford	F-150	2016	124635



Team Urban Science Project Plan Presentation

Team Urban Science Project Plan Presentation

Architecture Diagram





Team Urban Science
Project Plan Presentation

Team Urban Science Project Plan Presentation

Screen Mockup

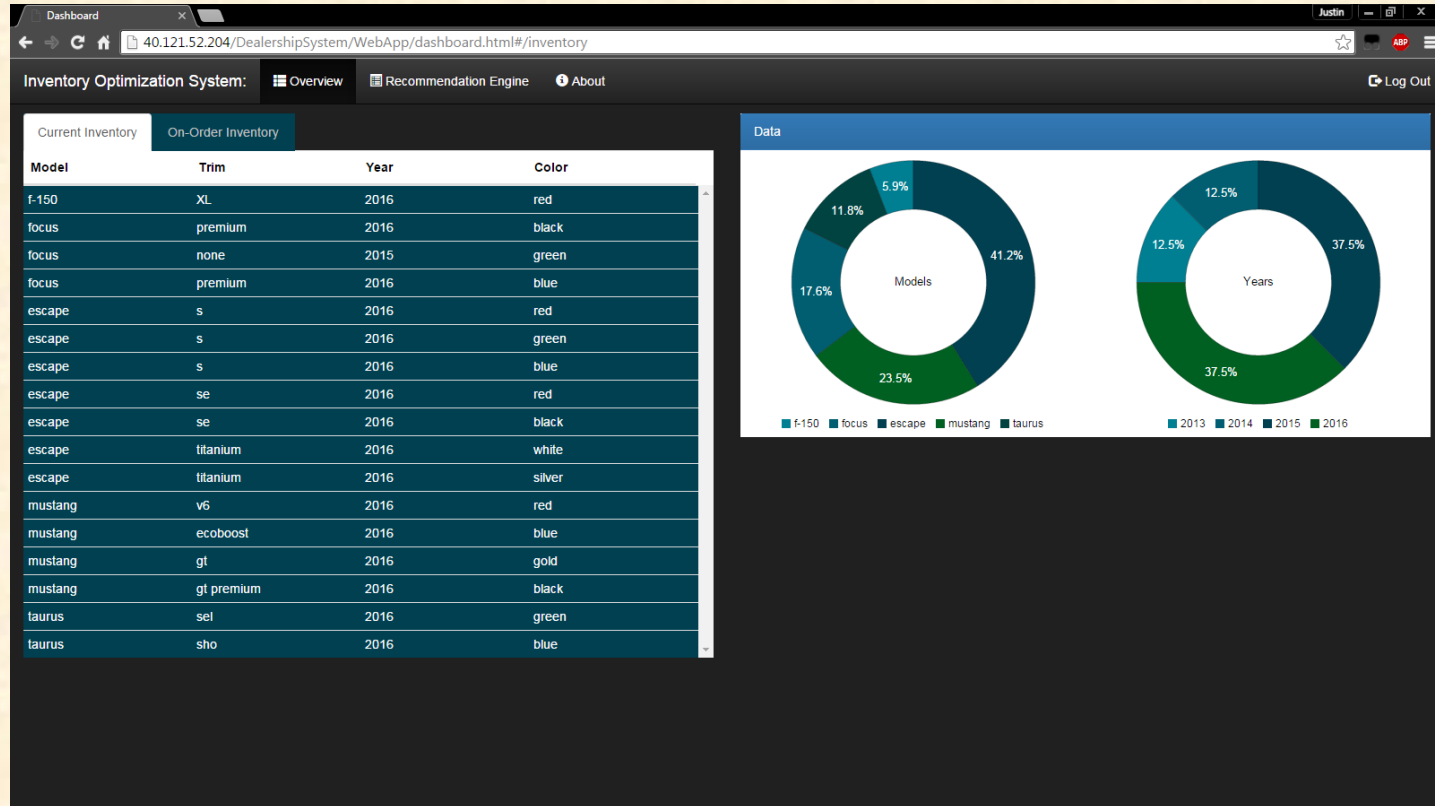




Team Urban Science Alpha Presentation

Team Urban Science Alpha Presentation

Inventory Overview



Team Urban Science Alpha Presentation

Inventory Recommendations

Dashboard

40.121.52.204/DealershipSystem/WebApp/dashboard.html#/engine

Inventory Optimization System: Overview Recommendation Engine About Log Out

Summary List

Model	Recommended	Desired	Planned	Customize
escape	5	<input type="text"/>	0	<button>Customize</button>
mustang	3	<input type="text" value="4"/>	4	<button>Customize</button>
focus	3	<input type="text"/>	0	<button>Customize</button>
taurus	2	<input type="text" value="1"/>	1	<button>Customize</button>
f-150	2	<input type="text"/>	1	<button>Customize</button>

Re-Calculate Recommendations

Recommendations List

Priority	Model	Trim	Reason	Select
1	mustang	ecoboost	??	<button>↓</button>
2	mustang	ecoboost	??	<button>↓</button>
3	mustang	ecoboost	??	<button>↓</button>
4	taurus	limited	??	<button>↓</button>
5	taurus	limited	??	<button>↓</button>
6	f-150	none	??	<button>↓</button>

Purchase List

Priority	Model	Trim	Customize	Remove
1	mustang	ecoboost	<button>⚙</button>	<button>×</button>
2	taurus	limited	<button>⚙</button>	<button>×</button>
3	f-150	none	<button>⚙</button>	<button>×</button>
4	mustang	ecoboost	<button>⚙</button>	<button>×</button>
5	mustang	ecoboost	<button>⚙</button>	<button>×</button>
6	mustang	ecoboost	<button>⚙</button>	<button>×</button>

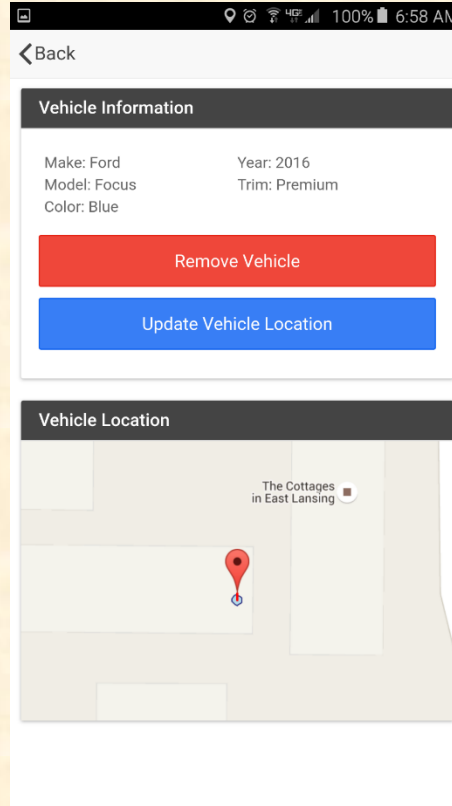
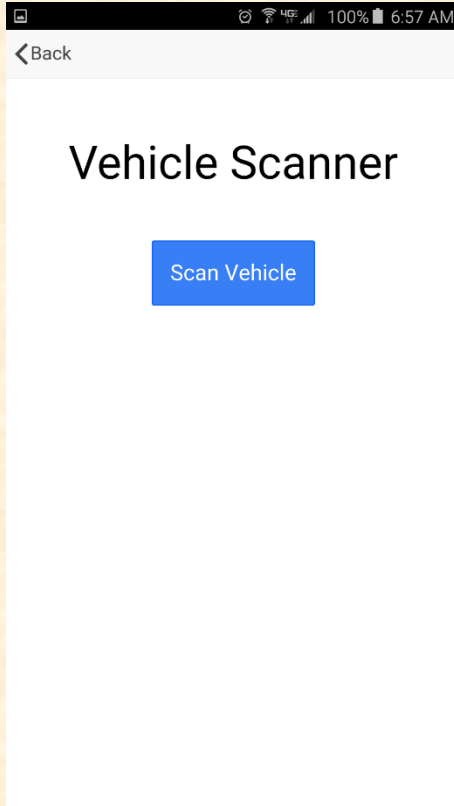
Reset Save



Team Urban Science Alpha Presentation

Team Urban Science Alpha Presentation

Mobile App

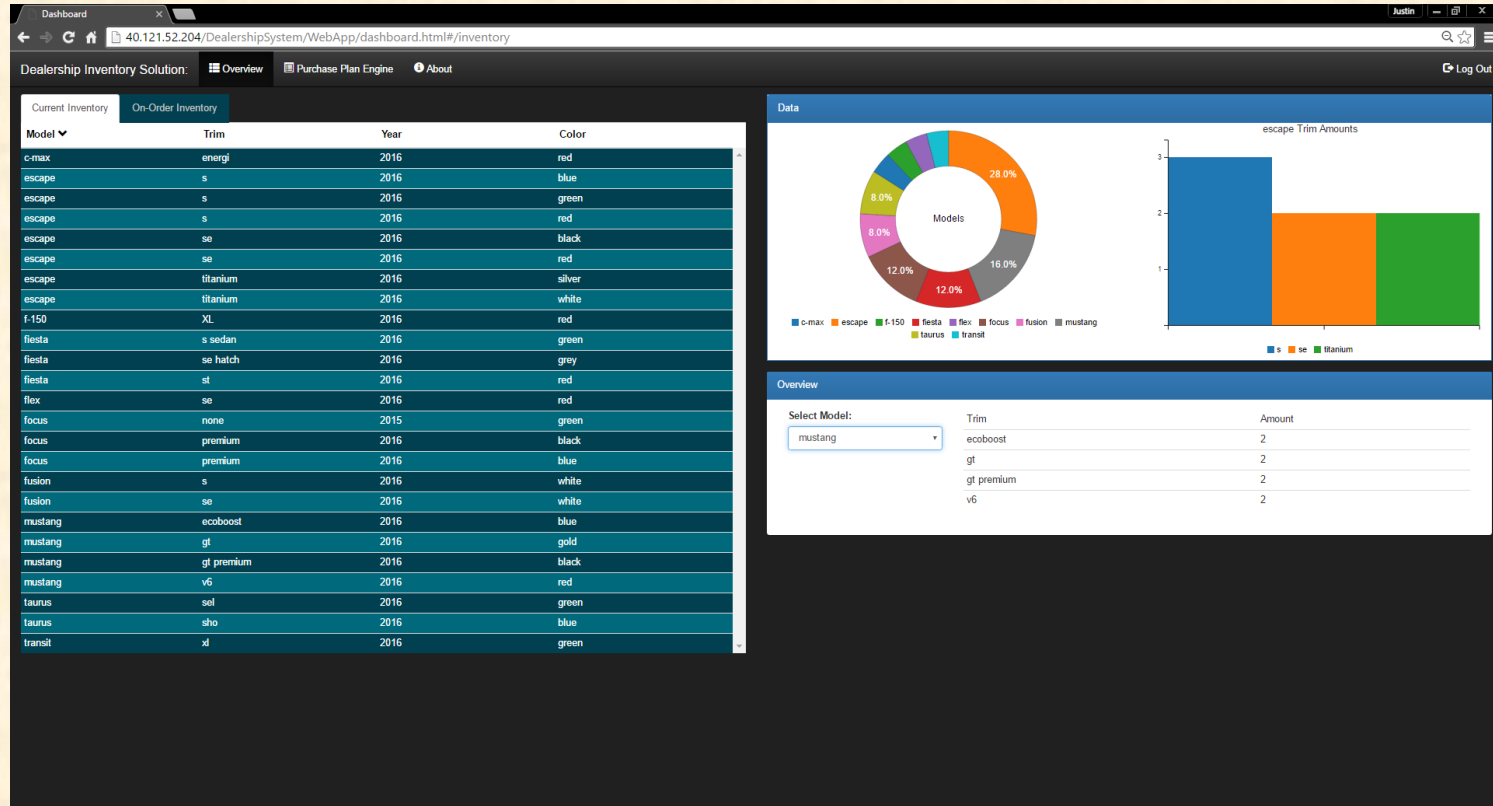




Team Urban Science Beta Presentation

Team Urban Science Beta Presentation

Inventory Overview



Team Urban Science Beta Presentation

Purchase Plan Engine

Dashboard

40.121.52.204/DealershipSystem/WebApp/dashboard.html#/engine

Dealership Inventory Solution: Overview Purchase Plan Engine About

Williams (1) Log Out

Summary

Model	Recommended	Desired	Planned	Trims
Edge	2	<div></div>	0	<div></div>
Fiesta	2	<div></div>	0	<div></div>
Transit	2	<div></div>	0	<div></div>
Fusion	2	<div></div>	0	<div></div>
F-150	2	<div></div>	0	<div></div>
C-max	2	<div></div>	1	<div></div>
Focus	3	<div></div>	0	<div></div>
Mustang	3	<div></div>	0	<div></div>
Escape	5	<div></div>	2	<div></div>
Flex	2	<div></div>	1	<div></div>
Taurus	2	<div></div>	0	<div></div>

Re-Calculates Recommendations

Recommendations

Priority	Model	Trim	Reason	Wholesale	Add
1	Edge	Sport	This model has been selling very well in your area.	\$96,541.00	<div></div>
2	Fiesta	S sedan	This model has been selling very well in your area.	\$34,568.00	<div></div>
3	Transit	Xi	This model has been selling very well in your area.	\$75,486.00	<div></div>
4	Fusion	S	Other successful dealers typically have more of this vehicle type.	\$87,549.00	<div></div>
5	Edge	Sport	Other successful dealers typically have more of this vehicle type.	\$96,541.00	<div></div>
6	Fiesta	St	You currently have low inventory in this model.	\$34,568.00	<div></div>
7	F-150	None	This model has been selling very well in your area.	\$15,475.00	<div></div>
8	C-max	Energi	This trim has been selling very well in your area.	\$54,127.00	<div></div>
9	Focus	Premium	This model has been selling very well in your area.	\$15,834.00	<div></div>
10	Transit	Xi	This trim has been selling very well in your area.	\$75,486.00	<div></div>
11	Fusion	Se	This trim has been selling very well in your area.	\$87,549.00	<div></div>
12	F-150	None	Other successful dealers typically have more of this vehicle type.	\$15,475.00	<div></div>
13	Mustang	Gt	This trim has been selling very well in your area.	\$21,548.00	<div></div>
14	Focus	Premium	This trim has been selling very well in your area.	\$15,834.00	<div></div>
15	Escape	S	This trim has been selling very well in your area.	\$14,785.00	<div></div>
16	C-max	Energi	Other successful dealers typically have more of this vehicle type.	\$54,127.00	<div></div>
17	Flex	Limited	This trim has been selling very well in your area.	\$54,789.00	<div></div>
18	Mustang	Ecoboost	Other successful dealers typically have more of this vehicle type.	\$21,548.00	<div></div>
19	Escape	S	This trim has been selling very well in your area.	\$14,785.00	<div></div>
20	Focus	Premium	This trim has been selling very well in your area.	\$15,834.00	<div></div>
21	Taurus	Limited	You currently have low inventory in this trim.	\$57,896.00	<div></div>

Add All

Purchase Plan

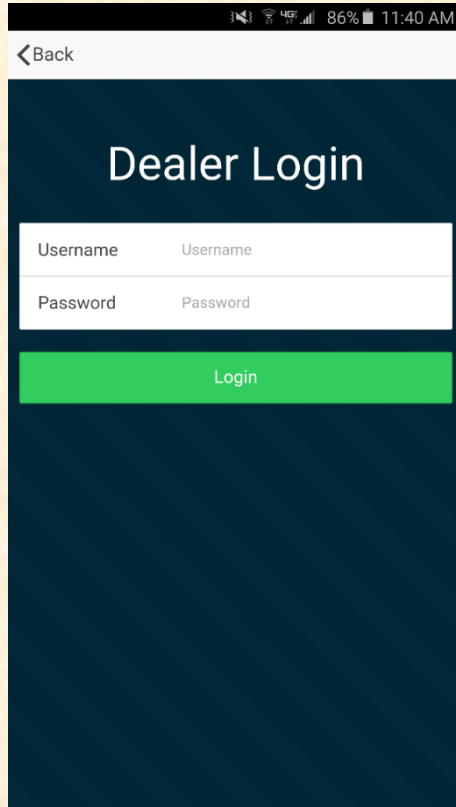
Move	Priority	Model	Trim	Color	Wholesale	Customize	Remove
<div></div>	1	C-max	Energi	Red	\$54,127.00	<div></div>	<div></div>
<div></div>	2	Escape	Titanium	None	\$14,785.00	<div></div>	<div></div>
<div></div>	3	Flex	Se	None	\$54,789.00	<div></div>	<div></div>
<div></div>	4	Escape	S	None	\$14,785.00	<div></div>	<div></div>

Total Wholesale: \$138,486.00

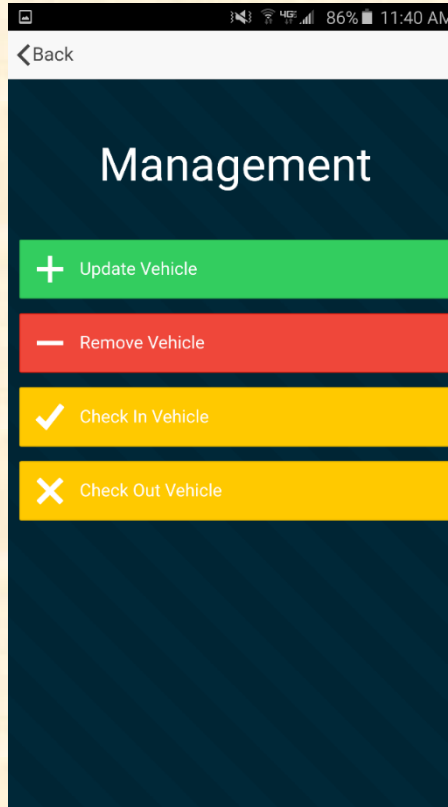
Print Reset Save

Team Urban Science Beta Presentation

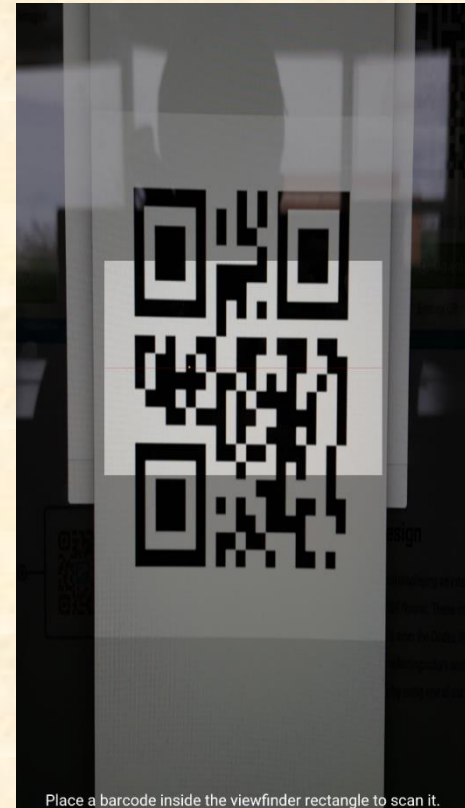
Vehicle Management



Mobile app screenshot showing the Dealer Login screen. The screen has a dark blue background. At the top, there is a status bar with icons for signal, Wi-Fi, and battery (86%), and the time 11:40 AM. Below the status bar is a white bar with a back arrow and the text "< Back". The main title "Dealer Login" is centered in white. Below the title are two white input fields: "Username" and "Password". At the bottom is a green button labeled "Login".



Mobile app screenshot showing the Management screen. The screen has a dark blue background. At the top, there is a status bar with icons for signal, Wi-Fi, and battery (86%), and the time 11:40 AM. Below the status bar is a white bar with a back arrow and the text "< Back". The main title "Management" is centered in white. Below the title are four colored buttons: a green button with a plus icon and "Update Vehicle", a red button with a minus icon and "Remove Vehicle", a yellow button with a checkmark icon and "Check In Vehicle", and a yellow button with an X icon and "Check Out Vehicle".





Team Urban Science
Design Day

MICHIGAN STATE
UNIVERSITY

The Capstone Experience

Team Whirlpool

Department of Computer Science and Engineering
Michigan State University
Spring 2016



*From Students...
...to Professionals*



Whirlpool

CORPORATION

CHAT

FIND A RETAILER

OUTLET STORE

SIGN IN OR CREATE ACCOUNT

FAVORITES (0)

CART (0)

search



EVERY DAY, CARE™

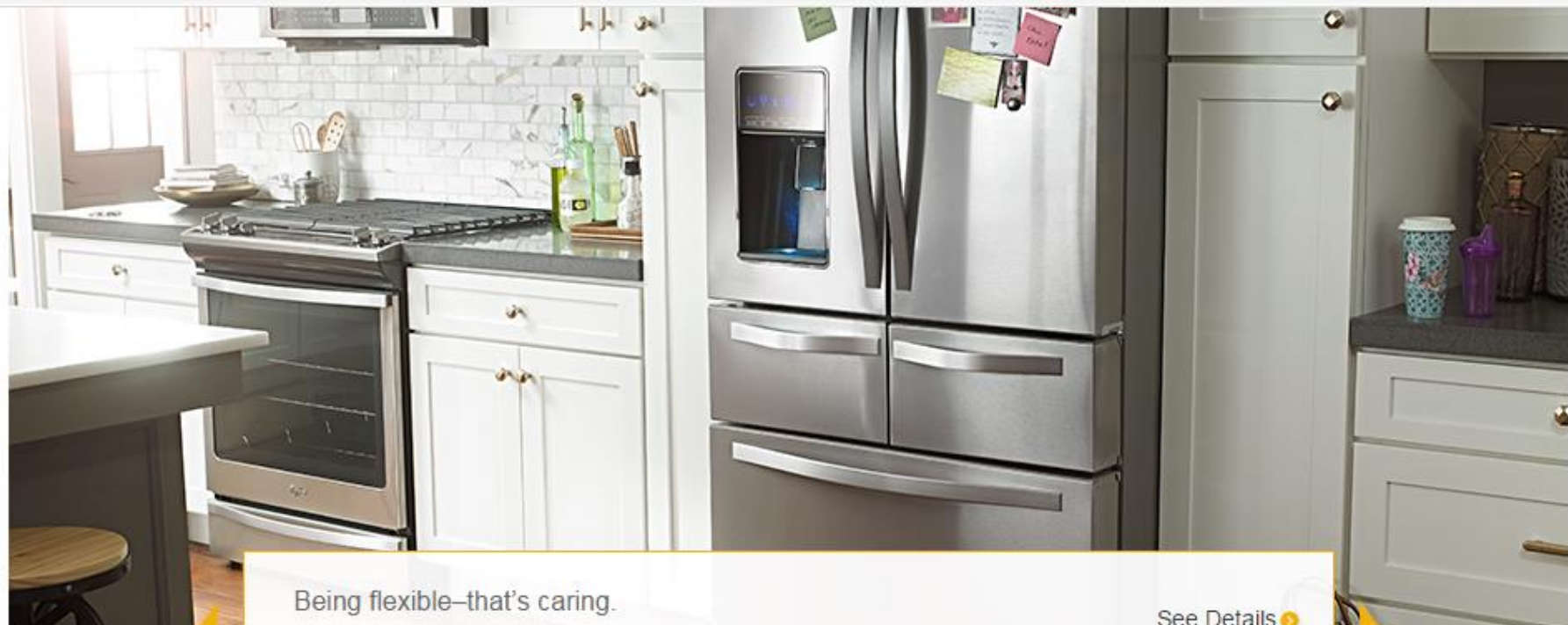
LAUNDRY

KITCHEN

TOTAL HOME

FILTERS & ACCESSORIES

SERVICE & SUPPORT



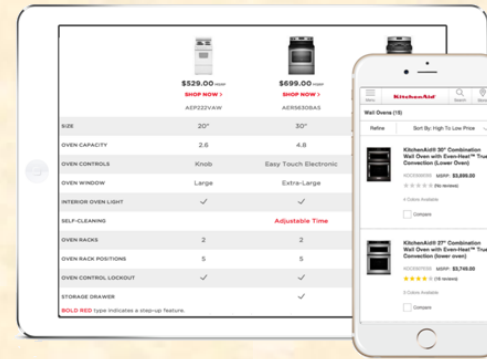
Being flexible—that's caring.

See Details

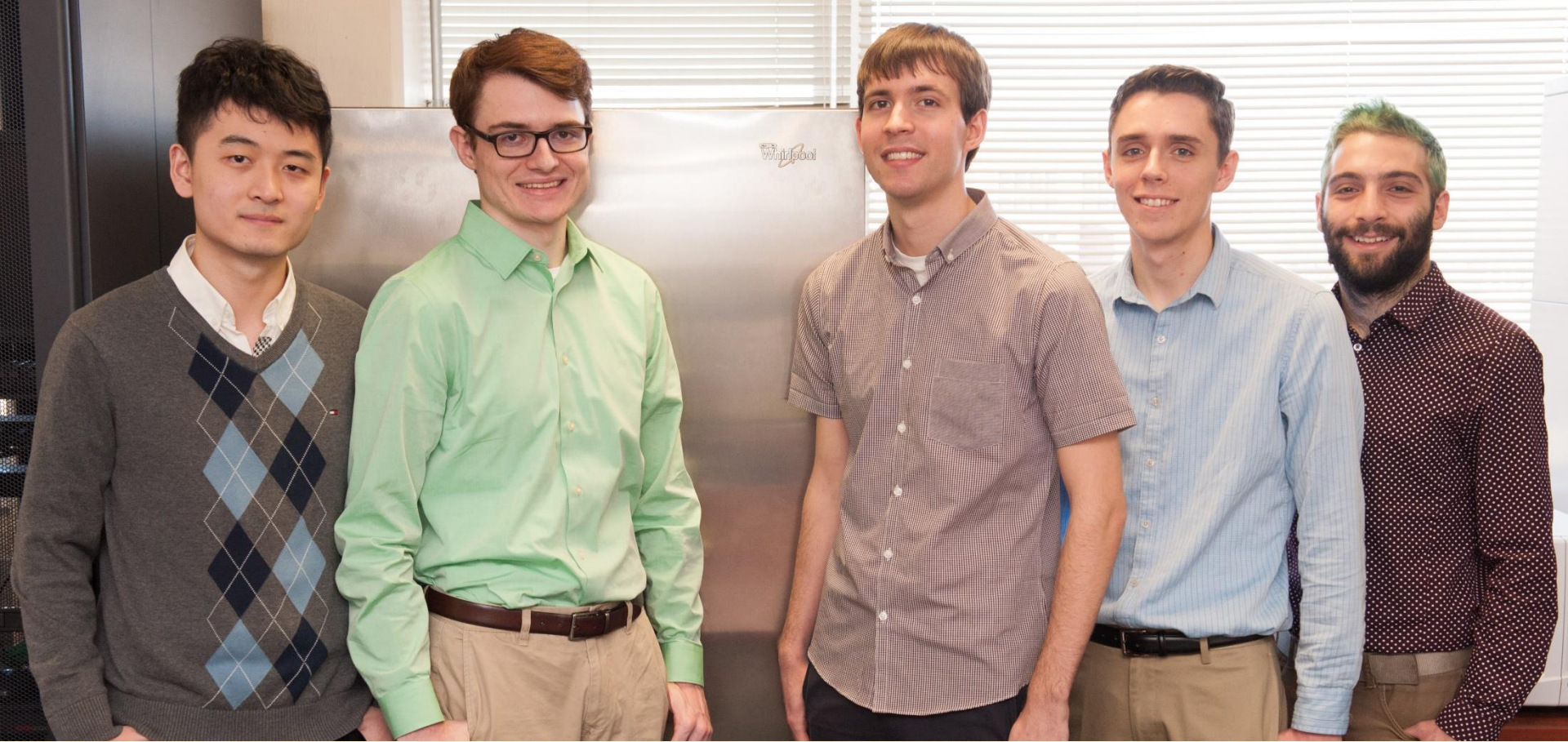
Team Whirlpool Project Overview

Mobile Product Catalog

- Functionalities
 - Provide Access to Whirlpool Product Information
 - For Trade Partners' Sales Associates (Home Depot, Lowes, Etc.)
 - Via Mobile Devices
- Features
 - Duplicate Whirlpool's *Web World* Functionality
 - Support Apple iOS and Google Android Devices
 - Show Complete Product Information
 - Images and Dimensions
 - Key Features
 - Related Products
 - Etc.
 - Compare Product Features
 - Implement Sharing with Customers
 - Text
 - Email
 - Store Login Credentials
 - Optimize for Minimal Latency
 - Provide Simple Analytics
- Technologies
 - Apple iPads and iPhones (iOS) / Swift or Objective-C
 - Google Android Tablets and Phones / Java
 - RESTful Web Services
 - SAP Integration
 - Google Analytics



Benton Harbor, Michigan



Team Whirlpool

Zhicheng Xu, Cam Merrill, Jordan Mikkelsen, Joe Schoenherr, Can Gokcek

Team Whirlpool Project Plan Presentation

Screen Mockup

Whirlpool Product Catalog Mockup: Login Screen
Cameron Merrill 1.28.2015



Product Catalog

Email / User Name

Password


Login

OR

Sign Up

Forgot Password

WHIRLPOOL MOCKUP 15:38 MAIN MENU



Browse by Category

Search Product

Cooking

Refrigeration

Kitchen Clean-Up

Laundry

Accessories

Gladiator Garageworks

Outdoor Entertainment

Countertop Appliances

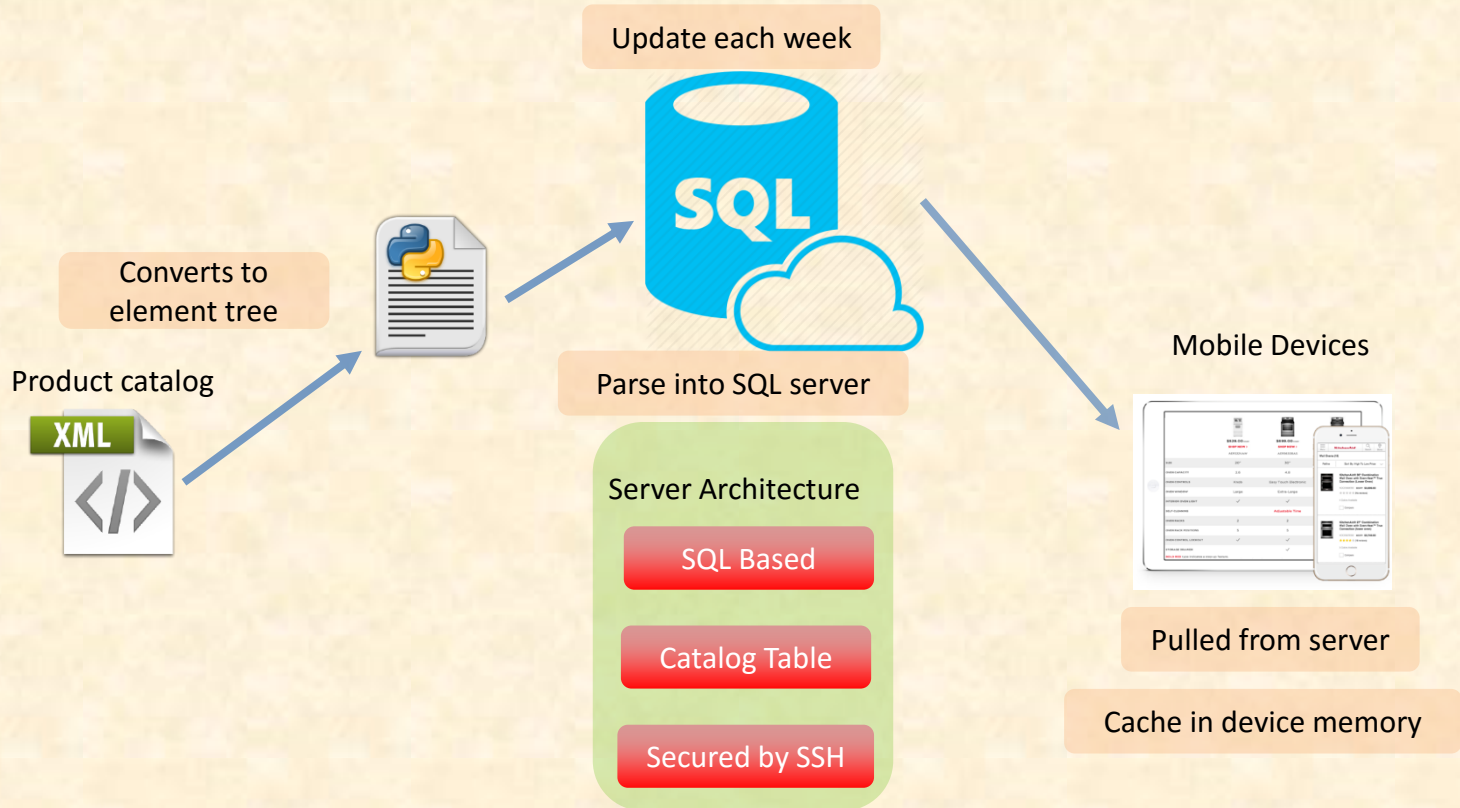
Kitchenware



Team Whirlpool Project Plan Presentation

Team Whirlpool Project Plan Presentation

Architecture Diagram

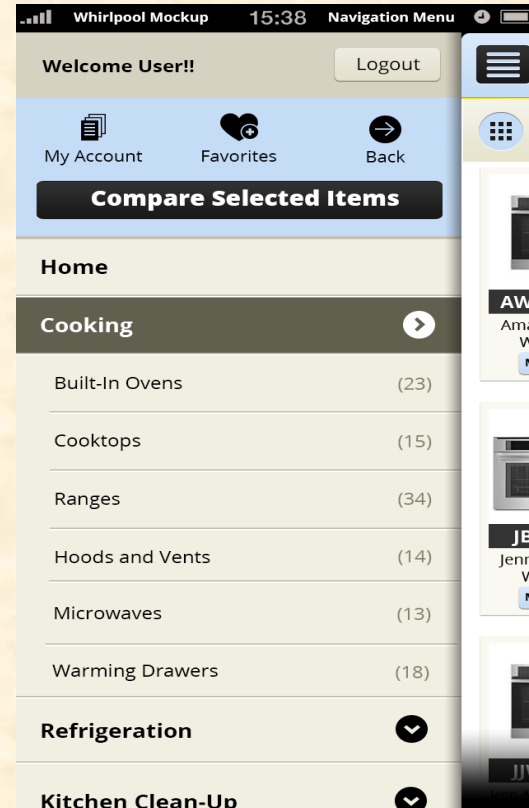




Team Whirlpool Project Plan Presentation

Team Whirlpool Project Plan Presentation

Screen Mockup

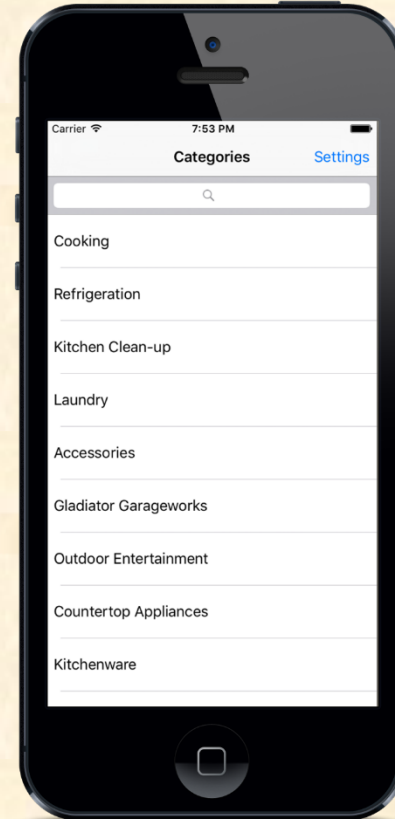
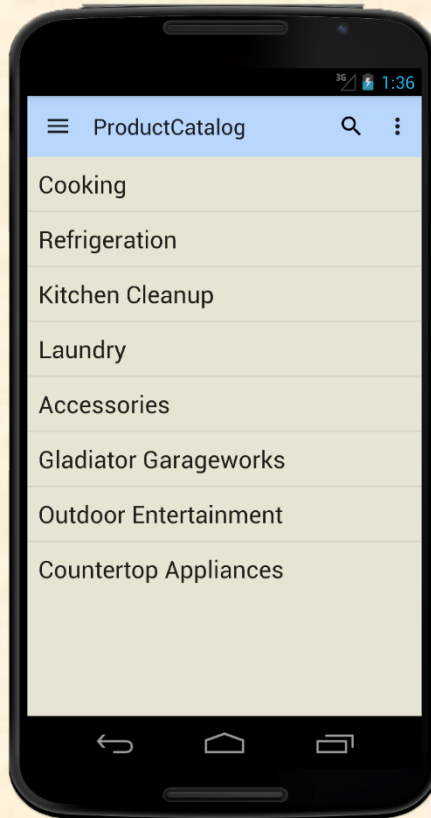




Team Whirlpool Alpha Presentation

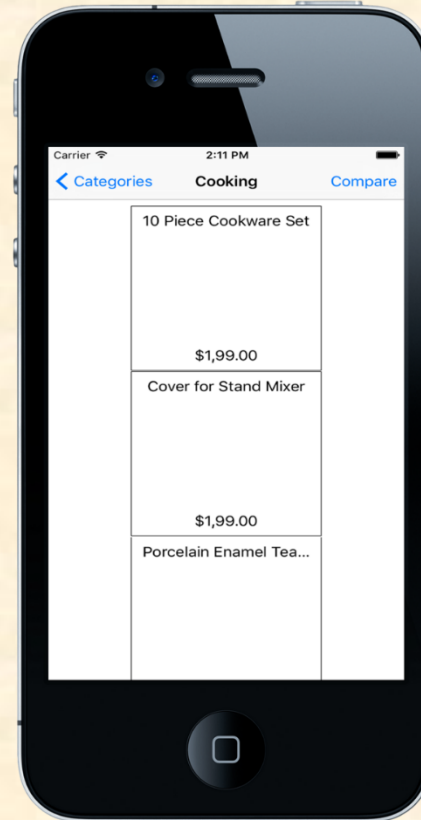
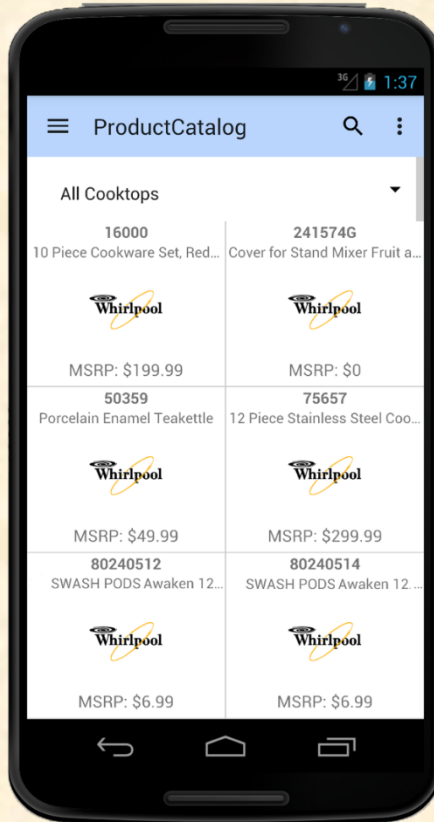
Team Whirlpool Alpha Presentation

Category View



Team Whirlpool Alpha Presentation

Multiple Product View

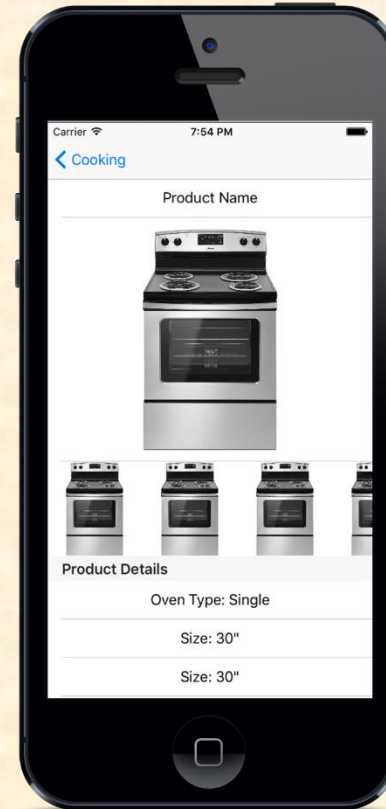
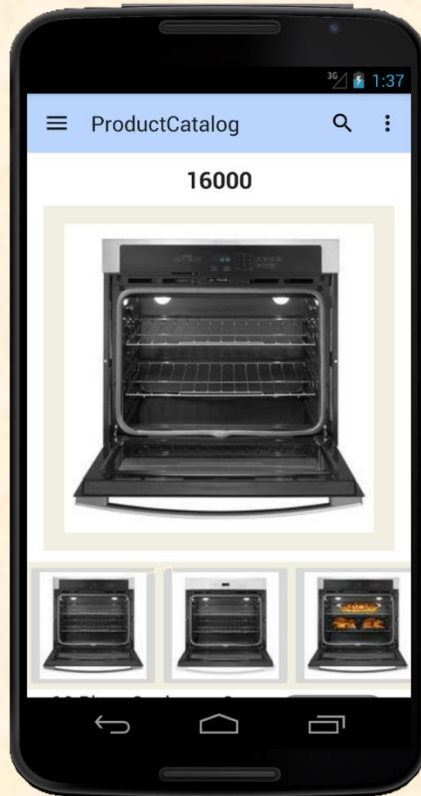




Team Whirlpool Alpha Presentation

Team Whirlpool Alpha Presentation

Product View

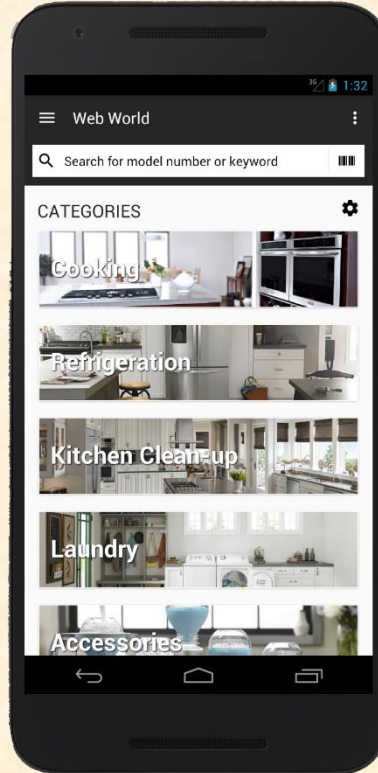




Team Whirlpool Beta Presentation

Team Whirlpool Beta Presentation

Catalog Home Page

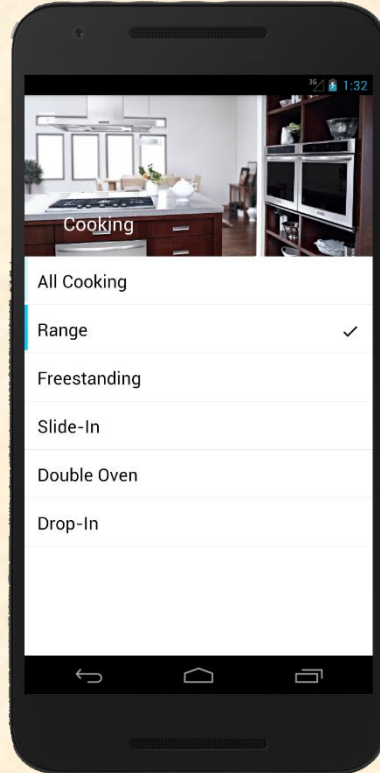


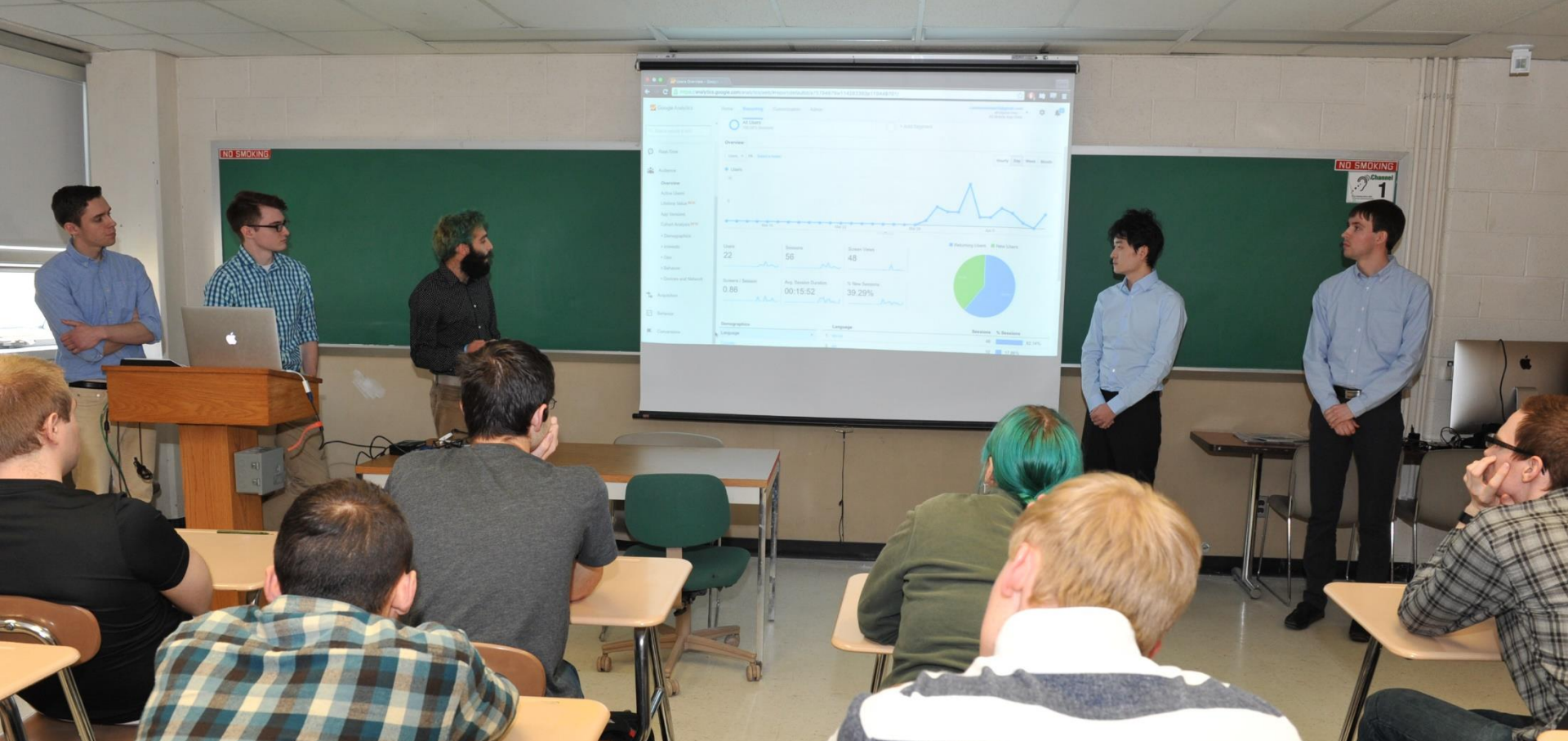
The Capstone Experience



Team Whirlpool Beta Presentation

Category Navigation View

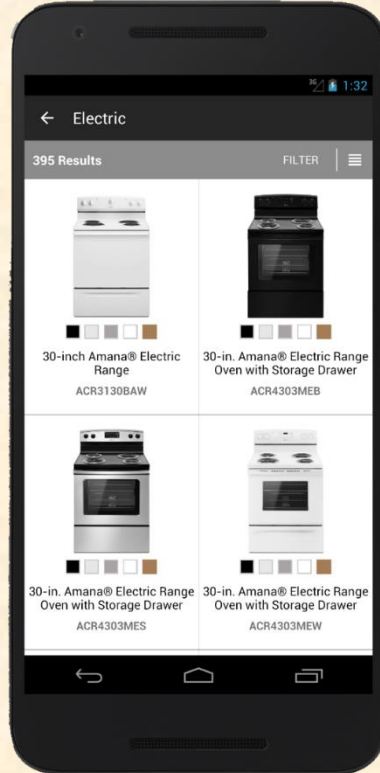




Team Whirlpool Beta Presentation

Team Whirlpool Beta Presentation

Product Grid View





Team Whirlpool
Design Day

MICHIGAN STATE
UNIVERSITY

The Capstone Experience

Team Yello

Department of Computer Science and Engineering
Michigan State University
Spring 2016



*From Students...
...to Professionals*

yello



[HOME](#)

[PRODUCTS](#)

[SERVICES](#)

[ABOUT](#)

[CONTACT](#)

[CAREERS](#)

[BLOG](#)

[LOGIN](#)



Hire the best employees for your enterprise

WITH *yello*

Team Yello

Project Overview

Syncing Mobile Data Without Internet Connectivity

- Functionalities
 - Synchronize Data Wirelessly
 - Between Tablets at Career Fair
 - Without an Internet Connection
- Features
 - Support
 - Both iPad and Android Tablets
 - At Least Five Simultaneous Devices
 - Any Data Model
 - Provide
 - Simple API for Developer
 - Easy Device Setup for Non-Technical User
 - Create Two Sample Apps
- Technologies
 - Apple iPads (iOS) / Swift or Objective-C
 - Apple Xcode
 - Google Android Tablets / Java
 - Android Studio
 - WiFi Direct, Multipeer Connectivity, Bluetooth



yello

Chicago, Illinois



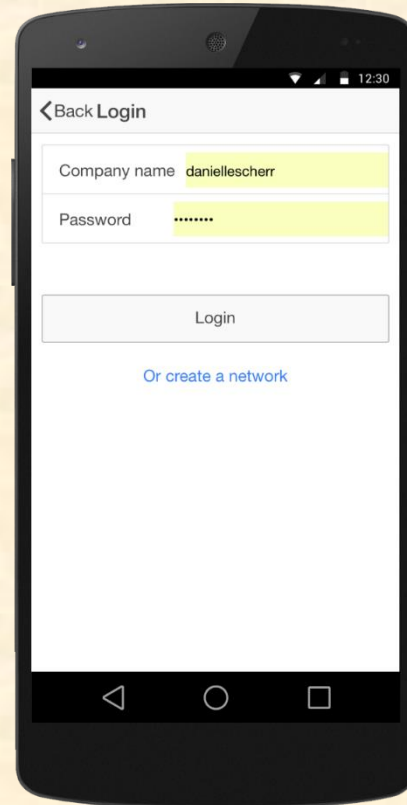
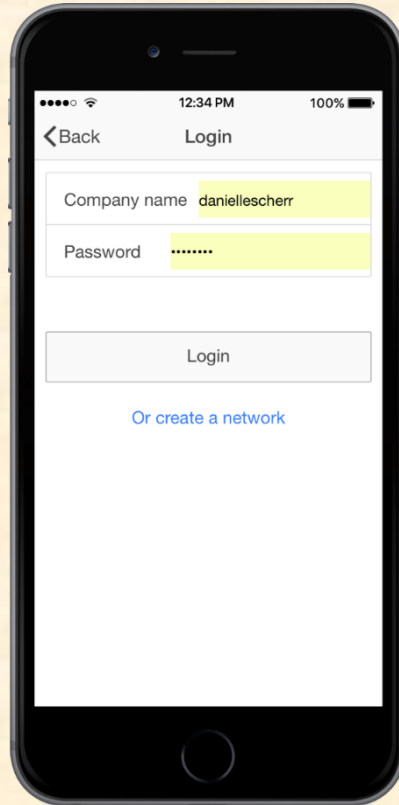


Team Yello

Kiera Wheatley, Kevin Miller, Danielle Scherr, Tanner Stewart, Min Weng

Team Yello Project Plan Presentation

Screen Mockup



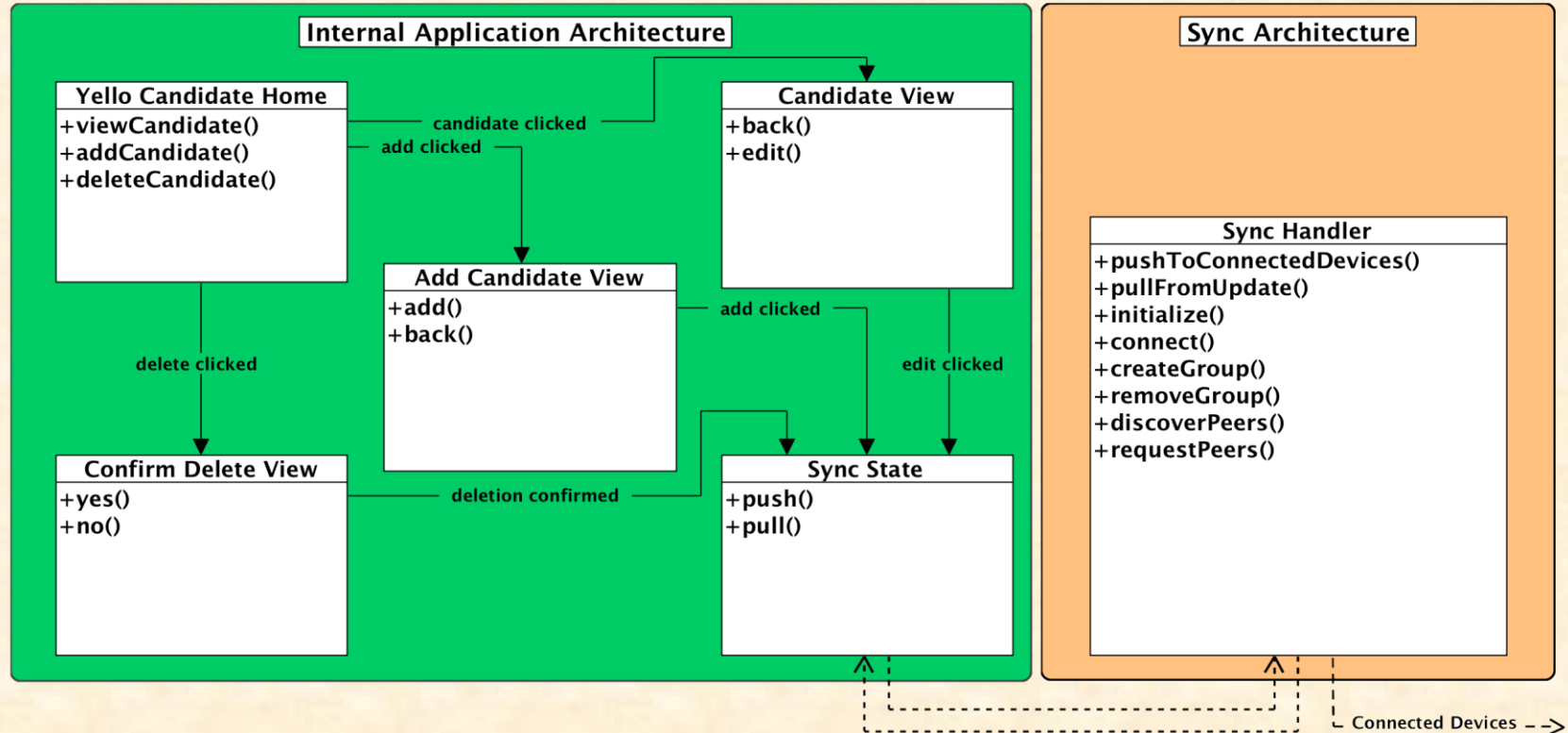


Team Yello Project Plan Presentation

Team Yello

Project Plan Presentation

Architecture Diagram

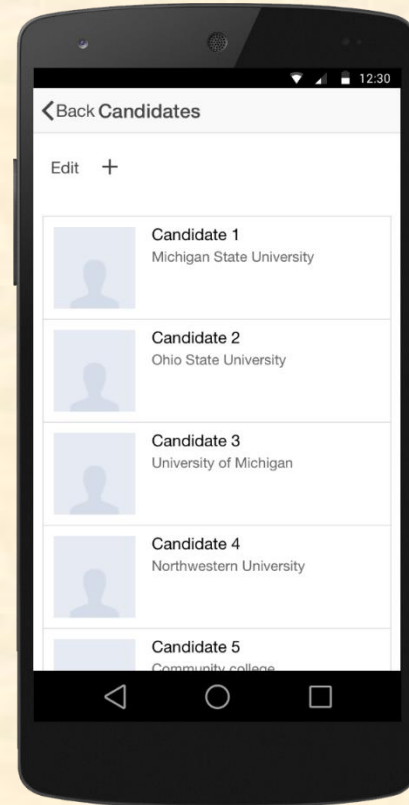
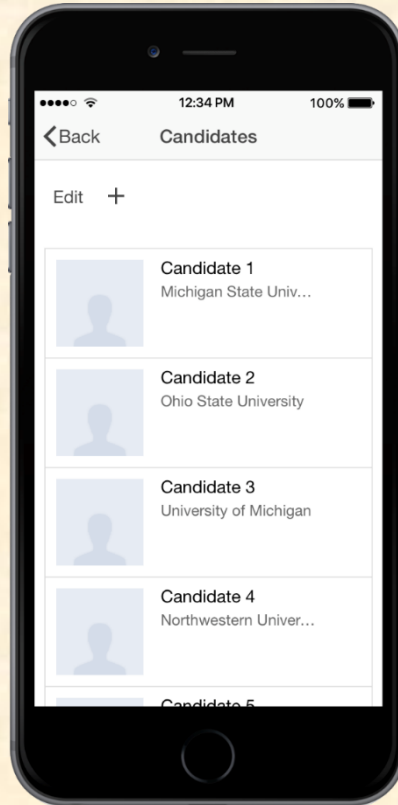




Team Yello Project Plan Presentation

Team Yello Project Plan Presentation

Screen Mockup

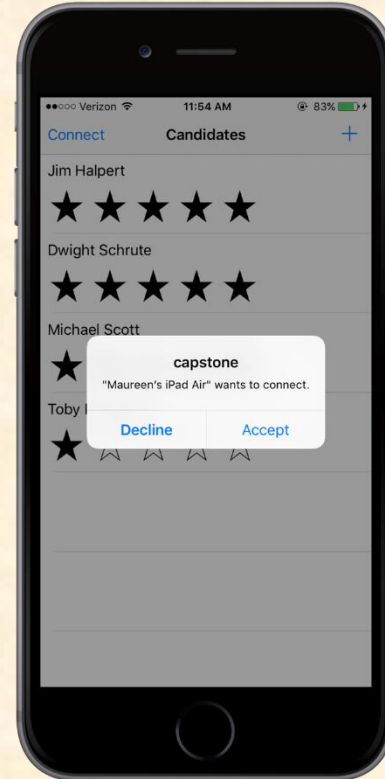
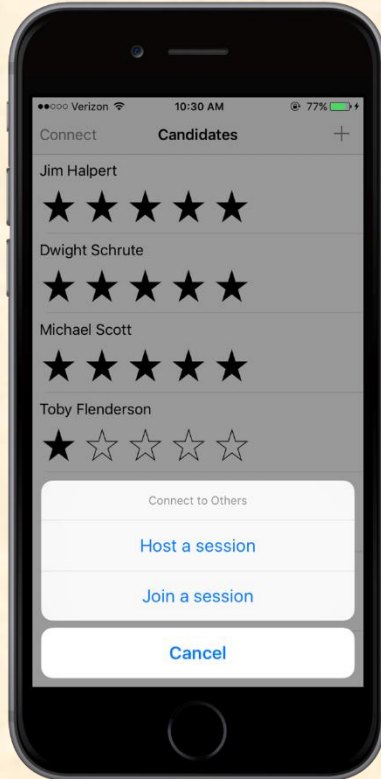




Team Yello Alpha Presentation

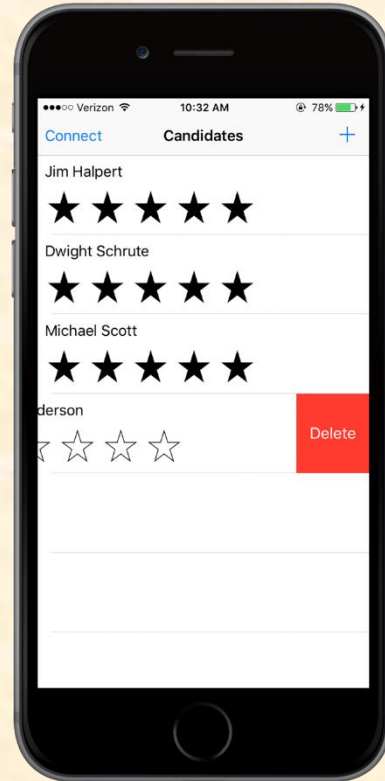
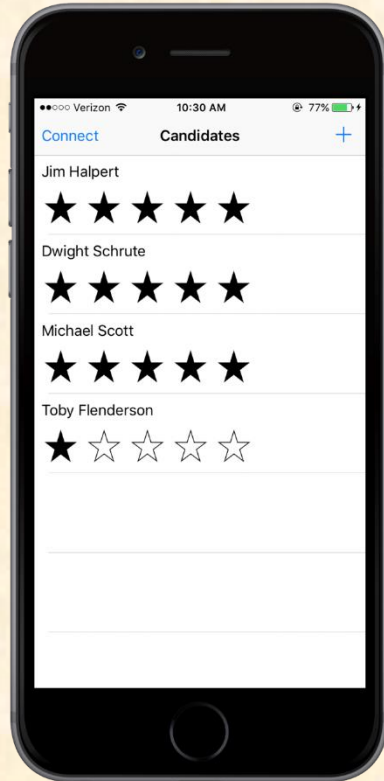
Team Yello Alpha Presentation

Create Session (iOS)



Team Yello Alpha Presentation

Candidate List (iOS)

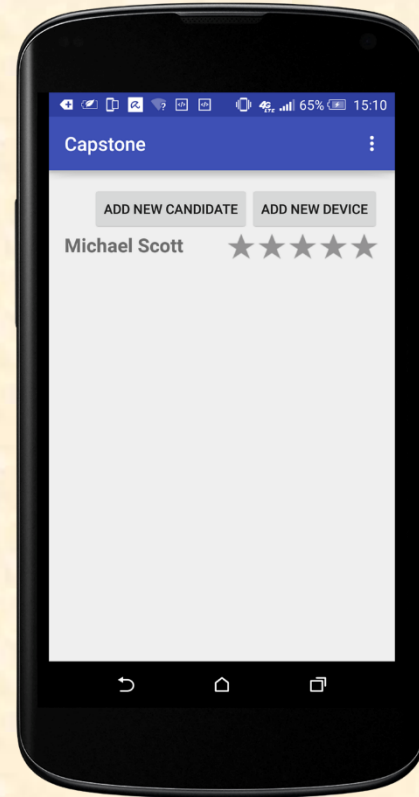
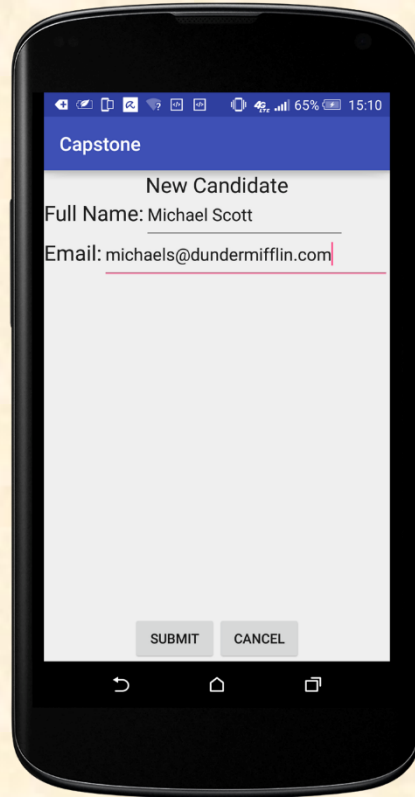




Team Yello Alpha Presentation

Team Yello Alpha Presentation

Add/Edit Candidates (Android)

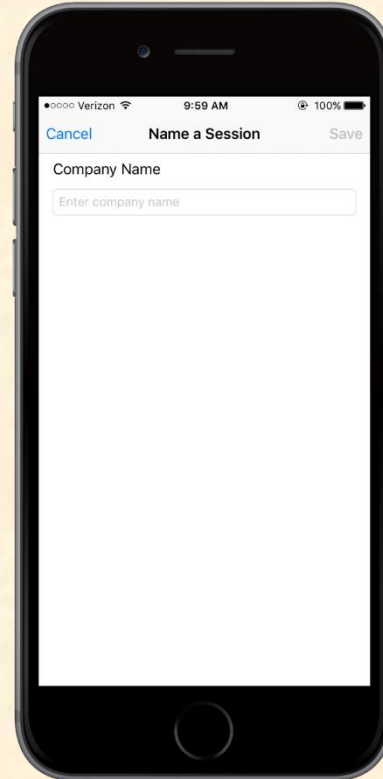
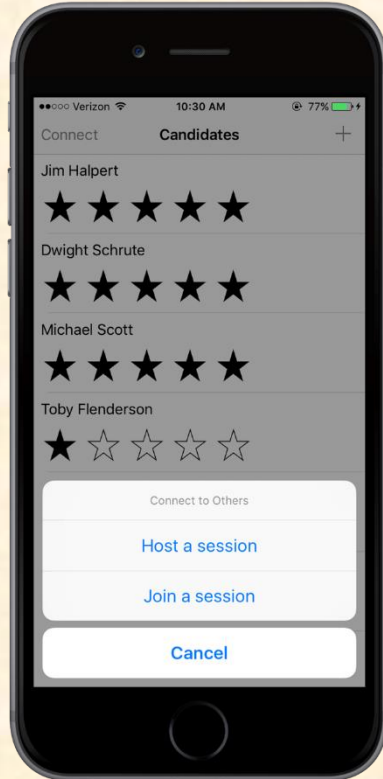




Team Yello Beta Presentation

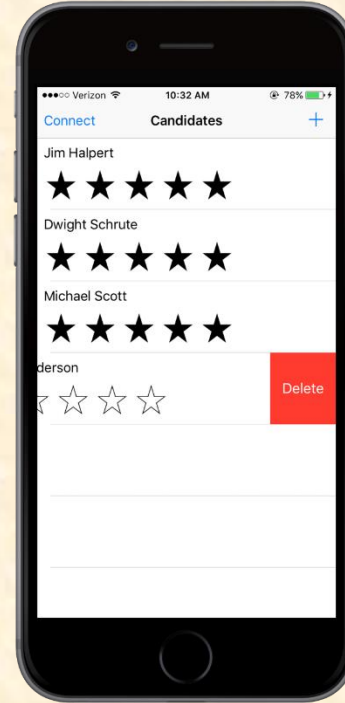
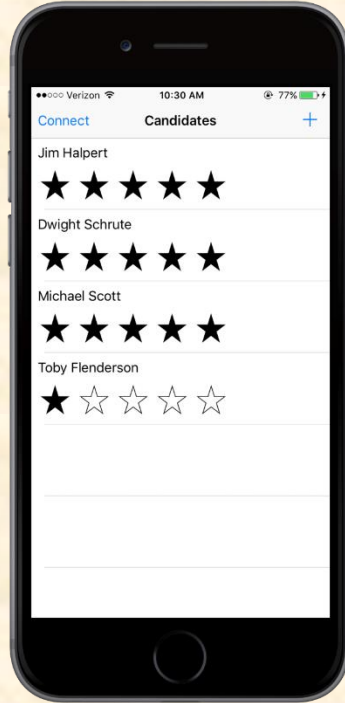
Team Yello Beta Presentation

Create Session [iOS]



Team Yello Beta Presentation

Candidate List [iOS]

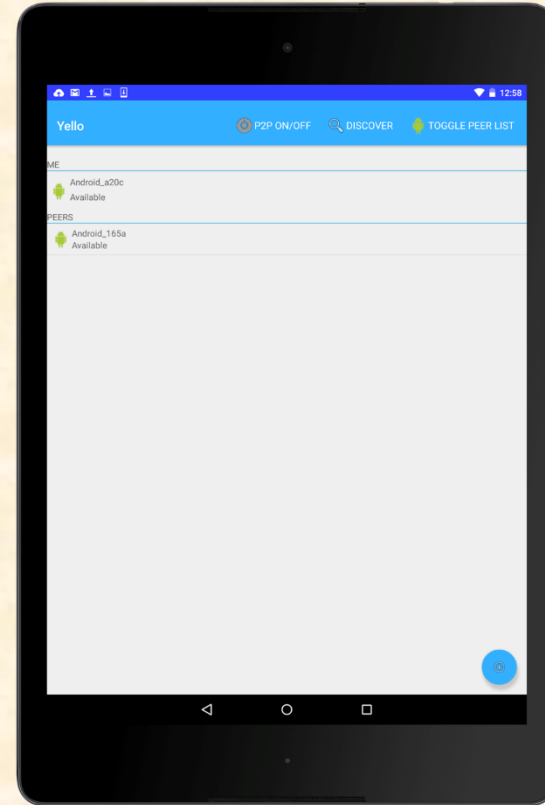
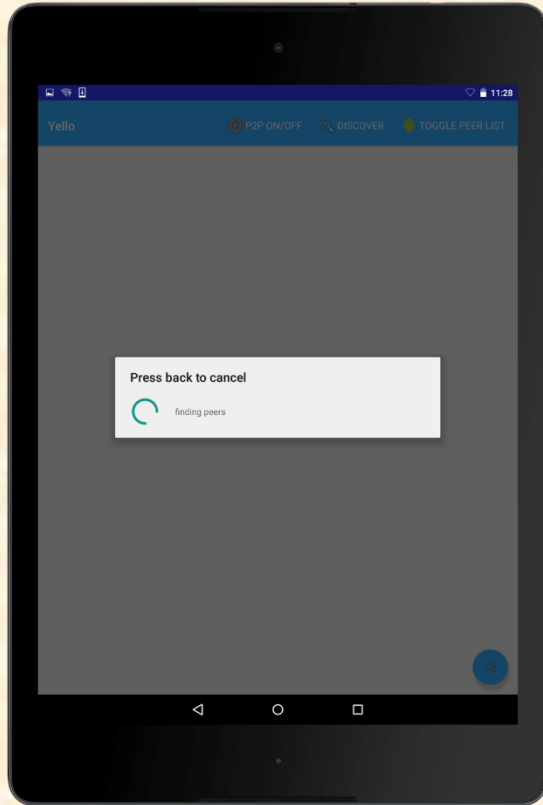




Team Yello Beta Presentation

Team Yello Beta Presentation

Discover/View Peers [Android]





Team Yello
Design Day

The Capstone Experience

Dr. Wayne Dyksen

Department of Computer Science and Engineering
Michigan State University
Spring 2016



*From Students...
...to Professionals*



Capstone Lab
View of Spartan Stadium



Capstone Lab
View of Spartan Stadium sans Smokestack



Capstone Lab
Winter View of Spartan Stadium

The Capstone Experience

Design Day Award Winners

April 29, 2016



*From Students...
...to Professionals*



All-Hands
Design Day, April 29, 2016



Auto-Owners Exhibition Award

Team Auto-Owners, Spring 2016

Catastrophic Claims Unit Mobilization

Nicole Lawrence, Jason Steele, Matt Wiechec, Nick Reuter

Scott Lake of Auto-Owners Insurance



MSU Federal Credit Union Praxis Award

Team Union Pacific, Spring 2016

Oculus Rift Inspection and Training Tool

Sam Berndt, Grant King, Mitch Leinbach, Michael Aughton, William Norman

Presented by Samantha Amburgey of MSU Federal Credit Union



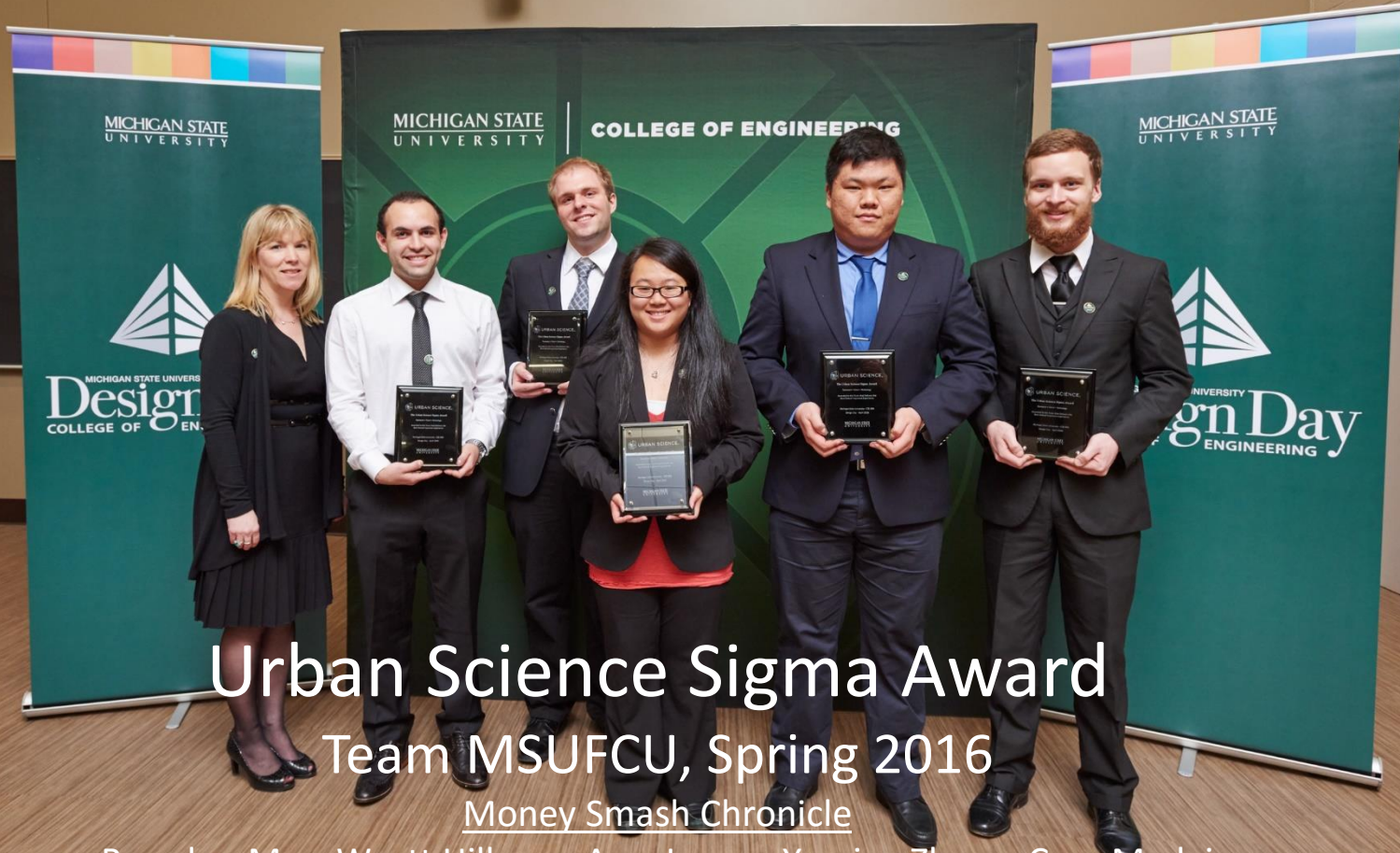
TechSmith Screencast Award

Team GM, Spring 2016

IT Advocate Live Help

Jake Price, Jenna Sanocki, Shuhao Zhang, Zack Keith, Joe Dinkha

Presented by Dean Craven of TechSmith



Urban Science Sigma Award

Team MSUFCU, Spring 2016

Money Smash Chronicle

Brandon Max, Wyatt Hillman, Amy Leung, Yuming Zhang, Cory Madaj

Presented by Elizabeth Klee of Urban Science

MICHIGAN STATE
UNIVERSITY

The Capstone Experience

Design Day Award Winners

December 11, 2015



*From Students...
...to Professionals*



All-Hands
Design Day, December 11, 2015



Auto-Owners Exhibition Award

Team GM, Fall 2015

Global Service Desk Mobile App

Corbin Rangler, Sean Rabaut, Evan Hlavaty, Brian Hart, Michael Palmer

Scott Lake of Auto-Owners Insurance



MSU Federal Credit Union Praxis Award

Team Symantec, Fall 2015

Integrated Silent Authentication via Symantec VIP

Dan Parlin, Scott Binter, Tyler Erskine, James Mariani, Chris Perry

Presented by Samantha Amburgey of MSU Federal Credit Union



TechSmith Screencast Award

Team TechSmith, Fall 2015

Intelligent Real World Text Recognition

Deb Deb, Kanpur, Max Miller, Cody Pearson, Whitney Mitchell, Jordyn Castor

Presented by Dean Craven of TechSmith



Urban Science Sigma Award

Team Spectrum Health, Fall 2015

Patient Service Delivery Planning

Chaz Bean, Josh Curl, Justin Oh, Jim Torres, Luke Stanton
Presented by Elizabeth Klee and Mike DeRiso of Urban Science

The Capstone Experience

Dr. Wayne Dyksen

Department of Computer Science and Engineering
Michigan State University
Spring 2016



*From Students...
...to Professionals*

amazon





Auto-Owners Insurance

Life Home Car Business

The "No Problem" People®







F E D E R A L C R E D I T U N I O N

Building Dreams *Together*

Quicken® Loans®

Engineered to **AmazeSM**

SPECTRUM HEALTH

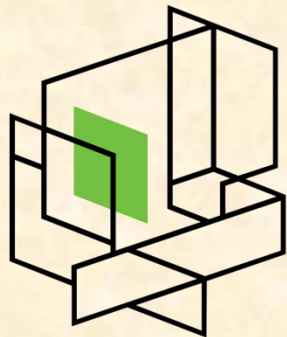




TechSmith®



BUILDING AMERICA[®]



URBAN SCIENCE™



Whirlpool
CORPORATION

yello