# MICHIGAN STATE UNIVERSITY

# 10/04:

# Design Day Booklet Production Process

## The Capstone Experience

Dr. Wayne Dyksen
James Mariani

Department of Computer Science and Engineering Michigan State University

Fall 2022



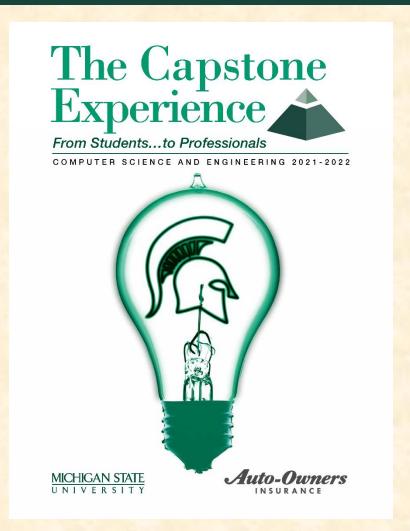
# Design Day Booklet

- Professional Publication
  - Corporate Relations
  - Alumni Relations
  - Recruiting
  - Keepsake for You
- Contents
  - Schedule of Events
  - Project Descriptions



# The Capstone Experience

- Professional Publication
  - Corporate Relations
  - Alumni Relations
  - Recruiting
- Contents
  - Capstone Projects
  - Academic Year





# Team Project Page

- Template Distributed by Dr. D.
  - Sponsor's "Official" Name
  - Sponsor Logo
  - Project Title
  - MSU Team Photo
  - MSU Team Members' Names
  - Corporate Sponsors' Names
  - Headers and Footers
  - Posted On Downloads Page
- Template Completed by Team
  - Project Description
  - Artwork

Use Microsoft Windows Office 365 Version of Word.

Computer Science and Engineering

## **Volkswagen Group of America** VW Car-Net Electric Vehicle Route Planner

olkswagen Group of America is the North American operation headquarters and subsidiary of the Volkswagen Group, one of the world's leading automobile manufacturers. They are comprised of 8,000 employees in the United States and sell their vehicles through a 1,000-strong dealer network.

Electric vehicles are one of the latest innovations in the automobile industry. Volkswagen, who just released their first electric vehicle, the ID.4, want a way to show potential customers the benefits of electric vehicles compared to gas powered vehicles as well as address and correct some of the common misconceptions many people have about

Our VW Car-Net Electric Vehicle Route Planner application is displayed in Volkswagen dealerships and educates potential car buyers about the benefits of buying an electric vehicle

A major concern many buyers have about electric vehicles is the car's range and charging options available on the road. Our application generates driving routes for gas vehicles and electric vehicles that stop at charging stations. Buyers can compare these various routes with respect to route length, route path, fuel costs and carbon emissions.

Our application also allows for extensive customizability including sliders to adjust starting battery charge, climate control, temperature and weather conditions to account for the effects these factors have on battery consumption.

Our Electric Vehicle Route Planner helps assuage the fears of potential electric vehicle buyers by showing them that their daily outine will have minimal disruptions, and significant benefits if they switch to an electric vehicle.

Our Electric Vehicle Route Planner is developed as an Android application that utilizes API calls to handle route altering attributes and route generation. Our application is written in Kotlin.



Michigan State University Team Members (left to right)

Joey Kelly Andrew Smigielski Zosha Korzecke

Michael Lin





Volkswagen Project Sponsors

Shelly Desmet

Igor Efremov

Frank Weith Auburn Hills, Michigan

PAGE 45

## Team's Job

- Read instructions <u>carefully</u>.
- Check everything.
- Use Microsoft Windows Office 365 version of Word.
- Make a checklist.
- Write the project description.
- Read the instructions <u>carefully</u>.
- Provide the artwork.
- Read the instructions <u>carefully</u>.
- Update the project description and artwork.
- Make a checklist.
- Check everything 100 times.
- Read the instructions carefully.
- Make a checklist. Key

Note: Many slides in this deck are "reference slides," hence wordy.

[1 of 3]

- Newspaper / Magazine Style
- Target Audience == General Public
- Do NOT Start...
  - "Our project is..."
  - "Our sponsor asked us to..."
  - "Our project aims to..."
- Use present tense throughout.
- Write as though your project is complete.
  - It works.
  - Your sponsor is using it.
- Fill the entire textbox, no less, no more.
- Read Past Examples
  - The Capstone Experience Booklet
  - Previous Design Day Booklets (<u>Design Day > Booklet</u>)
  - MSU Men's Basketball
- Make a Checklist ← Have I mentioned this yet?



[2 of 3]

- Beginning
  - Sponsor Overview
  - 2 to 3 Lines
- Middle
  - The Problem & Your Solution
  - Magazine Style
  - Understandable by Non-Technical Person
- End
  - Technical Jargon
  - 2 to 3 Lines



[3 of 3]

olkswagen Group of America is the North American operation headquarters and subsidiary of the Volkswagen Group, one of the world's leading automobile manufacturers. They are comprised of 8,000 employees in the United States and sell their vehicles through a 1,000-strong dealer network.

Electric vehicles are one of the latest innovations in the automobile industry. Volkswagen, who just released their first electric vehicle, the ID.4, want a way to show potential customers the benefits of electric vehicles compared to gas powered vehicles as well as address and correct some of the common misconceptions many people have about electric vehicles.

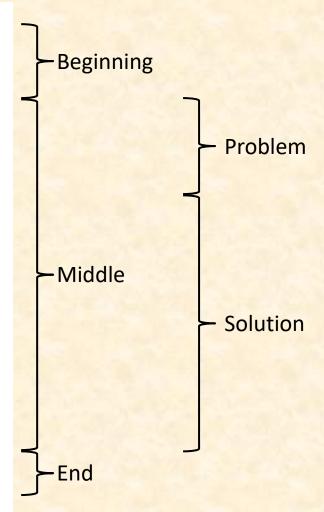
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Our Electric Vehicle Route Planner is developed as an Android application that utilizes API calls to handle route altering attributes and route generation. Our application is written in Kotlin.



## **Example Project Description: Spartan Basketball Player Timer**

Michigan State University's Men's Basketball is elite, one of the top programs in the NCAA.

NCAA Division I basketball is very competitive. Although it may not be apparent to the casual observer, every detail of each game is carefully planned and scripted.

One aspect of a game plan is that of playing times. For each player, the coaches determine target times for how long he can play at a stretch, how long he needs to rest before playing again, and the total amount of time he should play in a game.

Developed with Coach Tom Izzo, our Spartan Basketball Player Timer is used by the basketball staff on the bench during the game.

When a player enters the game, his playing time is displayed with a solid green background. When his target playing time goes under two minutes, it is displayed in yellow. When the time goes below zero, it is displayed in red.

The color coding of times provides visual cues that can be seen by the coaches at a distance. If there are many yellow or red boxes, the coaches begin to plan substitutions.

A game summary for all the players can be displayed at any time whether the game clock is running or stopped.

Our software runs on a Microsoft Windows Tablet PC about the size of a traditional clipboard only slightly thicker. With no mouse or keyboard, all input is done with a pen.

Spartan Basketball Player Time is written in Visual Basic. The underlying database is Microsoft Access.

Artwork [1 of 3]

- Read the instructions <u>carefully</u>.
- Take 2 to 3 screenshot(s) of working software.
  - Use eye-catching examples.
  - Avoid boring or trivial things.
    - Splash Screens
    - Login Screens
- Fill up the entire artwork space. Whitespace is bad!
- Overlap artwork if necessary.
- Include "framing" for web and mobile apps.
  - Browser with Window Frame
  - iPhone, iPad
  - Android Phone or Tablet
  - NOT Laptop or Desktop
  - See <a href="https://mockuphone.com">https://mockuphone.com</a>.
  - Eliminate shadows.



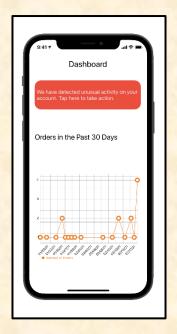
Artwork [2 of 3]

Read the instructions <u>carefully</u>. ← Have I mentioned this yet?

- Add borders if necessary.
  - If Blends Into White Background
  - Create a single PNG for each piece of artwork using PowerPoint.
  - Read Instructions
- Capture and provide very high-resolution images.
- Preserve aspect ratios.
- Crop to eliminate transparent "borders."
- Eliminate <u>all</u> surrounding "whitespace."
- Use paint.net.
- See examples.
  - The Capstone Experience Booklets
  - Design Day Artwork Feedback, Fall 2021
  - Previous Design Day Booklets (<u>Design Day > Booklet</u>)
  - MSU Men's Basketball



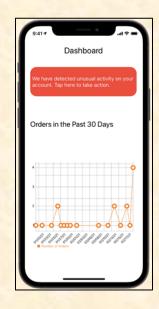
Artwork [3 of 3]



White Whitespace



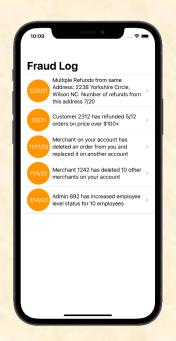
Too Much Transparent Whitespace

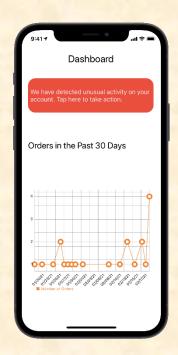


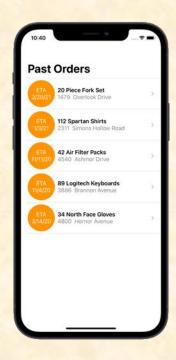
Nicely Cropped Transparent Whitespace

# Artwork Whitespace Issues

[1 of 3]





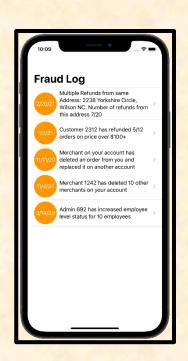


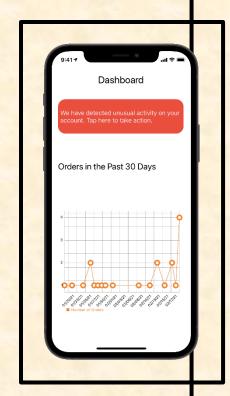
Look Identical

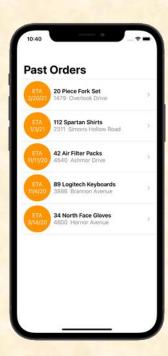
Key Think about our graphical designer copying, pasting, resizing and positioning your artwork.

# Artwork Whitespace Issues

[2 of 3]

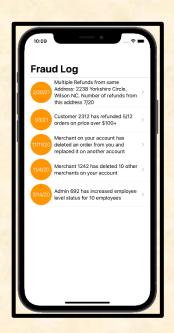






**Border Shows Transparent Whitespace** 





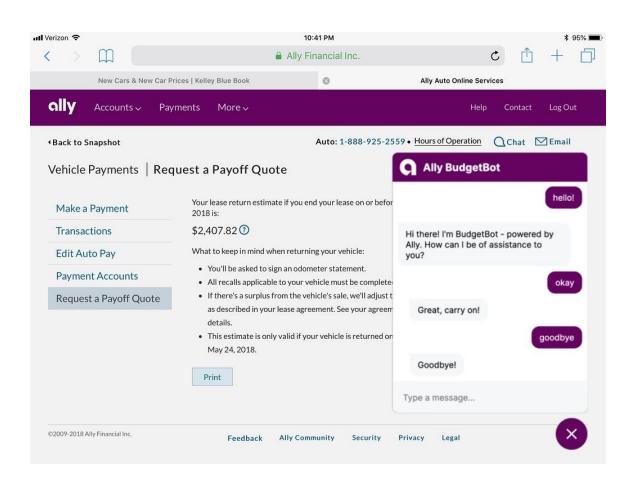




Select All. Rescale to 3" Height.

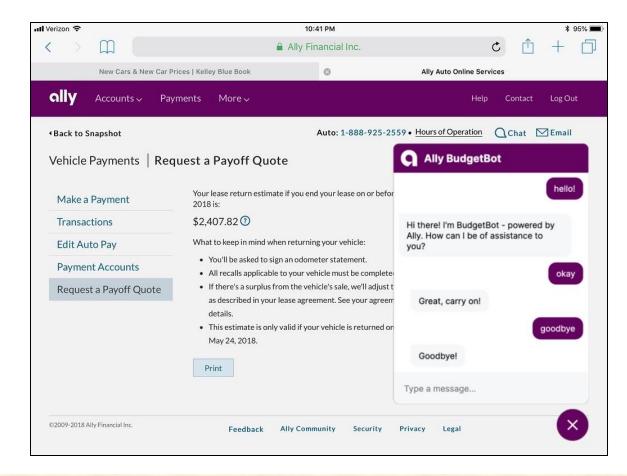
Download Design Day Artwork Whitespace Tester

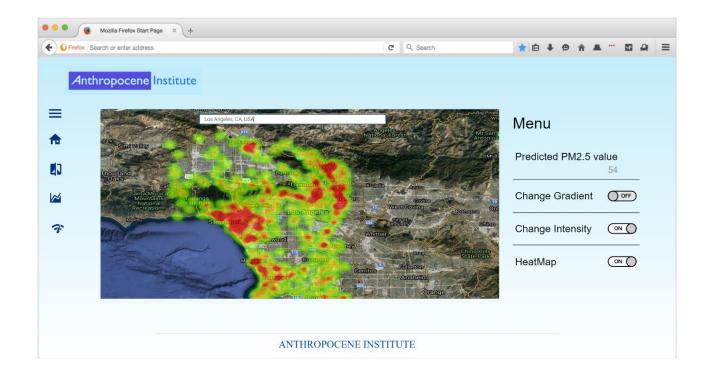
[1 of 6]



[2 of 6]

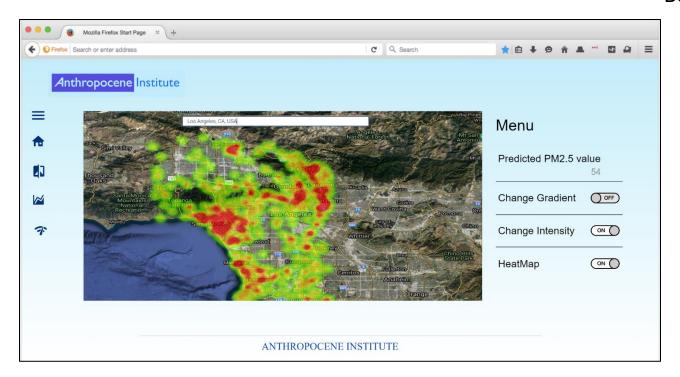
Issue Fixed Border Added



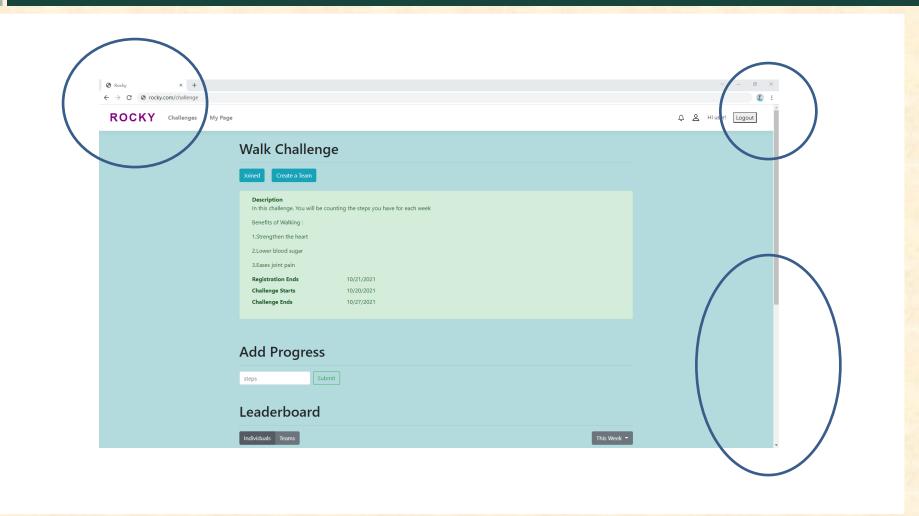


[4 of 6]

## Issue Fixed Border Added

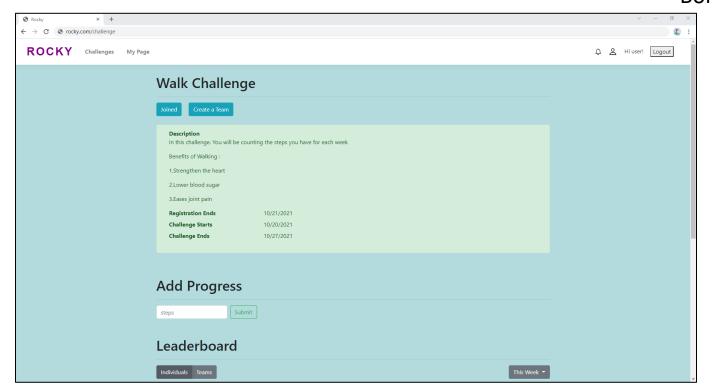


[5 of 6]



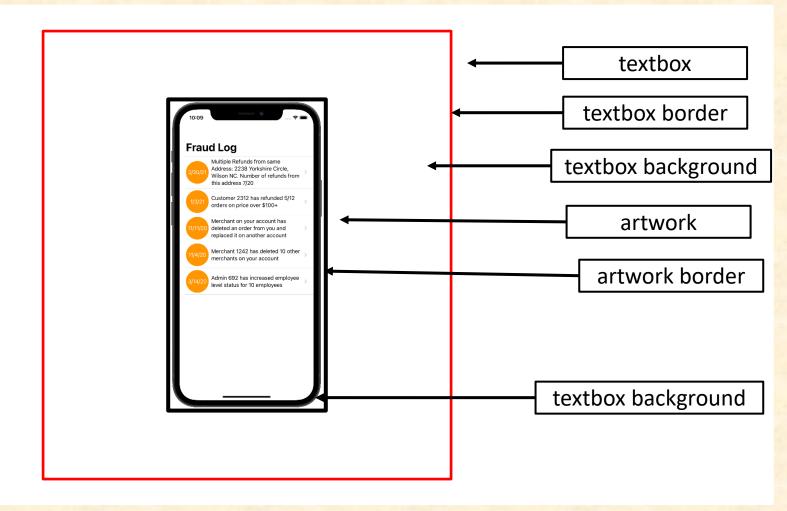
[6 of 6]

## Issue Fixed Border Added



# Artwork Who's on first?

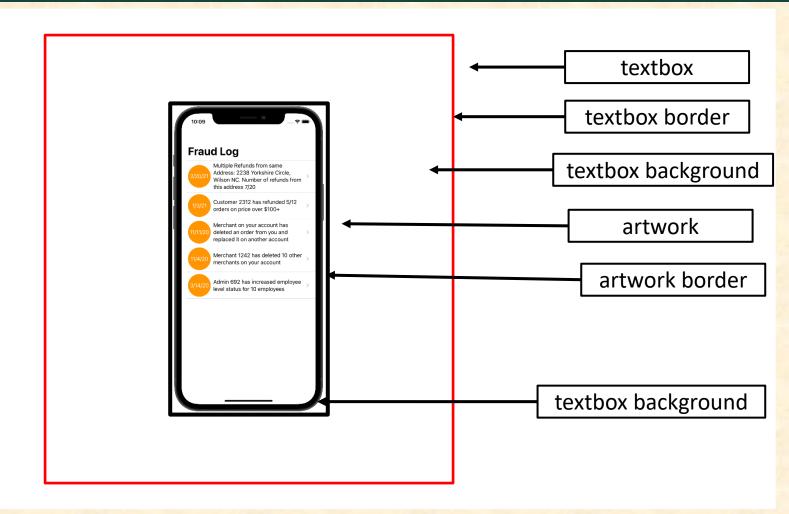
[1 of 3]





# Artwork Who's on first?

[1 of 3]



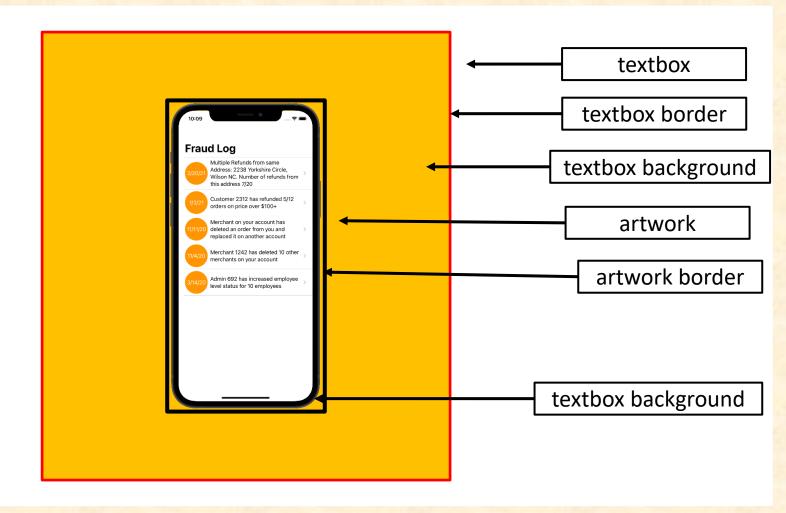


# Artwork Who's on first?

[2 of 3]

Changed color of textbox background.

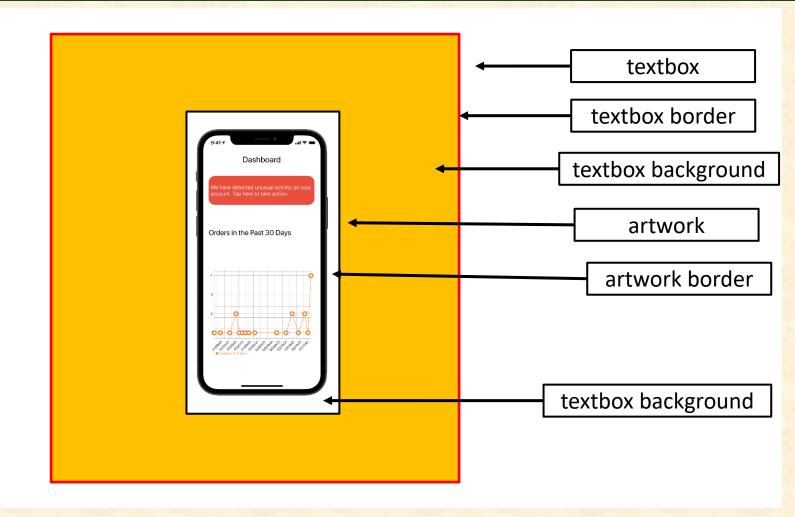
Artwork has transparent background.



[3 of 3]

Changed color of textbox background.

Artwork has white background, which is wrong. Why does this matter?



# Artwork Example

[1 of 5]

CSE 498 / 7:30 a.m. Engineering Building, Room 3405 | Third Floor

### Amazon

## **AVAST: Amazon Video And Shopping Technology**

ounded in 1994 as an online bookstore, Amazon is the largest online retailer in the world. In addition to retail, Amazon offers services in cloud infrastructure through Amazon Web Services, and audio and video streaming through Amazon Music and Prime Video.

According to a recent study, 80% of internet usage will be people watching online videos by the year 2020. This presents a significant opportunity for all online retailers.

Our AVAST (Amazon Video And Shopping Technology) platform leverages the growth in online video streaming by providing users with an easy way to purchase products of interest that they see in the videos they are watching.

Using AVAST, an Amazon customer can stream videos from content providers such as YouTube and their favorite TV networks.

While a user is watching a video, AVAST analyzes it to find items of potential interest to the viewer. As the video plays, related Amazon products are displayed alongside the video as illustrated in the examples at the right.

For each item, AVAST displays a product description, pictures and ratings. A viewer can easily purchase any product simply by clicking on the conveniently provided link to Amazon.

The frontend of AVAST (Amazon Video And Shopping Technology) is built using Angular 6, while the backend is implemented using PHP Laravel. In addition, several Amazon Web Services are used including Rekognition to analyze videos, and EC2 to host the AVAST website.

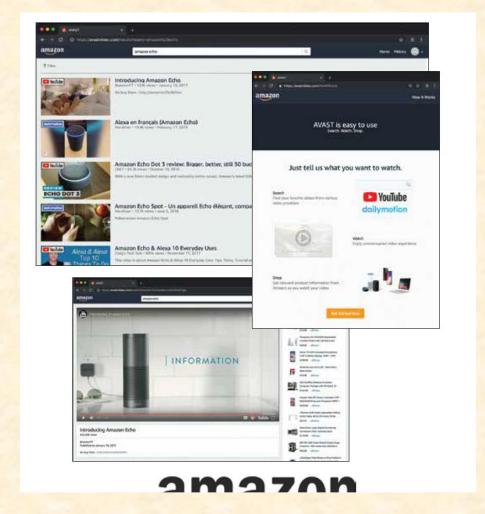






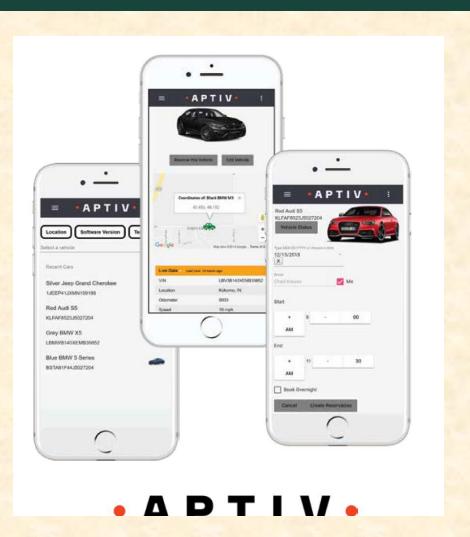


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[2 of 5]





The Capstone Experience

[3 of 5]

CSE 498 / 7:56 a.m. Engineering Building, Room 3405 | Third Floor

## Auto-Owners Insurance Jeffrey: Virtual Insurance Claim Advisor

that provides automotive, home, life and commercial insurance. Headquartered in Lansing, Michigan, Auto-Owners is represented by over 44,000 licensed insurance agents across 26 states, and provides insurance to nearly 3 million policyholders.

Every day, hundreds of insurance claims are filed with Auto-Owners through its independent agents. This process can be tedious for both policyholders and agents.

Our Jeffrey Virtual Insurance Claim Advisor system is a virtual claim assistant that automates the entire claim peorting process. Our mobile app, shown at the right, enables both agents and policyholders to file a claim easily and efficiently. Jeffrey engages in a dialogue with policyholders and

agents to gather information required to file their claim through natural conversation. If necessary, Jeffrey prompts users to take photos, record videos or attach documents relevant to a claim. After completing a dialogue with a user, Jeffrey automatically gathers the appropriate claim information and

submits it to Auto-Owners.

Our companion web app enables agents and Auto-Owners associates to find and review claim information that is submitted through the mobile application.

Our Jeffrey Virtual Insurance Claim Advisor system features natural language processing, which is implemented using Google's Dialogflow. A custom REST API, written in Kotlin, handles interactions between the applications and our MySQL database. Our web application is built using the React JavaScript framework.





LIFE . HOME . CAR . BUSINESS



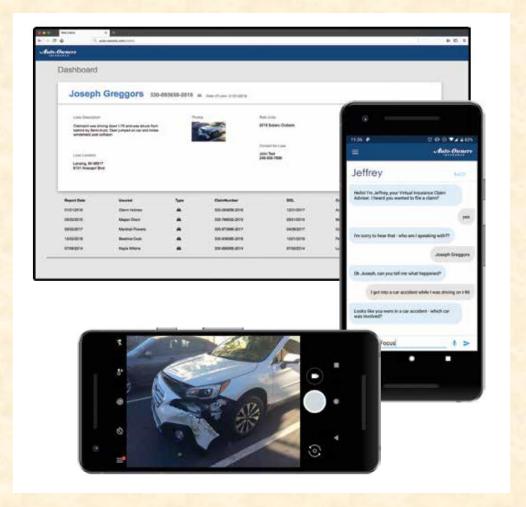
Michigan State University Team Members (left to right) Alex Klingel

Connor Stabnick Rochester, Michigan

Nabiha Biviji Novi, Michigan Michael Dickmann Auto-Owners Project Sponsors Ross Hacker Lansing, Michigan Scott Lake

Jim Schumacher Lansing, Michigan

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[4 of 5]



## **Proofpoint**

## **Improved Detonation of Evasive Malware**

eadquartered in Sunnyvale, California, Proofpoint provides cybersecurity to many organizations, including Fortune 100 companies and educational institutions such as Michigan State University.

Analyzing malware is challenging. Viruses, spyware, ramonware and other malicious programs come in many complex forms. To protect its customers, Proofpoint uses tools called sandboxes, which are restricted computing environments where potentially harmful malware can be tested and analyzed sadily. Unfortunately, a new class of malware called "evasive

malware" is rapidly emerging, thereby presenting a new, more dangerous class of cybersecurity threats. Evasive malware has the ability to detect the presence of the

Evasive malware has the ability to detect the presence of the sandbox environment. After doing so, it changes what it does, thereby evading analysis.

Our Improved Detonation of Evasive Malware system modifies evasive malware to block its ability to detect the sandbox environment, which causes it to execute. When the evasive malware does execute, its behavior is analyzed to determine precisely what it does so that Proofpoint can design countermeasures to protect

Our web app, shown at the right, displays the results of processed malware. Users can check the status of the malware samples being tested as well as see the top evasive techniques being used. Both harmless and harmful evasive results are presented.

Our Improved Detonation of Evasive Malware system is implemented in Python, using the Cuckoo sandboxing framework and Suricata network monitor. Our web app is implemented using Python and Flask with the interface framed in Bootstrap and iQuery.

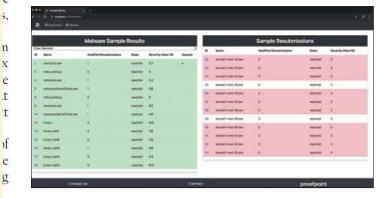




## proofpoint.







proofpoint...

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S

[5 of 5]

#### The Capstone Experience

### **MSU Federal Credit Union**

Banking with Amazon's Alexa and Apple's Siri

ounded in 1937, Michigan State University Federal Credit Union offers financial services to Michigan State University and Oakland University faculty, staff, students, alumni association members and their families. With 230,000 members and over \$3.3 billion in assets, MSUFCU is the largest university-based credit union in the world.

MSUFCU currently offers mobile banking apps on both Apple (iOS) and Google Android devices for members to access their funds and perform banking transactions at any time.

Our Banking with Amazon's Alexa and Apple's Siri systems maintain MSUFCU's technological edge by expanding their banking offerings to voice-controlled smart devices such as Amazon Alexa-enabled devices, Apple Watch and Android Wear.

Voice-controlled technologies give MSUFCU members new ways to interact with their accounts, including accessing their account balance, transferring money and obtaining information abour recent transactions. Members can request other information abour MSUFCU such as branch hours, current loan rates and the location of the nearest ATM or Branch.

Our companion administrative web portal enables MSUFCU staff to manage the available information and services offered by these voice technologies. Frequently asked questions can be added to the apps in minutes to improve the user experience.

The Alexa skill is written in Python, Apple Watch in Swift and Android Wear in Java. All three contact a MySQL database through JSON. The administrative web portal is written in PHP.



Building Dreams Together





## Previous Artwork Feedback

- Study Carefully to Learn
  - What to Do
  - What NOT to Do
- Posted on Downloads Page
  - Design Day Booklet Feedback, Fall 2021
  - Design Day Booklet Feedback, Spring 2022

## Example Spartan **Basketball Player Timer**

Computer Science CSE498 / 8:00 a.m. - Noon Engineering Building, 1300 Hallway | First Floor

## Michigan State University Men's Basketball Spartan Basketball Player Timer

NCAA Division I basketball is very competitive. Although it may not be apparent to the casual observer, every

detail of each game is carefully planned and scripted
One aspect of a game plan is that of playing times.
For each player, the coaches determine target times for how long he can play at a stretch, how long he needs to rest before playing again, and the total amount of time he should play in a game. Developed with Coach Tom Izzo, our Spartan Basketball Player Timer is used by the basketball staff

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When a player enters the game, his playing time is displayed with a solid green background. When his target playing time goes under two minutes, it is displayed in yellow. When the time goes below zero, it is displayed in red.

The color coding provides visual cues that can be seen by coaches at a distance. If there are many yellow

or red boxes, coaches begin to plan substitutions.

A game summary for all the players can be displayed at any time whether the game clock is running or stopped.

Our software runs on a Microsoft Windows Tablet PC about the size of a traditional clipboard only slightly thicker. With no mouse or keyboard, all input is done

Spartan Basketball Player Timer is written in Visual Basic. The underlying database is Microsoft Access.





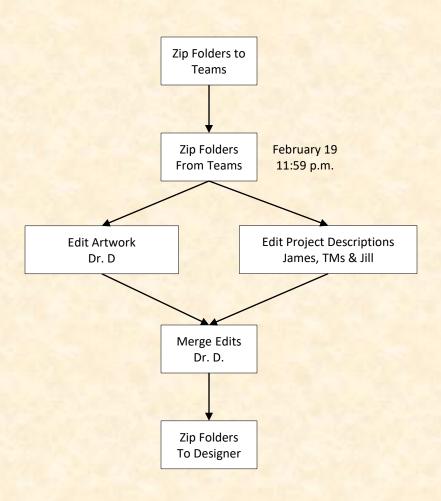


#### Michigan State University Team Members Nayne Dyksen orth Haledon, New Jersey Nayne Dyksen rand Rapids, Michigan Wayne Dyksen est Lafayette, Indiana Nayne Dyksen ast Lansing, Michigan





# The DD Booklet Production Process



# 1 Template From Dr. D. To Team

All of the textboxes are named for processing

Do NOT create your own textboxes.

If necessary, start over from the original downloaded template.

Engineering Building, 1300 Hallway | First Floor

8:00 a.m. - Noon / Computer Science CSE498

## **United Airlines**

## Training Scheduling and Optimization System II

Insert your project description here. Read the <u>Design Day</u> <u>Booklet Page Instructions</u> thoroughly, over and over and over and over and over.

For examples, see previous Design Day booklets, which you can find here.

You must use the Microsoft Windows version of Word. Do NOT even think about using anything else.,

The first two or three lines must be about your client. The following is an example.

Auto-Owners Insurance is a Fortune 500 company that provides automotive, home, life and commercial insurance to nearly 3 million policyholders in 26 states.

Do NOT use phrases like "Our clients asked us to,..." or "Our project is ..."

Do NOT uses phrases like "Our software aims to..." or "Our software is designed to..."

Write everything in the present tense.

Do NOT write anything negative about your client like "Our client's current software is horrible; ours is better."

Read the <u>Design Day Booklet Page Instructions</u> thoroughly, over and over and over and over.

It's okay for a paragraph to have only one sentence as long as the sentence is long enough to take up at least 1.5 lines. The last few lines (and only the last few lines) must contain

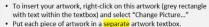
technical details about your project. The following is an example.

Read the Design Day Booklet Page Instructions thoroughly,

over and over and over and over and over.

The frontend of AVAST (Amazon Video And Shoppin

The frontend of AVAST (Amazon Video And Shopping Technology) is built using Angular 6, while the backend is implemented using PHP Laravel. In addition, several Amazon Web Services are used including Rekognition to analyze videos.



- Do not change the textbox's red external borders. Use them as handles to move and resize the textbox. The red borders will be made invisible later.
- Delete the artwork textboxes that you do not need.

border, select copy, and then paste.

- If you need more textboxes, you must copy-and-paste one of these existing artwork textboxes. Right-click on the outside red external border, select copy, and then paste.
- To layer overlapping textboxes, right-click on a textbox red border, and select "Bring to Front" or "Send to Back."

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Michigan State University Team Members (left to right) Josh Pezeshki

Franklin, Michigar Jack Soenke

Jack Soenke Naperville, Illinois

Laura Danila Livonia, Michigan

Andrew Ferguson Livonia, Michigan United Airlines Training

Project Sponsors Amadou Anne

Chicago, Illinois Craig Bennett Chicago, Illinois

Rick Brown Chicago, Illinois

Lynda McDaniel Houston, Texas

Tom Wilson Chicago, Illinois There are four placeholders for artwork.

The text boxes have red outlines for handles.

Each textbox includes one embedded placeholder artwork, a grey png image.

To add your artwork, right click on grey image and select Change Picture.

Delete the textboxes placeholders you don't need.

Do NOT create your own textboxes for artwork.



Project
Description Draft
From Team
To Dr. D.

Computer Science CSE498 / 8:00 a.m. - Noon Engineering Building, 1300 Hallway | First Floor

## **United Airlines**

## Training Scheduling and Optimization System II

United Airlines is the world's second largest airline company, operating 4,600 flights a day to 357 destinations. To maintain its fleet of 1,300 aircraft and enzure successful flights, it is crucial to have properly trained personnel. United's Technical Operations division has 60 instructors, who teach around 700 classes yearly to over 7,000 employees.

Our Training Scheduling and Optimization System II provides a web app to facilitate United's maintenance training schedulers to schedule instructors and students for courses across the country.

When the scheduler goes to schedule a course, the system displays available locations and instructors. The scheduler can also schedule a course from a training request inputted by instructors or supervisors.

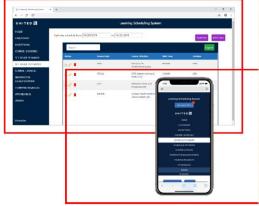
Our system contains a schedule optimization system. Within a given time frame, a scheduler inputs a set of classes and locations. The optimizer recommends an optimal schedule, including instructor and classroom. This reduces the amount of time the scheduler needs to plan courses.

The scheduler will be able to view calendars with published, planned, and optimized courses. They can edit classes from this view. The calendars can be sorted by instructor, location, and class. If a conflict is attempted to be scheduled, a notification will alert the scheduler.

The web app is fully functional using both web browsers and mobile browsers.

Our Training Scheduling and Optimization System II web app is built with ASP.NET Core, Angular 8, Node.js, an Entity Framework, and an Azure SQL database. The web app is hosted as an app service on Azure Cloud Platform.







#### Michigan State University Team Members (left to right) Josh Pezeshki

Franklin, Michigar Jack Soenke Naperville, Illinois

**Laura Danila** Livonia, Michigan

Andrew Ferguson Livonia, Michigan United Airlines Project Sponsors Amadou Anne

Chicago, Illinois Craig Bennett Chicago, Illinois

Rick Brown Chicago, Illinois Lynda McDaniel

Houston, Texas Tom Wilson Chicago, Illinois



# Project Description Draft From Team To Dr. D.

Read aloud.

Search your project description for the word "will."

Computer Science CSE498 / 8:00 a.m. - Noon Engineering Building, 1300 Hallway | First Floor

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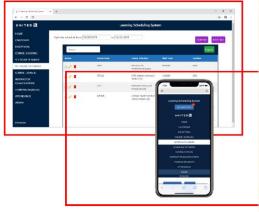
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The web app is fully functional using both web browsers and mobile browsers.

Our Training Scheduling and Optimization System II web app is built with ASP.NET Core, Angular 8, Node js, an Entity Framework, and an Azure SQL database. The web app is hosted as an app service on Azure Cloud Platform.







#### Michigan State University Team Members (left to right) Josh Pezeshki

Franklin, Michigan Jack Soenke Naperville, Illinois

Laura Danila Livonia, Michigan

Andrew Ferguson Livonia, Michigan United Airlines Project Sponsors Amadou Anne Chicago, Illinois Craig Bennett

Chicago, Illinois Rick Brown Chicago, Illinois

Lynda McDaniel Houston, Texas

Tom Wilson Chicago, Illinois



# Project Description Edits By James & TMs

Computer Science CSE498 / 8:00 a.m. - Noon Engineering Building, 1300 Hallway | First Floor

#### **United Airlines**

#### Training Scheduling and Optimization System II

United Airlines is the world's second largest airline company, operating 4,600 flights a day to 357 destinations. To maintain its fleet of 1,300 aircraft and ensure successful flights, it is crucial to have properly trained personnel. United's Technical Operations division has 60 instructors, who teach around 700 classes yearly to over 7,000 employees.

Our Training Scheduling and Optimization System II provides a web app to facilitate United's maintenance training schedulers to schedule instructors, students, and courses across the country.

When the scheduler wants to schedule a course, they must take into account a number of factors, including instructor availability, venue availability, instructor travel distance, and instructor qualifications.

Using our web and iOS apps, users can schedule classes manually, or through our automated schedule optimizer. Manual scheduling can be used effectively for a few classes in a short time frame. However, when dealing with a large number of classes taking into account all relevant factors, manual scheduling is an arduous task.

Our schedule optimization feature allows a scheduler to input a given time frame, a set of classes, and a set of locations. The optimizer then recommends an optimal schedule, including instructor and classroom assignments.

The optimized schedule minimizes the distance traveled by instructors, and takes into account instructor preferences and room availabilities.

An optimized schedule saves United Airlines significant time money, and resources.

Our Training Scheduling and Optimization System II web app is built with ASPNET Core, Angular 8, Node js, an Entity Framework, and an Azure SQL database. The web app is hosted as an app service on Azure Cloud Platform. Round 1 edits by James and Ryan ...

- Our Training Scheduling and Optimization System II provides a web app to facilitate United's maintenance training schedulers to schedule instructors and students for courses across the country.
- When the scheduler goes to schedule a course, the system displays available locations and instructors. The scheduler can also schedule a course from a training request inputted by instructors or supervisors.
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Andrew Ferguson Livonia, Michigan United Airlines Project Sponsors

Amadou Anne Chicago, Illinois Craig Bennett Chicago, Illinois

Rick Brown Chicago, Illinois

Lynda McDaniel Houston, Texas Tom Wilson Chicago, Illinois

PAGE N + 24



The Capstone Experience

#### 3 **Project Description Edits** By Jill

Computer Science CSE498 / 8:00 a.m. - Noon Engineering Building, 1300 Hallway | First Floor

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ranklin, Michigan Jack Soenke

aperville, Illinois Laura Danila

ivonia, Michigan

Andrew Ferguson ivonia. Michigan

### Round 2 edits by Jill..

· instructors (remove coma) · including (I would remove the colon) timeframe classes, ( would remove the comma and insert "and") timeframe

#### United Airlines Project Sponsors Amadou Anne

Chicago, Illinois Craig Bennett Chicago, Illinois Rick Brown

Lynda McDaniel Houston, Texas

Tom Wilson Chicago, Illinois



3
Artwork Draft
From Team
To Dr. D.

Computer Science CSE498 / 8:00 a.m. - Noon Engineering Building, 1300 Hallway | First Floor

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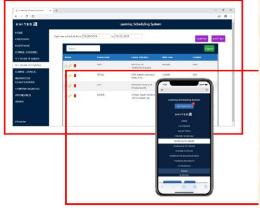
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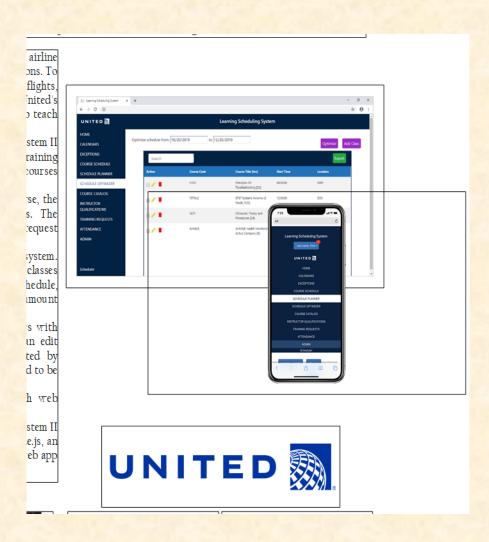
Chicago, Illinois Craig Bennett Chicago, Illinois

Rick Brown Chicago, Illinois Lynda McDaniel

Houston, Texas Tom Wilson Chicago, Illinois



# 3 Artwork Draft From Team To Dr. D.



What's wrong with this artwork?

3 Artwork Draft Feedback by Dr. D.



Dr. D. duplicated existing artwork to illustrate requested update.

# 3 Artwork Update From Team To Dr. D.

Computer Science CSE498 / 8:00 a.m. - Noon Engineering Building, 1300 Hallway | First Floor

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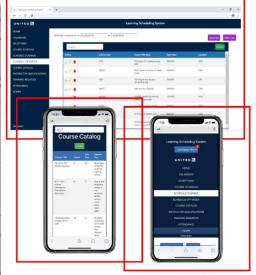
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#### UNITED

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**Laura Danila** Livonia, Michigan

Andrew Ferguson Livonia, Michigan United Airlines
Project Sponsors
Amadou Anne

Amadou Anne Chicago, Illinois Craig Bennett

Chicago, Illinois Rick Brown

Chicago, Illinois Lynda McDaniel

Tom Wilson Chicago, Illinois



# Final Update From Team To Dr. D.

Computer Science CSE498 / 8:00 a.m. - Noon Engineering Building, 1300 Hallway | First Floor

#### United Airlines

#### Training Scheduling and Optimization System II

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Andrew Ferguson Livonia, Michigan

#### United Airlines Project Sponsors Amadou Anne Chicago, Illinois Craig Bennett Chicago, Illinois Rick Brown

Rick Brown Chicago, Illinois Jamie Hill

Lynda McDaniel Houston, Texas Tom Wilson Chicago, Illinois



# Final Version From Dr. D. To Designer

Computer Science CSE498 / 8:00 a.m. - Noon Engineering Building, 1300 Hallway | First Floor

#### United Airlines

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#### Design Day Booklet

CSE 498 / 8:00 a.m. - Noon Engineering Building, 1300 Hallway | First Floor

## United Airlines Training Scheduling and Optimization System II

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PAGE 46



The Capstone Experience

### Design Day Production Schedule

Weekday	Date	Task	Elapsed Days
Monday	October 3	Dr. D. posts zipped folders with templates for downloading.	0
Tuesday	October 4	Dr. D. discusses process at all-hands meeting.	1
Friday	October 7	Teams submit zipped folders with first draft by 11:59 p.m.	4
Sunday	October 9	Dr. D. edits the artwork and creates artwork feedback.	6
Sunday	October 9	Dr. D. posts zipped folders with artwork feedback for downloading.	6
Sunday	October 9	TMs begin editing project descriptions.	6
Sunday	October 9	Teams begin updating artwork.	6
Tuesday	October 11	Dr. D. discusses artwork feedback at all-hands meeting.	8
Tuesday	October 11	TMs. discusses project descriptions at split-hands meeting.	8
Tuesday	October 11	Teams submit zipped folders with updated artwork by 11:59 p.m.	8
Wednesday	October 12	Dr. D. edits the artwork and creates artwork feedback.	9
Wednesday	October 12	Dr. D. posts zipped folders with artwork feedback for downloading.	9
Wednesday	October 12	TMs submit project description edits by 11:59 p.m.	9
Thursday	October 13	Dr. D. discusses artwork feedback at all-hands meeting.	10
Thursday	October 13	TMs discusses project descriptions at all-hands meeting.	10
Thursday	October 13	TMs and Jill meet to discuss project descriptions.	10
Thursday	October 13	Jill begins editing project descriptions.	10
Thursday	October 13	Teams submit zipped folders with updated artwork by 11:59 p.m.	10
Saturday	October 15	Jill submits project description edits by 8:00 a.m.	12
Saturday	October 15	TMs and Jill meet to discuss project descriptions.	12
Saturday	October 15	TMs begin final editing project descriptions.	12
Saturday	October 15	TMs submit project description edits by 11:59 p.m.	12
Sunday	October 16	Dr. D. posts final version of project descriptions.	13
Tuesday	October 18	Dr. D. discusses project descriptions at all-hands meeting.	15
Wednesday	October 19	Teams submit final version of project description by 11:59 p.m.	16
Thursday	October 20	Dr. D. discusses any remaining issues at all-hands meeting.	17
Thursday	October 20	Dr. D. posts final versions of zipped folders.	
Saturday	October 22	Dr. D. merges final artwork with final project description.	19
Sunday	October 23	Dr. D. submits zipped booklet assets to graphic designer.	20



### October 2022

October 2022					November 2022								
0	Tu	We	Th	Fr	Sa	S	u	Мо	Tu	We	Th	Fr	
3 10 17 24	4 11 18 25	5 12 19 26	6 13 20 27	7 14 21 28	1 8 15 22 29	2	6 13 20 27	7 14 21 28	1 8 15 22 29	2 9 16 23 30	3 10 17 24	4 11 18 25	

				30 31		
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
Sep 25	26	27	28	Production	30	Oct 1
2	3 1. Dr. Posts Zip Templates 2. Dr. Emails Instructions	4 Dr D Discusses Process at All-Hands	5	<u>Calendar</u>	7 Teams Submit Zip by 11:59pm	8
9 1. Dr D Edits Artwork 2. Dr Posts Artwork 3. TMs Edit Proj Desc 4. Teams Update Art	10	11 1, Dr D Discusses Discusses Artwork 2. TMs Discuss Proj Desc 3. Teams Submit Art	1 2 1. Dr D Edits Artwork 2. Dr Posts Artwork 3. TMs Submit Proj Desc	13 1. Dr D Discusses 2. TMs & JB Discuss PDs 3. JB Edits Proj Desc 4. Teams Submit Art	14	1. JB Submits PD 2. TMs & JB Discuss PDs 3. TMs Edit Proj Desc 4. TMs Submit Proj Desc
16 Dr D Posts Final PDS	17	18 Dr D Discusses Final PDS	19	20 1. Dr D Discusses Merges Art & PDs 2. Dr. Posts Final Zips	21	22 Teams Submit Final Zips by 11:59pm
Dr D Submits Assets to Designer	24	25	26	27	28	29
30	31	Nov 1	2	3	4	5

Dyksen, Wayne 1 9/28/2022 1:45 PM



## Zipped Assets Folder

- Link On Downloads Page
- Customized Per Team
- Contents
  - Project Page Template .docx
  - Four Template Artwork Files .png
- Do not change filenames.
- Example
  - team-amazon-design-day-booklet-page.zip
  - team-amazon-design-day-booklet-page.docx
  - team-amazon-artwork-1.png
  - team-amazon-artwork-2.png
  - team-amazon-artwork-3.png
  - team-amazon-artwork-4.png



### Submission

- READ Submission Instructions Carefully
- Zipped Assets Folder
  - Folder Name: team-urban-science-design-day-booklet-page
  - Contents
    - o team-urban-science-design-day-booklet-page.docx
    - team-urban-science-artwork-1.png (Very High Resolution)
    - o team-urban-science-artwork-2.png (Very High Resolution)
    - o team-urban-science-artwork-3.png (Very High Resolution)
  - Delete unused placeholder artwork files.
  - Zip Filename: team-urban-science-design-day-booklet-page.zip
- Upload to Microsoft Teams
  - General Channel File Space
  - Folder Named design-day-booklet-team-zip-files
  - Team's Private Channel File Space
  - Due 11:59 p.m., Friday, October 7. ← This Friday



## Design Day Grade

- 5% of Final Grade
- Two Factors
  - Design Day Booklet Team Page Process
  - Design Day Performance
- Design Day Booklet Process Deductions Including But Not Limited To...
  - Project Description Errors and Effort to Rewrite
  - Artwork Errors and Effort to Correct
  - Failure to Use Windows Version of Office 365
  - Submission Errors



[1 of 3]

- Upcoming Meetings
  - **10/04: Design Day Booklet Production Process**
  - 10/06: Creating and Giving Presentations
  - 10/11: Alpha Presentations

← New

- 10/13: Alpha Presentations
- 10/18: Alpha Presentations
- 10/20: Resume Writing and Interviewing

•

■ 11/15: Beta Presentations

### What's ahead?

[2 of 3]

- Important Dates for Planning
  - 10/07: Design Day Booklet Zip File Due

←Friday

■ 10/10: Alpha Slide Decks Due

←New

- 10/11: Design Day Updated Artwork Due
- 10/11: Alpha Presentations Start

←New

Start Working Towards Beta Presentations ← Key

- 11/14: Beta Slide Decks Due
- 11/15: Beta Presentations Start
   Start Working on Project Videos

**←**Key

[3 of 3]

- Capstone Due Dates / Deadlines
  - Published at Start of Semester
    - See Weekly Schedule
    - See Major Milestones
  - Immovable
    - Your team depends on you.
    - You must get your tasks done on time.
    - o Plan well in advance.
    - If you are "stuck," ask for help sooner rather than later.
    - If you are not going to complete your tasks...
      - ...tell your team well in advance of the deadline.
      - ❖ ....another team member will complete your task.
      - ❖ ...your team may be told they no longer need to depend on you.



## Read Me

[1 of 2]

#### Presenting

- The purpose of the Alpha Presentation is to convince everyone that your team will be successful; that is, to convince everyone that your team has your project completely scoped, the specifications complete, and all risks mitigated so that you are capable of implementing your project, full-featured, and delivered it to your client, on time (Wednesday, December 7).
- The time limit for your presentation is 15 minutes, which will be strictly enforced. Practice your presentation to ensure that you will finish within the allotted time.
- Each team will share and "drive" the slide deck for their own team.
- Plan on spending most of your presentation demonstrating your software. A suggested approach is as follows.
  - Very Brief Review of Project Overview
  - Very Brief Review of System Architecture
  - Software Demonstration (Skipping All of the Screen Shot Slides in Your Slide Deck)
  - Brief Summary of What's left to do?
- Your presentation should be professional, well rehearsed, and flow from beginning to end. Practice presenting using Microsoft Teams. Ensure that your slides are readable. Practice sharing your screens and demonstrating your software. Practice switching from one team member to another.
- As a backup to live demonstrations, consider making screen recordings of your software demonstrations using Camtasia.
- We will meet in two "split-hands" meetings with one Teams channel for Luke's teams and one for Griffin's teams.
- All team members are required to dress business casual on the day of their presentation. Business casual does not include sneakers, tennis shoes, hats, coats, hoodies, t-shirts or shirts that are not tucked into pants. Google "what is business casual."
- All team members should turn their cameras on during their presentation.
- Although the presentations will be scheduled over the course of three meetings, all teams must be prepared to present on the first day scheduled, Thursday, October 13.
- The presentation schedule will be posted on our All-Hands Meetings page in the evening of Wednesday, October 12.



## READ ME

[2 of 2]

#### Creating and Editing

- Use only the Windows version of Office 365.
- You must use this PowerPoint slide deck template as is. Do not change the number of slides unless the instructions explicitly allow you to duplicate slides. Do not change the order of the slides. Do not change the styles. Do not edit the master slides.
- Throughout the template, replace placeholders [...] with the appropriate information.
- Edit the center footer by clicking the Header & Footer button on the Insert ribbon. Change [Team Name] in the footer to your company name as in "Team TechSmith Alpha Presentation". If necessary, extend the width of the center footer textbox on the master slide, making sure that you re-center the enlarged textbox.
- Do not include any company confidential information in your presentation.
- Delete every textbox that includes "Delete this textbox" and every slide that includes "Delete this slide."

#### Submitting

- All presentations are due to us and to your client by 11:59 p.m., Wednesday, October 12.
- Name your PowerPoint slide deck file as "team-[team-name]-alpha-presentation.pptx" replacing "[team-name]" with your team's name (using all lower case and replacing all blanks with dashes) in your filename as in "team-auto-owners-alpha-presentation.pptx". Set File Explorer or Finder to show all file extensions to ensure that there are no blanks before the ".pptx" extension as in "team-amazon .pptx".
- Upload your PowerPoint slide deck to the folder "Alpha Presentation Slide Decks" in our Microsoft Teams General Channel file space by 11:59 p.m., Wednesday, October 12. In addition, upload your slide deck to your team's private channel file space in case your slide deck is deleted by accident from the General Channel file space, and you need to prove that you did indeed upload your slide deck by the due date and time.
- Email a copy of your slide deck to your client as well by 11:59 p.m., Wednesday, October 12. Do not cc us on that email.
  Include some professional text in the body of your email to practice being a professional and to avoid having your email sent to your project sponsor's junk folder.



# MICHIGAN STATE UNIVERSITY

# Alpha Presentation [Project Title 36pt]

### The Capstone Experience

Team [Team Name 24pt]

[Team Member 1 16pt]

[Team Member 2 16pt]

[Team Member 3 16pt]

[Team Member 4 16pt]

[Team Member 5 16pt]

[Team Member 6 16pt]

Department of Computer Science and Engineering
Michigan State University



# **Project Overview**

- Point 1
- Point 2
- Point 3
- Etc...



## System Architecture

Include your system architecture diagram from your Project Plan presentation.

Update or redo your system architecture diagram if you were asked you to do so in your Project Plan presentation feedback.

# [Title of Screen Shot 1]

You must include at least four screenshots.

Include actual screen shots (i.e., not mockups), replacing [Title of Screen Shot] with an appropriate title.

You may duplicate the Screen Shot template slide as needed.

The screen shots should <u>not</u> contain any bordering transparent or whitespace. Use paint.net to <u>crop</u> them appropriately.  $\leftarrow$  Read this carefully.

If a slide contains more than one screen shot or additional artwork (like arrows), group all of the items into a single grouping so that it can be copied-and-pasted and resized as a single unit. 

Read this carefully.



# [Title of Screen Shot 2]

You must include at least four screenshots.

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You may duplicate the Screen Shot template slide as needed.

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# [Title of Screen Shot 3]

You must include at least four screenshots.

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You may duplicate the Screen Shot template slide as needed.

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Read this carefully.



# [Title of Screen Shot 4]

You must include at least four screenshots.

Include actual screen shots (i.e., not mockups), replacing [Title of Screen Shot] with an appropriate title.

You may duplicate the Screen Shot template slide as needed.

The screen shots should <u>not</u> contain any bordering transparent or whitespace. Use paint.net to <u>crop</u> them appropriately.  $\leftarrow$  Read this carefully.

If a slide contains more than one screen shot or additional artwork (like arrows), group all of the items into a single grouping so that it can be copied-and-pasted and resized as a single unit. 

Read this carefully.



## What's left to do?

- Task 1
- Task 2
- Task 3
- Task 4
- Etc

#### Don't panic.

We do not expect that your project is done or even nearly done.

Simply give a list of the major tasks that you need to accomplish to complete your project.

Only include things that are relevant to your software system.

Do NOT include things such as "Update the Project Plan" or "Create Project Video."



# Questions?

