

09/11: Team Status Reports

The Capstone Experience

Dr. Wayne Dyksen

Department of Computer Science and Engineering
Michigan State University

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

Team Auto-Owners

Status Report

(1 of 4)

Catastrophe Insurance Adjuster App

- Project Description
 - Manage independent insurance adjusters
 - Handle claims resulting from catastrophes
 - Provide remote support at sites of catastrophe
- Project Plan Document
 - Eleven pages written
 - Approximately one-third done

Team Auto-Owners

Status Report

(2 of 4)

Catastrophe Insurance Adjuster App

- Server Systems / Software
 - Linux Server (Ubuntu)
 - Apache HTTP server
 - Our server is up and running
 - MySQL database
 - CodeIgniter framework (PHP)
- Development Systems / Software
 - HTML5
 - CSS3
 - JavaScript/jQuery



Team Auto-Owners

Status Report

(3 of 4)

Catastrophe Insurance Adjuster App

- Client Contact
 - In-person meeting
 - Weekly client meeting call scheduled (Wed. 4-5 P.M.)
- Team Meetings
 - Weekly meeting (Tue. 6:30-7:30 P.M.)
 - Triage meeting (Fri. 4-5 P.M.)
- Team Organization
 - Client liaison: Renee
 - No team leader

Team Auto-Owners

Status Report

(4 of 4)

Catastrophe Insurance Adjuster App

Risks

- Supporting multiple platforms
 - Supporting different resolutions, browsers, and devices
- Testing, considering more general UI design prior to implementations
- Integrating with other APIs
 - Google Maps API, which potentially needs some tweaking to work with our project
- Effectiveness issues with limited resources
- Battery life and data access limit (25,000 calls per day for Google Maps)



Team Boeing

Status Report

(1 of 4)

Continuous Improvement of Boeing Assembly Lines

- Project Description
 - Simulate Aircraft Assembly Line
 - Teams of Humans and Robots
 - Optimize Assembly Line Layout, Efficiency and Safety
- Project Plan Document
 - The current status of our Project Plan Document is “Work in Progress”
 - We have started working on the document.
 - We have a skeleton written.
 - It is currently 5% complete



Team Boeing

Status Report

(2 of 4)

Continuous Improvement of Boeing Assembly Lines

- Server Systems / Software
 - We've installed Windows Server 2008, and are currently in the process of installing software to it
 - We have decided to use Git as our source control
 - Visual Studio Team Foundation Server
- Development Systems / Software
 - Unity is downloaded, Sean is proficient, the rest of us are learning
 - Blender is downloaded
 - Microsoft Visual Studio 2012 is downloaded



Team Boeing

Status Report

(3 of 4)

Continuous Improvement of Boeing Assembly Lines

- Client Contact
 - We made first contact with our client on Thursday, September 5, at 5:30pm
 - We have a weekly client meeting on Thursdays at 5:30pm
- Team Meetings
 - Our team has met seven times
 - Our team meetings are on Mondays, Tuesdays, Wednesdays, Thursdays, and Fridays at 5:30pm, and Sundays at 1:00pm, and Away Football Game Saturdays at 1:00pm
 - Our triage meetings are on Tuesdays at 5:10pm
- Team Organization
 - Sean is our Client Contact and Project Design Lead
 - Ross is our Keeper of the Time
 - Dave is our Test Lead and 2D Design Lead
 - Kyle is our Daily Build Enforcer and 3D Design Lead



Team Boeing

Status Report

(4 of 4)

Continuous Improvement of Boeing Assembly Lines

- Risks
- Purchasing of Unity License
 - We will require access to Unity Pro, which will require the purchase of a license after 30 days.
 - \$129 license available through <http://www.studica.com/unity>
- Familiarity with the concept of Inverse Kinematics
 - Wikipedia: Inverse kinematics refers to the use of the kinematics equations of a robot to determine the joint parameters that provide a desired position of the end-effector.
 - Become more familiar with the concept of inverse kinematics.
- Knowing which metrics to measure
 - There are hundreds, possibly even thousands of factors that go into measuring safety and efficiency on an assembly line
 - Speak with Jayson, and decipher which metrics are the most relevant, and which aren't
- GUI for Unity
 - We are trying to use Unity, a game developing tool, to create a useful simulation "game", however limitations with unity's built-in UI functionality will force alternate approaches to be considered.
 - Figure out if it's possible, and if it's not, change our approach



Team GM

Status Report

(1 of 4)

Augmented Reality Mobile App Guide

- Project Description
 - iPhone App
 - Point phone at car to display make and model
 - Displays price, options, nearest dealer
 - Social sharing and posting of findings
- Project Plan Document
 - Rough Outline
 - Executive Summary
 - Core Functionality
 - Testing



Team GM

Status Report

(2 of 4)

Augmented Reality Mobile App Guide

- Server Systems / Software
 - Potentially using GM API for vehicle information
- Development Systems / Software
 - Using Metaio for Tracking - Tested Working
 - Xcode
 - iOS 6

Team GM

Status Report

(3 of 4)

Augmented Reality Mobile App Guide

- Client Contact- Keith Fry
 - Weekly Conference Call 1pm Friday
 - On Site Visit Friday 9/13
- Team Meetings
 - Triage Monday 4:40 pm
 - Weekly Status Meeting Afterwards
- Team Organization
 - Client Contact- Jon, Program Manager - Madalyn
 - All Developers

Team GM

Status Report

(4 of 4)

Augmented Reality Mobile App Guide

Risks

- Car Identification
 - Identify cars with just a picture
 - We are using scaled model cars to photograph cars in a controlled environment
- Proper Technology
 - We need specialized software to process image recognition
 - We are working with GM and MSU to get the necessary licensing
- App Development
 - The team all has minimal experience with mobile app development, but not extensive experience
 - Our team is spending extra time in the lab reading tutorials and learning Xcode
- GM API
 - The current support is unknown for vehicle information retrieval
 - Information may initially be hard coded until support is available



Team IBM

Status Report

(1 of 4)

IT Consultant Toolkit

- Project Description
 - IT Consulting Tool
 - Gathering clients current and expected business practices
 - Synthesizing client information to highlight potential gaps and issues in their future goals
 - Allows clients to better incorporate IT into their business model
- Project Plan Document
 - Our project plan document is at the starting point
 - Skeleton of main Areas needed to be addressed
 - Most of the material is there to be put in
 - Just need to organize it
 - Roughly 10% completed



Team IBM

Status Report

(2 of 4)

IT Consultant Toolkit

- Server Systems / Software
 - DB2 – Express C database kit
 - Web Server on IBM side?
- Development Systems / Software
 - Microsoft Visual Studio 2010 with the .NET 4.0 framework
 - SQL for database queries
 - Visual C# for GUI interactions and front end calculations
 - Potentially PHP and HTML for web pages
 - Microsoft Excel for generating spreadsheets, if web server isn't an option



Team IBM

Status Report

(3 of 4)

IT Consultant Toolkit

- Client Contact
 - Met 3 times in person, with 3 conference calls with many different representatives
 - Very convenient since our main contact, Louise, lives in Owosso
 - Monday at 6 is the weekly conference call
- Team Meetings
 - Met 6 times already
 - At least 3 times a week
 - Weekly work times on Fridays



Team IBM

Status Report

(4 of 4)

IT Consultant Toolkit

- Risks
- DB2
 - DB2 is the one of IBM's servers for the back-end data collection, which needs to interact with Visual Studio
 - Alex has been working with setting it up , and has it working successfully on localhost
 - Very likely this risk will be gone soon
- IBM web server
 - Only able to use free software, which requires no licensing
 - Security issues with creating a web server to access client data
 - Will be mitigating by just integrating their current Powerpoint/email system into our project



Team Meijer

Status Report

(1 of 4)

Chief Information Officer Dashboard

- Project Description
 - Web page to inform CIO of company's status
 - Simple graphical representation
 - Options for more detailed financial reports
 - Desktop and mobile friendly
- Project Plan Document
 - Document is skeletonized
 - Sections assigned
 - Progress on presentation



Team Meijer

Status Report

(2 of 4)

Chief Information Officer Dashboard

- Server Systems / Software
 - Server running & up to date
 - SQL Server running
 - Sharepoint, SVN server installed
- Development Systems / Software
 - Virtual machine installed & updated (159 updates?!)
 - Lab and personal computers set up for IDE and Office
 - Starting first prototype



Team Meijer

Status Report

(3 of 4)

Chief Information Officer Dashboard

- Client Contact
 - Bi-weekly conference call, status report
 - Regular email contact
- Team Meetings
 - Meet ~daily after class
 - Schedule additional meetings as needed
- Team Organization
 - Determined point of contact, server monkey
 - Design tasks assigned as they come up



Team Meijer

Status Report

(4 of 4)

Chief Information Officer Dashboard

Risks

- Some lack of experience with ASP.NET
 - Two members have some experience, two have none
 - Will work together early to answer questions, access resources
- No experience maintaining Windows servers
 - More complicated permissions, security
 - Must thoroughly read resources, be cautious with security
- Lack of business logic and SSRS experience
 - Unfamiliar with some financial terms, concepts
 - Need to discuss requirements in detail with client
- Corporate data unavailable
 - Can't access Meijer databases, uncertainty of correct output data
 - Generate sample data, specify desired data models, confirm with client



Team Mozilla

Status Report

(1 of 4)

Australis-Styled Widgets for Mozilla Firefox

- Project Description
 - 3 Widgets for new Firefox UI
 - Weather
 - Bugzilla
 - Music Player
- Project Plan Document
 - 20 % done
 - Outline, summary, overview, mockups, schedule, test plan

Team Mozilla

Status Report

(2 of 4)

Australis-Styled Widgets for Mozilla Firefox

- Server Systems / Software
 - Ubuntu Server 12.04 LTS LAMP Stack
 - Bugzilla
 - Github repository and local mirror
- Development Systems / Software
 - Windows VM with Microsoft Office
 - Firefox UI branch nightly build and download script
 - IRC clients and bots on Mozilla's server



Team Mozilla

Status Report

(3 of 4)

Australis-Styled Widgets for Mozilla Firefox

- Client Contact
 - 1 In-Person/Teleconference Meeting (8/30/2013)
 - Tentative weekly meetings Fridays at 4:20pm
- Team Meetings
 - 4 full meetings, 4 partial meetings
 - Weekly full meetings on Friday and Sunday afternoon
- Team Organization
 - Dan: Client Liason, Lead Developer; Dave: Writer, Developer; Eric P.: P. M., UI/ UX; Eric S.: Admin, Test Developer
 - Establishing ownership of modules

Team Mozilla

Status Report

(4 of 4)

Australis-Styled Widgets for Mozilla Firefox Risks

- Australis-Styled Widgets
 - No documentation for creating extensions which use new UI
 - Work with client to develop a working understanding of new APIs
- Scope Definition
 - Widget functionality is undefined, may be a fourth widget
 - Client contact, frequent mockups
- Third Party API Integration
 - Must select and use third-party APIs
 - Interfaces for multiple APIs, cache and degrade, continuous integration
- External Tooling Outages
 - External tools such as Github or Mozilla's Bugzilla instance may go down
 - Host repository mirror and Bugzilla instance on development server



Team MSUFCU

Status Report

(1 of 4)

In-School Banking Program

- Project Description
 - Micro branch in elementary and middle schools
 - iPad app serves as “Piggy Bank of the Future”
 - Run by parent volunteers
 - Creates summary for both students and local MSUFCU branch
- Project Plan Document
 - Completed outline
 - Tasks assigned to members
 - Completed executive summary
 - Completed functional specification



Team MSUFCU

Status Report

(2 of 4)

In-School Banking Program

- Server Systems / Software
 - Github – Accounts created, testing successful
 - MySQL database – not set up (joint responsibility)
 - SSL Authentication – being researched
- Development Systems / Software
 - Apple Enterprise Developer Membership – Provided by MSUFCU, not delivered/set up
 - Xcode – Project created, pushed to Github



Team MSUFCU

Status Report

(3 of 4)

In-School Banking Program

- Client Contact
 - Initial meeting: 9/4/2013
 - Weekly call/In person meetings: being discussed with client
- Team Meetings
 - Team meets 2-3 times per week
 - Scheduled for Mon/Wed after class, Sunday
- Team Organization
 - Client Contact/PM: Phil Getzen
 - iOS Leads: Adam Proschek, Phil Getzen
 - Server/Web Leads: Mairin Chesney, Allen Koppman



Team MSUFCU

Status Report

(4 of 4)

In-School Banking Program Risks

- Security
 - Banking data and transactions need to be secure.
 - SSL encryption when authenticating users.
- Integration with MSUFCU systems
 - May be difficult to integrate with necessary database and web app.
 - Work closely with MSUFCU to ensure compatibility.
- Usability & Scope
 - Usability for our target audience is a very high priority and feature creep is a possible problem for the application.
 - A detailed functional spec and extensive usability testing.



Team Quicken Loans

Status Report

(1 of 4)

Survey and Voting Web Apps

- Project Description
 - Internally administrated website
 - Voting and surveys
 - Reporting of results
 - Analytics of completed surveys/votes
- Project Plan Document
 - Executive summary completed
 - System architecture completed
 - Schedule completed
 - Initial Mock-ups completed



Team Quicken Loans

Status Report

(2 of 4)

Survey and Voting Web Apps

- Server Systems / Software
 - Active Directory
 - SQL Server 2008
 - Team Foundation Server
- Development Systems / Software
 - Visual Studio 2012
 - Internet Information Services
 - .NET Framework

Team Quicken Loans

Status Report

(3 of 4)

Survey and Voting Web Apps

- Client Contact
 - 1:00 PM Wednesday
 - Email follow-up and in-person TBD
- Team Meetings
 - Team meetings M/W/Sun
 - Met 5-7 times
- Team Organization
 - Client contact - Jake
 - Manager – Kate
 - Lead Programmer – Mike
 - Server Admin - Clif

Team Quicken Loans

Status Report

(4 of 4)

Survey and Voting Web Apps

Risks

- Active Directory
 - Getting set-up to properly mock Quicken Loans network – Can connect to server domain
- Quicken Loans API Integration
 - Integrate Quicken Loans software for data access and authentication
 - Early start and open communication with client
- Data Storage
 - Determine appropriate storage schema for required data
 - Get client requirements and design around technology limitations
- Website Usability
 - Usable between desktop and mobile devices – bootstrap/JQuery mobile
- Geo-location
 - Need the ability to integrate client location into surveys and voting
 - Determine client expectations and research technologies



Team Spectrum Health

Status Report

(1 of 4)

Talent Connection

- Project Description
 - A mobile HR website
 - Easily search and apply for jobs via smart phones or tablets
 - Responsive design, one code-base for both phones and tablets
 - Speed application process for internal applicants
 - Integrate with LinkedIn and other 3rd parties (Dropbox, Box, etc.)
 - Use secure SOAP service for back-end data connections
- Project Plan Document
 - Started
 - Technical and Functionality sections completed
 - Design section still very rough
 - Approximately 50% done



Team Spectrum Health

Status Report

(2 of 4)

Talent Connection

- Server Systems / Software
 - Capstone server running with test IIS website working
 - Need to connect to Client's Enterprise Web Service (EWS)
 - Involves VPN and Certificates for secure connection
 - May need help from Client to set up
- Development Systems / Software
 - Able to deploy test website via Visual Studio to our server
 - Private GitHub repository created
 - Git Extensions installed and correctly connecting to GitHub repository



Team Spectrum Health

Status Report

(3 of 4)

Talent Connection

- Client Contact
 - Weekly phone calls scheduled for Tuesdays at 3:00pm
 - In-person meetings
 - Business requirements meeting occurred on Tuesday, Sep 10th
 - Design session meeting scheduled for Tuesday, Sep 17th
- Team Meetings
 - Triage meetings scheduled for Tuesdays at 4:10pm
 - Team meeting before call on Tuesday at 2:30pm
 - Team has met 6 times
- Team Organization
 - Nathan Langolf – Developer, Client Contact
 - Hayden Boroski – Developer, Program Manager & Systems Administrator
 - Chris Cheaney – Developer, Tester
 - Max Sweet – Developer, Tester & Team Motivator



Team Spectrum Health

Status Report

(4 of 4)

Talent Connection

Risks (In order from High to Low Importance)

- Security Integrations
 - Setup VPN connection and install Security Certificates to ingest WSDL for proper SOAP integration
 - Mike Ply is willing to come to Lansing to help us with this if needed
- Access to Resources
 - Ability to get in contact with people from Spectrum Health
 - Rely on our Project Manager (at Priority Health) to handle this
- Uploading Resumes / 3rd Party Integrations
 - Allowing a mobile user to include a resume (PDF, Word, etc.) with their job application
 - Have user type out resume information or rely on LinkedIn info
- Data Layer / EWS
 - The SOAP integration to their HR system is being developed in tandem with our mobile website
 - Spectrum will set up stubs with fake data if needed



Team TechSmith

Status Report

(1 of 4)

Learning Activity Capture

- Project Description
 - Observe User Activity
 - Determine Learning Activities
 - Save and Store Learning Information
 - Retrieve and Present Activities Back To User
- Project Plan Document
 - Setup on Google Drive
 - Functional Specifications Complete
 - Design Outlined
 - 40% Complete



Team TechSmith

Status Report

(2 of 4)

Learning Activity Capture

- Server Systems / Software
 - Ubuntu Server
 - ADL Learning Record Store
 - Tin Can API
- Development Systems / Software
 - .NET Desktop App
 - Chrome Plugin
 - TechSmith Media Player



Team TechSmith

Status Report

(3 of 4)

Learning Activity Capture

- Client Contact
 - One Conference Call & One In-Person Meeting
 - Scheduled Weekly Conference Call and/or Meeting (Fridays)
- Team Meetings
 - Tuesday, Thursday, & Friday Afternoons
 - Met Six Times as a Full Team Thus Far
- Team Organization
 - Michael: Client Contact
 - David: Project Management
 - Development & Testing Will Be Handled By Everyone



Team TechSmith

Status Report

(4 of 4)

Learning Activity Capture

Risks

- Risk 1
 - Unfamiliar Technology (ie. Learning Record Store)
 - Find Existing Documentation/Samples
- Risk 2
 - Securely Sending Information To And From Server
 - Find Well-Documented Examples (ie. Watershed)
- Risk 3
 - TechSmith Media Player
 - Connectivity to Google Analytics As Basis
- Risk 4
 - Scope of Learning Activities
 - Start Narrow, Broaden Scope As Project Expands



Team Urban Science

Status Report

(1 of 4)

Dealership Consultant Mobile App

- Project Description
 - Support Urban Science Consultants
 - Before, During, and After Meetings with Dealerships
 - Optimize Consultant Reactions with Dealers
 - Propose Specific Action Plans
 - Record Dealer Reactions to Proposals
 - Rate General Atmosphere of the Meeting
 - Record Dealership Metrics
 - See Effectiveness of Past Action Plans
 - Follow Progress on Current Action Plan
 - Track Key Performance Indicator (KPI) Improvement
- Project Plan Document
 - Project Plan Document started, 20% Complete



Team Urban Science

Status Report

(2 of 4)

Dealership Consultant Mobile Apps

- Server Systems / Software
 - Server is up and running
 - Need to integrate their database with ours
 - Implement web requests to access data
- Development Systems / Software
 - XCode, Eclipse
 - Ramping up on iOS development
 - Investigating Android development



Team Urban Science

Status Report

(3 of 4)

Dealership Consultant Mobile Apps

- Client Contact
 - First Skype Meeting with Urban Science Contacts on 9/3/2013
 - On-Site Meeting on 9/6/2013
 - Scheduled Weekly Skype Meetings
- Team Meetings
 - Team Has Met in Capstone Lab Multiple Times
 - Weekly Team Meeting Scheduled
- Team Organization
 - Ryan Tempas - iOS
 - Eric Zipple - iOS
 - Zach Kuzmanic – Android, Client Liaison
 - Matt Ao – Server Implementation, Android



Team Urban Science

Status Report

(4 of 4)

Dealership Consultant Mobile Apps Risks

- Risk 1
 - Fully completing apps on two separate platforms
 - Staggering development of Android and focusing on iOS first
- Risk 2
 - Backend implementation – User login and data
 - Incorporate a login, research other mobile backend solutions
- Risk 3
 - Unsolidified requirements, which could result in changes
 - Get specs approved on a weekly basis



Team Whirlpool

Status Report

(1 of 4)

Connected Appliance SmartZones

- Project Description
 - Mobile Application
 - Appliance Control
 - Geolocation
 - User Alerts
- Project Plan Document
 - Project Plan Started
 - Major Details Present



Team Whirlpool

Status Report

(2 of 4)

Connected Appliance SmartZones

- Server Systems / Software
 - Whirlpool Connected Appliance API
 - Still learning to connect and interact with Fridge API
 - Issues with WiFi detection/connectivity
- Development Systems / Software
 - Mobile IDEs
 - Installed Eclipse on VM
 - Basic application running
 - iOS Account and Xcode running



Team Whirlpool

Status Report

(3 of 4)

Connected Appliance SmartZones

- Client Contact
 - Weekly Conference Calls
 - In-person Meeting Today
- Team Meetings
 - Meet Weekly (Tue 4:30 / Thur 4:30 / Weekends)
- Team Organization
 - Google Calendar
 - Google Docs
 - GroupMe SMS
 - Gmail
 - Skype

Team Whirlpool

Status Report

(4 of 4)

Connected Appliance SmartZones

Risks

- Appliance API
 - Is it easy enough for us to be able to work with.
 - Communicate with Whirlpool about the documentation/use.
- Geolocation GPS Services
 - Are they flexible enough to accomplish project goals.
 - Research API and create Geofence test program.