01/23: Team Status Reports

The Capstone Experience

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Spring 2013
Team Auto-Owners

Status Report

Event Planning Web Application

• Project Description
  ▪ Web and Mobile
  ▪ Administrative Features
  ▪ Attendee Features
  ▪ Email Correspondence

• Project Plan Document
  ▪ Screen Mockups
  ▪ Functional Specifications
  ▪ Design Specifications
  ▪ Basic Outline
Team Auto-Owners

Status Report

Event Planning Web Application

• Server Systems / Software
  - Windows Server 2008 (Staging)
    - Tomcat v.6 server
  - Tomcat v.6 on Windows 7 VM (Development)
  - IBM DB2

• Development Systems / Software
  - Eclipse Juno for Java development
  - Jquery Mobile
  - JDBC (Java Database Connectivity) API
  - Git Repository
Team Auto-Owners

Status Report

Event Planning Web Application

• Client Contact
  ▪ In-person meeting on site (1/12/13)
  ▪ Setup weekly conference calls
    ○ Thursdays at 2:30pm

• Team Meetings
  ▪ Mondays at 4:00pm
  ▪ Impromptu meetings throughout the week

• Team Organization
  ▪ Project Manager/Web Master – Trevor Murphy
  ▪ Customer Liaison/Project Facilitator – Ryan Burr
  ▪ Systems Administrator/Web Master – Minh Do
Event Planning Web Application

Risks

• Java and DB2
  ▪ Connecting Java apps with DB2
  ▪ Extensive examples/sample code

• Security
  ▪ Unwanted persons accessing event information
  ▪ Encrypted data and authentication

• Mobile Testing
  ▪ User readability on different mobile devices using jQuery mobile
  ▪ Set up outward facing server

• Setting up remote Tomcat Server
  ▪ Installing and configuring a production server
  ▪ Google
Airplane Building Game Simulator

• Project Description
  ▪ Paper Airplane Factory Simulator
  ▪ Player is the Factory Owner
  ▪ Arrange different robots to assemble paper airplanes
  ▪ Player graded on safety, quality, and efficiency
  ▪ All results and data logged for tracking

• Project Plan Document
  ▪ Divided project up into 3 main programming tasks
  ▪ Given each member a non-technical role
  ▪ Created rough task schedule for rest of semester
  ▪ Narrowing project down into manageable scope
Airplane Building Game Simulator

• Server Systems / Software
  ▪ Ubuntu Server with individual login accounts
  ▪ SVN installed, tested, and running

• Development Systems / Software
  ▪ Running Ubuntu 12.04 Virtual Machines
  ▪ Open Source Software
  ▪ Gazebo with ROS, Bullet, and Ogre to simulate our environment
  ▪ Programming with C++ and Code::Blocks
Team Boeing

Status Report

Airplane Building Game Simulator

• Client Contact
  ▪ Weekly conference calls with client
  ▪ Shared Google Calendar and Drive folder for collaboration

• Team Meetings
  ▪ 2-4 meetings a week
  ▪ One meeting a week dedicated to development
  ▪ Constant Skype communication outside of meetings

• Team Organization
  ▪ Project Manager – Grace Lweendo
  ▪ Customer Liaison/System Admin – Chris Flynn
  ▪ Documentation Lead – Greg Klein
Risks

• Scope
  ▪ Scope expands with every client meeting
  ▪ Working on core features and wish list

• Gazebo
  ▪ Very large open source project
  ▪ Spending 1-2 weeks getting every member proficient in use

• Simulation Speed
  ▪ Final simulation might run too slow
  ▪ Future stress tests on different hardware

• Project Complexity
  ▪ Three complicated parts need to be integrated
  ▪ Merge early and often
Personalized Intranet Portal

• Project Description
  ▪ Recreating Dow’s Intranet Portal, must authenticate users
  ▪ Website must be built with SharePoint 2013
  ▪ Must include user profiles that allows a customizable dashboard
  ▪ Intranet must display internal information based on user’s settings

• Project Plan Document
  ▪ Started drawing up System Architecture Diagram
  ▪ Filled out the system component slide
  ▪ Filled out the risks slide
  ▪ Meeting with Client on Thursday to discuss Project Plan
Team Dow

Status Report

Personalized Intranet Portal

• Server Systems / Software
  ▪ OS: Windows Server 2008
  ▪ SQL Server 2012
  ▪ SharePoint 2013 Enterprise
  ▪ Team Foundation Server for our version control

• Development Systems / Software
  ▪ Our VM of Windows 7 includes the following:
    ▪ Firefox (most editing within SharePoint is done through a web browser)
    ▪ SharePoint 2013 Designer (used for editing SharePoint pages)
    ▪ Visual Studio 2012
Team Dow

Status Report

Personalized Intranet Portal

• Client Contact
  ▪ Emailed Dow clients on 1/10, asked questions about the project
  ▪ Had 3 conference call meetings with Martin Brennan, IT architect from Dow (1/14, 1/16, 1/22), about SharePoint training and project description information

• Team Meetings
  ▪ First two meetings (1/09, 1/10) set up the server and installed required programs
  ▪ Three meetings to talk with Martin on conference call and discuss project planning afterwards (1/14, 1/16, 1/18, and 1/22)

• Team Organization
  ▪ Eric Miller: Client Contact, Developer
  ▪ Matt Savela: Developer
  ▪ Gordon Leung: Developer
Team Dow

Status Report

Personalized Intranet Portal

Risks

• Risk 1
  - SharePoint has a high learning curve
  - Continue going through training with Martin and also researching intensely on available online tutorials.

• Risk 2
  - Lack of documentation due to the new nature of SharePoint 2013
  - Working closely with Martin, who is experienced in SharePoint, and also making the best of the information online.

• Risk 3
  - Must develop custom web components, this requires writing html code and converting into a format that SharePoint can read.
  - Work on this early, and research available online information

• Risk 4
  - Security, only authenticated users can be allowed to view/create certain content
  - Must learn to deal with SharePoint’s built in authentication process
Team EA

Status Report

Android Emulator for EA Games
• Project Description
  ▪ An Emulator That Runs EA Game APKs on PC
  ▪ Control the Emulator with Android Device
  ▪ Stream Video Game From Emulator to HTML5 Webpage
  ▪ HTML5 Interface for Android Device

• Project Plan Document
  ▪ Delegated tasks to each team member
  ▪ Skeleton document outlined and partially completed
  ▪ Functional specifications partially completed with preliminary diagrams
  ▪ Rough schedule for the semester has been outlined
Team EA

Status Report

Android Emulator for EA Games

• Server Systems / Software
  ▪ Windows Server 2012 Standard – Installed
  ▪ Apache – Installed
  ▪ GitStack – Installed – Repository created

• Development Systems / Software
  ▪ Android SDK / Eclipse IDE
  ▪ Dalvik VM / Downloaded on Linux
  ▪ HTML5 / Researching
Team EA

Status Report

Android Emulator for EA Games

• Client Contact
  ▪ Already Had 2 Conference Calls
  ▪ Plan to Have a Weekly Call Every Wednesday - From 4 p.m to 5 p.m

• Team Meetings
  ▪ Already Had 9 Meetings
  ▪ At least 1 During Mon to Fri and 1 During Weekend

• Team Organization
  ▪ Jim Challenger – Client Contact
  ▪ Justin Vrooman – Systems Administrator
Android Emulator for EA Games

Risks

• Risk 1
  ▪ Redirecting video output from the Android emulator
  ▪ Investigate Android emulator source code and WebRTC

• Risk 2
  ▪ Lack of Knowledge of Android System and HTML5
  ▪ Research Relative Areas

• Risk 3
  ▪ How to interface the Android tablet with the emulator
  ▪ Create mobile HTML page with the ability to interpret gestures

• Risk 4
  ▪ Tons of Work & Time Limitation
  ▪ Schedule with short deadlines for each task
Team GM

Status Report

My Conference Room

• Project Description
  ▪ Be able to check on your phone if a nearby conference room is available
  ▪ Should show a calendar on your browser with its availability
  ▪ Be able to reserve that room for appropriate times through the web interface

• Project Plan Document
  ▪ Daniel Bachelis works on the PowerPoint
  ▪ Do Screen Mock-Ups
  ▪ Develop a working calendar app with Exchange API
Team GM

Status Report

My Conference Room

• Server Systems / Software
  ▪ Microsoft Exchange Server 2013 – Setup
  ▪ Microsoft Server 2012 – Setup
  ▪ Active Directory - Configured

• Development Systems / Software
  ▪ Visual Studio 2012 – Installed
  ▪ Team Foundation Server – Version Control
  ▪ Mac OS w/Windows Virtual Machines
Team GM
Status Report

My Conference Room
• Client Contact
  ▪ Initial conference call on 1/10/13
  ▪ Weekly status updates sent via email
• Team Meetings
  ▪ Wednesdays 2-3, 4-5
• Team Organization
  ▪ Daniel Bachelis – Documentation & Assurance
  ▪ Matt Tarnowsky – HTML5 Expert
  ▪ Jeff Girbach – Exchange API Expert
  ▪ Thomas Smale – Client Contact & Project Manager
Team GM

Status Report

My Conference Room

Risks

- Learning the Microsoft Exchange Web API
  - How to program and interact with an Exchange Server
  - Getting familiar with the Outlook Web Interface through online tutorials
- Tailoring the Outlook Web App to a Mobile Phone
  - Specifically designing the app to be run in a mobile environment
  - Documentation found on deploying Web Apps from Windows Server 2012
- Mobile Web (HTML5)
  - Learning HTML
  - W3Schools “Try It Yourself”
Team Meijer

Status Report

IT Metrics Repository – Project Description

• Provide a Metrics Repository for Meijer IT
  ▪ Ability to create and view data (metrics)
  ▪ Store historical values for all metrics
  ▪ Provide metric goals if appropriate
  ▪ Enable graphing functionality for data

• Project Plan Document
  ▪ Created document outline
  ▪ Assigned individual tasks to each team member
Team Meijer
Status Report

IT Metrics Repository - Technologies

• Server Systems / Software
  ▪ Windows Server 2008 R2
  ▪ SQL Server 2012
    o SQL Server Reporting Services (SSRS)
  ▪ Internet Information Services (IIS)
  ▪ Team Foundation Server 2012

• Development Systems / Software
  ▪ Visual Studio 2012 – C#.Net & ASP.Net
  ▪ SQL Server Management Studio
Team Meijer

Status Report

IT Metrics Repository – Team and Clients

• Conference Call with Clients
  ▪ 1/14/13 – Introduction, Overview of Project and Technologies
  ▪ 1/25/13 scheduled for 10 a.m.
  ▪ Ongoing contact through email

• Team Meetings
  ▪ Mondays and Wednesdays 4pm
  ▪ Tuesdays and Thursdays 3pm

• Team Organization
  ▪ Anthony – Program Manager, Developer, Tester
  ▪ Bob – Client Contact, Systems Administrator, Developer, Tester
  ▪ David – Database Administrator, Developer, Tester
Team Meijer

Status Report

IT Metrics Repository

Risks

• Provide mobile-device compatibility
  ▪ Application should be accessible and formatted for mobile use
  ▪ Research methods on mobile compatibility

• SQL Server Reporting Services (SSRS)
  ▪ Utilize SSRS to display metrics in graphical form
  ▪ Research information on SSRS

• Database schema
  ▪ Provide an efficient database structure
  ▪ Normalize the database
Team Mozilla
Status Report

Multi-Touch Gestures for Firefox on Mac OS X

• Project Description
  ▪ Pinch and double tap to zoom in/out
  ▪ Rotate on synthetic documents

• Project Plan Document
  ▪ Outlined, basic stuff done (glossary, summary, etc.)
  ▪ Functional, Design, and Technical Specifications nearly done
  ▪ Sent to client for review
Team Mozilla

Status Report

Multi-Touch Gestures for Firefox on Mac OS X

• Server Systems / Software
  ▪ Ubuntu Server 12.04
  ▪ Git repository, pulls from Mozilla
  ▪ User accounts with SSH access

• Development Systems / Software
  ▪ Git repositories, pull from our server
  ▪ Building done by Mozilla’s “mach” program
  ▪ Text editors for editing source
  ▪ GDB for debugging
Team Mozilla

Status Report

Multi-Touch Gestures for Firefox on Mac OS X

• Client Contact
  ▪ Weekly video meetings, Fridays at 2:35 PM
  ▪ Constant contact via IRC

• Team Meetings
  ▪ Tuesdays and Fridays at 2:15 PM
  ▪ Meet with Meredith, Tuesdays 2:35 PM

• Team Organization
  ▪ Project Manager—Brandon Waterloo
  ▪ Developers—Raymond Heldt, Guilherme de Araujo
Team Mozilla

Status Report

Multi-Touch Gestures for Firefox on Mac OS X

Risks

• Understanding Firefox
  ▪ Need to understand structure of browser
  ▪ Mitigation: Study into data flow for gestures, get help from community

• Coding standards
  ▪ Mozilla has high code quality standards
  ▪ Mitigation: Write good code up-front, understand standards

• Writing our own tests
  ▪ Create test code to test our features
  ▪ Mitigation: Look at test code for regular snap zoom
Team MSUFCU

Status Report

Mobile Calendar

• Project Description
  ▪ A calendar for MSUFCU employees to see company wide events
  ▪ A web interface to add/edit events and news
  ▪ Secure authentication with the web service
  ▪ iPhone and Android native apps

• Project Plan Document
  ▪ Functional specifications: 90% complete
  ▪ Technical specifications: 50% complete
  ▪ Schedule: 80%
  ▪ Testing plan: 90%
Team MSUFCU
Status Report

Mobile Calendar
• Server Systems / Software
  ▪ Ubuntu server
  ▪ LAMP stack
  ▪ Git for version control

• Development Systems / Software
  ▪ OS X 10.8 w/Windows 7 via VMWare on the iMac
  ▪ Xcode for iOS, Eclipse for Android, Sublime Text 2 for web
Team MSUFCU

Status Report

Mobile Calendar

• Client Contact
  ▪ Met with client on-site for initial consult
  ▪ Updates via email once a week

• Team Meetings
  ▪ After All Hands, 45 min
  ▪ Additional as needed

• Team Organization
  ▪ Project Manager - Clay
  ▪ Contact point - Mike
Mobile Calendar
Risks

• Risk 1
  ▪ Android ADK
  ▪ Research!

• Risk 2
  ▪ Push notification
  ▪ Google

• Risk 3
  ▪ Encryption (https)
  ▪ Google

• Risk 4
  ▪ MSUFCU internal systems
  ▪ Requested documentation
Team Spectrum Health

Status Report

SLA Management and Metric Reporting System

• Project Description
  ▪ System for defining, approving, tracking, reporting, and displaying metrics
  ▪ Must be flexible – new metrics and scorecards
  ▪ Securely control and link all information related to a metric

• Project Plan Document
  ▪ Started rough draft
  ▪ Worked out a detailed breakdown of features
Team Spectrum Health

Status Report

SLA Management and Metric Reporting System

• Server Systems / Software
  ▪ Windows Server 2008
  ▪ MySQL Server, PHP, PHPMyAdmin, Git repository, Active Directory

• Development Systems / Software
  ▪ Dreamweaver
  ▪ IIS up and running
Team Spectrum Health

Status Report

SLA Management and Metric Reporting System

• Client Contact
  ▪ Two conference calls
  ▪ Scheduled weekly Friday conference calls for 9:30 A.M.

• Team Meetings
  ▪ Every Sunday at 11 A.M.
  ▪ Every Monday/Wednesday at 2 P.M.

• Team Organization
  ▪ Ian – Project Manager, System Admin, Tester
  ▪ Lisa – Client Contact
  ▪ Shen - Developer
Risks

• Risk 1
  ▪ Active Directory for permissions control
  ▪ Mitigation - Researching methods for accessing user information

• Risk 2
  ▪ Flexibility of the system
  ▪ Mitigation – Working with client to determine the extent of the flexibility and rigorous testing

• Risk 3
  ▪ Little experience with PHP/MySQL
  ▪ Mitigation – Familiarizing ourselves with the technologies
American Sign Language Learning App

• Project Description
  ▪ Learning and teaching tool
  ▪ Interactive
  ▪ Student watches YouTube video
  ▪ Records themselves and sends to teacher
  ▪ Teacher annotates and critiques

• Project Plan Document
  ▪ List of Milestones
  ▪ Broke down to sub-milestones
  ▪ Ranked in order of perceived importance/difficulty
Team TechSmith

Status Report

American Sign Language Learning App

• Server Systems / Software
  ▪ Windows Server 2012
  ▪ GIT
  ▪ Google Drive for internal documents

• Development Systems / Software
  ▪ Running Windows 8
  ▪ Using VMware Fusion on Mac OS X
  ▪ Microsoft Visual Studio Express 2012
American Sign Language Learning App

• Client Contact
  ▪ Visited TechSmith 1/11
  ▪ Conference calls every Wednesday at 2:15 pm
  ▪ Weekly update email sent after Triage

• Team Meetings
  ▪ M, W 3:50-4:45
  ▪ Triage, W 4:45-5:05

• Team Organization
  ▪ Project Manager: Adam Crane
  ▪ Lead Developer: Malcolm Doering
  ▪ Database Administrator: Michelle Truong
American Sign Language Learning App

Risks

• How to develop Windows RT apps?
  ▪ New development environment
  ▪ Tutorials
• How do we maintain our servers?
  ▪ No experience dealing with them
  ▪ Research
• How do we annotate video?
  ▪ Major project feature
  ▪ Use examples from a previous course
• How do we test our app?
  ▪ Time constraints
  ▪ Following a process before writing code
Team Urban Science

Status Report

Dealership Consultant Mobile App

• Project Description
  ▪ Allows consultants to search for and find dealers based on location
  ▪ Displays KPI (Key Performance Indicators) for a selected dealer
  ▪ Provides recommendations based on KPIs
  ▪ Allows consultants to record meeting information

• Project Plan Document
  ▪ Outline created
  ▪ Initial rough draft completed
Dealership Consultant Mobile App

• Server Systems / Software
  ▪ Windows Server 2008 installed
  ▪ SQL Server 2012 installed
  ▪ PHP installed
  ▪ Version Control (Git repository) created

• Development Systems / Software
  ▪ Xcode installed
  ▪ Researching HTML5, PHP, SQL, C# and Xcode
Team Urban Science

Status Report

Dealership Consultant Mobile App

• Client Contact
  ▪ Initial conference call of January 11, 2013
  ▪ Meeting at client’s office on January 18, 2013
  ▪ Scheduled weekly conference call on Fridays at 10:30am

• Team Meetings
  ▪ Met on January 8, 14, 19 and 21
  ▪ Scheduled weekly meetings on Mondays at 2:00pm

• Team Organization
  ▪ Joseph Greer – Project manager, client contact and development
  ▪ Austin Hendry – Development and testing
  ▪ Yevgeny Khessin – System admin, development and testing
Team Urban Science

Status Report

Dealership Consultant Mobile App

Risks

• SQL Database
  ▪ No prior experience with SQL
  ▪ Researching and creating queries

• iPad Application Development
  ▪ No prior experience with mobile development
  ▪ Created “hello world” application and researching

• Bing Maps API
  ▪ No prior experience with Bing Maps
  ▪ Researching API for Bing Maps

• C#, PHP and HTML5
  ▪ No prior knowledge of languages
  ▪ Performing research on languages and basic coding
Team Whirlpool

Status Report

Guided Cooking and Recipe App

• Project Description
  ▪ Develop/Manage cloud based database of recipes
  ▪ Interact with oven’s own database
  ▪ Web app interface for recipes
  ▪ Send cooking instructions to oven

• Project Plan Document
  ▪ Document outline in place
Team Whirlpool

Status Report

Guided Cooking and Recipe App

• Server Systems / Software
  ▪ Apache with PHP
  ▪ Ubuntu
  ▪ MySQL

• Development Systems / Software
  ▪ Eclipse with PHP
  ▪ VMWare Windows 7 Machine
  ▪ GIT code repository
Team Whirlpool

Status Report

Guided Cooking and Recipe App

• Client Contact
  ▪ In person meeting on 1/16, weekly conference calls scheduled
  ▪ Box.com resource repository set up

• Team Meetings
  ▪ Meetings twice a week
  ▪ Readily available on email/mobile

• Team Organization
  ▪ Google calendar
  ▪ List of smaller/manageable milestones
Team Whirlpool

Status Report

Guided Cooking and Recipe App

Risks

• Risk 1
  ▪ Limited or no knowledge of some technologies
  ▪ Google, Textbooks, Example Code

• Risk 2
  ▪ Web to Oven Communication
  ▪ Build/Test prototype to send simple messages

• Risk 3
  ▪ Converting database from SQLite to MySQL
  ▪ Try converting smaller tables first

• Risk 4
  ▪ Mapping outside recipes to our database
  ▪ Build/Test prototype using simple websites