



MICHIGAN STATE UNIVERSITY

09/15: Team Status Reports

[The Capstone Experience](#)



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Fall 2010

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Team Auto-Owners Status Report
Agent Multimedia Ad Builder (1 of 4)

- Project Definition
 - Create a web application to allow independent agents to create custom advertisements.
 - Agents will create print, radio, and television advertisements using existing templates
- Project Plan Document
 - Outline created
 - In process of completing project summary, requirements and schedule.

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Team Auto-Owners Status Report
Agent Multimedia Ad Builder (2 of 4)

- Server Systems / Software
 - Server not set up yet
 - DotNetNuke-To be installed on server
- Development Systems / Software
 - Visual Studio 2010-Installed on desktop
 - ASP .Net – Team members learning

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Team Auto-Owners Status Report

Agent Multimedia Ad Builder (3 of 4)

- Client Contact
 - On site meeting
 - Weekly conference calls scheduled-Mondays 4pm
- Team Meetings
 - Weekly meetings scheduled for Wednesdays at 4pm
 - Additional meetings to be scheduled as needed
- Team Organization
 - Client Contact-Marie Buckner

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Team Auto-Owners Status Report

Agent Multimedia Ad Builder (4 of 4)

- Risks
 - ASP .Net
 - Team has never used ASP .Net before
 - Team is researching and learning
 - Audio Synthesizer
 - Do not know of a synthesizer which can be integrated into a web application
 - Researching solutions
 - Video/Audio Joining
 - Do not know how to add to a video or audio clip via a web application.
 - Researching solutions

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Team Boeing Status Report

O-Show for Simulation Software (1 of 4)

- Project Definition
 - Solve a variation of the traveling salesman problem using Ip_solve
 - Visualize/simulate the output of Ip_solve through the use of OpenSceneGraph
- Project Plan Document
 - Executive Summary
 - System Diagram in development
 - Design Requirements in development
 - Schedule in development

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Team Boeing Status Report

O-Show for Simulation Software (2 of 4)

- Server Systems / Software
 - Windows Server 2003
 - VisualSVN Server for revision control
- Development Systems / Software
 - Ubuntu 10.04 LTS / Windows 7
 - Eclipse IDE
 - Subclipse (svn integration)
 - CDT (c++ development tool)
 - OpenSceneGraph (OSG)
 - Ip_solve
 - Python

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Team Boeing Status Report

O-Show for Simulation Software (3 of 4)

- Client Contact
 - Initial design requirements received from client.
 - Weekly progress meeting at 11:15am every Wednesday.
- Team Meetings
 - Triage meeting with Stephen scheduled for Wednesday after class (3:50).
 - Ad-hoc meetings for urgent problems.
 - Communication through email and phone outside of normal
- Team Organization
 - Matt France is the main client contact.
 - No other internal organization, acting as peers.

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Team Boeing Status Report

O-Show for Simulation Software (4 of 4)

- Risks
 - Risk 1
 - Interaction between Ip_solve and OSG.
 - Research possible solutions, Python as a high-level layer to massage the input.
 - Risk 2
 - None of the team members know Mixed Integer Linear Programming
 - Risk 3
 - No one has used OSG before.
 - Reading through on-line tutorials and documentation.
 - Risk 4
 - Interfacing Ip_solve with the input data.
 - Bryan will read the documentation on the Ip_solve site and relay that to the team.

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Team Ford Status Report

Ford Idea Place Mobile Edition (1 of 4)

- Project Definition
 - Mobile Idea Submission App
 - Employees can record and submit ideas to improve the company via text, photos, videos, etc
 - Can subscribe to other users, rate others ideas
 - Can push achievements to other users
- Project Plan Document
 - 80% of PowerPoint complete
 - UI layout pictures
 - Working on UML diagrams
 - Working on architecture illustrations

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Team Ford Status Report

Ford Idea Place Mobile Edition (2 of 4)

- Server Systems / Software
 - Windows SQL Server 2008
 - Apache Web Server
 - Windows Server Operating System
- Development Systems / Software
 - Java Android SDK Version 1.6
 - Eclipse IDE with Android Plug-Ins
 - iPhone SDK in XCode

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Team Ford Status Report

Ford Idea Place Mobile Edition (3 of 4)

- Client Contact
 - Michael Volk - NA Design IT Business Analyst.
 - Contact conference calls on Mondays at 2:00 PM
- Team Meetings
 - Weekly Phone Conference Calls with client Mondays 2:00pm
 - Weekly team meeting Tuesday 4:15pm
- Team Organization
 - Manager/Main Contact: Josh Kitchens
 - Contact via e-mail, skype, extra team meetings

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Team Ford Status Report

Ford Idea Place Mobile Edition (4 of 4)

- Risks
 - Risk 1
 - Lack of Experience in chosen language
 - One member has extensive java experience. Will do research about language as well as ask teammate questions
 - Risk 2
 - Lack of Experience in client/server communications
 - Research common practices, utilize known knowledge sources
 - Risk 3
 - Staying too broad across multiple platforms
 - Focus on design to keep platform-specific issues to a minimum
 - Focus on one platform primarily at first
 - Risk 4
 - Securing client/server interaction
 - Encrypt all communications to preserve confidentiality

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Team GE Aviation Status Report

Super Synoptics (1 of 4)

- Project Definition
 - Present pilots with unobtrusive systems management application
 - Providing pilots with potential problem solutions and the consequences to each solution
- Project Plan Document
 - Outlined
 - Discussing with client on Friday

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Team GE Aviation Status Report

Super Synoptics (2 of 4)

- Server Systems / Software
 - Waiting for rack-mount installation
 - SVN
 - Documentation Wiki
 - Investigating SharePoint for documentation
- Development Systems / Software
 - X-Plane / C++
 - Silverlight / C#

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Team GE Aviation Status Report

Super Synoptics (3 of 4)

- Client Contact
 - Met with Tim and Dashiell Thursday 9/2 for ~2 hrs
 - Scheduled weekly teleconferences Friday @ 11:30
- Team Meetings
 - Triage meetings: Mon 3:55-4:15
 - Group meetings: Tuesday and Thursday 4:30-??:??
- Team Organization
 - Shawn – Contact Liason
 - Adam – Sysadmin
 - Mutual accountability
 - Agile-ish

Team GE Aviation Status Report

Super Synoptics (4 of 4)

- Risks
 - X-Plane
 - Complexity of integration and communication between applications
 - Look at old Capstones and X-Plane documentation
 - Lack of Aviation Knowledge
 - Must understand complex relationships of airplane systems
 - Communication with GE correspondents and lots of stick time.
 - Silverlight
 - Working with new platform
 - Dedicate one team member to learning it
 - Interface Design
 - Systems already exist to 'warn' pilots, but we must provide superior knowledge, while being minimally intrusive.
 - Use tools and processes that promote fast iteration

Team Medtronic Status Report

Wellness Application for Medtronic Patients (1 of 4)

- Project Definition
 - Complete and polish current Wellness Portal apps
 - Streamline existing functionality
 - Integrate with:
 - Microsoft HealthVault
 - Medtronic devices
 - Nutrition source (e.g. CalorieKing)
- Project Plan Document
 - Done
 - Product functions, risk analysis, use cases
 - Assigned
 - State, class, data flow diagram
 - Mock-ups, Constraints, Schedule, Technologies

Team Medtronic Status Report

Wellness Application for Medtronic Patients (2 of 4)

- Server Systems / Software
 - MySQL
 - Grails
- Development Systems / Software
 - Installed and Deployed
 - JDK, Grails, and SpringSource Tool Suite
 - iPhone SDK and XCode
 - Capstone Mobile Health Management System from Spring 2010 : Deployed

Team Medtronic Status Report

Wellness Application for Medtronic Patients (3 of 4)

- Client Contact
 - One teleconference
 - Most contact via email
 - Future teleconferences planned
 - Weekly status report: Friday 3pm
- Team Meetings
 - Weakly Triage Meetings: Wednesday 2pm
 - Face-to-Face group meetings: varies from week to week
- Team Organization
 - Web app: Chris, Joe, Zach
 - iPhone app: Vu, Zach

Team Medtronic Status Report

Wellness Application for Medtronic Patients (4 of 4)

- Risks
 - Person Hours & Estimated Project Schedule
 - Over 650 hours in 4 months
 - Assign Project Manager, create comprehensive project timeline with frequent baseline reviews
 - Team members Availability
 - Team members are full-time students and work, scheduling meetings difficult
 - Using project and source code management tools Teambox.com and GitHub.com
 - Weak Participation
 - Possible investing time, level of commitment and level of expertise vary greatly among team members
 - Assign Project Manager, need better project plan
 - Team's Lack of Knowledge of Involved Technologies
 - No previous experiences working with Grails, Objective C
 - Spend extra time to learn the technologies
 - Must learn API for several external services
 - Existing Code-Base
 - Lots of issues, not well organized or implemented



Team Meijer Status Report

ITS Products and Services Request System (1 of 4)

- Project Definition
 - SharePoint ITS portal site
 - Single Catalog of all ITS services and products
 - Descriptions of each service, required approvals, expected turnaround time, and Business area responsibility
 - Ability to track and follow submitted requests
- Project Plan Document
 - Skeleton Written
 - Screen Mock up's in progress
 - Feature list defined
 - In process of setting up development system

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Team Meijer Status Report

ITS Products and Services Request System (2 of 4)

- Server Systems / Software
 - MS SQL Server 2008
 - Microsoft Server 2003
 - SharePoint Server 2007
- Development Systems / Software
 - MS Visual Studios 2008
 - SharePoint Development 2007
 - WSS Extensions 3.0 for VS
 - InfoPath Forms 2007

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Team Meijer Status Report

ITS Products and Services Request System (3 of 4)

- Client Contact
 - Made contact and went over project specs
 - Weekly conference call scheduled for Wednesdays at 4:00
- Team Meetings
 - Triage meetings Monday 2:20
 - Team Meetings: Sunday nights, Tuesday/Thursdays as schedules permit, and Fridays at 3:00
- Team Organization
 - Client Contact – Matt
 - Systems Administrator – Andy
 - Developers/Testers - All

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Team Meijer Status Report

ITS Products and Services Request System (4 of 4)

- Risks
 - Risk 1
 - SharePoint setup
 - Online documentation
 - Risk 2
 - Programming with SharePoint
 - Online resources and books
 - Risk 3
 - Interfacing with Remedy System that is already in place
 - Trial and error, Using Internal documentation
 - Risk 4
 - Possible feature creep
 - Try to stick as close to the original product description, while still giving them a product they are satisfied with

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Team Motorola Status Report

Enhanced Program Guides for Mobile Devices (1 of 4)

- Project Definition
 - Admin Panel to Manage Secondary Content Lifecycle
 - Sync Content to Mobile Client at Specified Times
 - Mobile Client can be associated to Set-Top Box
 - Simulate TV backend and EPG for Set-Top Box
- Project Plan Document
 - Completed Main Architecture and Design
 - Completed Sequence Diagrams for Use Cases
 - Working on RESTful API Service Details
 - Working on UML Diagrams and Database Schema

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Team Motorola Status Report

Enhanced Program Guides for Mobile Devices (2 of 4)

- Server Systems / Software
 - Set up IPTV Streaming Service to Set-Top Box
 - Set up MySQL on Windows Server 2003
 - Deciding on using RESTlet 1.1 or 2.0 for Services
- Development Systems / Software
 - Installed JDK, Eclipse, RESTlet, and related plug-ins
 - Downloaded GWT, iOS, and Android SDK
 - Waiting for VPN fix for Win7 (x64) to access SVN

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Team Motorola Status Report

Enhanced Program Guides for Mobile Devices (3 of 4)

- Client Contact
 - Conference Call every Tues/Thurs Afternoon
 - Available to contact anytime using multiple methods
- Team Meetings
 - Directly after Conference Calls and Weekends
 - Posting Meeting Notes on Motorola Wiki
- Team Organization
 - Determined Specialties of each Team Member
 - Everyone fills a part of each role

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Team Motorola Status Report

Enhanced Program Guides for Mobile Devices (4 of 4)

- Risks
 - Understanding RESTful Web Services
 - Entire system must have RESTful architecture
 - Research REST best practices and examples early
 - Integrating with previous semester's code
 - We will be using services developed by the Spring 2009 Team
 - Check-out the code and design our system with it in mind
 - Understanding the Set-Top Box
 - We must utilize the proprietary Motorola hardware device
 - Create test programs to create basic streams
 - Programming on Mobile Devices
 - We must develop a client that runs on mobile devices
 - Create basic test GUIs for these devices

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Team TechSmith Status Report

Extending Apps with Cloud Asset Sharing (1 of 4)

- Project Definition
 - Application for sharing Snagit and Camtasia assets
 - Assets are images, callout sequences, etc.
 - Application synchronizes with Azure cloud server
 - Users can share and rate each others' assets
- Project Plan Document
 - Completed skeleton, headers and footers
 - Developing functional and design specifications
 - Waiting to determine technical specifications
 - Identified preliminary risks
 - Created initial functional specification

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Team TechSmith Status Report

Extending Apps with Cloud Asset Sharing (2 of 4)

- Server Systems / Software
 - Microsoft Azure cloud - Completed test program
 - Already set up capstone server for code repository
 - Determining Camtasia/Snagit data to store.
- Development Systems / Software
 - Visual Studio 2010, C# - Learning as we go
 - WPF - Completed test program
 - Generated some Camtasia/Snagit test data

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Team TechSmith Status Report

Extending Apps with Cloud Asset Sharing (3 of 4)

- Client Contact
 - Met in person last Friday
 - Set up meetings on every other Friday
 - Set up weekly email status reports on Fridays
- Team Meetings
 - Scheduled weekly Triage meeting
 - Scheduled weekly team meeting
 - Additional meetings as needed
- Team Organization
 - Defined roles for team members
 - Coordinating via email

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Team TechSmith Status Report

Extending Apps with Cloud Asset Sharing (4 of 4)

- Risks
 - Using Microsoft Azure
 - Need to learn interface
 - Created test program
 - Learn C#, WPF
 - Need to learn the languages we will be using
 - Created test programs, learning as we go
 - Determine Features/Interface
 - What do we need to make?
 - Draw mock UI, discuss with client, created functional feature list
 - Rendering preview images
 - Assets use non-standard rendering (xml + standard image)
 - Need to get details or code from client

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Team Urban Science Status Report

Modern Online Analytical Processing Cube (1 of 4)

- **Project Definition**
 - Create a tool to quickly and efficiently query specific data amongst large databases to provide detailed and aggregated statistics - OLAP cube (OnLine Analytical Processing)
 - Faster than relational databases
 - No limitation on database size
 - Provides reports for easier data analysis
- **Project Plan Document**
 - Cover Page
 - Table of Contents outline

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Team Urban Science Status Report

Modern Online Analytical Processing Cube (2 of 4)

- **Server Systems / Software**
 - Windows Server 2003
 - SQL databases – MS SQL Server 2008
- **Development Systems / Software**
 - Silverlight – Installed client and VS 2010 SDKs
 - C# - .NET Framework 4.0 - Comes with VS 2010
 - Contour Cube / Dundas OLAP cube / Contos Demos from client

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Team Urban Science Status Report

Modern Online Analytical Processing Cube (3 of 4)

- **Client Contact**
 - Discussed initial team questions
 - Attempts to setup phone conferencing and visit Urban Science
- **Team Meetings**
 - Installed software on machine
 - Prepared questions to ask client
- **Team Organization**
 - Dinesh – C#, Silverlight, Project Manager
 - Ryan – Silverlight, Database, Customer Liaison
 - Nathan – C#, Programmer, Analyst

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Team Urban Science Status Report

Modern Online Analytical Processing Cube (4 of 4)

- **Risks**
 - Requirements Change
 - ❖ Some assumptions we make might not stand if requirements change
 - ❖ Understand what client wants before starting to code
 - Technology
 - ❖ Inadequate knowledge of the technologies we are implementing
 - ❖ Research and read more articles
 - Time Constraint
 - ❖ Scheduling conflicts with client preventing effective communication
 - ❖ Anyone whose schedule permits should be present
 - Availability of resources
 - ❖ Current OLAP software costs are very high
 - ❖ Get a license from Urban Science

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