MICHIGAN STATE UNIVERSITY

4. Teams: Status Reports

CSE 498, Collaborative Design

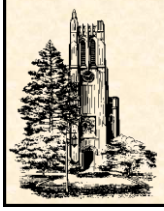
Wayne Dyksen

Department of Computer Science and Engineering
Michigan State University

Spring 2008

MICHIGAN STATE UNIVERSITY

4. Teams: Status Reports



CSE 498, Collaborative Design

Wayne Dyksen

Department of Computer Science and Engineering
Michigan State University

Spring 2008

MICHIGAN STATE UNIVERSITY

4. Teams: Status Reports

CSE 498, Collaborative Design

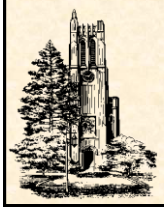
Wayne Dyksen

Department of Computer Science and Engineering
Michigan State University

Spring 2008

MICHIGAN STATE UNIVERSITY

4. Teams: Status Reports



CSE 498, Collaborative Design

Wayne Dyksen

Department of Computer Science and Engineering
Michigan State University

Spring 2008

Team 1 Status Report (1 of 4)

- Client Contact
  - Had initial client conference call.
  - Making plans to meet in person.
  - Discussed high-level overview of requirements
- Team Meetings
  - Triage Meeting set up
  - Regular team meet times established
- Team Organization
  - Google Calendar
  - Main Project Deadlines outlined

Team 1: Auto-Owner's

4-5

Team 1 Status Report (2 of 4)

- Server Systems / Software
  - Windows Server 2003
  - SQL Server with a fresh database
- Development Systems / Software
  - Visual Studio 2005
  - ASP.NET with C#
- Web Site
  - Up and running (link)
  - Most pages complete and up to date

Team 1: Auto-Owner's

4-6

Team 1 Status Report (3 of 4)

- Project Definition
  - Vendor Check-In System
  - Barcode scanning and printing
  - Web-based, multi-user
  - Database-driven backend
  - From-scratch database
- Technical Specification Document
  - ER Diagram/Database Schema
  - Class Diagram
  - Layout Design
  - Barcode

Team 1: Auto-Owner's

4-7

Team 1 Status Report (4 of 4)

- Risks
  - Barcode Printing
    - Importance: HIGH
    - Difficulty: unknown – guess medium
    - Priority: 2
  - Learning ASP.NET and C#
    - Importance: HIGH
    - Difficulty: minimal
    - Priority: 1
  - Possibly integrating with current Auto-Owners DB
    - Importance: Medium
    - Difficulty: unknown (If SQLServer DB, easy)
    - Priority: 3

Team 1: Auto-Owner's

4-8

Team 2 Status Report (1 of 4)

- Client Contact
  - Set up the weekly schedule
  - Had the first conference call
- Team Meetings
  - Set up the weekly schedule for team meetings
  - Set up the Triage meetings
- Team Organization
  - Split up into two subteams:
    - PACI – visual display (Scott and Nick)
    - IOS – process control (Steve and Tom)
  - Determined team positions

Team 2: Boeing

4-9

Team 2 Status Report (2 of 4)

- Server Systems / Software
  - Set up an SVN repository
  - Enabled Remote Desktop
- Development Systems / Software
  - Windows Environment
  - Using CIGI and C# with VS2005
- Web Site
  - ISS up and running
  - Website in development

Team 2: Boeing

4-10

Team 2 Status Report (3 of 4)

- Project Definition
  - PACI:
    - Visual simulation of P-8A aircraft
    - General flight physics
    - Control of the aircraft, flight path
  - IOS:
    - Process launching and management
    - Interface, tabbing, windows
- Technical Specification Document
  - Working with client on desired specifications
  - In development

Team 2: Boeing

4-11

Team 2 Status Report (4 of 4)

- Risks
  - CIGI
    - Understanding/Setup/Use
    - Online tutorials, working with client, cigi.sourceforge.net
  - IOS
    - Managing multiple processes
    - Books, Google
  - Integration
    - Communication between PACI and IOS
    - Work closely with each other and client

Team 2: Boeing

4-12

Team 3 Status Report (1 of 4)

- Client Contact
  - Conference call with clients on 1/14 to assess requirements and goals of project
  - Will meet 1/16 in person to further discuss project and to receive sensors
- Team Meetings
  - Triage meeting scheduled for Tuesdays at 5:20pm
  - Met Thursday 1/10 to discuss general concepts
- Team Organization
  - Austin/Colin: Application/database
  - Nathan/Devin: Instrumentation and software interface

Team 3: Ford

4-13

Team 3 Status Report (2 of 4)

- Server Systems / Software
  - Will run Debian Linux and Apache
  - Linux installation issue needs to be resolved
- Development Systems / Software
  - Sensor software requires Windows XP and Visual Studio 2005 and .NET Micro 2.0
  - Database will be developed using SQL/PHP
- Web Site
  - Website is up to date with required information
  - http://www.msu.edu/~crostyna/fomoco

Team 3: Ford

4-14

Team 3 Status Report (3 of 4)

- Project Definition
  - Develop a way to identify how many times a vehicle is inspected by a potential buyer
  - Utilize sensors and construct a mesh network
  - Analyze sensor data and store it in a database
  - Create a web application to view the data from the database
- Technical Specification Document
  - Sensor software interface written in C#
  - Data stored to a SQL database
  - Web application written in PHP
  - Automotive scoring system to be developed

Team 3: Ford

4-15

Team 3 Status Report (4 of 4)

- Risks
  - Risk 1
    - Scalability – adding more/different sensors, autos
    - Mitigation – Assess potential growth during planning, keep design open and general
  - Risk 2
    - Hardware Knowledge – must learn Crossbow libraries
    - Mitigation – Dedicate member to familiarize himself
  - Risk 3
    - Sensors are not ideal for the expected application
    - Mitigation - Acquire different sensors or simulate desired function

Team 3: Ford

4-16

Team 4 Status Report (1 of 4)

- Client Contact
  - Held a conference call 1/11
  - Bi-weekly conference calls Wed/Fri
- Team Meetings
  - After Class
  - Every Friday afternoon
- Team Organization
  - Jordan – Client Contact
  - Josh – Sysadmin
  - Scott – Creative Talent

Team 4: IBM

4-17

Team 4 Status Report (2 of 4)

- Server Systems / Software
  - Fedora 8 Workstation
  - Server not up (Linux network install broken)
- Development Systems / Software
  - Eclipse
  - EPIC
- Web Site
  - Up and running on our workstation
  - Created/Updated by Scott

Team 4: IBM

4-18

Team 4 Status Report (3 of 4)

- Project Definition
  - Hypervisor: layer between guest OS's and hardware
  - Performs privileged operations for OS's
  - Interface: hypercalls (similar to syscalls)
- Technical Specification Document
  - Skeleton created by Scott
  - Outlined information for GUI front end
  - Outlined preliminary info for test suite structure
  - Still waiting on information from IBM

Team 4: IBM

4-19

Team 4 Status Report (4 of 4)

- Risks
  - Perl
    - Test suite written in Perl
    - Learn Perl
  - IBM
    - Project Advisors are somewhat slow to respond
    - Lots of contact, firm and clear times
  - Hypervisor
    - Hypervisor only runs on PPC systems
    - Use an IBM server
  - Developing “pseudo-random” test cases
    - Cannot test all possible hcalls
    - Develop set reasonable test cases

Team 4: IBM

4-20

Team 5 Status Report (1 of 4)

- Client Contact
  - Met with client to discuss project in more detail
  - Set up weekly meetings, Fridays at 3pm
- Team Meetings
  - Chris gave a report about distributed computing
  - Kim gave report about database independence
- Team Organization
  - Chung-Hi Kim–Webmaster/ Developer
  - Dustin Manning– Lead Developer
  - Chris Samiadji-Benthin–Client Contact/ Developer
  - Jared Wein-Technical Writer/Developer

Team 5: MATRIX

4-21

Team 5 Status Report (2 of 4)

- Server Systems / Software
  - Apache Server, MySQL, Windows XP
  - Up and running
- Development Systems / Software
  - Python, Subversion
  - BOINC?
- Web Site
  - http://cse498t05s.cse.msu.edu
  - Meeting minutes added to website

Team 5: MATRIX

4-22

Team 5 Status Report (3 of 4)

- Project Definition
  - Archive logging of MATRIX's KORA project
  - Computing checksums
  - Distributed computing
  - ...and fast performance
- Technical Specification Document
  - Began writing document
  - Added commonly used terms and some diagrams of proposed solutions

Team 5: MATRIX

4-23

Team 5 Status Report (4 of 4)

- Risks
  - Distributed Computing
    - No one in our group has DC experience
    - Will start experimenting early
  - KORA is being rewritten
    - Mentor is unclear on final shape of archive
    - Will keep in very close contact with client
  - Performance
    - Estimated 28 days to compute checksums for archive
    - DC might be an answer
  - Reliability
    - Dealing with network issues
    - Will have to implement a lot of fault tolerance

Team 5: MATRIX

4-24

Team 6 Status Report (1 of 4)

- Client Contact
  - Overview conference call (Sunday)
  - Weekly meetings to be arranged
- Team Meetings
  - Weekly team meetings (Mon 2-3)
  - Weekly triage meetings with TA (Wed 2:30)
- Team Organization
  - Kirsten: Website, meeting notes
  - Rob: Client contact, PM, server maintenance
  - Charles: Presentation coordinator
  - Sean: Documents

Team 6: Microsoft

4-25

Team 6 Status Report (2 of 4)

- Server Systems / Software
  - Installed Windows Server 2k3
  - Installed SVN
- Development Systems / Software
  - Installed Windows (Various)
  - Installed Visual Studio 2008
  - Installed Silverlight Alpha 1.1 SDK
- Web Site
  - ASP.NET for project (http://cse498t06s.cse.msu.edu/)
  - http://cse498t06s.cse.msu.edu/498/ (Class Site)

Team 6: Microsoft

4-26

Team 6 Status Report (3 of 4)

- Project Definition
  - Online Whiteboard (4-5 Users)
  - Draw shapes, add text blocks, free-form pen tool
  - Initially focus on user interaction and design
  - More features to come?
- Technical Specification Document
  - We looked at it!
  - Will make template if needed
  - Firm understanding of project requirements
  - Members assigned subsections

Team 6: Microsoft

4-27

Team 6 Status Report (4 of 4)

- Risks
  - Working with Silverlight Alpha
    - Silver is currently in alpha and missing many components
    - Online help forums
    - Get additional documentation if possible
  - Conflict Resolution
    - What to do when two users simultaneously edit/delete
    - Mitigation: Looking into solutions; Received past capstone source
  - Additional features
    - New features may be requested as we go
    - Frequent client contact

Team 6: Microsoft

4-28

Team 7 Status Report (1 of 4)

- Client Contact
  - 2 conference calls with Kabe completed.
  - Weekly calls scheduled for Wednesdays
- Team Meetings
  - Triage Meeting Mondays 2:30
  - Internal meetings after calls and as needed
- Team Organization
  - Matthew – Project Manager
  - Kyle – Web Site Manager
  - Tamy – Team Planner
  - Dan – Client Liaison

Team 7: Motorola

4-29

Team 7 Status Report (2 of 4)

- Server Systems / Software
  - Windows 2003 Server Operating System
  - Apache Web Server
- Development Systems / Software
  - Eclipse IDE
  - TIBCO Open Source AJAX Interface
- Web Site
  - Apache Web Server up and running
  - http://35.9.22.106/

Team 7: Motorola

4-30

Team 7 Status Report (3 of 4)

- Project Definition
  - INFM (Network Fault Management)
  - Currently working standalone application
  - Separate business logic from GUI logic
  - Implement new deployable GUI using AJAX
- Technical Specification Document
  - Functional: Manage Network Fault Data
  - Design: Separate Business & GUI logic
  - Technical: Distributed Application, AJAX Front End

Team 7: Motorola

4-31

Team 7 Status Report (4 of 4)

- Risks
  - Risk 1
    - Many team members have little Java/AJAX experience
    - Kabe has ordered us some reference books/tutorials
  - Risk 2
    - Understand and document the existing classes quickly
    - We have it running and are looking at the code now
  - Risk 3
    - Time Management - Extremely short time period
    - Emphasis on prioritization, many small deadlines, etc.
  - Risk 4
    - Project requirements aren't all available yet
    - Focus on the priorities that are currently known

Team 7: Motorola

4-32

Team 8 Status Report (1 of 4)

- Client Contact
  - Visited Sircon last week
  - Established a bi-weekly iterative meeting
- Team Meetings
  - Weekly Team meetings Monday after class
  - Triage Wednesday mornings (9:30am)
- Team Organization
  - Andrew: Systems Administration/Java Expert
  - Akif: Point of Contact
  - Matt: Technical Developer, GUI designer
  - Mark: Project Manager

Team 8: Sircon

4-33

Team 8 Status Report (2 of 4)

- Server Systems / Software
  - OS-independent, VNC (set-up) and SVN clients
  - WAMP server running as of last week
- Development Systems / Software
  - Java, NetBeans IDE, SWING UI
  - XMLBeans Parser Library
  - Installed on everyone's laptop and lab desktop
- Web Site
  - http://cse498t08s.cse.msu.edu/
  - Functioning as of last week, completed Monday

Team 08: Sircon

4-34

Team 8 Status Report (3 of 4)

- Project Definition
  - Graphical Workflow application for Autopilot automation
  - Based upon OSWorkflow project, XML based
  - Create/view/edit XML configuration files for producer requests with the GUI, previously done by hand edits
  - Add/remove/move functions and decision points, rendering connective lines
- Technical Specification Document
  - Schedule in progress by Mark
  - Reviewing OSWorkflow DTD, remaking XSD version
  - Waiting on GUI guidelines and suggestions from Sircon
  - Have sample XML files already

Team 8: Sircon

4-35

Team 8 Status Report (4 of 4)

- Risks
  - Risk 1
    - Auto-correcting (nesting) of pre-existing XML files
    - Stand-alone aimed at reordering XML code
  - Risk 2
    - Dynamic Function creation instead of from Palette
    - Gather req's, predictions, similarities to define rules
  - Risk 3
    - Flowchart rendering (moving items), line connections
    - SWING and other frameworks' docs for behavior/events
  - Risk 4
    - Spring/Beanshell Frameworks
    - Investigation of docs, website and existing code

Team 8: Sircon

4-36

Team 9 Status Report (1 of 4)

- Client Contact
  - Met at TechSmith 1/10
  - Received Installers
  - Some Documentation
  - Corresponded about Server setup
- Team Meetings
  - Weekly Triage Fridays at 2
  - Group Meeting Friday after Triage
  - Already met 3 times
- Team Organization
  - Ian: Client Contact

Team 9: TechSmith

4-37

Team 9 Status Report (2 of 4)

- Server Systems / Software
  - Camtasia Relay Server Setup
  - SVN Setup
- Development Systems / Software
  - Ubuntu workstation for dev and testing
  - Windows and Mac Client as examples
- Web Site
  - http://35.9.22.108/TechSmith/index.htm
  - Basic Information

Team 9: TechSmith

4-38

Team 9 Status Report (3 of 4)

- Project Definition
  - What is Camtasia Relay?
  - Target Audience
  - Recorder
    - GUI
    - Screen Recording SDK
  - Uploader
- Technical Specification Document
  - Split up known information
  - Researching unknowns

Team 9: TechSmith

4-39

Team 9 Status Report (4 of 4)

- Risks
  - Screen Recording in Linux
    - Capture pixels and mouse movements in X windows
    - Mike Ezzo: Research similar Open Source projects
  - Audio Recording in Linux
    - Capture Audio from microphone
    - Ian: research open source audio recording packages
  - Creating Video
    - Syncing Screen Video and Audio to AVI
    - Mike Harriman: research FFmpeg
  - Multiple Distributions
    - Not tightly integrated to a specific Distribution
    - Keith Barnes (also researching QT GUI toolkit)

Team 9: TechSmith

4-40

Team 10 Status Report (1 of 4)

- Client Contact
  - Established first phone contact with client
  - Open line of email communication
- Team Meetings
  - Weekly Triage Meetings Friday Afternoons
  - Meetings after class
- Team Organization
  - Project Manager – Stephanie Cook
  - Graphics – Daniel Fiordalis
  - Software Lead – Matthew Grabow
  - Disassembler – Thomas Castellani

Team 10 : Toro

4-41

Team 10 Status Report (2 of 4)

- Server Systems / Software
  - Windows Server 2003
  - IIS
- Development Systems / Software
  - Visual Studio 2008 with C#
  - Windows Presentation Foundation
- Web Site
  - Finished
  - www.cse498t10s.cse.msu.edu

Team 10: Toro

4-42

Team 10 Status Report (3 of 4)

- Project Definition
  - Redesign front end for Irritrol
  - Rewrite USB drivers for use with Vista and XP
  - Enable Scheduling Advisor capability
  - Utilize more of existing hardware functionality
- Technical Specification Document
  - Code should be in C#
  - Use Windows Presentation Foundation
  - Use Visual Studio
  - Use 3.5 version of .NET Framework

Team 10: Toro

4-43

Team 10 Status Report (4 of 4)

- Risks
  - USB Drivers
    - Ensure compatibility for Vista and XP
    - Build on understanding gained by sample driver provided
  - Understanding Backend Storage
    - Finding how scheduling are created and scored
    - Meet with client to draw on his knowledge base
  - Porting Action Scripts to C#
    - Convert functionality of existing Action Scripts to C#
    - Utilize “easter egg” of program for debugging purposes
  - Use Scheduling Advisor
    - Input features of the environment to generate schedule
    - Research weather information online for understanding

Team 10: Toro

4-44