CSE762 - Web Services - Based Distributed Systems Project Winter 2012

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Monday,Wednesday. DL317 5:30 - 6:48 PM (26394)

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Office Hours: Meetings on request. Rm. DL246->MW before class

Course newsgroup **cse.course.cse762** is on server **news.cse.ohio-state.edu**. Use your CSE account id and password to connect with SSL password authentication.

Grader: Thomas Henretty, henretty.1@osu.edu **Office hours: TBD . Phone:**

Description

CSE 762 is a capstone class and the primary workload in the class will be an open-ended team implementation project.

Additionaly each student will have to prepare and present technical (no more than 5 pages) paper.

Web Services and related technologies will be used to implement a real project from a projects portfolio prepared for this class.

This project will serve the following goals:

1. fluency in using web-service technologies;
2. provide an opportunity to work with real business client/sponsor to collect an input needed to build an application for them;
3. gain experience in working under strenous circumstances.
4. forming practical skills in describing vision and scope, business use case, application actors, its solution and design and test plan;
5. improve your ability to make design decisions, including those that impact the performance and scalability of the implemented service;
6. provide an opportunity to install, learn, and use new technologies on your own (possibly with the help of others in your group);
7. enhance your skills in documenting the developed system and in presenting it orally;
8. enrich your experience in working in groups.

Projects Information

- We are trying to give students an opportunity to work on real projects.
- You will be split into seven teams with 4-5 students in each team. The idea is to make each team to act as a small consulting company working on a client project. Your client/sponsor will provide you with the business input and your role will be to collect it and convert into software engineering artifacts: Vision and

Scope document, Actors description document, Business Use Cases document.

- Then you will develop application architecture solution and design to support business requirements, develop business objects model, logical and physical data models, identify stages of functionality implementation, develop application and test it.
- While in this class you will give several presentations:
    1. Vision and Scope, Business Use Cases, Architecture Solution and Design, business objects model, logical and physical data models, current progress;
    2. Test Plan and application Demo;
    3. Poster presentation.
- The expectation is that your client/sponsor will be present during presentations.
- This year each team will have readily available development environment created by CSE Computing Staff. It includes one virtual server running either Windows 2008 R2 or Linux operating system.
- Each Windows 2008 server comes with preinstalled Visual Studio 2008, Eclipse, and SQL Server 2008 Enterprise Edition, SVN Source Code control client and other software. These servers are available from university network and from your local ISP. You may also install all additional software needed for your project.
- You **have to read** an exciting document describing this environment at this location.
- You can also conduct development on your own desktops/laptops and migrate it to your team development environment.
- Projects Portfolio is available here.
- ALL students need **to print and sign a copy** of the attached student agreement once they have been placed in a project team.

Course Schedule

Weeks 1-3

Presentations on Web Services, SOAP, WSDL and UDDI.
.NET and J2EE Web Services and Client applications Demos

Weeks 4-5

Project Proposal Presentation (20-30 minute presentation from each group)

Weeks 6-7

Technology Learning Experience Presentation (30 minute presentation from each group, and a write-up)

Weeks 8-9

Intermediate Progress Presentation (30 minute presentation from each group)

Week 10

Final project presentation (continuing on to finals week)

Grading:

The course will be graded as follows:

1. Class attendance and participation: 5 points
2. Technology Learning Experience Presentation and write-up;Intermediate Progress Presentations: 15 points
3. Technical paper: 10 points
4. Project Implementation and Demonstration: 60 points (based on team members contributions data)
5. Client/Sponsor feedback: 10 points

Class Results

Important Instructions:

- *Following the department requirements for all capstone classes, these presentation will be (peer) evaluated using rubrics available here.*
- *Write-Ups* Two write-ups will be required during the course of the quarter. The first write-up will be due 6th week of the quarter. This write-up must be completed individually. The instructions for this paper are available here . The specific tool you will be learning will be the one you will be using for implementation of your project.

  The second write-up will be done jointly by all team-members, and will be due at the end of the quarter. It will be a 6-8 page single-spaced write-up with the following approximate outline:

  - List of Team members
  - Overall goal of the system implemented
  - Details of the software (modules, specific functionality, high-level implementation details)
  - Major design decisions made
  - How the system has been evaluated (correctness and performance)
  - Distribution of effort among the team members
  - Lessons learned (how you might do things if you started over again)
- *Team-Work* An important goal of a capstone project is to give you experience in working in a team. I will expect that all members of the team contribute to all aspects of the project: project proposal, design, implementation, presentations, and write-up. Moreover, each member will be expected to contribute equally to the overall effort - however, it is acceptable if they do not each contribute equally to each component (e.g. each presentation does not need to be split equally between all members of the team!). Each team member will be required to fill forms to confidentially evaluate all other team-members.
- *Class Participation and Attendance* Class participation is an important component of a capstone class. It is important for you to listen to the presentation of other teams, and ask questions, or share your experiences. You will also be required to fill in a peer-evaluation of the presentation. 10 percent of the grade will be for class participation and attendance.