

Mobile Web Services Group Project

Due Date: [Insert due date]

Overview

The purpose of this project is to gain experience in developing distributed mobile applications using Web services. The assignment is to be done in groups of 3-5 persons. Your group should choose a significant, innovative, application of interest to you. Any programming language is acceptable for this project.

The final mark for the project will be based on the following grading criteria:

1) Proposal (10%) - Due [Insert due date]

Submit one-page document that describes the idea of your project and an overview of the architecture of your system/application (i.e. figure or diagram). Make sure that you get approval for your project before you start. The group will be graded on the following:

- How compelling is your project idea?
- How much impact will Web services have on cost, quality, functionality, etc.?
- How innovative is the idea of your project?
- How is the quality of your architectural design?
- What technologies will be used and why?

2) Presentation and Demo (20%)

The group will demonstrate and defend their work. You must prepare PowerPoint slides for a 10 minute presentation. Each presentation will be followed by 5-minutes for questions. Everyone in the group must contribute to the presentation.

3) Implementation/Coding/Performance Evaluation (30%)

The completed system will be graded on how well it was implemented which includes the coding, level of functionality, creativity in developing the system, and its usability.

4) Final Report (40%)

The final report should be a 3000 word document that includes an abstract, introduction, relation to other work, the main body of work, conclusions with contributions made, thoughts about any future work, and references. The report should discuss the goals of the project, design and implementation, results and analysis.

Problem Description

These days, Web services are being used in all facets of business operations but more commonly they are being used to extend the interoperability of legacy systems. In this project, think of a system that would be useful to extend it's functionality for mobile device use. Use Web services to provide a service to the mobile. The Web services should be the primary focus in the overall design and functionality of the system.

Whether you decide to build a standalone client, browser-based client, or both is completely up to you. Whichever target mobile device platform you choose is also completely up to you but any and all of your design decisions should be explained in your final report.

This is a general description of the assignment; the details are left up to your imagination. You can develop whatever web services and clients you like, as long as they offer some useful functionality.

Any programming language is acceptable, and you can use whatever web services tools you like.

Milestones

[Insert due date]: Form a group, and e-mail me the group information (student names and group name).

[Insert due date]: E-mail me your group's project idea and initial design (proposal).

[Insert due date]: A CD containing your final paper, source code, and any instructions to run your system must be handed in AT START OF CLASS. You should also submit a printed copy of your final paper. Submission of material by e-mail, if desired, should be discussed *in advance* with the instructor.

[Insert due date]: Presentations and Demos.

Evaluation

The following factors will be amongst those considered in evaluating the project:

- Choice and justification of architecture, technology, platform, etc.
- Bugs found and fixed; possible future enhancements
- Appropriateness of solution to stated problem
- Interface design and usability
- Standard of writing, including grammar and spelling
- Organization of reports, including clarity of introduction, logic of structure and navigability
- Quality of code, including coding style: comments, modularity, etc.

- Delineation of creative activity, i.e. what you have produced that is new, innovative, and/or helpful
- Extent of research done, including history of problem domain
- Completeness