Group Assignment for MIT Students

In this assignment you need to implement a range of web services technologies. The project will be done in groups. The group size is 2 persons.

The topic or the idea of the project is open. However, the novelty or the complexity of the idea is not the main issue of evaluating the effort of this project.

The main evaluation criteria of this project is the number of different web services technologies and standards used in the development process. The more standards you use, the more appreciation you will have.

During the discussion of your project, you should be able to demonstrate the different technologies you used, the role of each technology and your specific contribution in the project.

A typical example of this project is to develop your own 3 simple web service operations, use two existing available free web services and integrate them in one client program.

Your web service must feature all of the following functionality:

Composition. At least one of your web service operations must call another web service. The second web service could be designed by you or it might be publicly available.
Transactions. At least one of your web service operations should be transaction-based that updates the contents of an internal database.
Public Web Service. Your system should use at least one public web service.
It is not a requirement to publish your developed project on the Internet. It is enough to be able to run it into a local web server. You will run a demo of your system during the practical sessions of weeks 11, 12, and 13.

What you Need to Submit

Week	Date and Time	What	Marks	Late submission
8	3 May, 5pm	One-page Proposal	N/A	N/A
9	10 May, 5pm	Background Documentation	5 marks	-1 mark per day
12	31 May, 5pm	Final Submission	22 marks	-4 marks per day
13	4 Jun, 5pm	Individual Report	3 marks	-1 mark per day

One-page Proposal
Each group should submit one proposal as a file proposal.pdf using iLearn to this page.

The goal of this proposal is to inform me of the overall technologies that you plan to develop, the general topic of your application, and the expected roles of each team member.

This proposal will not be assessed formally but you will receive feedback about the feasibility of your project and the viability of the roles assigned to each group member.

You are encouraged to submit the proposal early or discuss your proposal with the lecturer early to obtain early feedback.

Background Documentation
Each group should submit one report as a file progress.pdf using iLearn.

The goal of this submission is to report on the specific web services technologies that you are implementing. It is also a chance for you to receive feedback on how your work is progressing.

You need to submit a report with the following sections:

A title page with the title, group members, unit name, degree (MIT), and date.
A page declaring that the work presented is your own and all text taken from other sources has been appropriately acknowledged. It's important that you do this since if we detect significant unacknowledged copy and paste or rewording from published work you will be charged with plagiarism and be penalised with up to -30 marks.
Introduction. A paragraph or two explaining what you are trying to achieve with your system.
Web Services Technologies. Two to three pages describing the details of all the web services technologies that you are using in your system.
System Architecture. Three to five pages describing all components of your system. It will help if you can insert a system architecture diagram and explain it. For every component of your system, describe the programming language and the web services technology that you are using. List and briefly describe the public web services that you are using.
Progress Report. Insert a timeline of the key past and future milestones of your project. Include and justify any changes from the initial proposal.
Group Members. Detail the contribution of each member to the group work. Be explicit about the role of each person, what they have contributed, and what is the approximate percentage of the project work done by each person. This percentage will be used to assign specific marks to each member.
References. Include all the references that you have talked about in the other sections.
Appendix. Include any additional information, e.g. code, run samples, etc.
Final Submission
Each group should submit one file implementation.zip using iLearn. This file must contain a file report.pdf and additional files with the implementation code.

Submit the final documentation and source code. The format of the report will be like that of the background documentation.

Individual Report
Each individual should submit one file selfreport.pdf using iLearn.

The self-report is your chance to explain what was your personal contribution to the project and what you learned from the project. The self-report will help us determine if the project marks are to be distributed equally or not.

Use the following template to write your individual report.

Individual report template
Assessment
This assignment is worth 30% of the total unit assessment. The background documentation submission is worth 5 marks and the final submission is worth 25 marks. Late submission penalties apply as specified above.

By default all marks will be distributed equally among group members unless there is clear evidence that some members contributed significantly more than others.

Each of the three submissions will be assessed according to the following standards:

Standard
P
Cr/D
HD
Presentation The presentation can be understood even though it may have occasional language errors and suboptimal organisation of the topics. The presentation does not have significant problems with language and organisation. The presentation is professionally made. It could be used as an example to the other students.
Technology used The basic web services technology is used, including SOAP, WSDL, service composition and transactions. There is at least one service implemented, one public service, and one client that uses the services. Additional web services technology is used, such as BPEL, WS-Transaction, WS-security, etc. A comprehensive range of web services technology is used.
Implementation The implementation is functional. The code presents basic in-code documentation. No significant bugs detected. The code presents good in-code documentation. No significant bugs detected. The code is presented professionably.
Questions