CAS757 - Team Project Description

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1 General Project Description

Each student will carry out a design project of his or her choice (subject to the instructor's approval) in the context of eHealth for this class. Initially, everyone will work individually. Each student will hand in a written design project proposal and present it to the class (Feb. 12). The proposal document is limited to 4 pages (including references) and must be formatted according to the IEEE conference proceeding template (http://www.ieee.org/conferences_events/conferences/publishing/templates.html). Each student has 3 minutes to pitch his/her proposal to the class. After all project proposals have been turned in and presented to the class, individuals should choose to merge into 4-5 member teams (doing project individually is only allowed by the permission of the instructor). The team then identifies the requirements for the design problem, creates a design concept and implements it as a prototype, and evaluates the prototype. The team will describe their work-in-progress (preferably covering the first iteration of the design) in a 2-page document (Mar. 18) and present their progress to the class (Mar. 19). Finally the work carried out in the project will then be described as a poster/Demo to be showcased on April 9 and reported as a scientific paper. The written report is limited to 10 pages (IEEE format) and should describe the motivation, the problem space, the solution space and how the prototype is being evaluated. The written report may include an appendix containing supporting materials that will help the reader evaluate your work.

The project proposal document and presentation (individual) are worth 15% of the course marks. The progress report and presentation are worth 10%, the prototype and final report are worth 30%, and the poster/demo is worth 10% of the course marks.

2 Project Milestones and Deliverables

Milestone	Deliverable	Date
0. Team Assignment	List of team members	Feb 14, 6:00pm (via discussion board)
1. Select topic and project objectives	Project Log: team list, topic selected, objectives	Feb 26, 6:00 PM (via course website - Group dropbox)
2. Project staffing and Team	Project Log: team list, topic selected, roles assigned	Feb 26, 6:00 PM (via course website - Group dropbox)
3. Develop project plan	Project Log: roles and detail task assignments to team members	6:00 PM (via course website - Group dropbox)
4. Prepare written progress report: highlight plan revisions	Written Progress Report + Project Log	Mar 18, 6:00 PM (via course website - Group dropbox)
5. First prototype	A work-in-progress prototype (n^{th} iteration)	Mar 19 (in lecture and office hour)
6. Progress presentations	A work-in-progress prototype (first iteration) + Project Log	Mar 19 (in lecture and office hour)
7. Final Prototype	A final working prototype + Project Log	Apr 2 (in lecture and office hour)
8. Deployed Project	A Deployable package of your project with all dependencies + Project Log	Apr 7 (via course website - Group dropbox)
9. Final presentation	Project poster/demo	Apr 9, 4:00PM
10. Final report	Final written report + Project Log	Apr 9, 11:59PM (via course website-Group dropbox)
10. Team peer evaluation (prepared individually)	Completed evaluation form of other team members	Apr 10, 6:00PM (via course website - Individual dropbox)

All activities to produce deliverables for Actions 1 through 10 must be recorded in the Project Log (see format below) and submitted as an updated version on daily basis (of course if an entry has been added to the log after the previous submission). Note that the Project Log is a living document nothing is deleted: rather new entries are appended.

3 Teams and Roles

Your first job after forming a team is the topic selection and project staffing. The topic should be one of the members' topics. You cannot switch to a new topic. Nevertheless you can change the scope (most likely to make it narrower). Then you should assign team roles (e.g., researcher, writer, designer, programmer, tester, manager, etc.). Among the roles that you decide, two roles are mandatory to be assigned: *Project leader* who is responsible to manage the project to meet all the milestones and produce the prototype, and *Log admin* who is responsible to keep the log as a living document of the project. One person can play multiple roles. But all those roles must be assigned at the beginning of the project. If for some reasons a role needs to be assigned to someone else the decision making process must be captured in the project log. You must also designate at least two members of your team for progress report presentation and two members for the Poster/Demo session. The same two members can do both (but doesn't have to). *The team will need to plan ahead to ensure that the presenters are not overloaded with preparation work for the presentations.*

4 Project Log

The Project Log is a record of the project: what happened, what decided, etc. It could be anything relevant to the project, from an individual activity in programming a class to a group meeting on Google+, and so on. The log is an on-going document, written during the project not after the fact. If there are no entries in the log for a date it simply means that nothing has been done in that date. The project log must be updated and submitted on daily basis. The events cannot be backdated. Analogous to the transactional databases that we discussed in the lecture, the project log should always mirror the changes on your project. To do so, there should be one person responsible to keep this crucial document up to the date and submit it to the course website (group dropbox). While submitting the log is a mandatory deliverable at certain points in your project life cycle (milestones), your team should submit the document on daily basis (of course if something happened or done on your project) and use this live document as a tool to help all members of the team stay up-to-date regarding the current status of the project and trace back to find out the root cause of a problem.

The project log file name should be GroupN_Log_YYMMDD where N is your group number and YYMMDD is the date you are submitting the log file.

Note that partial marks of your progress report and final report will be assigned to the log, evaluating how well you have kept the log complete and up-to-date.

The Project Log has three sections. Each section begins on a separate page and with the header format as follows.

Header:

Team Name: _____
Topic: _____

Report Version & Date
1. _____
2. _____
3. _____
4. _____

Team Members

	Name	Role(s)
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____

Section A: Project Administration Tasks

This is a sample list of tasks in the **administration** of the project. It should start on a new page and with the above header. It should be formatted as follows:

Task ♯	Task Desc.	Assigned to	Milestone	Due Date	Date Achieved
A1.0	Select topic and define objectives	all	Topic	Feb 17	
A2.0	Project staffing and assign roles	all	Staffing and roles	Feb 17	
A3.0	Project plan	all	Tasks identified and assigned	Feb 1	
A4.0	Prepare written progress report		Project Log updated	Feb 2	
A6.0	Prepare progress presentation		presentation given	Mar 18	
A8.0	Prepare final presentation			Apr. 9	
A9.0	Prepare written project report		Report submitted	Apr. 9	

Your task list (i.e., for milestone ♯ 2 and beyond) should be larger than this.

You should add sub-tasks (e.g., what are the tasks involved in writing the report for milestone ♯ 4?): a plan with as little detail as the one given above will not satisfy the milestone. Any revisions and additions should be reflected in new versions of the Project Log and should be clearly highlighted in the written report.

Section B: Design and development Task List

This is a list of the tasks in developing your solution. It should be on a new page with the header format given above. These are more technical tasks as opposed to the administrative/management tasks in Section A. Decision making on selecting a platform, the DB engine, and all tasks related to analysis (requirements elicitation, studying similar applications, generating use cases, etc.), design, implementation, test, and evaluation should be described ahead. Your should break down the tasks to more detailed tasks based on the following two criteria: (1) you can estimate a task duration with high precision and (2) you can estimate (again with high precision) what resources (human power, platform, etc.) you need to accomplish the task.

Task ♯	Task Desc.	Assigned to	Due Date	Date Achieved
D7.0				
D8.2				
⋮				
Dn.m				

Section C: Progress Log

This is an ongoing list of progress toward achieving the tasks listed above. Note that any Task, Issue, Decision, and Changes to the tasks including the addition of new tasks should be recorded here. As with the other sections, this one should begin on a new page with the header detailed above. As described above this section should be updated and submitted on daily basis unless nothing has been changed or done for the project in a day.

Timestamp	Originator	Type	ID	Status	Comments	Supporting Document
140217T1223	All	Task	1.0	Completed	Topic is a community site for breast cancer awareness	xxx.pdf
140218T1223	All	Task	2.1	Completed	team roles assigned	xxx.pdf
140221T1224	Mark	Issue	1		The Drupal CM cannot be used for this project	yyy.pdf
140228T1224	All	Decision	1		PHP libraries will be used to manage the contents	zzz.doc
140228T1224	Alice	Change	1		Task ♯ n.0 changed from ...	xxx_v02.doc
⋮						

The timestamp format should be YYMMDDThhmm. Some log events may have supporting documents. In this case supporting documents should be uploaded to the Group Project Log Dropbox as soon as the event has been logged in this document. Use meaningful names for supporting documents. For example you can use GroupN_ProjectSummary, GroupN_CMStudty, GroupN_LibStudy.doc for xxx, yyy, zzz in the sample log above where N is your group number.

Using Third Party Tools, Code, Designs and Templates

Most likely there are a number of third party resources for your application available either for free or at some cost. The line between plagiarism (by using someone else's work) and building on existing technology might therefore seem a bit fuzzy. The following are guidelines that you must adhere to:

- You must design your own application. You cannot use already existing application templates. You can look at existing templates to teach yourself how to build you application, but the design of the application must be uniquely yours. Any templates you do study must be referenced in your reports.
- You may use third party code for implementing particular functionality (e.g., database access) provided it:
  - is freely available for academic use

- it is integrated with the rest of your application
- you have compiled the code yourself
- the code and sources are clearly referenced in your reports and commented in your code

Application Evaluation Criteria

- Evidence of research effort for requirements gathering
- Verification: Are you building the system right? (Does the application do what it is supposed to do?)
- Validation: Are you building the right system? (Are the functionalities relevant to the design purposes and requirements?)
- Correctness: Does the application execute correctly?
- Performance: Are the time and resources required for the execution of different parts of the application are reasonable?
- Consistency and style: Sufficient and appropriate use of application development (programming) capabilities
- Readability of the code and presence of sufficient and meaningful comments and documentation in the code

Team Peer Evaluation

At the end of the project, each team member must individually submit a review of each team member. For each person reviewed, the review should specify the amount of interaction that the reviewer had with the person together with an evaluation of each of the following criteria on a 5-point scale (1=low, 3=average, 5=high):

- The effort that the person put into the project.
- The quality of the work performed.
- The person's professionalism in terms of meeting deadlines, doing their share of the project, being easy (and even pleasant) to work with, etc.

These ratings should be accompanied by written comments, justifying the scores given.

Team peer evaluations are to be done independently and are confidential. No one but the instructor would read the reviews.

The reviews will be used by the instructor as part of the criteria to assign 10% of the final project mark individually to each team member. Provide your

opinion based on your interactions with the person. The reviews are not a popularity contest: each person is expected to honestly evaluate the contribution of each team member. Abuse of the process will be dealt with harshly.

Any milestone that is missed (i.e., turned in late or not done satisfactorily even if it is on time) costs you marks! Milestones are cumulative: you cannot achieve milestone ♯ 3 without having achieved ♯ 1 and ♯ 2. So if you do not satisfactorily complete a milestone, you need to resubmit it before the next milestone is due in order to be able to achieve the next milestone.