

Phase 1 – Project Brainstorming and Project Scoping

1. Course Overview:

This course covers principles, techniques, architectures, and enabling- technologies for the development of various components and layers of web-oriented systems. In particular, students will benefit from: Working within teams and learning to collaborate in the development of software systems – thus the opportunity for getting exposed to the culture of participation. Furthermore, students will gain experience employing the agile software engineering methodologies, as well as developing appropriate testing strategies and methodologies for given projects.

An important aspect will be to *learn by reflection*. This means, whatever steps are taken students should become aware of what they are doing, and reflect on the consequences. More importantly, unlike most other course that prescribes precise course specification, students should expect to think for themselves “*outside the box*” particularly at the early stages, and utilise this as an exciting opportunity to apply their own creativity in influencing the design and definition of their course project.

For the duration of the course, assessments are organised into a series of “Phases”. At each phase, each contains a set of deliverables that need to be completed by the “Phase Deadline”. Late penalties normally apply.

2. Project – Phase 1 : Summary

Overall Aim: An **open** phase for exploring the **potential** requirements of the course. At the heart of this phase, you will be required to conduct a “*Brainstorming*” process. In general, brainstorming can often be proved as a very effective way to generate a plethora of interesting ideas over a specific issue in a collaborative manner. Where moreover, you may also thereby determine which idea (or ideas) is the best solution to a given problem. In addition, you will also be required to conduct background research, in particular those related to the overall theme of your project.

This an **open** phase for exploring the **potential** requirements of the project. During this phase, this means the possibilities are open for negotiation, however, by the end of the phase, a **contract** must be agreed upon. It is thus expected that the intended requirements that translate from the specified scope should not change from Phase 2 onwards. Furthermore, it may be important to make specific **definitions**, to make the contract very clear so that proposed design satisfy the contract.

More specifically, deliverables for this phase should be organised as follows:

Part 1. Introduction/Project Summary. Provide a brief description of the project summary, as you understand and *in your own words*. You are of course welcome to add any other extra information and details in order to formulate and support your response. We suggest to use the following format:

Provide a project summary including team member goals. In essence, this serves to define the high-level goals of the entire project. The following is a **summarised** example from previous students (different topic!). As we see ideally it should been organised into the following layers:

(A) Vision Statement:

"The goal of our project is to create an online learning environment where reputable lecturers, mentors and eager students can communicate and participate in a variety of full-length courses all over the world that both rival and complement physical institutions."

(B) General Goals:

- *Create a course feedback system so any issues can be addressed; allowing the best learning experience to be provided.*
- *Provide appropriate information, such as a user-based course and lecturer ratings, to aid users in selecting the right course to enrol in.*
- *Add features such that credible members of the community are recognized. (e.g. a system where users can give reputation points to other users who have made helpful posts on the course forums.)*
- *Build a simplistic, clutter-free and easy to navigate learning environment; where users can immediately enjoy the education without having to learn any tedious functionalities of the website.*
- *Ensure the validity of all course content is maintained at the highest standard. Users shouldn't have a doubt over the quality of the information being provided to them.*
- *Expand the current forum feature to form a happier community. (Ideas include all course related discussion visible to the wider community, as well as a general discussion forum where like-minded self-motivated users can discuss non-course related topics.*

(C) Group/Team Goals:

- Visual Browsing team: (Student 1, Student 2)*
- *Improving the user experience on the MOOC*
- People Management team: (Student 2, Student 3, Student 4)*
- *Devising effective methods of MOOC control based on tiers*
 - *Coordinating with the visual browsing team for seamless visual implementation of management systems*

(D) Individual Team Member Goals:

- Student 1** -> *Devise features for visual browsing, currently lacking in the platform to enhance the social connectivity of users in the MOOC system*
- Student 2** -> *Re-evaluation of pre-existing visual features and management of visible information (i.e. personal details of users) of the MOOC system to improve the user experience*
- Student 3** -> *Overseeing development of management controls for lecturers*
- Student 4** -> *Overseeing development of management controls for tutors*
- Student 5** -> *Overseeing development of management controls for students*

Part 2. Problem Statements. Based on the above, describe a few problem statements. Remember, while this phase is open and allows you to explore and negotiate, the following phase will require you to abide by these requirements. The following again is a summarised example from previous students, which should be used as guidance only. This deliverable could be organised in the following layers:

(A) Problem Statements:

- (1) There is no feedback system for a particular course.*
- (2) There is no reputation / popularity system for users or course instructors.*
- (3) The forums are visually messy. They are cluttered and jumbled up together.*
- (4) There is no general forum for the students to interact with each other, only a forum for each individual course.*
- (5) Old course content is removed / hidden, thus not allowing students to revisit already covered material.*
- (6) The dashboard is not interactive enough and lacks information of recent activity from the course.*
- (7) There is no Intuitive notification system.*
- (8) Major social hubs have been integrated poorly into the platform.*

(B) Methods used to infer problem statements:

We inferred our problem statements in 2 stages: First we developed a pool of potential problem statements through individual investigation. Secondly, we developed as a group a set of guidelines upon which to select a list of problem statements most relevant to our project - visual browsing and management of people.

Moreover, we based it on our own user experience, for example: As regular users of various online interfaces from online stores to social hubs, such as The Iconic and Facebook, we have come to expect certain user experiences. Of particular concern is the user experience in relation to visual browsing and the several dimensions it contains, such as how information is visually represented. There are 2 key aspects we believe are vital to an effective visual browsing experience and people management system, which also can be applied to a MOOC platform. They are: (i) Simplicity: Navigation of the platform should become seamless quickly and interactive. (ii) Aesthetics: It's about attracting people to the site, and making sure that they enjoy their time on the platform in a pleasing environment.

3. Marking Evaluation Metric:

| PART | Excellent | Satisfactory | Poor |
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| <u>Part 1.</u> <i>Project Summary</i> [40%] | Provides a well-structured (see notes) Summary statement. That captures: vision statement; general goals; how those goals reflect the overall group effort; and finally how those goals are linked to team members. | A Summary Statement is provided; is organized as per the notes, but content is not sufficient and/or lacking in substance. | No statement is provided, or provided but either not well-structured, or content is incorrect and does not demonstrate a proper well-thought summary statement. |
| <u>Part 2.</u> <i>Problem Statements.</i> [40%] | Well-thought Problem Statements are provided that correctly reflect the project topic that was previously presented. Selection of problem statements are concise (i.e. does not confuse irrelevant content). Furthermore, students include description of how these problems were inferred. | Problems Statement are provided but is either: too generic; does not reflect the investigation conducted earlier; is too long or irrelevant; is not well-thought off, in that it would be difficult or otherwise impossible to translate these into potential features that could absolve these identified problems. | Problems Statements are incorrect and not well-thought. They do not reflect the investigation conducted. Also, students do not provide, or provide not properly explained statements about how the given problem statements were inferred. |

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| <p><u>Part 3.</u> <i>Evaluation of Ideas.</i></p> <p>[20%]</p> | <p>Clearly elaborates on the how ideas were formulated; how they were deliberated upon, and finally how these ideas were properly and jointly evaluated.</p> | <p>An explanation of the brainstorming and evaluation process is provided, but does not clearly delineate how some ideas were considered favorable as opposed to others.</p> | <p>Very poorly presented and explained process of the brainstorming process; does not clearly state the metrics used, and/or justify the evaluation of ideas.</p> |
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4. Submission & Deadline:

You are required to prepare a document for Phase 1 based on the above guidelines, and submit it to through the online course management system (submission instructions will be made available). The deadline for submission of Phase 1 is **Monday, 14th August 2017 @ 23:59**. Please feel free to contact your mentors in order to discuss any further issues and/or details. **Please note** that we will track attendance to mentoring sessions and use other mechanisms to make the marks individuals.