

Software Engineering and Testing

NB: ** Upload both the Draft Proposal and the First Diary entry to the link on Brightspace.

Lab 1: Group Formation / Project Theme / Diary Entry (read all instructions carefully)

Objectives: Form a team of three members from your lab group. It has been shown that teams of three students work best for this project. Software Engineering is primarily concerned with process over product. Feasible themes are anything whereby users interact/request something from a website. Interactive websites using a database and front end (e.g. Server-Side PHP). Last year's projects included *car buyer*, *fashion and concert ticket sites*. Reasonably complex databases (3+ Tables/relationships) and corresponding classes.

(a) TEAM:

Form a team of three. Create a name for your team that relates to your project theme.

(b) DRAFT PROPOSAL:

Let's begin the proposal by writing a few sections that can eventually be included in CA1 next week. Most technical problems can be solved by answering the following questions: **WHAT? WHY? HOW?** For a technical document, these headings can be substituted as: **ABSTRACT, MOTIVATION, JUSTIFICATION**. So, Complete the following three paragraphs (guide is given)

Abstract (What?)

What will the project do?

Outline objectives, themes, purpose, and overall description of what your project will do. Do not go in to too much detail here and keep technical details to a minimum. No need to mention a programming or database language here. Just focus on the end goal desired.

Motivation (Why?)

Why would anyone want to use this tool your team is proposing once completed?

Motivation as a technical term is slightly different to the general use of the word. It is defined as the concrete reasons a user will benefit from this software. Why would anyone invest time and money into building this project? While you may be tempted to say, "It'll get me high grade", think more so of motivation as about the problem solved for a real-world client. For example, The Storm chaser website discussed at the last lecture solves the problem of helping users prepare for storms in terms of location/safety.

Justification (How?)

Can this project be achieved, and how?

Finally, outline how this proposed project lends itself to being created as a Client – Server – Database model. Can it be achieved? What elements indicate it can? You can now mention suitable programming languages here. Why PHP? Why, MySQL? Bonus points for Open-Source definition.

(c) DIARY:

A sample diary entry template is provided for you on **Brightspace** to complete and fill in the details of your discussion today. Fill it in after working with your lab lecturer about what you covered on your degree programme so far to help you create this project (i.e. Databases, Programming, Webpages etc.,)

The diary entry should also include what was decided upon regarding the Software Engineering and Testing project, what was learned and changed today.