

Examiners' Reports 2011–12

CO3320, Project

Preliminary Project Report

Please note, that as from the 2012–13 academic year, *all* PPRs must be submitted online, and hard-copy submission is no longer required. All students will receive feedback on their PPRs from the academic staff at the University of London. Also note that the required structure of the PPR has been slightly changed for the 2012–13 year, so be sure you read the latest version of the *CO3320 Project Study Guide* before writing your PPR.

The primary purpose of the Preliminary Project Report (PPR) is to encourage students to begin thinking about, and working on, their Projects at an early stage of the year.

Furthermore, students who submitted their PPR online via the VLE (in addition to hard-copy) received feedback from the Examiners in early February, commenting on their progress to date and plans for future work. We were pleased to see that, compared to 2010–11, many more students (80 per cent of all registered students) this year took advantage of receiving this feedback by submitting their PPRs online.

The structure required of the PPR is specified in the *CO3320 Project Study Guide*. A brief description of what is expected in each section is provided in the guide. Marks are awarded for each section of the specified structure, so reports which do not follow this structure may lose out on some of the available marks. A number of students lost marks because of this.

Ideally, the Examiners are looking for a Project to address a specific problem by following the structure of an academic research project:

- ▶ identifying a specific question to be addressed
- ▶ proposing a means of answering that question (which may entail proposing a solution to an identified problem)
- ▶ performing some sort of experimental data collection relating to the proposed means of answering the question
- ▶ analysing the collected data
- ▶ drawing conclusions from the analysis which relate back to the original research question.

Some students misinterpreted the meaning of the word ‘research’, taking it to be ‘finding out about a topic’. While any project will involve some amount of this ‘personal research’ (and probably a considerable amount of it), the full Project has to go further than this. The Project should be about actually doing something within the topic area, and answering a question or questions – whose answers are not already known (in the manner described in the previous paragraph). So the questions are not questions that you answer to extend your own knowledge; they are questions that you ask and answer in order to **extend the knowledge of this area in general**.

Projects which merely involve the implementation of a piece of software or website, with no academic question driving the development, will not achieve high marks. They may, however, be deemed sufficient for a pass if they demonstrate the application of solid software development practice. Even a Project which is, on the face of it, a straightforward software development task, can be cast as an academic research project if appropriate questions can be addressed (for example, Can novel feature X improve some aspect of a business process?; Can novel user interface feature Y improve customer satisfaction of the system?). The more specific a question that can be framed, and the more specific the means of analysis, the easier it will be to provide a definitive answer to it in the Project.

In addition to identifying a specific question to be addressed, it is also very important to be clear right at the beginning of your Project exactly how you are going to *evaluate* the success of your work. A common failing in the PPRs was a lack of a clear plan for evaluation.

Think about what question(s) you want to answer, then think carefully about some of the following more specific issues:

- ▶ How will you test the system?
- ▶ What results data will you collect?
- ▶ How will you analyse the results?
- ▶ How will you judge the significance of the results (for example, what will you compare them against)?

For Projects which involve developing software for a group of intended users, be sure to include in your Preliminary Project Plan a process of stakeholder consultation at the start of the Preliminary Project to establish their requirements and their views on your proposed solutions. There are very few cases where such stakeholder consultation will not be appropriate.

For software development Projects, in addition to stakeholder consultation at the design stage, it is also important to include some element of stakeholder evaluation after the system has been developed. For such Projects, care should be taken at an early stage to decide who will evaluate the end product, and how such evaluation will be carried out. It may be that different sorts of evaluation are appropriate for different groups of stakeholders. Without seeking stakeholder evaluation and analysing the results, it can be hard to evaluate whether the Project has succeeded or failed in its goals.

For Projects that involve questionnaires and user feedback, many of the PPRs showed a lack of thought about exactly what would be required. Be sure to think about questions such as:

- ▶ Who will you ask? (Is there a single group of stakeholders, or multiple groups?; How can you select the most representative sample possible from each group?)
- ▶ How many people do you need to include in order to generate reliable results? (Think about what is required for statistical significance, although sometimes practical matters may prevent you from including as many people as you would like.)
- ▶ What will you ask?
- ▶ How will you analyse the data?
- ▶ How long will all of this take?

One emerging trend that we were pleased to see in the PPRs this year was the use by some students of online survey software (for example, surveymonkey.com, Google Doc Forms, etc.), to facilitate their surveys. In many cases, these allowed students to conduct surveys involving many more people than would have been possible with more traditional paper-based surveys.

Students whose Projects were more concerned with software development often had very weak plans for analysis in their PPRs, and were marked down for this. Analysis and evaluation of your work is just as important for this type of Project as it is for a more academically focused Project, and you will find that this is also the case in the commercial world; think about if you were trying to sell your software to another company – how could you convincingly demonstrate that your software does something of value to them, better than what they already have or what is already available?

Many students provided a work plan for their Project only at a very high level. The more specific you can be about your work plan, the more helpful you will find it for guiding your work and for quickly spotting if and when things are starting to fall behind schedule. A more specific plan can be made by dividing large tasks into a number of smaller sub-tasks, and providing time estimates for each of those (and also noting any dependencies that may exist between tasks).

As always with any submitted work, care should be taken in providing full references to any cited work. A number of PPRs were marked down for not referring to related previous work. On the other hand, do not include references in the *References* section to any work which has not been cited in the PPR. If you think it is important to mention such texts, these may be listed in a separate *Bibliography* section, although it is rarely necessary to do this (if the work is relevant, it probably should have been mentioned in the main text!).

Finally, it is good to see a realistic assessment in the PPR of what you have achieved so far, and of how much work is left to do. If your original project plan is already starting to look unachievable at this stage, give some consideration to contingency plans for cutting down on the goals of the work. For the final Project submission, it is better to submit

a smaller, well planned, and complete piece of work, than an incomplete larger Project which was not finished because you ran out of time. Remember, in addition to allowing the Examiners to evaluate what you have achieved so far, the PPR is intended to be beneficial for your own planning and successful completion of the Project.