Final Project

Module description

This module is aimed at students who are near to completing their BSc or Graduate Diploma in Computer Science. It is the culmination of your degree, in which you apply all of your learning to this project.

Module goals and objectives

Upon successful completion of this module, you will be able to:

1. Select and apply appropriate Computer Science techniques to a particular problem.
2. Develop a project proposal that can be addressed using Computer Science techniques.
3. Evaluate previous work in areas related to your chosen project, and write a literature review.
4. Design and develop a substantial piece of software that matches a project brief.
5. Test and evaluate a software project in terms of how it matches a project brief including such factors as user needs, software correctness and efficiency.
6. Report the results of the project in written and visual form.

Textbook and Readings

Given the nature of the module, there is no single recommended reading. You should select specific readings that are relevant to the topic of your project.

Module outline

The module consists of ten topics that guide you through the process of completing a project

Topic 1. Project Concept	**Key concepts:** • What is a Project?

	• Choosing a project idea • Critiquing previous work **Learning outcomes:** • Select an appropriate topic for a project • Critique related work • Develop a project proposal
Topic 2. Project Proposal	**Key concepts:** • Project proposals • Ethics • Advice on project topics **Learning outcomes:** • Identify ethical issues with a project • Select an appropriate scope for a proje • Prepare a project proposal
Topic 3. Background Research	**Key concepts:** • Background research • Literature reviews **Learning outcomes:** • Search and discover appropriate literature and previous work • Evaluate previous work and literature • write a literature review
Topic 4. Design	**Key concepts:** • Designing your project • Prototyping **Learning outcomes:** • Design a project

	• Critique project designs • Prototype key functionality
Topic 5. Planning and Evaluation	**Key concepts:** • Project Planning • Work plans • Evaluation plans **Learning outcomes:** • Plan the development of a substantial project • Plan the evaluation of a project relative to a project brief • Report the results of project design, prototyping and planning
Topic 6. Development	**Key concepts:** • Setting up a development environment • Development Advice • Writing up project implementation **Learning outcomes:** • Select appropriate computer science techniques for your project • Set up an appropriate development environment • Develop a first iteration of a substantial project
Topic 7. Testing and Iteration	**Key concepts:** • Test Criteria • Responding to test results **Learning outcomes:** • Choose appropriate evaluation criteria for your project • Gather feedback from peers • Respond to peer feedback

Topic 8. Academic Writing	**Key concepts:** • Project report structure • Writing a draft report **Learning outcomes:** • Write descriptions and evaluations of computer science development work • Critique academic computer science writing • Write a draft project report
Topic 9. Your project and your career	**Key concepts:** • Computer Science Careers • Portfolios **Learning outcomes:** • Evaluate your project in the context of your future career plans • Present your project as a portfolio piece
Topic 10. Completing your project	**Key concepts:** • Advice on completing a project • Developing a demo video • Final project evaluation **Learning outcomes:** • Prepare your project for final presentation • Evaluate your project as a whole • Create a demo video

Activities of this module

Unlike other modules in this degree, the work of this module is primarily independent work on your project. However, you are supported with a number of activities:

- Lecture videos
- Advice videos from students and lecturer
- Peer reviewed work in progress milestones

- Staff graded work in progress milestones to receive timely feedback from a project supervisor
- Exercises in which you critique examples of work.

How to pass this module

The module has two major assessments, i.e. coursework and written examination. There will be four submissions of various parts of the coursework throughout the study session:

- Two submissions are formative ones that do not count towards the final grade but required in order to receive timely feedback from your project supervisor. In the grading formula they have 0% weighting.
- Two submission are summative ones that do count towards the final grade and take place in the mid-term and in the end of the course.

Until the mid-term coursework consists of several activities that you do on the Coursera platform and which will be assessed half way through course (after week 10).

Written examination will take place on the University of London virtual learning environment (Moodle) in weeks 21 and 22.

After the mid-term coursework also consists of several activities and will be submitted on the Coursera platform. The deadline of submission of the final project report is in week 25.

The table below shows a detailed breakdown of all of the submission deadlines and the marks:

Activity	**Required?**	**Deadline week**	**Estimated time per module**	**Weighting in % of final grade**
Project Proposal	Yes (formative)	4	Approximately 10 hours	0%
Preliminary Project Report	Yes	10	Approximately 50 hours	10%

Check in quizzes	Yes	1-20	Under 2 hours	5%
Draft report (formative)	Yes	16	Approximately 3 hours	0%
Written examination	Yes	22	2 hours	20%
Project presentation video	Yes	25	Approximately 4 hours	5%
Final project report and code	Yes	25	Approximately 150 hours	60%

Note: The project presentation video and the final project report and code will be submitted together as one submission in week 25.