# Level 4 Individual Project Information - Reference Notes

The Level 4 project is 40% of your Level 4 grade.

You should expect to spend at least 400 hours working on your project which corresponds to 16 hours a week during regular term time.

See further documentation on Moodle for more in depth notes.

#### Assessment

5% Oral Presentation 10% Professional Conduct

85% Dissertation

### **Learning Outcomes**

Show this:

- Manage and organise a large independent solo piece of work
- Choose among technologies, tools and approaches and apply them effectively
- Synthesise technical skills appropriately to address a single challenging problem
- Develop a substantial product which demonstrates technical achievement in computer science.
- Appropriately evaluate the outcome of their work
- Conduct themselves in a professional manner, taking responsibility for the progress
  of the project, recording their time and effectively using their supervisor's input
- Write a coherent, literate dissertation that documents the project, justifies decisions made and sets their work in context
- Present their work orally to a technical audience, communicating their project precisely and fluently
- Produce concise, informative video summaries of their work

#### **Milestones**

- Week 11 13:
  - Expectation of full working weeks (40 hours +) on the project during this period.
  - o Plan and prepare for this time in advance
  - Use it wisely young one
- End of Week 13:
  - Submit a one-page project summary to supervisor and Project Co-ordinator
- Final Week of Semester 2:
  - o Dissertation electronic upload
- Final Friday of Semester 2:
  - Presentation

# **Project & Dissertation Type**

### CS: Product-focused projects

A software engineering or product focused project is one whose main purpose is to design and implement a software system that solves a (more-or-less) well-understood problem.

The student is expected to proceed in a well organised manner, passing through a series of phases each of which culminates in a deliverable document

Finally, the student must submit a dissertation that includes a project report together with the implemented software and appropriate documentation. The educational justification for such projects is training in professional software engineering methods.

General advice given to the software engineers for a product led project (and I'll take all the advice I can get):

- Analysis: Review of related products with a clear and comprehensive documentation of product requirements
- **Product:** The extent to which the software code base is "deliverable". Just write clean, good code that is maintenance friendly and easy to expand upon.
- **Evaluation:** Efforts to demonstrate that the software meets customer requirements through rigorous and documented acceptance tests and the like, identify future work in the form of features, enhancements, etc.

### **Professional Conduct: General Advice**

### **Minuting Meetings:**

• Take minutes of meetings (text document on repo) to outline meeting content

# **Meeting Preparation:**

- Prepare questions
- Progress updates (or questions if null progress from previous meeting)
- Suggests good practice of written questions and status report (can be brief) going into meeting

### Time Logging:

- I get to track time!
- Log time spent on project in a log, prepared to show supervisor, document each hour spent on project (as you do it)
  - Write a brief summary of what you did and what was achieved
- Reference commits in the log
- Although not marked this time-log should be submitted alongside project evidence

### **Appropriate Tools & Version Control:**

- GitHub
- Remember and experiment with Unity and GitHub (separate repo)
- There shouldn't be any confidentiality issues

#### **Client Interaction:**

Same meeting preparation and minutes for clients

# **Dissertation**

- Page limit: 40 pages
- Page counting starts from the first page of the first chapter to the last page of the last chapter.
- Appendices and bibliography are not included in the page count.
- Use the template provided
- There are example dissertations from the alleged Hall of Fame as well as some additional examples supplied alongside the template.
- There is a readme explaining the examples
- I need to revise LaTeX