What the Project Is

- A *report* and a *product* addressing a problem/need relevant to your course, and a *presentation* on the project.
- **Product**: usually, a piece of software (on desktop, web, mobile). Also, a set of experiments/analyses, a methodology/database, a multimedia artifact.
- **Report**: Dissertation with:
  - explanation of problem/need (*relevance*, *degree of challenge*)
  - aim and objectives (*desiderata*)
  - review of related work (*acknowledgement*, *critical evaluation*)
  - description of solution (*analysis*, *design*, *implementation*)
  - evaluation (against aim, objectives, desiderata)

  Showcase explaining what the project involved and generated.

Scale, Time Frames

- **Amount of effort**: 300 hours over 30 weeks - about 10 hours a week, 2 a day (minimum).
  - This includes vacations!
- **Dissertation size**: between 8,000 and 14,000 words
  - So about 40 to 70 pages of text.
- **Submissions:**
  - **Feasibility Study**: at the end of Block 1, Week 5 (22/10/21)
  - **Product**: at the start of Block 4, Assessment Week 2 (16/05/22)
  - **Report**: at the end of Block 4, Assessment Week 2 (20/05/22)
    - N.B. Showcase will also be in Block 4, Assessment Week 2.
- **Is it too little or too much?**: *talk to your supervisor* - has the experience and is in a better position to judge that given the nature of the project, the (technical) challenges and the time constraints.

Groups

You'll each have one Block free of other commitments:

- to work on the Project;
- may be Blocks 2, 3 or 4;

A few people lack full diets and so need sorting out.
Thus separated you into Groups:

- **Group A**, students taking CAVE, CO if doing 6G6Z1104 or 6G6Z1111, CFS if doing 6G6Z1104;
- **Group B**, students taking CS if doing 6G6Z1112, CO if doing 6G6Z1103 or 6G6Z1114, CFS if doing 6G6Z1103;
- **Group C**, students taking CGT, SE or CS if doing 6G6Z1104.

You should have a label on Moodle saying which group you are in - if you can't see one, or you think it is wrong, please tell me ASAP.
But everyone needs to the FS **now**!

Submission and Marking

Important note: the assessment and schedule have changed significantly from previous years.
Do not go on what students in previous years may tell you.

- Three components:
  - Feasibility Study (5%) due in B1W5 (22/10/21, on the Friday)
  - Product (30%) due in B4A2 (16/05/22, on the Monday)
  - Report (65%) due in B4A2 (20/05/22, on the Monday)
    - The Report includes the Showcase, which will also be held in B4A2.
- For marking criteria, see assignment briefs - marking sheets will also be on Moodle.
- Report by two examiners: supervisor and **advisor**.
- Don’t plagiarize - we will catch it; last year we found a person who had obfuscated his copied text...

Supervision arrangements

Some major changes in how this will be arranged:

- Your timetable will has *two* Project webinars each week;
- these are at 17:00 on Tuesday and Thursday.
- We're currently all in one of them:
- Other hour is free for you.
- This will be a group supervision, and will cover general topics.
- Each supervisor will also nominate *another* hour each week:
  - Times will be published on Moodle;
  - *Any* student can contact *any* supervisor in these;
  - For discussion of technical issues *only*.
  - Don't abuse this facility - we'll keep a record of meetings.

Your Supervision

I'm here to:

- *guide*, *not* to *lead* projects. With time, it will be become **your** project;
- *provide regular* informal, formative *feedback* on your work;
- give a varying amount of support, according to supervision style, project nature, and your academic background and initiative;
- advise you on *breaking down tasks and managing time*; I'm not expected to solve technical problems, but to guide you to finding the solutions.

Managing Your Supervision

- Contact me regularly (see *make regular progress* above).
- I have many other tasks; make appointments (i.e. accept the one I put in your calendar) and turn up to your meetings.
- Make sure you come prepared, and provide material for discussion ahead of meetings.
- Make notes; have a logbook (perhaps using Trello) for project meetings.

Please attend all the meetings in Block 1 - they concern the Feasibility Study etc. You may reduce attendance outside your Project Block.

What the FS is:

- A description of what project you wish to undertake.
- A consideration of difficulties you may encounter.
- A setting out of your time-plan.
- A listing of the resources needed.
- The proof that you've addressed any ethical issues

What the FS needs:

- Title
- Course-Specific Learning Outcomes
- Project Background
- Aim
- Objectives
- Problems
- Required Resources
- Schedule
- Ethics number

Total length should be not more than 2,000 words or 4 pages (pages are generally fairly sparse, so reduce the word count). The Ethics forms are extra.

The course-specific learning outcome issue:

All projects must be clearly linked to your overall degree:

- British Computer Society (our professional body, validates the degrees) requirement.
- Partly managed by requiring you to choose from a degree-sorted list of topics;
- Also by allocating students to relevant staff.

But also

- you must show awareness of and response to this requirement,
- so include relevant part of the degree specification in the FS (and then the introduction to Report).

Course-specific learning example:

From the file on Moodle:
BSc (Hons) Software Engineering
Students successfully completing this award will:

- Demonstrate an understanding of the principles of object orientation in the context of analysis and design.
- Apply project management techniques in order to plan, monitor and control a project.
- Explain and utilise fundamental object orientation concepts such as classes, encapsulation, inheritance and polymorphism and relate them to their practical situations including library and graphical user interface (GUI) development.
- Utilise in-depth, practical experience of the types of software tools that can support an object-oriented software lifecycle and develop this through practical experience.
- Utilise and understand methods and appropriate software tools for software development, including Software Testing Tools, Version Control and Project Management.
- Demonstrate an understanding of the fundamental, basic issues of software testing.
- Evaluate and apply design patterns for the development of high-quality, object-oriented software systems.
- Build robust, secure distributed systems using techniques such as messaging, persistent storage, remote methods and components.
- Have a range of programming skills to apply in the software engineering environment.
- Demonstrate that they can participate in and complete a substantial project, involving research, planning, specifying, designing, building and testing software, integrating knowledge gained from the core units on the award.

Additional components:

- Title
  - Agree with your supervisor (i.e. the two of you can change it)
- Project Background
  - A few paragraphs on general area and challenge.
- Aim
  - Formal statement problem to be solved,
  - Generally one, might have a couple more.
- Objectives
  - Stages you will go through to solve problem.
  - Approach you will take to address them.
- Problems
  - Are there any critical points where the project might fail?
  - Consider them now, with supervisor...
- Required Resources
  - The hardware and software needs of task
  - Have a list of hardware on Moodle.
- Schedule
  - Table of weekly tasks, including interim documents.
- Ethics - discuss that next week.