Critical Success Factors in the Project

The project consists of a number of required deliverables such as a Project Pitch, Proposal, Requirement Specification, Technical Report, Prototype and mid-point presentation and a final complete system and presentation. Students should ensure that they do deliver each of the required components and attempt to achieve a high standard on each of them. In particular, the early deliverables provide an opportunity to set the foundations for a good project early in the project cycle.

Similarly, well-written, well-presented documentation will achieve valuable extra marks compared to sloppy or carelessly produced documents. These marks may make the difference in the overall grade a student ultimately obtains. Seminars on technical writing provide advice and guidance on style and content. Students should attend those seminars and follow the advice offered.

Project Management

The time available to complete the project is limited. Students should make sure they manage their time carefully so as to complete their project within the time. Start as early as possible and work with your supervisor to ensure you make continuous progress.

A project may consist of various different software components some of which may be more difficult to implement than others. Students should ensure that they make continuous progress in their project by addressing easier parts as well as the difficult parts so that early on they have got something that works on which they can build. A project that fails to produce any working code will not achieve good marks.

Project Content Students should ensure that they keep their user firmly in mind as they develop their project. Obtain and act on input and feedback from real potential users of the application.

Technical Report

This is a very important deliverable not just because of the marks allocated to it but because it is one of the examiners main source of information about the project. This report should be started as early as possible in the project so it can be a complete record.

The section on architecture is an area where many technical reports lose marks. The report must describe the structure of the application at a high level, identifying each of its components and the relationships between them and describing those components in detail. A single class diagram or a set of use cases will not suffice.

The technical report is the formal record of what is in the project. All components of the project must be described there. If a component mentioned in the proposal or the requirements is not described in the technical report, the examiners may conclude that the project did not implement it.
The technical report should include information on work done which did not ultimately contribute to the project for example technologies tried and subsequently rejected.

**Project Presentation**

The presentation/demonstrations are one of the examiners main sources of information about the project. It is important therefore that students do themselves justice in the demonstrations. One way of facilitating that is for students to attend the seminars on presentation techniques, to follow the guidance offered and avail of the opportunity to practice and get feedback on their presentation.

During the presentation / demonstrations students should be careful to strike the right balance between the ‘Power Point’ phase of the session and the actual software demonstrations.

The content of the presentation/demonstrations session should be related to the marking scheme for the project. Projects are assessed for qualities such as innovation, difficulty, use of technology and completeness. The presentation is the student’s opportunity to highlight those qualities of their project to the examiners.

Students will be required to demonstrate their familiarity with and knowledge of the project code they submit. If a student cannot explain or appears not to understand some of the code in their project, the examiners may conclude that it is not the students own work.

Student should prepare for the project demonstrations on the day beforehand to avoid problems on the day.

**Source Code**

Do not ‘dump’ the source code in an Appendix to the technical report. It will be sufficient to store it in a Version Control Repository (e.g. GitHub) and provide access to the Supervisor.

The code should be indexed, well-commented and in a non-proportional font (i.e. Courier) so that it can be easily followed and understood by the examiner.

Source code obtained from elsewhere (i.e. not written by the student) which is used in the project should be clearly acknowledged and referenced and the student should be able to demonstrate knowledge of it.

**Supervisor Input**

It is important that students meet with their supervisor regularly and follow the advice and guidance they receive. In particular acting on feedback from the prototype stage of the project makes a valuable contribution to improving the mark achieved in the final stage.