**INDIVIDUAL**

**PROJECT HANDBOOK**

**CS3D661**

**40 Credits**

**2017-18**

1. **Introduction**

The individual project is a major piece of work that will be a significant undertaking. Provided the correct approach is taken it should be an enjoyable experience that will allow you to demonstrate your ability to understand ideas and develop them into working solutions. During interviews for your first job post-graduation your project is something you will most likely be quizzed about. An employer can distinguish between a student who has gone through the motions and a student who has immersed themselves in the project and driven it forward. It allows you to highlight yourself as someone who is both motivated and technically able. The more you engage in the project, the more you will gain from it.

Not all projects are suitable for a final project. Your project topic must have a clear aim, such as addressing a problem that you are attempting find a solution to. It is important that you have this in mind when working on your project. It will help you define the scope of your work (i.e. what features are absolutely necessary for realisation of your project goals compared to what is a “nice to have” but contributes little to address the motivations of the project).

The deliverable of a project must include code or a piece of software that you have developed. You cannot exclusively use an existing library/solution to generate results.

Your project should have a set of objectives that outline what you hope to achieve. These objectives should represent the major steps in accomplishing your project aim. The exact path your project will follow cannot be known from the outset, therefore, the objectives should not necessarily remain static throughout the project. However, they should only be changed on discussion with your supervisor. Furthermore, any changes should be documented in your report along with their justification.

Your project should allow you to demonstrate the practical and analytical skills you have developed as an undergraduate in addition to your creativity in tackling the problem identified in your project.

The outcome of the project will be a major report describing what you have done and a technical solution to the problem you are addressing.

1. **The Project Assessment**

Each student will have two supervisors. The first supervisor will be the main point of contact throughout the project. You should have regular meetings with your first supervisor. Your second supervisor will be less directly involved with the project and will assess it independent to the first. This is to ensure the marks awarded are fair and consistent across all projects. If the marks differ significantly between your two supervisors a third assessor will be appointed.

The delivery of the project is split into four milestones. These have been introduced so that both supervisors have a formal opportunity to assess your current progress and provide feedback to you. It is expected that each milestone will build on the previous, so that you will not have to start each from scratch. Therefore preparing the final report should not be too arduous.

The first two milestones are effectively progress reports. The third milestone is your completed formal report. The fourth milestone is a presentation of your project to both assessors along with a poster describing what your project. All submissions must be submitted electronically through Turnitin (including your poster and presentation). Source code for your project must be submitted for Milestone 3. This can be submitted online, unless your source code is too large (for example if your project includes large meshes, or supporting files).

The deadline for each milestone is provided in the table below.

|  |  |
| --- | --- |
| **Milestone** | **Deadline** |
| 1 | 24/11/2017 |
| 2 | 02/02/2018 |
| 3 | 20/04/2018 |
| 4 | 04/05/2018\* |

\* The date and time of your presentation should be agreed with your supervisors to be completed by this date. In any event the electronic versions of your poster and presentation must be submitted by this deadline.

When writing each milestone it is often best to think as your second supervisor as the target audience. Your first supervisor should already have a good idea of what you have achieved. It is your second supervisor who needs to be convinced that the project is of interest and your contribution of value.

Note all references should be in Harvard format.

Each of the milestones is discussed in detail in the following sections.

* 1. ***Milestone 1***

The aim of the first milestone is to give your supervisors confidence that you understand what you are hoping to achieve and have a realistic grasp of the challenges this will present.

This will most likely be your second supervisor’s first insight to the project. It is important to make clear what problem you are tackling, what the challenges are and place this into a wider context of the subject area.

You must outline your project objectives and summarise the work you have completed so far. This should include a background review of either the literature or competing products (as appropriate), details of any initial prototyping or experimentation undertaken and an initial timeline of the project. You should try to identify what the significant steps of the project are and highlight any unknowns associated with each of these steps (i.e. what are the risks associated and how you can mitigate against them).

You must include the Ethics checklist from Appendix II as part of this milestone, even if you do not plan to use any participants to evaluate your work. If you are in any doubt that your project does not comply with any of the points on the sheet, you should contact your supervisor to seek an alternative approach or apply for ethics approval.

* 1. ***Milestone 2***

The aim of the second milestone is to demonstrate that you are on target to achieving your planned objectives. By this milestone you should have at least a prototype/skeleton implementation or sufficient detail in your report outlining the design of your deliverable.

You should ensure you make clear in your report what you have currently achieved and what is still outstanding to meet your objectives. Again you should outline any major steps still outstanding to complete the project and their associated risks. Any changes to your objectives should be explained.

* 1. ***Milestone 3***

The third milestone should convey the work you have undertaken to complete the project, including background reading, designing, planning, implementation and evaluation. More details on the final report are given in Section 4. Ensure you discuss whether your objectives were met and how they changed throughout the project.

You must submit any source code along with your project.

* 1. ***Milestone 4***

The fourth milestone is a chance for you to present your project to both your supervisors. This will typically involve a 15 minute presentation followed by 15 minutes of questions. In addition to a formal presentation you may wish to prepare a demo of your project, this should be discussed with your supervisors before the presentation. The presentation should be written assuming neither supervisor has prior knowledge of your work. You should also create a poster to bring to your presentation slot.

It is your responsibility to arrange a convenient slot with your supervisors to present your work.

1. ***Marking Scheme***

The project will be assessed in four main areas: “Project Management, Project Responsibility and Professional Conduct”, “Understanding of Problem Area and Technical Solution”, “Technical Report” and ”Poster and Oral Presentation”.

“Project Management, Project Responsibility and Professional Conduct” concerns your ability to manage your time, set yourself realistic goals, keep to project deadlines, attend meetings and carry out your project professionally. Higher marks will be awarded to students who demonstrate they are capable of taking ownership of their project and progressing it independently.

“Understanding of Problem Area and Technical Solution” concerns your grasp of the project area, identification of the main problems and how your solution fits into the wider context of the existing literature/current products. The technical solution to your project will be assessed under this heading.

“Technical Report” examines your ability to clearly communicate what you have achieved during your project. This examines both your technical writing skills and your ability to critically reflect on the work you have undertaken.

“Poster and Oral Presentation” gives you an opportunity to present your work and prepare a visual summary of your work.

If your project is undertaken with an industrial partner they will also be asked to provide feedback.

* 1. ***Marking of Milestones***

Whilst Milestones are of vital importance for formally tracking your progress and providing feedback to you, it is hard to provide an exact mark for each milestone and it would be unfair to do so. This is as essentially an incomplete piece of work is being marked; a project can only be accurately marked once it is finished, by looking at all milestones in conjunction.

Furthermore, depending on the project the exact format of each of these milestones may differ, for example a more theoretical project may require an extensive literature review as the main feature of Milestone 1. However, a more application driven project may already expect a crude implementation of some parts of the system. It is therefore difficult to mark Milestones from different projects with the same scheme fairly.

Therefore, whilst you will receive feedback for each milestone, you will not receive an exact mark, nor is there a specific weight attached to completion of each Milestone.

It is important to remember that the purpose of the Milestones (particularly Milestones 1 and 2) is to allow both supervisors to review your current progress and coach you to get the best possible grade for your project. Therefore, it is in your best interest to engage in delivery of high quality Milestones so your supervisors have an accurate reflection of what you have achieved.

It is also important to note that whilst there is not an explicit mark for each milestone failure to submit them on time, or submit milestones of a poor quality, will severely impact the marks you will be awarded for “Project Management and Responsibility”. It is important that you discuss with your supervisor what their expectations are for each milestone (particularly 1 and 2).

* 1. ***Marking Rubric – Implementation and Technical Report (80%)***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Fail | Narrow Fail | 3rd Class / Pass | Lower 2nd Class / Pass | Upper 2nd Class / Merit | 1st Class / Distinction |
| Project Management, Project Responsibility and Professional Conduct 20% | * No arranged meetings attended * Unaware of project, unable to give any feedback * The student showed very little interest in the project * The student seemed unaware of what they were doing and why * No evidence of ongoing work * There was little or no evidence of a project plan * The student failed to meet any deadlines * No attempt had been made to produce minutes * The student's conduct during meetings was wholly unprofessional and they seemed unwilling to contribute beyond turning up * Lack of understanding of legal requirements and ethical issues | * Very few arranged meetings attended * Showed an awareness of project, but contributed little during meetings. Lacked understanding of progress made, had little or no ideas for ongoing work * The student showed limited interest in the project for the majority of meetings, occasionally provided some feedback on progress * The student had an awareness of their current work, though were unable to relate it to the objectives of the project * The work being produced seemed to have little relevance to the project * A project plan was in place though seemed to be of little relevance to the project * The student met very few deadlines. There were significant periods of inactivity * A very limited attempt had been made to produce minutes following a meeting * The student's conduct during meetings was occasionally unprofessional, they contributed little to the meetings * Poor understanding of legal requirements and ethical issues | * Majority of arranged meetings not attended * Adequate meeting preparation. No physical evidence. Student could describe work done so far, but had little other input * Student engaged in discussion of ideas and suggestions raised by the supervisor * The student had a very thin grasp of their current work in terms of how it would contribute to the project * The student often worked in areas that contributed little to the project. They appeared to lack focus and understanding of the project objectives * A project plan was in place, however, it failed to identify any risks. there is no evidence it was updated during the project * The student met very few deadlines and had little or no understanding of the issues that were blocking their progress * Minutes were prepared that were vague or had omitted significant details. Minutes were frequently distributed several weeks late if at all * The student was generally courteous and considerate to others in all meetings. They were frequently difficult to contact (e.g. frequently unresponsive to email of over a week) * Basic understanding of the legal and ethical requirements | * A few arranged meetings not attended without warning or frequently poor punctuality * Good meeting preparation for the majority of meetings with some physical evidence. However, often seemed unaware of the direction of ongoing work * Student made at least one suggestion or proposed an idea to progress the project * The student seemed to grasp the content of current milestone, however, didn't seem to fully understand the significance of it or how it contributed to the project * The student often worked in areas that contributed little to the project objectives. Though on discussion could understand why the work is of limited relevance * A project plan was in place, however, it was unrealistic (e.g. overly optimistic) or failed to identify many of the risks associated with each of the steps in the project. There is no evidence it was re-examined during the project or updated * The student met several deadlines, however, seemed to have a limited understanding of the issues that prevented them from making progress. Made little suggestions to circumvent blocking issues even when lead * Minutes were prepared and distributed for about half the meetings. Some details may have been unclear and they seemed to demonstrate a lack of clarity of what had been discussed * The student was courteous and considerate to others in all meetings. They were frequently difficult to contact (e.g. frequently unresponsive to email of over a week) * Clear understanding of legal requirements and possible ethical issues | * Attended all arranged meetings or gave warning of non-attendance, occasional tardiness * Good meeting preparation for the majority of meetings with some physical evidence. Student was able to articulate current progress, ongoing work and raise any current issues * Student occasionally made suggestions and proposed ideas of how to progress the project * The student had an excellent grasp of the current project milestone and its contribution to the project, but generally had little understanding of what would be required beyond it * The student generally showed a clear understanding of how their ongoing work related to the project objectives, however, occasionally drifted into areas that did not directly contribute to the overall project goal * A project plan was in place, however, it was perhaps unrealistic (e.g. overly optimistic) or failed to identify some of the risks associated with each of the steps in the project. However, it was modified as the project progressed * The student consistently met deadlines, many of which were self set. If deadlines were missed they were able to explain issues that had arose and on discussion propose solutions * Clear and concise minutes were prepared and distributed following the majority of project meetings. Minor inaccuracies may have been recorded or details omitted. Minutes were distributed before the following meeting in the majority of cases * The student was courteous and considerate to others in all meetings. They were occasionally difficult to contact (e.g. very slow email response of over a week) * Demonstration of a reasoned ethical approach | * Attended all planned project meetings or gave advanced warning of non-attendance. Always punctual * Excellent meeting preparation for all attended meetings along with physical evidence. e.g. agenda covering report of current progress, ongoing work and any issues encountered * Student frequently made suggestions and proposed ideas of how to progress the project * The student had an excellent grasp of the significant milestones in the project and understood how they contribute to obtaining the project objectives * The student demonstrated a clear understanding of how their ongoing work related to the project objectives. The work they completed was always relevant * A clear and realistic project plan was in place that highlighted the major steps required of the project and assessed the risks. It was re-assessed and modified as the project progressed. the time frame for each step seemed realistic * The student achieved all self set deadlines (e.g. I will complete X by next week), or was able to clearly articulate issues that arose and prevented deadlines being met and propose potential solutions * Clear and concise minutes were prepared and distributed in a timely manner following each project meeting. They demonstrated a clear understanding of what had been discussed * The student was courteous and considerate to others in all meetings. They responded to emails in a timely fashion * Succinct discussion of key points and appropriate improvements detailing an excellent understanding of the legal, social, ethical and professional issues |
| Understanding of Project Area and Technical Solution 30% | * Technical solution produced does little to indicate the student has any knowledge of the project area or methods used * Technical solution makes no contribution to achieving any project objective * Technical solution is not substantial enough to provide evidence of adhering to coding standards | * Technical solution produced demonstrates a severely limited grasp of the project area or methods used * Technical solution contributes to achieving at least one objective * Technical solution shows very minor evidence of good coding practice. Code is undocumented | * Technical solution demonstrates a fair grasp of the project area and an understanding of the methods used. However, there may be some major issues/flaws with the provided solution that indicates significant gaps in the students knowledge of the project area * Technical solution has significant missing functionality or is incomplete, but contributes to some project objectives * Technical solution is a bit confused in areas, shows lack of clarity of thinking. Coding standards don't appear to have been adhered to. Documentation is weak or largely missing | * Technical solution demonstrates a reasonable grasp of the project area and an understanding of the methods used. However, there may be some issues/flaws with the provided solution that indicates the student only partially understood the project area or taken approach * Technical solution meets some project objectives * Technical solution frequently deviates from coding standard in places. Documentation is missing in a number of places that makes the code difficult to follow. Overall is of a good quality | * Technical solution demonstrates a good grasp of the project area and an understanding of the methods used. However, the solution may contain issues/flaws that indicates minor gaps in the student's knowledge/understanding * Technical solution meets the majority of project objectives * Technical solution has a consistent coding standard, uses well named variables, is well documented and clearly written. The solution occasionally deviates from the coding standards or occasionally contains areas of poorly commented code | * Technical solution demonstrates an excellent grasp of the project area and an understanding of the methods used * Technical solution meets all project objectives * Technical solution has a consistent coding standard, uses well named variables, is well documented, clearly written and easy to follow |
| Problem Awareness 10% | * Purpose not stated. No objectives stated * Does not do what is claimed in the title, abstract and/or introduction * Unable to explain topic to be critically explored * Algorithms and/or methods not included | * Purpose stated, but confusingly. All objectives inappropriate * Title, abstract, introduction and conclusion are incoherent * Frequently unable to explain topic to be critically explored * Algorithms and/or methods included, but fail to do so | * Purpose stated simply or most of the objectives are inappropriate * Coherence of topic coverage is disjointed and lacks flow * Frequently unable to explain topic to be critically explored * Algorithms and/or methods included, but are very limited in scope and do little to illustrate the topic | * Purpose and objectives stated, but long winded or a few objectives inappropriate * Topic coverage may be confusing or disjointed at times * Generally able to clearly explain topic to be critically explored * Algorithms and/or methods included, but are either limited in scope or comprehension | * Purpose and objectives stated with clarity * Report generally reads coherently with a well delivered message running throughout * Consistently able to clearly explain topic to be critically explored * Algorithms and/or methods included, but not fully comprehended | * Purpose and objectives stated with clarity and succinctly * Report clearly and coherently addresses the objectives * Consistently able to vividly explain topic to be critically explored * Algorithms and/or methods included and completely understood |
| Academic Quality 10% | * Has captioned graphics that are poorly selected and/or not cited where required * Some content is relevant to the project area * Uncited sources have been used verbatim (word for word) * The description of what was implemented is extremely limited | * Has captioned graphics that are not particularly well selected cited where required * Most content is relevant to the project area * Uncited sources have been paraphrased * It is not possible to understand what was implemented from the description and it would be of limited use. The author would effectively need to pair program with anyone who was hoping to re-implement the project | * At least one of the graphic is uniquely labelled, contains a caption, is referenced in the text and is of a suitable clarity/resolution for production * All content is relevant to the project area * Excessive use of cited quotations and/or references not clearly linked to paper body * The implementation is not clear. Several lengthy conversations would be needed for someone to re-implement the work, however, with guidance from the author the included description would be beneficial as an additional aid | * Some of the graphics are uniquely labelled, contain a caption, are referenced in the text and are of a suitable clarity/resolution for production * All content is relevant and appropriate to the project area * Excessive use of cited quotations and all references are appropriately linked to paper body * A reasonable description is provided of the final implementation. There are a few significant gaps that would need addressing to re-implement the solution. However, the description provides the majority of the detail | * The majority of graphics are uniquely labelled, contain a caption, are referenced in the text and are of a suitable clarity/resolution for production * Almost all content is relevant, accurate and appropriate to the project area * Some cited quotations used and all references are appropriate linked to paper body * A good description is provided of the final implemented. A few minor areas may be vague or poorly explained such that some minor discussions with the author would be necessary to re-implement the provided technical solution | * All graphics are uniquely labelled, contain a caption, are referenced in the text and are of a suitable clarity/resolution for production * All content is relevant, accurate and appropriate to the project area * Quotations used appropriately and sparingly, and all sources appear as citations in the paper body * A clear description is provided of the produced implementation such that it could be reproduced with ease with very minor discussion with the author |
| Evaluation 20% | * A missing or superficial evaluation of evidence, presented from an entirely biased perspective * Conclusions drawn are not based on evidence and rely on speculation * A missing or superficial reflection on the impact of the project on your professional practice that does not display considered thought | * A missing or superficial evaluation of evidence, presented from an entirely biased perspective * Conclusions drawn are not based on evidence and rely on speculation * A missing or superficial reflection on the impact of the project on your professional practice that does not display considered thought | * A weak evaluation of evidence that informs discussion somewhat, but is presented from a somewhat biased perspective * Conclusions drawn are loosely based on interpretations of evidence and includes much speculation * A vague reflection on the impact of the project on your professional practice that displays minimal considered thought | * A fair evaluation of evidence that informs discussion, but displays a slightly biased approach * Conclusions drawn are based on reasonable interpretations of evidence although include some speculation * A reasonable reflection on the impact of the project on your professional practice although more considered thought could be included | * A good evaluation of evidence that informs a mainly well-argued discussion, although it could be more balanced * Conclusions drawn are mainly based on sound interpretations of evidence * A good reflection on the impact of the project on your professional practice, that shows some considered thought | * A strong evaluation of evidence that informs a well-argued and balanced discussion * Conclusions drawn are based on clear and measured interpretations of evidence * A thorough and well-considered reflection on the impact of the project on your professional practice |
| Bibliography and Background 10% | * There is no referencing or bibliography in the document * References/ citations missing or incorrect * Background is very poor and has little relation to the subject area * Very little evidence of a literature review provided | * Few sources cited * References/citations missing * Background is very disjointed and almost completely irrelevant * The literature review is extremely brief | * Evidence of reading only web sites and class notes * Some references are incomplete or incorrect * Background seems very disjointed, contains significant inaccuracies * The literature review contains several major gaps | * An adequate/fairly good level of in text referencing is evident. There are still a few incorrect references/citation, and therefore full adherence to Harvard would glean higher marks * Evidence of reading relevant books and quality web sites * Background provides a reasonable introduction to the subject area. However, significant portions are irrelevant or contain minor inaccuracies * The literature has a few significant gaps that are of importance | * In text referencing and Bibliography is to Harvard standard. Only minor errors in incorporating citations into the text * Evidence of reading relevant journals, books and quality web sites. Sources are used to justify your points * Background provides a good introductory text to the subject area. However, in some places the background literature is not placed within the context of the project or occasionally seems of limited relevance * The literature contains minor gaps, though covers most of the pertinent issues | * Evidence of reading relevant academic journals, books and moderated web sites. Sources used to justify your points clearly * All sources cited and referenced in Harvard format * Background provides a good introductory text to the subject area and places the project clearly into the context of existing work * A good coverage of the literature is provided |
|  | | | | | | |

***3.3 Marking Rubric – Poster and Oral Presentation (20%)***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Fail | Narrow Fail | 3rd Class / Pass | Lower 2nd Class / Pass | Upper 2nd Class / Merit | 1st Class / Distinction |
| Quality of the poster presentation 50% | * Some content is relevant to the project * Few or no correctly formatted citations * None or very few items of importance are labelled and can be read from three feet away * Has captioned graphics that are poorly selected and/or not cited where required * Distractingly messy or poorly designed and/or uninformative * Little or no consideration for grammar and/or spelling evident | * Most content is relevant to the project * Incorrectly formatted citations, perhaps from a single source * Few items of importance are labelled and can be read from three feet away * Has captioned graphics that not particularly well selected cited where required * Poorly designed and/or marginally informative * Many grammatical or spelling mistakes | * All content is relevant to the project * Includes correctly formatted citations, perhaps from a single source * Some items of importance are labelled and can be read from three feet away * Has at least one graphic related to the object with relevant caption(s) cited where required * Reasonably attractive, although it may be messy, and marginally informative * Several grammatical or spelling mistakes | * All content is relevant and appropriate to the project * Two correctly formatted citations from a different of sources * Most items of importance are labelled and can be read from three feet away * Has at least one good graphic related to the object with relevant caption(s) cited where required * Attractive in terms of design, theme and colour use, layout and neatness, and reasonably informative * A few grammatical or spelling mistakes | * All content is relevant, accurate and appropriate to the project * Three correctly formatted citations from different sources * Almost all items of importance are labelled and can be read from three feet away * Has at least two good graphics related to the object with relevant captions cited where required * Attractive in terms of design, theme and colour use, layout and neatness, and informative * One or two grammatical or spelling mistakes | * All content is relevant, accurate and appropriate to the project * Four or more correctly formatted citations from different sources * All items of importance are labelled and can be read from three feet away * Has at least two excellent graphics related to the object with relevant captions cited where required * Exceptionally attractive and attention grabbing in terms of design, theme and colour use, layout and neatness, and very informative * Grammar, spelling and clarity excellent |
| Quality of the oral presentation 50% | * Very unstructured, digressive, unclear or very confusing * All or almost all read from notes * Very poor use of intonation and body language * Time taken was far too long or far too short | * Unstructured, rambling or confusing * Majority of presentation read from notes * Very poor use of intonation or body language * Time taken was far too long or far too short | * Some structure and underlying rational to talk * Frequent reading from notes * Monotone and/or static presentation * Time taken was far too long or far too short | * Adequate structure and the vast majority of the talk has a clear message * Some reading directly from the notes * Varied tone somewhat and/or effective use of body language * Time taken significantly too long or too short | * Well-presented, structured and almost all the talk had a clear message * Speaker's notes used effectively * Good use of intonation and body language * Talk was close to the time allowed | * Professional talk * Speaking style clear and informative without being verbose * Excellent use of intonation and body language * Talk was very close to the time allowed |
|  | | | | | | |

1. ***Contents of the Final Report***

The final report handed in as part of Milestone 3 must fulfill the following:

* It must make clear the problem being addressed and the objectives that the project aims to achieve.
* It must place the project in the context of the literature, or within the context of similar products.
* It must outline the approach taking to developing the proposed solution.
* It must outline the approach taken to perform verification or validation of the proposed solution.
* If appropriate, it should describe the tools used to support development.
* It should contain a critical review of what was achieved, rational of decisions made during development and evaluation of the project outcome.
* It must contain references to existing work.
* It must contain a description of Ethical, Legal, Social and Professional issues encountered during the undertaking of the project. You must enclose the Ethics checklist provided in Appendix II.
* A statement of originality (See Appendix I).

You should think carefully about how you will evaluate your project and how you will demonstrate its success to your supervisors.

A suggested format for your final report is provided in Appendix III.

The report should be no more than 10’000 words. Source code must be submitted.

Appendix I

**STATEMENT OF ORIGINALITY**

**CS3D660 Individual Project**

This is to certify that, except where specific reference is made, the work described within this project is the result of the investigation carried out by myself, and that neither this project, nor any part of it, has been submitted in candidature for any other award other than this being presently studied.

Any material taken from published texts or computerized sources have been fully referenced, and I fully realize the consequences of plagiarizing any of these sources.

Student Name (Printed) ………………………………..

Student Signature ………………………………..

Registered Course of Study ……………………………….

Date of Signing ……………………………….

**Appendix II - Ethics Checklist**

This form is only applicable for assessed exercises that use other people (‘participants’) for the collection of information, typically in getting comments about a system or a system design, or getting information about how a system could be used, or evaluating a working system.

If your proposed activity does not comply with any one or more of the points below then please contact your project supervisor and/or project coordinator for advice. If your evaluation does comply with all the points below, please sign this form and submit it with your assessed work.

1. Participants were not exposed to any risks greater than those encountered in their normal working life. *Investigators have a responsibility to protect participants from physical and mental harm during the investigation. The risk of harm must be no greater than in ordinary life. Areas of potential risk that require ethical approval include, but are not limited to, investigations that occur outside usual laboratory areas, or that require participant mobility (e.g. walking, running, use of public transport), unusual or repetitive activity or movement, that use sensory deprivation (e.g. ear plugs or blindfolds), bright or flashing lights, loud or disorienting noises, smell, taste, vibration, or force feedback.*
2. The experimental materials were paper-based, or comprised software running on standard hardware. *Participants should not be exposed to any risks associated with the use of non-standard equipment: anything other than pen-and-paper, standard PCs, mobile phones and PDAs.*
3. All participants explicitly stated that they agreed to take part, and that their data could be used in the project. If the results of the evaluation are likely to be used beyond the term of the project (for example, the software is to be deployed, or the data is to be published), then signed consent is necessary. A separate consent form should be signed by each participant. Otherwise, verbal consent is sufficient, and should be explicitly requested in the introductory script.
4. No incentives were offered to the participants. The payment of participants must not be used to induce them to risk harm beyond that which they risk without payment in their normal lifestyle.
5. No information about the evaluation or materials was intentionally withheld from the participants. Withholding information or misleading participants is unacceptable if participants are likely to object or show unease when debriefed.
6. No participant was under the age of 16. Parental consent is required for participants under the age of 16.
7. No participant has an impairment that may limit their understanding or communication. Additional consent is required for participants with impairments.
8. Neither I nor my supervisor is in a position of authority or influence over any of the participants. A position of authority or influence over any participant must not be allowed to pressurise participants to take part in, or remain in, any experiment.
9. All participants were informed that they could withdraw at any time. All participants have the right to withdraw at any time during the investigation. They should be told this in the introductory script.
10. All participants have been informed of my contact details. All participants must be able to contact the investigator after the investigation. They should be given the details of both student and module co-ordinator or supervisor as part of the debriefing.
11. The evaluation was discussed with all the participants at the end of the session, and all participants had the opportunity to ask questions. The student must provide the participants with sufficient information in the debriefing to enable them to understand the nature of the investigation.
12. All the data collected from the participants is stored in an anonymous form. All participant data (hard-copy and soft-copy) should be stored securely, and in anonymous form.

Student Name:

Student ID:

Student’s Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

Appendix III

**Sample Milestone Three Report Layout**

Title Page

Statement of Originality

Abstract

Table of Contents

Introduction, Problem Statement and Objectives

Background Research

Methodology

Results

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Conclusions and Future Work

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Ethical, Legal, Social and Professional Issues.