



Session 2016/17

Honours Project Handbook for the following Programmes:

BSc (Hons) Computer Games Technology

BSc (Hons) Computer Game Applications Development

BSc (Hons) Computing

BSc (Hons) Computing and Networks

BSc (Hons) Digital Forensics

BSc (Hons) Engineering and Intelligent Systems

BSc (Hons) Ethical Hacking

BSc (Hons) Web, Design and Communication

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**1. Introduction**

This document details the principles and processes involved in the Honours Stage project modules within the Computer Games Technology, Computer Game Application Development, Computing, Computing and Networks, Digital Forensics, Ethical Hacking and Web, Design and Communication degree programmes. All students embarking on these modules should become familiar with this content and refer to relevant sections as appropriate during the course of the project work.

The Honours Stage Project consists of two 20-credit modules - *Honours Project Scoping and Proposal*, *and Honours Project Dissertation* and one 40-credit module *- Honours Project Execution* which in total amounts to 66% of the total work associated with the Honours stage. Honours Project Scoping and Proposal and Honours Project Dissertation are single modules which run in Term 1 and Term 2 respectively. Honours Project Execution is a double module and runs across both Terms. All modules are compulsory for all students.

The project has several objectives and benefits, chiefly to allow students to show their all-round ability to tackle a substantial piece of investigation, research, software design and development work related to their Degree Programme. The project will also allow the student to demonstrate project and time management skills and to bring a large and significant task from concept to a successful conclusion with a quality dissertation and presentation of completed work. Within this overall context however, the actual work done can vary widely between different projects.

The work of the first semester is mainly concerned with selecting a topic for the project, developing this into a project proposal document, which will be submitted as an assessed component in **Week 10 of Term 1** and undertaking initial research, analysis and design work which will be demonstrated through Feasibility Demo in **Week 14 of Term 1.**

The onus is on the student to select the topic for the project, which will normally be related to an area that interests you, but there will be some project ideas that come from members of staff related to their area of interest or research. Students are encouraged to talk to members of staff about project ideas in order to help validate their topic.

During the first semester there will be formal classes related to the project mainly associated with research methods, project selection and proposal writing. The classes will be in the form of lectures and workshops and the importance of attendance at these classes is critical to the success of the project. During the second semester, there will be fewer classes and these will be associated with dissertation writing and will provide guidance on the structure and content of the dissertation which will be submitted towards the end of the second term. Also towards the end of the second Term, there will be a showcase event, where students will demonstrate the software solution that they have developed to staff, other students and external visitors.

The allocation of your project supervisor takes place during **Week 7** of **Term 1**. The project supervisor will be the member of staff who will supervise your project work and will have a detailed knowledge of your project topic and progress. You should normally meet with your supervisor once per week. It must be emphasised however, that the project work is driven by you (the student) and not by your supervisor. You should be deciding the direction and focus of the project in the light of the guidance and advice that will be provided by your supervisor.

The formal deliverables for the project modules are:

Term 1

* The Project Proposal – Week 10
* Feasibility Demo – Week 14
* Ethics Form – Week 14

Term 2

* The Project Dissertation – Week 34 (14)
* The Final Project Software/Application including its demonstration – Week 34 (14)
* Additionally, a small but important element of assessment relates to Project Management and Professional Conduct by you the student throughout the project period and this will be recorded and graded by your supervisor.

**2. Project Topics, Selection and Supervision**

Students should develop their own project topic idea and discuss this in good time with potential supervisors amongst the teaching staff. Guidance on how to develop your project idea into a realistic project proposal will be provided as part of the formal classes.

You should talk to members of staff who may share an interest in your potential topic area. Your project should contain sufficient scope for you to demonstrate the range of abilities indicated in Section 1, throughout the period of the project. Your topic area should be neither trivial nor superficial, but can be drawn from a context which is too large or complex to be addressed entirely within the project time scale: this allows you to exercise project management skills, related to choosing what to implement and what to leave for future work, and software design skills in your implementation to allow for future extensions to be made. A 'too big' project could be quite acceptable for initial approval, where a 'too small' one cannot be.

In order to help define the project topic you will identify a “Research Question” that you would like your project work to answer.

For example, a research question in CGT or CGAD project may be:

*“What is the most effective technique to implement ambient occlusion in real time within a computer game application and what are the performance implications of its use?”*

A research question in Computing and Networks

*“What are the different techniques used to optimize security within a network and which of those investigated is most efficient?*”

A research question in DF

*“What are live response techniques and open source tools designed for memory acquisition and analysis and how these can be utilised in RAM captures to find evidence of malicious attacks?”*

A research question in EH

*“What are malware concealment methods and how effective methods of changing malware signatures can be used to evade detection by antivirus software?”*

A research question in EIS

A research question in Computing/WDC

*“What improvements can be made with the use of an automated testing program in the effectiveness testing of mobile applications?”*

A good research question will allow you to perform background reading and research, select a methodology based upon this research, implement a solution, evaluate the effectiveness of the solution and provide some direction for future work. All projects will require a research question but it is important to point out that the exact wording of the research question is dynamic and may change throughout the lifetime of the project work. Guidance on the identification and structure of the research question will be provided in the formal classes.

When you have chosen your initial ideas you will develop a project proposal document which will be considered for approval by the module tutor. Guidance on how to develop the proposal will be provided within the formal class sessions.

Proposing your own project is in itself a mark of your initiative and awareness of potential topic areas within your subject, and can be the best way for you to work on a topic that you are really interested in and passionate about. You will spend around 9 months working on your project and it is important for you to be committed.

**3. Rights, Ethics and Plagiarism**

**3.1. Intellectual Property Rights**

[**https://intranet.abertay.ac.uk/media/Intellectual%20Property%20Policy%20January%202016.pdf**](https://intranet.abertay.ac.uk/media/Intellectual%20Property%20Policy%20January%202016.pdf)

The ownership of your project work is a question of Intellectual Property Rights (IPR), and the area of shared rights is technically complex. In addition to yourself as the project worker, your supervisor, the University and any external collaborating organisation or individual may have a claim to benefits from exploiting your project, or conversely liabilities from any faults discovered in your work.

In order to simplify and manage this complexity, the University has taken the position that all Intellectual Property Rights associated with student project work belong to the University in the first instance. This should not be seen in a negative situation for you since this position has been taken so that the University can show your work at open days and can build on it in future projects and also to protect you the student from exploitation by a third party. If after the end of the project you wish to continue with the development of the project work into a commercial product (for example) then the University is normally willing to negotiate the transfer of the IPR.

Intellectual Property Rights must also be seen from the opposite position: it is important that within your project you do not use or exploit the Intellectual Property Rights of others without consent since this may infringe those rights and leave you and/or the University open to legal actions.

**3.2. Ethics, Health and Safety**

As with all research conducted by staff and students at the University, your project must be approved by the School Research Ethics Committee and the School Health and Safety Committee **before you start any practical work**. These committees are teams of experienced researchers who will review your project to make sure that it meets the University's legal and professional requirements.

You must complete a Research Ethics Approval Application form, and submit it before your research proposal. You may need to make changes to your research proposal or your experimental methods in order to gain approval; if this is the case, your supervisor and the Ethics/H&S Committees will advise you on how to fix your application. Note that if you change your approach later on then you may need to submit a revised ethics form for approval.

The Research Ethics Approval Application form is available from:

<https://intranet.abertay.ac.uk/services/secretariat/abertayknowledge/research/ethics/>

You should consider the longer-term implications of your research ethics when writing your dissertation.

**3.3. Plagiarism**

When making use of others' work, (for example, quoting other documents in your report, or using software libraries or example code), you must make it clear which work is your own and which is drawn from other sources, and you must give clear and accurate references to those sources. Failure to do this may be considered as plagiarism.

Turnitin is a system in which evidence of poor academic work can be electronically detected (e.g. plagiarism and collusion). Turnitin will be used to collect and archive an electronic copy of each student's written assessment. All students will therefore be expected to submit their assessments to Turnitin. Once an assessment has been submitted to Turnitin, the system will produce a similarity report highlighting possible problem areas of the assessment. Evidence produced by Turnitin may be used in assessing the integrity of your work and may be used in any unfair means case that has been raised. The university policy document on plagiarism in available in Blackboard.

**4. Management of Your Project**

Every individual project is unique in its precise content and profile of activity, so the descriptions here can only provide general guidance. You are required to maintain regular contact with your individual project supervisor throughout the project period, ideally on a weekly basis, to benefit from specific guidance related to your own project area and progress. In addition to your individual supervision, the module tutor will give timely guidance at important stages of the project, relating to approaching deadlines.

**You must develop and maintain a project journal throughout your project, to record ideas, thoughts, and events relating to your progress, and to collect notes, extracts and source references of background research.** This is an important aspect of your Project Management technique, which will help you to discuss your progress at each supervisory meeting, and to remember later in the project just why you did particular things in the early days. Quite often, a project may not turn out exactly as originally envisaged: this should not be a problem if you can explain the reasons in your Final Report – so your Journal is an important strategic resource. The journal may be inspected by a member of the University to substantiate that the work contained within the project report, is that performed by you the student, e.g. at times pertaining to unfair means.

Your project supervisor will eventually make an assessment of your overall Project Management, through which your development and use of the journal, effective use of supervisory meetings, and other aspect such as time management issues, will contribute to part of your overall Project grade.

**4.1. Timescales and Deliverables**

The project period begins in earnest at the start of Term 1 of the Honours Stage. The first formal deliverable is the **Project Proposal, due Week 10 - Term 1 for CMP401** , to document your intentions as to the overall purpose, context and goals of the project in detail, to outline the type of background information you have found, identify necessary work tasks and time scales, and provide a risk analysis. This is sole piece of assessment for this module.

You will do a **Feasibility Demo in Week 14 – Term1\***. This is **first** assessment for **CMP402** worth **30%**. At the Feasibility Demo, you should discuss and demonstrate progress in your project to prove that it is at stage that deems it Feasible.

The progress should be evidenced by appropriate artefacts that demonstrate what you have achieved since Proposal submission. You should be able to discuss the artefacts, the reasons that they relate to your project and prove feasibility

Examples of artefacts which can include, depending on your project,

* Initial software specification,
* Concept demonstrator
* Literature Review (Annotated Bibliography)
* Prototype Design Documents
* Structure Diagrams
* Case Study material
* Example Code
* Hardware Review
* Survey Design
* Any other type of artefact that relates to your project

This not only brings a welcome early sense of achievement alongside the down-time of revision for Term 1 assessments, it also provides a focus for specific feedback from your supervisor or any other clients, to help further developments through Term 2.

The first half of Term 2 is typically the heavy period of intense attention to detailed software development. This is the time for getting your ideas realised in software and properly working as you intend – and to your client/supervisor's satisfaction. However, you should plan to be scaling down software development toward the final quarter of Term 2, so as to ramp up your time on completing your dissertation.

You should also not underestimate the time needed to pull together all the aspects of your work into your Project dissertation. It is the Final Report which forms the anchor for all the components of the project, and it is thus the main focus for assessment. First preparation for this, outlining the chapter structure and making first drafts of your background material is expected around March.

Throughout Term 2, you should keep the report structure under consideration, and more actively develop draft sections as you proceed with major development of project software. The draft will be progressively firmed up to generate the finished Report and other deliverable documentation as appropriate. Your supervisor will expect you to produce a draft of at least one chapter of your Final Report in good time (at least 2 weeks in advance of the required return date) during Term 2 to allow for advice and feedback on content and style (not detailed spelling and punctuation corrections) to be given before the remainder of the report is completed.

Your Final Report and associated software deliverables must be submitted in Week14. You will be asked to make a Presentation of your project, to two examiners, one of whom will normally be your supervisor. The presentation allows you to demonstrate your software in operation, showing its structure and capabilities, and to highlight significant aspects of your achievements within a general overview of the project. The software demonstration and general presentation is not formally assessed but is an opportunity for you to highlight and emphasise important aspects of your work and for the examiners to ask questions to clarify issues before they reach their final assessment decisions.

Both examiners will read and make their assessment of your Final Report, taking account of your Presentation and Demonstration of software.

**4.2. Equipment and Facilities**

Projects will normally be expected to use equipment and facilities available through the University. If you prefer to work with your own equipment, you should ensure at all times that your work can be presented effectively within the University. You will also need to show work in progress to your supervisor at regular intervals.

It is the responsibility of each project student, working in a professional manner, to maintain adequate back-up copies of their work in progress, to guard against unplanned problems such as equipment failure or loss (e.g. theft of a laptop). This is particularly important for students working on personal or other non-University facilities (either for the whole project or for production of report deliverables) which do not achieve the same level of back up protection that would be provided on University computers. One way of achieving this, for example, might be to copy your files to university systems at regular intervals.

In the event of problems arising which should be resolved by resorting to a recent back-up, the absence of such a back-up will not in itself be accepted as mitigating circumstances justifying an extension to any imminent deadline. If, for example, you suffer a disk crash on your personal computer while completing your project report in the run up to the final deadline, and you do not have appropriate backups, your project may be failed as late.

No student is expected to provide their own equipment to support their project unless there are exceptional circumstances, and formal assessments and presentations will normally be conducted on University premises. If your project ends up as runnable only on your own equipment, you will have to arrange for it to be available in the University for formal presentations, and examiners may well ask why your software is not portable. There may also be insurance and electrical safety issues to consider in bringing personal equipment onto University premises. If relevant, you should obtain advice after consulting your supervisor.

**4.3. Preparing for your Project**

You should now be thinking of a project topic and talking with various members of staff (and your peers) about your ideas. Your first contact with staff will allow more detailed discussion of the project topic and you will then be able to begin background research and reading to find relevant information on existing examples of work related to your intended project and other contextual background.

You should keep notes not just of the material you find, but also record the complete source reference details of where you find useful information. This is so you can get back to the original information later, and you can properly list the reference details in your report bibliography, for others to follow up if they wish. You will be provided with Guidelines on how to reference the work of others and on what to include and how to present your reference citations in the formal classes. You should avoid bulking up your project portfolio with verbatim printed copies of source material: develop your skill at noting and abstracting essential points, and refer back later if you need to clarify things. You are strongly encourage to use a reference management system such as RefWorks (this is the library recommended package and training is available for this by library staff) EndNote, JabRef, Zotero, CiteULike (etc.) right from the start of your background reading. Doing so will save a lot of work later on, since you will have an electronic record of what you have referred to, and won't have to write the references section of the report by hand.

Note that a good project will refer to background material from a wide range of sources, not just those on the Web. In particular, you should make every effort to reference original sources of cited material and be careful with unmoderated or informal sources, avoiding citing only unmoderated material in your work. Web pages are becoming predominantly the primary source for much of the information that you may need, and they are frequently more up-to-date, more effectively peer-reviewed, and thus more accurate than academic publications and reference books. You should be sceptical about sources in general and should think critically about the trustworthiness of references regardless of how they are published, and should not assume that just because something is in print that it is accurate.

In parallel with your background explorations, you should give more detailed thought to the range of things you expect to achieve in your project, how these tasks relate to the overall goals, and the sequence in which they might be tackled; along with appropriate risk management considerations. This enables you to draw up a sequenced time-plan of tasks through the various phases of the project work. The time plan will form a component of your Project Proposal.

Background preparation should take place during Semester 1 leading to submission of the Proposal. Attending formal project classes and meetings with potential supervisors in Semester 1 will focus on reviewing the background material, discussing your developing project framework and your list of expected tasks within that, all aimed at producing a clear, concise and complete Proposal as the foundation document for your project.

**4.4. Risk Analysis**

An important step in the planning of a project is to consider likely problems which may arise, and consider contingency plans. This process is known as risk analysis, and you are expected to include a brief section on this in your project proposal. You should identify aspects of your project activity that may be a serious risk to success and outline potential avoiding strategies, corrections or workarounds.

**5 Project Deliverables**

This section provides details on the format, structure and content of the project deliverables (project proposal, ethics and health and safety form, feasibility demo, dissertation and software demonstration) which will be used for assessment purposes.

**5.1 Project Proposal – Term 1 – Week 10**

As outlined above, the project is meant to be an investigation into a topic that you find interesting. It should be based around a statement of a research question or a research problem. In your proposal you should not be afraid to think about the future (e.g. expected advantages due to advances in technology) when justifying why your project is worth doing – remember that you will likely be using your project as a major part of your portfolio in 9 month time for gaining employment. It is worth pointing out that the project is NOT:

* Just reading about something and then writing an essay about it,
* Learning a new skill and using it to make something such as a game,
* Learning to use a new piece of software or a development environment.

In other words, in your project you must be creating something (a software application) that is used to carry out an investigation – the investigation is the important aspect of the project, the software is simply the tool that allows the investigation to be carried out and validated. You prove that you can do this by preparing a Project Proposal; this must clearly deal with the 3 key aspects of the proposed investigation:

**WHAT**: A clear statement of what the project is about and what it hopes to achieve. This is ultimately done by the statement of a research question or problem.

**WHY**: A clear explanation of the background to the project and a justification of why the project investigation is worth doing. This will require careful use of references that have some status.

**HOW**: A clear statement of what practical work will have to be done to carry out the investigation and what methods will be used to collect, analyse and evaluate the necessary data.

Example proposals are available to give you an idea of the style required but the following sections give some idea of a typical structure for a proposal; you are not required to copy this structure exactly but you should think carefully about how you may want to change it. The project proposal has a defined and strict word count.

**Abstract** – this is in effect an executive summary of the proposal; it is not just a short introduction. In the abstract you should summarise the 3 key aspects (what, why, how) and do this without the use of any references since abstracts are often published separately in compilations. You will usually write this section last.

**Introduction** – this sets the scene for the reader and should be easy to follow without too many references. It should start general and then focus towards the specific topic of the proposed project. Photos and diagrams can help explain the topic at this early stage and you should finish this section with a clear statement of your research question or problem – **WHAT**.

**Background/Context** – this explains the background and context to the project and explains where the idea for the project has come from and its relevance - **WHY**. Any statements you make or opinions that you express could be challenged so use your references to support your position and also to save yourself the trouble of having to explain everything in detail. Most of your references will be cited here and typically around 10 references in total are expected to be seen.

**Methodology** – in this section you will explain what practical work needs to be carried out (e.g. develop some software for a particular function) and how it will be used to collect the data or evidence needed to answer your research question – **HOW**. In this section it is also important that you provide some initial thoughts on how you will evaluate the effectiveness of what you intend to produce within the project. It is most unlikely that you are experienced in this area and so your background reading is important here to help you identify what methodologies and techniques of evaluation are available to you; therefore don’t forget to cite those references here. A project plan is required in this section simply to show that you have considered the timescale available.

**Risk Analysis –** set out any major risks to the success of the project and describe how these could be mitigated, e.g.:

* what will you do if some specialist equipment is no longer available to you?
* what will you do if you can’t carry out the experimental methods as envisaged in the proposal?

**Summary** – Outline the significance of the project to the subject area and explain what you hope to find out, learn or achieve by undertaking the project.

**References and Bibliography** – in the text you will have cited references in the Harvard style and so you should list your references here in alphabetical order. Literature that has influenced your thinking, but is not directly referenced in the text of the proposal, should be included in the Bibliography.

**5.2 Ethics and Health and Safety Form – Term 1 - Week 14**

This is the second submission for the Project. This submission does not form part of the assessment process but the other parts of your project will not be graded at all if the project does not achieve approval for both research ethics and health and safety. The submission date for the form is given in appendix 5.

**5.3 Feasibility Demo – Term 1 – Week 14**

The Feasibility demo takes place in Term 1, Week 14. During the demo you will provide formal evidence of the progress of your project to your supervisor. The demo will involve discussion of project related artefacts that you have written, designed or developed that demonstrate progress.

**5.4 Project Demonstration – Term 2 – Week 14**

The demonstration of software and general presentation of your project provides an opportunity for you to show the use and capabilities of your application in operation, and to highlight significant aspects of your achievements within a general overview of the project. Although the presentation/software demonstration is not assessed it provides a chance for both examiners to ask questions and to clarify issues before they reach their final assessment decisions. Linked to Project Showcase.

**5.5 Project Dissertation – Term 2 – Week 14**

**General advice**

Think of your dissertation as a story to be told to an interested reader (who could be considered as one of your peers in terms of subject knowledge and understanding) – in this way a number of general points can be made:

* The dissertation is not a diary and so need not follow the events in chronological order; choose an order that makes sense and is easy to follow.
* You don’t need to include everything. You may well leave out some work that took a lot of time or was very interesting simply because you can’t see how to include it in the main story (perhaps an Appendix).
* Present work in a logical order. Give the reader the information they need to understand something but give a gentle reminder if you presented it some way earlier in the dissertation.
* Don’t spend a lot of time describing or explaining something that doesn’t get used or is pretty minor. The reader is putting effort into what they are reading and doesn’t want to feel that any of that effort is wasted.
* Don’t try to explain everything to the ultimate degree. Use references to save yourself the trouble but do explain things that are key to understanding your work. Going away to track down and check a reference should not be a necessity to understand the main aspects of the dissertation.
* Relegate long pieces of explanation or extensive listings of data to an appendix; they would disrupt the reading of the dissertation if included in the main part.
* The tone of the dissertation should be professional, honest and upbeat. Don’t dwell on problems or spend a lot of time making excuses – look to report things in a positive light.

**Main parts of the dissertation**

Listed below are the main parts of a dissertation together with an explanation of what role they play in the story you are telling. This is not a definitive list and you are free to vary it as you see fit. The balance can vary quite widely (especially between the Methodology and Results sections), but again this is your personal choice. For these reasons it is important for you to consider the structure of your dissertation at an early stage so that you can decide what will go where (so that nothing gets missed or overly repeated).

***Abstract***

The abstract is a kind of executive summary. Abstracts are often published separately and so must function entirely on their own. They are not short introductions but rather they summarise the whole dissertation in terms of the aims of the work, what methods were used, what was actually done, what findings are reported and what conclusions have been reached; this is done in around 300 words. The abstract should contain no references and is often the last part to be written.

***Introduction***

The introduction should set the scene for the dissertation and allow the reader to align themselves to the topic. It should start very general and then focus towards the specific topic of the project. This is probably the only part of the dissertation where you can be slightly informal and you might quote some interesting text to get the attention of the reader. The introduction should make the reader want to continue reading. You will doubtless repeat some of this material in more detail later on, so don’t put too many references in the introduction in order to keep it fairly light. A couple of photos, screen shots or diagrams won’t go amiss at this point to get the reader’s interest and help explain the topic. A typical introduction will be no more than 5 pages and you should finish this section with a clear statement of your project focus as a research question or problem

***Background/Literature Review***

The purpose of this section is to explain the context and background of your project i.e. it summarises the current “state of play” when you began, explains how your project builds on this and justifies your choice of methods and evaluation. When writing this section you will be making a series of statements to explain the background of your project topic and your choice of what to do. Imagine that each time you make a statement or express an opinion your reader is thinking “I don’t believe that” or “I’m not sure that’s right” – and anticipate these questions by supporting your writing with a reference from an appropriate source. In this way your references are used to either save you time explaining everything or are being used to support your arguments. Don’t go overboard on this but certainly try to use your references as stepping stones to lead the reader to the same position that you got to.

***Methodology***

Having explained the background to your project and justified your choice of project topic (perhaps in terms of commercial importance or clarification of a theory or development technique for example), it is now time to deal with the practical aspects of the project. In this section you should explain what practical work you have identified as needing to be done i.e. what evidence you will need to obtain in order to address your research question or problem. You should justify your choice of practical methods and the means of collecting and analysing the data. You should also deal with any ethical considerations here, especially if they have restricted you in any way. This section should also use references to avoid long explanations or to justify the choice of a particular method of data acquisition or analysis. **If you are to use a questionnaire to help evaluate your work you should explain your questionnaire design and how the data will be collected and evaluated in this section.**

***Results***

In this section you will now present your practical work e.g. prototypes, level designs, screen shots, data, etc. Use appendices to avoid having lots of pages of charts or tables or code listings so as to not interrupt the flow of the dissertation. Present your results and the analysis you have carried out clearly and honestly. Mention areas where there are perhaps problems or issues but don’t dwell on these at this point. **Be scientifically rigorous when analysing quantitative data - e.g. choosing appropriate statistical methods of analysis?** Use charts, tables and diagrams etc. effectively, to help the reader understand what you have found and to lead them to the conclusions that you will be discussing next.

***Discussion***

Hopefully at this point the reader has seen the results of your work and will appreciate how your project has added to the current understanding of the topic. However they will probably have a number of questions and will expect you to address them in this section. Discuss the findings of your work and be fair and honest about it. Don’t emphasise any failings or things that didn’t work as expected but don’t try to hide them. Try to discuss your work in a positive manner and specifically identify in what way your research question or problem has been answered. Don’t worry if the question has been answered in a way that you didn’t predict or anticipate – as long as your expectations were realistic and your methods correct then the work you are reporting is valuable and extends the understanding of the subject.

***Conclusions and Future Work***

In this final part you now draw the dissertation to a close with a summary of the main findings and clarification of where there may still be questions or uncertainties or disagreement with previous work. You should finish on a positive note by considering how your work could be continued or extended and perhaps mention any recent developments that have relevance to the project (which is now almost 1 year old).

***Appendices***

All the material that would interrupt the flow of the reading of the dissertation should be put in the appendices.

***References***

This contains the works, listed in Harvard format that you have actually cited in your dissertation.

**6. Supervision, Support Lectures and Facilities**

Your supervisor will expect to meet with you at around weekly intervals from **Week 7/8 Term 1 through Week 13 Term 2**, to support your work and give any advice you may seek about strategy, timing, and other choices during project development. You should keep a written record of meetings in an electronic journal, which can be accessed by your supervisor.

Your attendance at these meetings is compulsory and a professional approach to project management includes arranging in advance if a meeting rescheduling is necessary, not picking up the pieces later.

The hallmark of good project management is to keep in touch with your supervisor, be professional in your conduct and avoid wasting time – think about what you want from each meeting, and have your discussion points ready. If problems arise, try to solve them yourself to start with, but don’t spend too long without seeking guidance or switching to another task for a while. The worst thing you can do is go off to complete your project on your own without showing your progress to your supervisor - this is very poor project management. You should also remember that a completed software system that works to your satisfaction may still not be sufficient or appropriate work for the academic requirements of the project modules, and you need to know that before you submit the project.

**7. Assessment Briefs**

The assessment criteria that will be used to grade your work on the various project components are provided in the appendices at the end of this document. You should study these sheets prior to producing your assessments in order to ensure that you have a clear understanding of the requirements.

You will obtain THREE grades for your project work, one for the Honours Project Scoping and Proposal module (CMP401), one for the Honours Project module (CMP402) and one for the Dissertation Module (CMP403).

The Honours Project Scoping and Proposal module (CMP401 has ONE unit of assessment- the Project Proposal.

The Project proposal will be submitted in Week 10 of Term 1. In terms of feedback, a copy of the grading sheet given in Appendix 1 will be made available to you via Blackboard, showing how you have performed against the various criteria. In addition, there may be some general written feedback provided by the marker in the “feedback” section of the grading form. A proposal template is available in Appendix

Feasibility Demo will take place in Week 14 of Term 1. This is to evidence through artefacts progress in Project. This is worth 30% of Honours Project Execution

The dissertation will be graded using the grading sheets given in Appendix 3 and in terms of feedback, these sheets will be made available to students via Blackboard after the assessment boards towards the end of June.

The second unit of assessment for the “Execution” module which amounts to 70% of the module grade is the Final Project Artefact. This will be graded using the assessment sheet given in Appendix 4 and in terms of feedback, this sheet will be made available to students via Blackboard after the assessment boards towards the end of June.

A style guide for the writing of the dissertation is provided in Appendix 5 and this should be adhered to.

**8. Bibliography**

University of Abertay Dundee. 2011. Guide to Harvard Referencing [online]. Available from: <https://portal.abertay.ac.uk/portal/page/portal/Library/selfhelp/Referencing/> [Accessed 16 August 2011]

University of Pittsburgh, 1995. Style and form manual for graduate thesis and dissertation preparation at the University of Pittsburgh [online]. Available from: <http://www.pitt.edu/~graduate/style.html> [Accessed 16 August 2011]

Walliman, N. S. R. 2005. *Your research project: a step-by-step guide for the first-time researcher.* Sage Publications

# **Appendix 1**

# **CMP401 Honours Project Scoping and Proposal**

# **Coursework Specification**

# **Project Proposal**

**Date of Issue: Monday 5 September 2016**

**Due: Tuesday 8th November2016**

**Feedback: Feedback and grade will be provided within 2 weeks of submission**

## Task

**You are to produce a project proposal of 2500 words.**

The word limit must be strictly adhered to within the thresholds of +/-10% (2250-2750 words). The proposal will be graded down if it is out with the word limit range. The word count does not include references and must be stated on the front page.

The project proposal needs to identify context and literature which is relevant to the project and to briefly indicate the relationship of the proposed study to the relevant literature.

### Framework of Research Proposal

Your research proposal should deal with the following issues:

* What is the purpose of the proposed work?
* What is it trying to find out or achieve?
* What is the context of the project and how does it relate to existing work?
* What practical work will you undertake?
* What research methods and tools will you use?
* What are the expected outcomes and benefits of the project?

### Guidance on Headings and word count for the Research Proposal

### Please use template as provided on Blackboard

|  |  |
| --- | --- |
| **Title and Author** |  |
| **Abstract** (Approx 250 words) | Overview of project topic, methods and expected outcomes. Use structured approach |
| Introduction (Approx 600 words) | Clear definition of the topic area and of the specific aim of the project within the topic area. Tell the reader what questions the project is trying to answer focusing on a specific research question. |
| Project Context (Approx 800 words) | Identify the context and relevant literature for the project. |
| **The Project Methodology** (Approx 600 words) | A clear statement of the methods that will be used to undertake the practical work of the project. Include a brief project plan which estimates timings for the major parts of the project. Also include risk assessment |
| Summary (Approx 250 words) | Summarise the significance of the project and the contribution that the project will make to the subject area. Indicate what you hope to achieve or learn from undertaking the project. |
| **References and Bibliography** (Not included in word count) | Relevant material in Harvard Format. |

## Submission

# Each student will submit electronically via Blackboard. The proposal should be in the template format provided. The submission will be automatically directed to the Turnitin scanning site and the student will have access to the results. Prior to the submission deadline draft copies can be submitted for originality checking and replaced with updated versions if desired. After the submission deadline no further submissions are allowed and the version on the system will be graded.

## Late submission details:

Work submitted late without an extension will be graded as described in the academic regulations. A Coursework Extension form or Mitigating Circumstances form must be submitted if appropriate.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| School of ARTS Media and computer games  Project Scoping and Proposal - Project Proposal Grading sheet  Student Name Grade Marker \* Date \_\_\_\_ | | | | | | |
|  | **A+/A** | **B+/B** | **C+/C** | **D+/D** | **MF** | **F** |
| **Abstract** | Excellent summary of purpose, methods and expected outcomes of project. | Very good summary of purpose, methods and expected outcomes of project with minor flaws or omissions. | Good summary of purpose, methods and expected outcomes of project with some flaws or omissions. | Satisfactory summary of purpose, methods and expected outcomes of project with some significant flaws or omissions. | Unsatisfactory abstract missing components of purpose, method and/or expected outcomes. | Unsatisfactory or missing abstract. Abstract missing components or not appropriately developed. |
| **Introduction** | Excellently sets context for project and presents project aim clearly. Research question developed and clearly described. | Very good description of context for project. Project aims clear and very good. Objectives combine to achieve aims. Research question emerges very well. | Good description of context for project. Project aims clear. Objectives combine to mostly achieve aims. Research question clear. | Satisfactory context for project. Project Aim poorly expressed. Objectives loosely connected to Aim. Research question vague. | Little context for project. Project Aim confused. Objectives seem unconnected to Aim. Research question missing or  ineffective. | No context for project. Project Aim confused and/or unachievable. Objectives seem unconnected to Aim. Irrelevant or missing research question |
| **Background/Context** | Excellent critical review of relevant material. Excellent research of project background. | Very good critical review of chosen material. Very good research of project background with some minor omissions. | Good critical review of chosen material. Good research of project background with some omissions. | Just adequate review of chosen material showing minimal critical ability. Background to project shows just satisfactory research. | Review of chosen material shows little critical ability. Background to project is not sufficiently researched. | Review of chosen material shows no critical ability. Background to project shows little or no research. |
| **Methodology** | Excellent description of methods to be used (related to findings of Literature Review). Critically describes testing and validation of methods. Excellent work plan and risk analysis. | Very good description of methods to be used (largely related to findings of Literature Review). Critically describes testing and validation of methods. Very good work plan and risk analysis. | Good description of methods to be used (mostly related to findings of Literature Review). Describes some testing and validation of methods. Good work plan and risk analysis. | Satisfactory outline of methods to be used (loosely related to findings of Literature Review). Little testing or validation of methods. Satisfactory work plan and risk analysis. | Unsatisfactory description of methods to be used (not related to findings of Literature Review). No testing or validation of methods. Unsatisfactory work plan and risk analysis. | Little information on methods to be used (not related to findings of Literature Review). No testing and validation of methods. Poor or missing work plan and risk analysis. |
| **Summary** | Excellently summarises the significance of the project and the contribution that the project will make to the subject area. | Very good summary of the significance of the project and the contribution that the project will make to the subject area. Some minor omissions in terms significance | Good summary of the significance of the project and the contribution that the project will make to the subject area. Some omissions in terms significance | Satisfactory summary of the significance of the project and the contribution that the project will make to the subject area. Lacking depth of significance and contribution | Poor summary of the significance of the project and the contribution that the project will make to the subject area. Insufficient detail given | No summary provided that demonstrates significance or contribution |
| **References and Bibliography** | Excellent choice of sources. Properly formatted and excellent discrimination of sources for Reference and those for Bibliography. | Very good choice of sources. Properly formatted and very good discrimination of sources for Reference and those for Bibliography. | Good choice of sources. Mostly well formatted and good discrimination of sources for Reference and those for Bibliography. | Satisfactory choice of sources. Adequate formatting and satisfactory discrimination of sources for Reference and those for Bibliography. | Unsatisfactory choice of sources. Poor formatting and poor discrimination of sources for Reference and those for Bibliography. | Missing or inappropriate choice of references. Very poor formatting and unacceptable discrimination of sources for Reference and those for Bibliography. |
| **Overall** | Formatting and coherence of sections showing excellent appreciation of structure and purpose. | Formatting and coherence of sections showing very good appreciation of structure and purpose. | Formatting and coherence of sections showing good appreciation of structure and purpose. | Formatting and coherence of sections showing a satisfactory appreciation of structure and purpose. | Formatting and coherence of sections showing unsatisfactory appreciation of structure/purpose. | Formatting and coherence of sections showing no appreciation of structure and purpose. |

# Marking scheme

|  |  |  |
| --- | --- | --- |
| **Literal grade** | **Grade Point** | **Evaluative descriptor** |
| A+ | 4.5 | Excellent overall.   * Demonstrates an excellent grasp of the subject matter. * Excellent capacity for original and creative enquiry. * Excellent ability to critically evaluate, analyse, synthesise and integrate complex information. * Excellent communication skills.   Exceptional in at least one of the above. |
| A | 4 | Excellent overall.   * Demonstrates an excellent grasp of the subject matter. * Excellent capacity for original and creative enquiry. * Excellent ability to critically evaluate, analyse, synthesise and integrate complex information. * Excellent communication skills. |
| B+ | 3.5 | Very good overall.   * Demonstrates a very good grasp of the subject matter. * Very good capacity for original and creative enquiry. * Very good ability to critically evaluate, analyse, synthesise and integrate complex information. * Very good communication skills.   Excellent in at least one of the above but overall performance deemed to be very good. |
| B | 3 | Very good overall.   * Demonstrates a very good grasp of the subject matter. * Very good capacity for original and creative enquiry. * Very good ability to critically evaluate, analyse, synthesise and integrate complex information. * Very good communication skills. |
| C+ | 2.5 | Good overall.   * Demonstrates a good grasp of the subject matter. * Good capacity for original and creative enquiry. * Good ability to critically evaluate, analyse, synthesise and integrate complex information. * Good communication skills   Very good in at least one of the above but overall performance deemed to be good. |
| C | 2 | Good overall.   * Demonstrates a good grasp of the subject matter. * Good capacity for original and creative enquiry. * Good ability to critically evaluate, analyse, synthesise and integrate complex information. * Good communication skills |
| D+ | 1.5 | Satisfactory overall.   * Demonstrates a satisfactory grasp of the subject matter but limited grasp in some areas * Satisfactory capacity for original and creative enquiry. * Satisfactory ability to critically evaluate, analyse, synthesise and integrate information. * Satisfactory communication skills |
| D | 1 | Adequate.  Achievement of all threshold standards but grasp of some subject areas and graduate attribute development may be more limited. |
| MF | 0.5 | Marginal fail.  Performance just below the threshold standard. A reasonable expectation that a pass is achievable by reassessment without the need to repeat the module. |
| F | 0.0 | Fail. Performance well below the threshold level. Some limited evidence of achievement of the outcomes. |
| NS |  | No assessments submitted. |

Appendix 2

**School of Arts, Media and Games**

# Session 2016/17

# CMP402 Honours Project Execution

**Unit 1 – Feasibility Demo**

## Module Deliverer(s): Dr Jackie Archibald

**Coursework Specification –**

**Date of Issue:** Monday 5th September

**Submission date:** week of 5th December 2016

**Feedback date:** within Two weeks

## Assessment overview

To show progress in Honours Project you have to demonstrate Feasibility of your project to your Supervisor during week of 5th  - 9th December 2016 -. The Feasibility Demo should highlight progress in the development of the Project evidenced through discussion and artefacts

## Feedback

Summative feedback will be provided on the date as specified at the start of this document. This will be given either as comments accessed on the Blackboard system or emailed directly to your university mail account.

### Task

At the Feasibility Demo, you should discuss and demonstrate progress in your project to prove that it is at stage that deems it Feasible.

The progress should be evidenced by appropriate artefacts that demonstrate what you have achieved since Proposal submission. You should be able to discuss the artefacts, the reasons that they relate to your project and prove feasibility

Examples of artefacts

* Developing Literature Review (Annotated Bibliography)
* Prototype Design Documents
* Game Design
* Game Engine Prototypes
* Structure Diagrams
* Case Study material
* Example Code
* Hardware Review
* Survey Design
* Any other type of artefact that relates to your project

The number of artefacts you present should be governed by your project and the **four week time** **frame** since Proposal submission. A **minimum of THREE** are expected. The quality of each artefact is also important in that should contain sufficient detail to demonstrate what you are trying to achieve.

The Feasibility Demo will take form of a discussion with your supervisor. You will lead the discussion by presenting artefacts in a structured and coherent manner that demonstrates your understanding and the stage that you are at with your project. Your supervisor will ask questions.

The discussion should last 15-20 minutes, including questions.

**Date and Time**

Feasibility Demo to be held during Week Commencing 5th December **at a time agreed in advance with your supervisor.**

### Assessment Criteria

In your submission you will be requested to provide evidence of the following.

1. **Grasp of Subject Matter**   
   In your Feasibility Demo you will demonstrate through artefacts and discussion how your project will progress and its suitability for development. You will have identified significant aspects of the project which evidence its feasibility and viability.
2. **Capacity for original and creative enquiry**

Within this assessment we are expecting you to demonstrate feasibility of project through evidenced artefacts that detail knowledge and understanding of the project as progressed beyond proposal

1. **Ability to critically evaluate, analyse, synthesise and integrate complex information.**  
   Demonstrate a critical analysis, evaluation and synthesis of ideas, concepts and information in relation to the selection of artefact and their content and the appropriateness to your project.
2. **Communication skills**  
   All written work should be well presented, organised and readable. Presentation work should be to the point and informative.

## Submission

On the **day** of your Feasibility Demo, but prior to your Demo you should upload to Blackboard a zipped file containing electronic versions of your artefacts. You should bring paper versions where appropriate to the actual Demo.

**All submissions must be uploaded to the appropriate location within the Blackboard system. All Demos and therefore submissions must be completed by Friday 9th December at 2359**

**Plagiarism**

Coursework must be the exclusive work of the individual. Where the work of others is used this must be indicated by means of explicit references in the Harvard style.

We draw your attention to the declaration on the submission pages of Blackboard in terms of the originality of your work. You can read the University policy on academic deceit at:

1. <https://intranet.abertay.ac.uk/services/secretariat/abertayknowledge/teachinglearningandassessment/assessment/>

## Late submission details

*“D9.2 Introduction of a common penalty across the University for the late submission of coursework. Any submission received within 3 days will be graded on merit, but a penalty will be applied.*

* + *For work received 1 day late the penalty will be one literal grade deducted.*
  + *For work received 2 days late the penalty will be two literal grades deducted.*
  + *For work received 3 days late a grade of NS will be awarded.”*

If you are ill for 7 days or less, and if you are going to miss a coursework submission deadline you can self-certify for a period of up to 7 calendar days and receive an automatic extension of 7 calendar days. If you are suffering from a short-term illness on the day of a scheduled assessment (eg examination, class test, presentation) you can also self-certify and will be given the opportunity to take the assessment at a later date.  To self-certify you must complete the self-certification online task via your OASIS page BEFORE 4pm on the day of your assessment or coursework submission. If you are unable to log-in to OASIS to fill in the self-certification form, you must notify the Support Enquriy Zone either by email or telephone by 4pm on the submission day. Your self-certification will be accepted as providing a mitigating circumstance providing you comply with these requirements.  Please note that you can only self-certify for illness and can only do so a maximum of 3 times per academic year.

# Marking scheme

|  |  |  |  |
| --- | --- | --- | --- |
| **Literal grade** | **Grade Point** | **Evaluative descriptor** | **Pertinent Points** |
| A+ | 4.5 | Excellent overall.   * Demonstrates an excellent grasp of the subject matter. * Excellent capacity for original and creative enquiry. * Excellent ability to critically evaluate, analyse, synthesise and integrate complex information. * Excellent communication skills.   Exceptional in at least one of the above. | Demo conducted in professional manner through outstanding artefacts and discussion that evidence the progress and feasibility of project. Demonstrates superior knowledge through answers to questions.  Keeps within time limit |
| A | 4 | Excellent overall.   * Demonstrates an excellent grasp of the subject matter. * Excellent capacity for original and creative enquiry. * Excellent ability to critically evaluate, analyse, synthesise and integrate complex information. * Excellent communication skills. | Demo conducted in professional manner through outstanding artefacts and discussion that evidence the progress and feasibility of project. Demonstrates superior knowledge through answers to questions.  Keeps within time limit |
| B+ | 3.5 | Very good overall.   * Demonstrates a very good grasp of the subject matter. * Very good capacity for original and creative enquiry. * Very good ability to critically evaluate, analyse, synthesise and integrate complex information. * Very good communication skills.   Excellent in at least one of the above but overall performance deemed to be very good. | Demo conducted in professional manner through detailed artefacts and discussion that evidence the progress and feasibility of project. Demonstrates relevant knowledge through answers to questions.  Keeps within time limit |
| B | 3 | Very good overall.   * Demonstrates a very good grasp of the subject matter. * Very good capacity for original and creative enquiry. * Very good ability to critically evaluate, analyse, synthesise and integrate complex information. * Very good communication skills. | Demo conducted in professional manner through detailed artefacts and discussion that evidence the progress and feasibility of project. Demonstrates relevant knowledge through answers to questions.  Keeps within time limit |
| C+ | 2.5 | Good overall.   * Demonstrates a good grasp of the subject matter. * Good capacity for original and creative enquiry. * Good ability to critically evaluate, analyse, synthesise and integrate complex information. * Good communication skills   Very good in at least one of the above but overall performance deemed to be good. | Demo conducted in reasonable manner through suitable artefacts and discussion that evidence the progress and feasibility of project. Demonstrates appropriate knowledge through answers to questions.  Keeps within time limit |
| C | 2 | Good overall.   * Demonstrates a good grasp of the subject matter. * Good capacity for original and creative enquiry. * Good ability to critically evaluate, analyse, synthesise and integrate complex information. * Good communication skills | Demo conducted in reasonable manner through suitable artefacts and discussion that evidence the progress and feasibility of project. Demonstrates appropriate knowledge through answers to questions.  Keeps within time limit |
| D+ | 1.5 | Satisfactory overall.   * Demonstrates a satisfactory grasp of the subject matter but limited grasp in some areas * Satisfactory capacity for original and creative enquiry. * Satisfactory ability to critically evaluate, analyse, synthesise and integrate information. * Satisfactory communication skills | Demo conducted in satisfactory manner through artefacts and discussion that evidence the progress and feasibility of project. Demonstrates some knowledge through answers to questions.  Keeps within time limit |
| D | 1 | Adequate.  Achievement of all threshold standards but grasp of some subject areas and graduate attribute development may be more limited. | Demo conducted in adequate manner through artefacts and discussion that evidence the progress and feasibility of project. Demonstrates some knowledge through answers to questions.  Keeps within time limit |
| MF | 0.5 | Marginal fail.  Performance just below the threshold standard. A reasonable expectation that a pass is achievable by reassessment without the need to repeat the module. | Demo conducted in below satisfactory manner through poor artefacts and discussion that evidences limited progress of project. Demonstrates limited knowledge through answers to questions. |
| F | 0.0 | Fail. Performance well below the threshold level. Some limited evidence of achievement of the outcomes. | Demo conducted in an unsatisfactory manner. Little or no evidence of progress. |
| NS |  | No assessments submitted. | Non submission |

# Appendix 3

# Honours Dissertation

# Coursework Specification –- Dissertation

**Date of Issue: Monday 5 September 2016**

**Due: Week 14 T2**

**Feedback: Feedback will be provided after the examination board in June.**

## Task

* Effectively communicating and critically appraising, through a dissertation (7000-10000 words in length), all aspects of the project work carried out during the Honours Stage.
* Set the honours project work within the larger context of the subject.
* Ensure that you submit an initial draft of the dissertation to your supervisor for feedback during the semester in order to assist with the construction process.

In your submission, you will be required to provide evidence of the following:

1. **Evidence of research**

Exploration of relevant literature and resources

**ii A clear analysis of ideas**

Describe the analysis and rationale of your project topic

**iii A clear development of ideas**

The dissertation should clearly describe the methodology of your project

**iv A creative approach to problem solving**

Detail the creative solutions developed and applied during the project

**v An engagement with the project proposal**

Your work should address and elaborate upon points identified within the project proposal.

## You should regard your dissertation as a stand-alone document that may be read by someone who does not have access to your proposal.

## Submission

# **Each student will submit electronically via Blackboard. These submissions will be automatically directed to the Turnitin scanning site and the student will have access to the results. Prior to the submission deadline draft copies can be submitted for checking and replaced with updated versions if desired. After the submission deadline no further submissions are allowed and the version on the system will be graded.**

All work submitted must be clearly labelled. Name, student identification number, module number and title, and module deliverer must be displayed clearly on all pieces of work.

# **Marking**

The dissertation will be marked by a first and second marker who will then agree a grade.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| School of ARTS Media and computer games  Honours Project dissertation  dissertation Grading sheet  Student Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Grade \_\_\_\_\_\_\_\_\_\_\_ Marker \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_ | | | | | | |
| **Topic** | **A+/A** | **B+/B** | **C+/C** | **D+/D** | **MF** | **F** |
| **Abstract** | Fully describes purpose of project, methods used and results obtained | Describes purpose of project, methods used and results obtained | Describes project purpose, methods used and results obtained in sketchy form | Satisfactory description of project purpose, methods used and results obtained | Unsatisfactory description of project purpose, with poor or missing methods and/or results | Insufficient description of Project, with missing methods and/or results |
| **Introduction** | Sets excellent context for project. Project aims clear. Objectives combine to achieve aims. Clear and well defined research question. | Sets very good context for project. Project Aim clear. Objectives combine to largely achieve Aim. Well defined research question. | Good context for project. Project Aim clear. Objectives combine to mostly achieve Aim. Research question is appropriate. | Satisfactory context for project. Project Aim satisfactorily expressed. Objectives loosely connected to Aim. Research question is satisfactory | Little context for project. Project Aim inappropriate. Objectives seem unconnected to Aim. Research question is unsatisfactory. | No context for project. Project Aim confused and/or unachievable. Objectives are unconnected to Aim. Missing or inappropriate research question. |
| **Literature Review or Background** | Excellent choice of reference materials.  Excellent critical review of chosen material. | Very good choice of reference materials.  Very good review of chosen material. | Good choice of reference materials.  Good review of chosen material. | Just adequate choice of reference materials.  Review of chosen material shows some critical ability. | Poor choice of reference materials with obvious missing sources.  Review of chosen material shows little critical ability. | Poor or missing reference materials with few relevant sources.  Review of chosen material shows no critical ability. |
| **Methodology** | Excellently describes methods to be used. Critically describes testing and validation of methods. | Very good description of methods to be used. Critically describes testing and validation of methods. | Good description of methods to be used. Describes some testing and validation of methods. | Satisfactory description of methods to be used. Satisfactory outline of testing and validation of methods. | Unsatisfactory description of methods to be used. Little information on testing and/or validation of methods. | Little information on methods to be used. No testing and/or validation of methods. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Topic** | **A+/A** | **B+/B** | **C+/C** | **D+/D** | **MF** | **F** |
| **Results and Discussion** | Excellent presentation of results. Excellent analyses of results in light of Project Aim. | Very good presentation of results. Very good analyses of results in light of Project Aim. | Good presentation of results. Good analyses of results in light of Project Aim. | Satisfactory presentation of results. Satisfactory analyses of results in light of Project Aim. | Few results presented. Very poor analyses of results with no references to Project Aim. | Missing results. No analyses of results with no references to Project Aim. |
| **Conclusion and Future Work** | Pulls together threads from previous chapters to come to a conclusion. Extends discussion to provide excellent plan for further investigations. | Pulls together most threads from previous chapters to come to a conclusion. Extends discussion to provide good plan for further investigations. | Pulls together some threads from previous chapters to come to a conclusion. Extends discussion to provide reasonable plan for further investigations. | Doesn’t resolve threads from previous chapters, and no viable conclusion. Poor discussion leading to weak plan for further investigations. | Doesn’t resolve threads from previous chapters, and no conclusion. No discussion leading to poor plan for further investigations. | Discussion doesn’t relate to previous chapters, and provides no conclusion. No discussion and no plan for further investigations. |
| **References and Bibliography** | Properly formatted and proper discrimination of sources for Reference and those for Bibliography. | Properly formatted and good discrimination of sources for Reference and those for Bibliography. | Mostly well formatted and reasonable discrimination of sources for Reference and those for Bibliography. | Adequate formatting and acceptable discrimination of sources for Reference and those for Bibliography. | Poor formatting and barely acceptable discrimination of sources for Reference and those for Bibliography. | Unsatisfactory formatting and unacceptable discrimination of sources for Reference and those for Bibliography. |
| **Overall** | Formatting and coherence of chapters showing excellent appreciation of structure and purpose of Dissertation. | Formatting and coherence of chapters showing very good appreciation of structure and purpose of Dissertation. | Formatting and coherence of chapters showing good appreciation of structure and purpose of Dissertation. | Formatting and coherence of chapters showing satisfactory appreciation of structure and purpose of Dissertation. | Formatting and coherence of chapters showing unsatisfactory appreciation of structure and purpose of Dissertation. | Formatting and coherence of chapters showing no appreciation of structure and purpose of Dissertation. |

APPENDIX 4

School of ARTS Media and computer games

Honours Project Execution

Student Name Grade Marker \* Date

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Grade** | **A+/A** | **B+/B** | **C+/C** | **D+/D** | **MF** | **F** | **NS** |
| **Independently develop a project from concept into deliverables** | Demonstrated a high level of independence and self direction in the execution of the project. | Work mainly in a self directed and independent manner in the execution of the project. | Work with significant guidance and input from the supervisor in the execution of the project. | A high level of guidance and input was provided by the supervisor in the execution of the project. | Student showed little initiative and worked mainly under instruction. | Student did not show initiative and failed to follow instruction or guidance. | No work undertaken by student. |
| **Record progress regularly** | Maintained a professional relationship with supervisor and submitted high quality interim deliverables on time. Contributed fully to discussions with supervisor. | Maintained a professional relationship with supervisor and submitted good quality interim deliverables on time. Contributed very well to discussions with supervisor. | Maintained a good relationship with supervisor and submitted good quality interim deliverables on time. Contributed well to discussions with supervisor. | Maintained a satisfactory relationship with supervisor and submitted satisfactory interim deliverables mostly on time. Demonstrated some contribution to discussions with supervisor. | Demonstrated a lack of professionalism in relationship with supervisor and failed to submit satisfactory interim deliverables. Demonstrated little or no contribution to discussions with supervisor. | Attended few meetings with supervisor, provided few interim deliverables and made little contribution to discussions. | Minimal/no attendance at meetings. No interim deliverable provided. No contribution to discussions with supervisor. |
| **Synthesise a solution appropriate to the project aims** | Produced a comprehensive, high quality solution to the problem which fully meets all of the aims of the project with no significant flaws. | Produced a very good quality solution to the problem which meets all major aims of the project possibly with minor deficiencies. | Produced a good quality solution to the problem which meets most of the aims of the project possibly with a number of deficiencies. | Produced a satisfactory solution to the problem which meets the major aims of the project with a number of deficiencies. Treatment either lacks depth or exhibits substantial, but not fatal weaknesses. | The solution produced has major flaws and does not meet the aims of the project. | No solution produced. and unsatisfactory or inappropriate work submitted | Nothing submitted by student. |

**Appendix 5**

**Template for the Honours Proposal**

Student Name

School of Arts, Media and Computer Games

University of Abertay Dundee

DUNDEE, DD1 1HG, UK

**ABSTRACT**

This section is in the main body text of 9 point Times New Roman.

Insert here your Structured Abstract using the headings explained in a separate document.

**Keywords**

Suggest a few keywords here that might be used to classify the topic of your project

**1. INTRODUCTION**

Insert your introduction text here. Remember that the introduction should set the scene for your project by describing a current situation or problem. Start in quite general terms so that your reader has a chance to align themselves but then focus towards the specifics of your chosen topic. Hopefully in this section it will become clear that there is a need for the work you are planning to carry out

Headings for the sections (INTRODUCTION etc) should be in 12 point Bold, Times New Roman. The main body of the text continues in 9 point Times New Roman.

You are advised to simply cut and paste your text into these sections and so preserve the formatting information

The page size is A4 , the top and bottom margins are 2.54cm and the left and right margins are 1.9cm. The document is in 2 columns each of width 8.2cm with a 0.8cm gutter; all of these are usually simple to set up in Word if you wish to create your own template. As you can see the text is both left and right justified.

**2. BACKGROUND**

In this section you should be giving the background to your project – what is the current state of the art or understanding. What problem are you going to address and who says that it’s a problem anyway. This section should make it clear that your project is an investigation at Honours level and follows on logically from other work that’s of relevance and importance to other workers in your field.

**2.1 Subsections**

Subsection headings are also 12 point Bold, Times New Roman but only the first letter of the title is capitalized

Remember that you should be citing references within the text in these sections using the Harvard style of referencing (Harvard (2011)) since this is the accepted method within the university.

You can find detailed guidance on how to reference all styles of material within the guide available on the

Library Portal or from the Library itself in a booklet form.

**2.2 Tables**

Sometimes you may wish to include a table in your document.

Place tables as close to the point at which you refer to them as possible. A large table may extend across both columns if required.

Captions for the table should be in 9 pint Bold, Times New Roman and they should be numbered (Table 1) – please note that the word “Table” should be spelt out in full and the caption should appear above the table and centred.

**Table 1 – An Example table for the text**

|  |  |  |  |
| --- | --- | --- | --- |
| **Graphics** | **Top** | **Centre** | **Bottom** |
| Tables | End | Last | First |
| Figures | Good | Similar | Very well |

**2.3 Figures**

Figures can help describe something very effectively but be careful of just using screen shots since these can run to many MB without you noticing it.

Captions for figures should also be 9 point Bold, Times New Roman but are centred below the figure. Use the full word “Figure” in the caption



**Figure 1 – A view of the entrance on level 2 in UAD**

Remember that you should give due credit to figures that you use by giving a reference after the caption – the above photo is one I took and so I have given myself permission to use it

The next section is the Method section and the two-column format continues.

**3. METHOD**

In this section you will describe what practical work you actually intend to carry out. You should mention what choices exist and explain why you have chosen a particular method. Also consider here what problems might arise and what you can do to deal with these risks in terms on alternatives or contingency plans

Of course at this point you have not actually done anything and so you are speculating to some extent but by looking at what other people have done (and referencing that work) you should be able to identify what is feasible given your own limitations in terms of time and skills

**4. Summary**

You should finish you proposal with a summary of what you see your project as contributing to the subject area. Why is it worth doing and who might benefit from your results?

**5. REFERENCES**

All of the references that you have cited in the text must now be listed here in alphabetical order using the Harvard style of referencing. Again we remind you that booklets and documents are available to explain how to reference all the material you are likely to come across from journal papers to blogs or DVDs. The reference you give must enable anyone to obtain the reference, not just people with a UAD IT account for example

The reference list should be 9 point Times New Roman but only left justified:

Other, A, N, date, “Title of the article”, *Name of the Journal,* Volume number, pages

See the guides for other examples of style

Finally, note that we have tried to make the two columns on this last page roughly the same length by inserting blank lines in the first column

Appendix 6

Dissertation Writing/Style Guide

(Adapted from University of Pittsburgh’s Style Guide)

**Submission copy**

The dissertation will be submitted electronically via Turnitin.

MANUSCRIPT PREPARATION

**Print**

1. Use 12pt fort with 1.5x line spacing for your body text.
2. Number your tables and figures, and refer to them in the text as needed (e.g. 'see Figure 12').
3. Use Harvard style for citations and the list of references.
4. Ensure the text and diagrams are readable when printed and when converted to PDF.".

# **Pagination**

1. Each page must be numbered, with the exception of the first blank page and the Title Page

**Margins**

1. The left margin should be 38 mm; top, bottom, and right margins should be 25 mm. Tables, figures, and illustrations use the same margins as text.
2. A subheading at the bottom of a page should be followed by at least two full lines of type. If space does not permit two lines plus a 25-mm margin, the subheading should begin the next page. Similarly, a new paragraph toward the bottom of a page should run for at least two lines or be started on the next page. The final few words of a paragraph should not be continued on the next page. At least two full lines of type are required to continue a paragraph on the next page.

**Spacing**

The text of the manuscript be one-and-a-half-spaced with the exception of long quotations, footnotes, bibliographical references, and the index (if included), which may be single-spaced.

**Centring**

When the instructions call for "centring" a heading, title, or other element, the material is to be centred between the left and right margins.

**Footnotes and Bibliography**

1. Citation may vary among disciplines, but for this work the Harvard style of referencing will be used.
2. Footnotes should appear on the page on which they are cited.

TABLES AND FIGURES

**Definitions**

1. The word "table" is used for tabulated numerical data in the body of the thesis or dissertation and in the appendices.
2. The word "figure" designates all other illustrative material used in the body and in the appendices, including graphs, charts, drawings, photographs, diagrams, schematic illustrations of experimental apparatus, etc.

**Positioning**

1. Tables and figures of a half-page or less in length may appear on the same page with the text, separated from the text above or below by triple spacing. If they exceed a half-page in length, they should be placed on a separate page. Two or more small tables or figures may be placed on a single page.
2. Table numbers and captions are placed two spaces above the top line of the table.
3. Figure numbers and captions are placed two spaces below the last line or bottom edge of the figure.
4. The placement of the table or figure does not affect the position of the page number.

**Numbering**

1. Tables and figures are numbered in separate series. Each table and figure, including any in the appendices, has a number in its own series. Each series is numbered consecutively in Arabic numerals, e.g., Figure 10, Figure 11, Figure 12, etc.
2. If a table continues to the following page, the top line should read "Table 10 (cont'd)." The caption is not repeated.

**Captions**

1. Captions, or descriptive titles of tables and figures, should be kept to one line of type if possible.
2. These captions will appear in the preliminaries as the List of Tables and/or List of Figures.

**Citations**

When referring to a table or figure in the text, use the full word and number, e.g., Table 10 or Figure 6.

SEQUENCE OF CONTENTS

There are three parts to every thesis or dissertation: the preliminary material, the text, and the reference material. Each part has several sections, which are to be arranged in the order they are discussed below.

PRELIMINARIES

**Title Page**

1. The title in English is typed in capital letters. Words should be substituted for formulae and symbols in the title. The author's name is typed in full. See sample at the end of this guide.
2. The submission statement names the school (and optionally the department), the degree sought, the University's name, and the year. See sample at the end of this guide.

**Abstract**

1. An Abstract written in English and no more than 350 words in length must be inserted immediately before the Preface page in all dissertations. It should be prepared in accordance with the specifications that may be available for the candidate’s discipline.
2. The Abstract should state briefly the problem discussed in the dissertation, describe the research procedures or methodology, and summarise major findings and conclusions. The Abstract should not include illustrative materials, references or tables.

**Preface or Foreword**

1. The Preface, or Foreword, is optional and, if used, should be brief. Acknowledgements in the form of a brief statement of appreciation for special assistance or support, including editorial assistance, should be included in this section.
2. Preface or Foreword pages are numbered with small Roman numerals centred at the bottom of the page.

**Table of Contents**

1. The heading TABLE OF CONTENTS is centred without punctuation 50 mm from the top of the page. The actual listing begins at the left margin four spaces below the heading.
2. All material following the Table of Contents is listed with the exception of lists of tables and figures, which are listed separately. Material that precedes the Table of Contents (e.g., title page, blank page, and dedication) is not listed.
3. The titles of chapters, parts or sections are listed in the Table of Contents as well as primary and secondary subdivisions.
4. Wording in the Table of Contents must be identical to wording of the actual titles in the body of the thesis or dissertation.
5. Table of Contents pages are numbered with small Roman numerals centred at the bottom of the page.

**List of Tables**

1. The heading LIST OF TABLES is centred without punctuation 50 mm from the top of the page. The listing of tables begins at the left margin four spaces below the heading.
2. Wording in the List of Tables must be identical to the captions that appear on the tables in the text.
3. The List of Tables pages are numbered with small Roman numerals centred at the bottom of the page.

**List of Figures**

1. The heading LIST OF FIGURES is centred without punctuation 50 mm from the top of the page. The listing of figures begins at the left margin four spaces below the heading.
2. Wording in the List of Figures must be identical to the captions that appear on the figures in the text.
3. The List of Figures pages are numbered with small Roman numerals centred at the bottom of the page.

TEXT

**Introduction**

1. If the Introduction precedes the first chapter or division as a separate unit, the heading INTRODUCTION should be centred without punctuation two inches from the top of the page. The text begins four spaces below the heading.
2. If the Introduction is the opening statement of the first chapter or division, the chapter title should be centred at the top of the page and INTRODUCTION used as a subheading at the left margin.
3. The page on which the Introduction begins is page 1 of the thesis or dissertation.

**Main Body**

1. This section is the substance of the thesis or dissertation, including all chapters, divisions, and subdivisions as indicated by headings identical to those listed in the Table of Contents.
2. All tables and figures should be placed as close as possible to the text they illustrate.
3. The thesis or dissertation be written as a coherent whole. However, published articles authored by the student and based on research conducted for the study may be included.
4. If the previously published article is included in the body of the document, it must be presented in a manner consistent with the remainder of the text: i.e., identical typeface, paper, margins, and consistent numbering of tables, figures, and footnotes. Bibliographic citations should be integrated with those for the rest of the document.
5. If the previously published article is placed in the appendix, its size may be adjusted on a copy machine to insure that the margins are sufficient to support binding. Appended previously published articles may retain the originally published numbers for tables, figures, footnotes, and bibliographic entries.

**Summary and Conclusions**

These usually constitute the last major chapter or division.

REFERENCE MATERIAL

**Appendices**

1. Appendices contain supplementary or illustrative material or explanatory data too lengthy to be included in the text or not immediately essential to the reader's understanding of the text.
2. Appended material is separated from the main body of the text by a cover sheet bearing the heading APPENDIX or APPENDICES centred without punctuation. This sheet is counted but not numbered.
3. If more than one appendix is needed, the appendices may be divided into APPENDIX A, APPENDIX B, etc. Separate cover sheets for each appendix are not required, although each appendix must begin at the top of a new page. The heading for each appendix is centred without punctuation 50 mm from the top of the first page. The title of the appendix is centred four spaces below the heading.
4. Each appendix should be listed with its title in the Table of Contents.
5. Tables and figures in the appendices should be numbered, captioned, and listed in the List of Tables and List of Figures. The numbering may continue the series in the body of the material (e.g., Table 14, Figure 16, etc.), or a separate numbering sequence (e.g., Table A1, Figure A3, etc.) may be used.
6. Non-print materials, such as audio or videotapes, or colour print materials significant to the thesis or dissertation may be included in an appendix. Such materials must be listed in the Table of Contents as included in an appendix. Students should consult in advance the appropriate office in their school or department for instructions on the preferred container for submission of such materials.

**References**

1. Any books, articles, or other sources that have been used in direct quotation or by citation must be listed in a Reference.
2. This section begins with a cover sheet carrying the heading REFERENCES centred without punctuation. This page is counted but not numbered.
3. The heading is repeated on the first page of the reference itself centred 55 mm from the top of the page. The actual listing of sources begins at the left margin four spaces below the heading.
4. The list of sources is single-spaced within each entry and double-spaced between entries.

**Bibliography**

1. Any books, articles, or other sources that have been read and used, but not cited in the text of the dissertation, must be listed in a Bibliography.
2. This section begins with a cover sheet carrying the heading BIBLIOGRAPHY centred without punctuation. This page is counted but not numbered.
3. The heading is repeated on the first page of the Bibliography itself centred 55 mm from the top of the page. The actual listing of sources begins at the left margin four spaces below the heading.
4. The list of sources is single-spaced within each entry and double-spaced between entries.
5. The Bibliography continues the page numbering sequence that began with the Introduction. The last page of the Bibliography is normally the final page of the thesis or dissertation (unless an Index is made, in which case the page numbering continues through to the last page of the Index).

## Title of Dissertation

**Candidate’s full name**

**Abertay University**

**School of Arts, Media and Computer Games**

**Month 201x**

**Appendix 7**

**Submission Calendar**

**Term 1**

Issue of all assignments – **Monday 5 September 2016 (Wk 1)**

Submission of Proposal Document – Tuesday **8th November 2016 (Wk10)**

Submission of Ethics Form **– Wk of 5th December 2016 (Wk 14)**

Feasibility Demo – **Wk of 5th December 2016 (Wk 14)**

**Term 2**

Submission of Dissertation – **Wk of** **24th April 2017 (Wk 34) (T2 Wk14)**

Submission of ‘Project Executable’ **Wk of** **24th April 2017 (Wk 34) (T2 Wk14)**

Presentation of project at showcase – **Friday 5 May 2017**

**Appendix 8**

**Project Supervisors (CGT and CGAD)**

|  |
| --- |
| **Grant Clarke**  **Interest/research/activities**  Games Programming, Console programming, Games controllers and hardware.  **Email:** g.clarke@abertay.ac.uk |
| **Dr Euan Dempster**  **Interest/research/activities**  Development, design, production and management within the creative industries.  **Email:** e.dempster@abertay.ac.uk |
| **Dr Iain Donald**  **Interest/research/activities**  Quality Processes and Assurance for games. Game Development.  **Email:** i.donald@abertay.ac.uk |
| **Matthew Bett**  **Interest/research/activities**  Games and Graphics Programming. Hardware and input devices.  **Email:** M.Bett@abertay.ac.uk |
| **Dr Craig Stark**  **Interest/research/activities**  Simulation and modelling from a mathematical perspective.  **Email**: c.stark@abertay.ac.uk |
| **Dr Ruth Falconer**  **Interest/research/activities**  Graphics programming, GPGPU programming, procedural programming  **Email:** r.falconer@abertay.ac.uk |
| **Dr David King**  **Interest/research/activities**  Artificial Intelligence Techniques - particularly as applied to Computer Games AI.  **Email:** d.king@abertay.ac.uk |
| **Dr Karen Meyer**  **Interest/research/activities**  Simulation and modelling from a mathematical perspective.  Email: k.meyer@abertay.ac.uk |
| **Dr Paul Robertson**  **Interest/research/activities**  Mobile Programming, Evaluating Interfaces, Unique gaming interfaces  **Email:** p.robertson@abertay.ac.uk |
| **Dr Adam Sampson**  **Interest/research/activities**  Concurrent and parallel programming; language design and implementation; operating systems; open source.  **Email:** a.sampson@abertay.ac.uk |

**Project Supervisors (Comp, Comp +Networks, Digital Forensics, Ethical Hacking and Web, Design** and **Communication)**

|  |
| --- |
| **Dr Jackie Archibald**  Interest/research/activities  HCI, Web Design, E-learning, Usable Security  **Email:** j.archibald@abertay.ac.uk |
| **Ethan Bayne**  Interest/research/activities  **Email :** e.bayne@abertay.ac.uk |
| **Dr Xavier Bellekens**  Interest/research/activities  IDS, Internet of Things  **Email** |
| **Dr Natalie Coull**  Interest/research/activities  **Email** |
| **Dr Ruth Falconer**  **Interest/research/activities**  Graphics programming, GPGPU programming, procedural programming  **Email:** r.falconer@abertay.ac.uk |
| **Dr Ian Ferguson**  Interest/research/activities  Digital Forensics, Smart Technology, Vizualisation  **Email:** |
| **Dr Gavin Hales**  Interest/research/activities  **Email:** |
| **Dr Dave King**  Interest/research/activities  Artificial Intelligence Techniques  **Email:** d.king@abertay.ac.uk |
| **Dr Geoff Lund**  Interest/research/activities  Mobile Computing and Internet of Things  **Email:** g.lund@abertay.ac.uk |
| **Colin Mclean**  **Interest/research/activities**  **Ethical Hacking etc**  **Email: c.mclean@abertay.ac.uk** |
| **Dr Karen Meyer**  Interest/research/activities  Simulation and modelling from a mathematical perspective.  **Email:** k.meyer@abertay.ac.uk |
| **Lynsay Shepherd**  Interest/research/activities  Affective computing, Security  **Email:** lynsay.shepherd@abertay.ac.uk |
| **Dr Adam Sampson**  Interest/research/activities  Concurrent and parallel programming; language design and implementation; operating systems; open source.  **Email:** a.sampson@abertay.ac.uk |
| **Dr Craig Stark**  Interest/research/activities  Simulation and modelling from a mathematical perspective.  **Email:** k.meyer@abertay.ac.uk |
| **Dr Andrea Szymkowiak**  Interest/research/activities  **HCI, Virtual Agents**  **Email: a.szymkowiak@abertay.ac.uk** |
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