SCHOOL OF MEDIA, ARTS AND TECHNOLOGY

PROJECT HANDBOOK

FOR UNITS:

Game Development Project – CGP601

Indie Game Project - CGP602

Version 8
January 2018

CONTENTS

1.   Introduction

The undergraduate Final Major Project requires the student to conduct a significant body of independent work that draws from and extends the taught elements of the degree programme.

The content of the project should reflect your particular interests, but must also reflect the named award (i.e. Computer Games Indie or Computer Games Software Development).

The completed project must demonstrate your ability to plan, execute and present the findings of a suitable applied research topic.

You should expect to spend about 400 hours working on the project; the reports, log book, software and other products should provide evidence for this.

Assessment

There are 4 hand-ins over the course of the project:

Project Proposal – this is a **formative/unmarked** assessment and an initial indicator of the direction of the project.

Project Definition – this is also a **formative/unmarked** assessment, and is a more complete description of the project after the initial research phase has been completed, along with an initial project plan. This report should allow you and your supervisor to understand what you intend to do.

Progress Report – This report is a **summative/marked** assessment due on 23 February 2018. It represents the end of the fundamental research and project planning stages and defines the work that needs to be done during the implementation phase.

Final Report – This is a **summative/marked** assessment of the implementation and testing phases, along with a critical analysis of your project management. There will also be a reflective conclusion on all aspects of the project.

2.   Learning Outcomes

In order to complete the unit successfully, you must demonstrate that you are able to:

INDIE CGP602

Cognitive Skills
C1   Critically evaluate the suitability of methods, tools and technologies in an independent development context.

Practical and Professional Skills
P1   Undertake a significant self-managed project in a planned and systematic fashion.
P2   Identify, interpret and integrate technical theory drawn from a range of business and independent development sources.

Transferable and Key Skills
T1   Communicate clearly and concisely using a variety of media.

SOFTWARE DEVELOPMENT CGP601

Cognitive Skills
C1   Critically evaluate the suitability of methods, tools and technologies for achieving project outcomes that are meaningful in the context of current professional practice.

Practical and Professional Skills
P1   Undertake a significant self-managed project in a planned and systematic fashion.
P2   Identify, interpret and integrate technical theory drawn from a range of appropriate sources.

Transferable and Key Skills
T1   Communicate clearly and concisely using a variety of media to professional standards.

3.   Conduct of the project

Over the course of the Project, you will be are expected to:

Relate to the solution of a non-trivial and normally real-world problem through the development of a software system.

Synthesize theory and practice in providing interesting and novel solutions.

Justify the choice of any adopted approach and/or methods, tools and techniques applied using criteria.

Evaluate the fitness for purpose of the chosen solution.

Demonstrate the meaningful application of project management using appropriate metrics.

Evaluate appropriateness of tools and methods used.

Reflect on all aspects of the development process.

All of the above skills are assessed at various points during the unit.

There are two distinct areas within the project:

- There is the "**PROCESS**" that you use to research, plan and monitor the creation of the "product", including the selection of appropriate methods, tools and techniques.

- There is the "**PRODUCT**" - this is what you actually create, and might be a software system and associated documentation or the results of an investigation and primary research.

As part of your final report, you will be expected to evaluate your "product" in terms of how well it satisfies your original objectives, and also to review the tools and techniques you used during the "process".

In assessment terms, the process you use to conduct your project is as important as the product you create. It is therefore important that you maintain careful records in your logbook and project library throughout the project to assist you when discussing and writing up the project process. Projects should be based in one of two areas:

The design and build of a technical product or game.

The testing and proving/disproving of a theory or concept.

Other topics may be acceptable, but they will have to be approved by the project coordinator.

The project has several distinct phases:

- **Identification** of a problem to be solved followed by formal definition in terms of aims and measurable objectives.

- **Research** into potential solutions to the given problem, and criteria based selection of potential solution(s).

- **Selection** of suitable tools/methods to be used in the process of solving the problem.

- **Planning** the process of solving the problem, including contingency and risk analysis.

- **Determination** of methods whereby the success or otherwise of all aspects of the project can be assessed.

- The project **implementation** or primary research results and analysis.

- **Review** and reporting on the product and the process.

Project management:

Project management can be a time consuming and challenging part of the project, and many students struggle to follow a single methodology which leads to successful results.

Rather than a specific methodology, or an ad hoc approach of your own choosing, your project will follow a "Prescriptive Framework" which utilizes elements of both Predictive and Adaptive approaches.

The framework requires you to develop the project in a series of phases. Each phase ends with one or more outputs, including one that defines the plan for the following phase. Within each phase, you are expected to identify and track the main tasks and how they develop toward achieving your phase goals, using appropriate tools.

The pre-defined, distinct phases align to formal project milestones and the unit's assessments - both formative and summative. You may choose to introduce more phases if doing so supports your project outcomes – check with your supervisor.

	Phase name	Primary Output	Time frame / due date
1	Definition	Definition Report	w/c 12th – Feb
2	Progress	Progress Report	Due 23rd-Feb
3	Project mid-point	Prototype (or similar, based on project)	w/c 19th - March
4	Final	Complete final project	Due 4th-May

The work conducted during each phase is documented using two primary tools:

1. A **Work Breakdown Structure (WBS)** describing all tasks as they contribute to the goals and outcomes of the phase. Specifically:

   Tasks should be broken down into **durations** of 2 days maximum.

   Tasks larger than 2 days should be split into sub-tasks.

2. A **Gantt chart** which captures the sequence in which tasks will be completed during the phase, and presents them in an easily understood format. The Gantt should also:

   Highlight dependencies between tasks.

   Indicate task progress or completion status.

   Indicate those tasks which are critical to the phase outputs.

   Tasks smaller than 0.5 days should be combined and summarised.

Additional management, planning and communication tools such as User Stories, Burndown charts, Velocity charts, Kanban boards, retrospectives etc., can be valuable and may improve your ability to manage your time and maximize project achievement. An overall Product Backlog or task list may be useful for organization and planning. These tools and/or others may be used within the framework to define a comprehensive approach.

What every student should do for Project Management:

At the outset of each phase, beginning with the Proposal, students should present the initial Phase Plan outlining the expected outcomes of the phase, key tasks and a realistic timeline. The phase plan contains:

Start and end dates

Brief description of the goals of the phase and summary of the <u>types</u> of tasks included

The initial WBS (it will change over time)

The initial Gantt (it, too, will change over time)

A new WBS and Gantt should be produced weekly which reflect progress against the phase plan, indicating any necessary adjustments and completed tasks. In particular, plan modifications should be noted:

Added tasks (especially due to splitting larger tasks)

Removed tasks

Changes to task dates, durations or sequence

The results of each phase are to be compiled into a chronological report that shows how the project progressed, and referred to in Project Management section.

What every student should do for their Final Major Project:

4.   Project Idea

The project process commences with the selection of a topic area at the start of the academic year. In order to make a start on the process of choosing a topic for the project, the following questions may be of help:

What aspects of the course would I like to pursue further in a practical way?

How will my project topic selection relate to my degree pathway?

Will my project satisfy the unit outcomes?

Is there an appropriate amount of primary or secondary research potential?

Will the project help me to get a job or start my own business?

What industry-related technical skills do I consider as interesting or important for investigation?

What practical outcome can be achieved as the result of a study and investigation?

Please consult Appendix D for some guidance on choosing a project idea.

Once the project idea has been identified and approved, you will have to prepare a more detailed project proposal.

5.   Project Proposal

For your Project Proposal, you will need to build upon the approved project idea.

The proposal is designed to ensure that the project is completed according to plan, and will meet the criteria for level six of an undergraduate course.

The project proposal must contain:

Name

Project Title

An overview of the background, context and scope of the proposed project
The overall aim(s)

Some initial objectives

A review of relevant literature

An initial plan for the remainder of the project

The overview should be used to explain broadly the background of the subject area of the project, as well as what you want to achieve by carrying out the project and how the project 'fits' into the course.

The aim(s) should summarize the description of the project in the overview in one or two sentences, these are the overall goal(s) that you will be working towards during the project.

The objectives should describe the steps you will need to take in order to fulfil the aim(s) of the project. At this stage these do not need to be fully detailed, a broad overview of five to ten objectives is sufficient - this will be refined in later reports.

The literature review identifies key sources that you plan to use later for research and decision making. You should give a short overview for each source, briefly summarizing the content and how it might inform your project.

The proposal must be agreed by the supervisor to indicate that these criteria have been met before moving on to the Definition Report.

6.   Definition Report

The definition report should demonstrate that you have already done a reasonable amount of research, planning and justified decision making. This stage of the project should examine, in detail, what the project is expected to achieve, and identify the options (or possible solutions) that may lead to the desired outcomes. Essentially it can be expressed as the questions "What am I going to do?" and "How am I going to do it?" It will be formatively assessed by your project supervisor. The definition report can be seen as building on the project proposal, and as an interim step towards the progress report. It should include the following sections:

[Updated] background (discussing the context and scope of the project)

[Updated] project aim(s) and objectives

[Updated] literature review (in an Appendix)

Description of research/prototyping completed

Project Specification

Discussion of potential solutions and justified choice

Discussion of choice of tools and technologies required, with justified decisions

Project Work Breakdown Structure with appropriate Gantt chart

Resource implications (e.g. human and physical resources, potential costs)

Reference List and Reading List (unreferenced reading that informed project)

This report should begin with your project background, aim(s) and objectives. These may have been changed since the proposal, so include the updated versions here.

The literature review should have expanded in scope since the proposal, so add any new sources along with descriptions. Move this section to the appendices for this report, this will become the basis of your references and reading list.

A section on the research you have so far conducted should be added to this report. You should cite literature using Harvard referencing, and begin to build your references list and reading list from these sources. Any prototyping so far conducted should also be included here, with some form of evidence of results.

The specification is the control document for the whole design activity, and must demonstrate that you have given sufficient consideration to the effort required at each stage and that you can provide a realistic assessment of the phasing and the duration. It is a fully detailed description of your "product", i.e. what you plan to hand in, based on the objectives that have been derived. Use short, clear descriptions, and try to use measurable values wherever you can. The specification is used to determine potential solutions to complete the project, as well as a basis for the project planning and task breakdown. **For primary research projects this should be a statement of research questions instead.**

Once a specification has been created you should then consider several potential solutions, consisting of a set of methods or algorithms, which could get the project completed to the given specification, based on your research. Simply selecting a single method with no justification is a poor way of doing this, there should be several possibilities with justified rationale as to which one is eventually chosen. You should try to generate as many ideas as possible - proceeding with the first one you think of will inevitably lead to long delays when difficulties arise later in the project. The proposed solutions should then be evaluated by measuring how well each one will satisfy the project objectives, by using a set of criteria relating to your specification, in order to find the best one. You should use references to help justify your selection of criteria.

The definition report should also look at some issues of enabling technology and systems. In other words it answers the questions; "Are there methods, technologies and systems that can be used to solve this problem?", and if so, "What is my strategy for using them?" These activities require background research to determine the nature of the problem. You must show that you are using literature references to inform your decision making and to establish what work has already been carried out in your chosen subject area. In many cases this may also involve further experimentation to ensure that proposed tools, methods and techniques are capable of doing the job required. This sort of work must be done in a structured way and the results need to be carefully recorded to provide justification for any choices made.

Once the preceding stages have been completed you need to confirm with your supervisor that your project is viable and that you have the ability to complete it successfully. As this report is formatively assessed you will have the opportunity to improve it iteratively with feedback from your supervisor until it is agreed that it is of a sufficient standard to move on to the Progress Report.

7.   Progress Report

The progress report is the first summative/marked assessment of the project. It should be the culmination of incremental improvements and additions to the definition report based on student work guided by project supervisor feedback at project meetings. The progress report is essentially the development of the definition report to the point at which all of the initial research is complete and the project planning has been finalized.

The progress report should contain all of the content of the definition report that will have been discussed with your project supervisor, and should contain at the very least the following sections (please note the highlighted new sections):

Background (discussing the context and scope of the project)

Project aim(s) and objectives

Literature review (in an Appendix)

Description of research/prototyping completed

Project Specification

Discussion of potential solutions and justified choice

Discussion of choice of tools and technologies required, with justified decisions

Project management Work Breakdown Structure and Gantt chart

High level overview of classes that may be required (or equivalent components for research projects)

High level flow diagrams and pseudocode (or equivalent processes for research projects)

Resource implications (e.g. human and physical resources, potential costs)

Reference List and Reading List (unreferenced reading that informed project)
Appendices

Some of the above sections will have been part of the definition report. For the progress report please ensure you review the requirements laid out in the definition report section of this document, and consult the assessment criteria to ensure you have covered all the areas required.

This element of the assessment has a word count that you can find in the unit descriptor. If the word count of your project exceeds this limit you should first of all ensure that you have not included any words in appendices, tables, pseudocode, code snippets, flow diagrams, class diagrams, etc. If word count is still a problem you should look at whether your text is too verbose, and consider how you might explain things more succinctly. Finally, astute use of appendices can help reduce the word count in the main body of the text – move detailed discussions to appendices, and use a summary in the main text referencing the detail in the appendices. One good way to think of the main body of the report is as an 'executive overview' of the process and results of the project, with the

relevant details in appendices if the reader of the report wants it.

Remember, the main body of the text still needs to be coherent and make sense, don't fall into the trap of putting so much content into appendices that the main report contains little or no information, and never end up with text along the lines of 'Section 1.3 – Planning Methodologies – see Appendix C', there should always be some form of overview of the text referenced in the appendices.

Some of your work may need to reference information in your logbook and/or project library. If this is the case then you need to reproduce that information in your report in some fashion, as neither the logbook nor project library is handed in and therefore cannot be used for marking. Usually this will be in the form of a properly summarized and referenced appendix. If you use scans or photos then ensure any text is legible, if it is not you should consider reproducing it as text.

Please ensure that, as well as following the guidelines in this document, you consult the assessment criteria as you produce and finalize your report.

8.   Final Report

High-Level Overview of Project Report
The Project Report is a combination of everything that has been achieved during the Final Major Project in one nice neat package. It is split into four distinct sections. Below is a brief description of the areas that are to be covered within each section.

Progress Report
> The initial assignment submission, exactly as originally submitted.

Implementation
> A description of the implementation of final project as the development cycle progressed, using the planning and tracking methodologies identified in the Project Definition.

Product
> The finished software product, to be submitted on an electronic storage medium.

Reflections and Conclusion

> Post-mortem discussions on the project development cycle and overall success of the project as a whole.

Note: Only the *Implementation, Product*, and *Reflections and Conclusion* sections will be marked.

Document Overview for Project Report

The document **must** be formatted in the style specified in Appendix G with the following structure and section headings.

Cover page

Abstract

Table of Contents and Figures

Progress Report
    The headings in this section will be dependent upon the contents of the progress Report as originally submitted.

Implementation
    The headings in this section will be dependent upon the project management methodology laid out in the Project Definition (AE1).

Reflections and Conclusions
    Evaluation
    Reflections
    Future Development

References

Bibliography

Appendices

Breakdown of Sections:

Abstract
The Abstract is a description of the entire project summed in one or two paragraphs. This section should be written last, when the entire Project Report has been completed.

Table of Contents
A list of section headings, tables and figures and their associated page numbers.

Progress Report
The Progress Report is assignment AE1, exactly as it was submitted with no changes, modifications or updates but *with the original abstract/Background removed*.

NOTE: The Progress Report (AE1) is included here only for completeness of the project and will not be marked again.

Implementation
Headings in this sections will be dependent upon the project definition. It should be a formalized and professional version of the logbook created during development.

This section *may* contain the following discussions:

How the project progressed: Did it stay on track?

Changes made (if any) to the schedule, why and when did they happen?

What was learned from each milestone?

Feedback from end-users and/or questionnaires.

Difficulties encountered during the implementation stage.

Implementations of backup plans.

Any interesting implementations of tasks.

Any other events of note that occurred during the development cycle of the project.

Any diagrams, burn-down charts and tables used in this section are not included in the word count.

Evaluation and Reflections

Evaluation
A critical discussion of the project:

Does it meet the desired aims and objects defined in the project definition?

What processes have been performed to verify this?

Were certain objectives not met? If so, discuss why.

Reflections
A post-mortem discussion of the project as a whole:

What went right?

What went wrong?

What was learned?

What could have been done differently?

If the project were to be repeated, what changes would be made to improve the project?

Future Development
A discussion of the potential continuation of the project:

What questions has the project raised?

How could the project be used as a foundation for future development?

References
The reference list at the end of the document which demonstrates the depth of the

research carried out in the project. It also acknowledges sources of information and protects against the serious charge of plagiarism (passing off others' ideas as one's own). Any reference to sources used in this document must be covered in this Harvard-referenced list.

Bibliography
This is a Harvard-referenced list of all sources that were researched during the development of the project. This also include any citations required for the libraries, software and resources used during the development of the project.

Appendices
Any material relating to research that does not fit easily or suitably in the body of the paper may be presented as an appendix.

Examples are:

Survey questionnaires

Observation sheets

Interview transcripts

Supplementary data that, while not essential to the understanding of the paper, does add useful information or insight.

Each individual appendix must be numbered and titled and must start on a new page. The Appendices should use a different page-numbering system.

For example:
Report numbering:	'1', '2', '3' … '57', '58', etc.
Appendix A numbering:	'A-1', 'A-2', 'A-3' … 'A-7', 'A-8', etc.
Appendix B numbering:	'B-1', 'B-2', 'B-3' … 'B-11', 'B-12', etc.

For information on the marking criteria specific to your project type, please consult the individual Project Types in Appendix L.

Appendix A

Project Supervision
Once the project proposal has been accepted it is your responsibility to carry out the project to the agreed plan.

Each project student **must** meet regularly with their nominated supervisor. **<u>Failing to do so always results in poor performance.</u>**

Individual meetings are used to discuss specific project progress and outcomes. Each meeting should be recorded in the project logbook. Your supervisor will expect to review the project logbook and the project library at each meeting.

Careful planning of the project is essential and after discussion with your supervisor you should produce an initial plan of methods, activities and timings in some appropriate form, preferably a Gantt chart.

Your initial plan may change as you get to grips with the investigation and shift the emphasis of your project, but such a plan will act as a project management tool, and it should be included in the project library. The Gantt chart (or equivalent) should be included in all reports and detailed methods and activities documented in your logbook.

Your initial plan **MUST** be finalised before any development work begins. For the finalised plan, as a rough guide, since there are 200 hours for implementation there should be about 200 tasks to complete in that phase. Every task **MUST** have metrics for assessing its successful completion. The highest grades are only achievable if these are in place before the implementation has commenced.

The relationship between you and your supervisor is founded in certain basic expectations placed on both parties. The role of the project supervisor is **NOT**, in any way, to carry out any part of your project. Your supervisor is there to help you make the most of the opportunity the Project presents.

The project student will be expected to:

Provide regular updates on relevant progress.

Communicate regularly, either in person or by e-mail.

Inform the supervisor of any problems that may arise that may have an effect on performance.

Listen to and act upon advice.

<u>Even if you have not done any work since your last meeting, you should still attend.</u>

The project supervisor will be expected to:

Provide academic advice as and when required.

Review progress and try to ensure you are setting and meeting appropriate objectives.

Help you to develop the skills of research and reporting appropriate to level 6 of an undergraduate programme.

Appendix B

The Logbook

You **must** maintain a logbook in support of the project. It should be hard bound and A4 in size. It would be prudent to periodically scan the contents of the logbook to maintain an independent backup in case physical book is lost or destroyed.

The logbook is used to record project-related information, and will save time at the write-up stage because you should have recorded the thinking and evidence behind the decisions made at each stage. In other words it helps in the development of the rationale for any choices made.

The logbook should reflect the on-going evolution of the project. It should be used to record the following sorts of information:

Key references to sources of information, journals, books, technical documentation and URLs consulted.

Key ideas drawn from these sources which have helped shape the thinking behind the project.

Technical and design information, recorded while working on aspects of the project.

Discussions with your supervisor and any other parties involved in the project.

Preliminary thoughts and ideas, lists of work to do and plans.

Development of criteria for choices to be made, and metrics for project tasks.

Results of technical proving exercises, experiments or technical/product evaluations.

This is not an exhaustive list, and other things may occur as the project evolves. As a general principle the log book should be used as the project's 'memory'.

Pages should be dated to show regular progress in the work of the project.

Logbooks are not necessarily designed to be neat and tidy, but they should be well organized and the information in them should be **readily accessible**.

DO NOT stick things in the logbook, anything loose should be placed in the project library and cross-referenced in the logbook.

Your supervisor will want to see your logbook at every meeting to monitor what you have been doing, and to check your progress.

Appendix C

The Project Library
A project library should be kept and maintained throughout the duration of the project. The project library is a record of material that comes from research and other activities to gather data that informs your project. The information held in it should be cross-referenced in your logbook in order to ensure you record the context of each document. The library will provide evidence that you can include in your reports for any claims or statements that you make.

It should contain any copied or original material pertinent to the project.

It may hold:

> Journal articles.
>
> Reference material.
>
> Information obtained from websites.
>
> Technical literature.
>
> Specifications and other documents developed during the project (under revision control).

The library may be part electronic and part physical, depending on the source of the material. It is worthwhile periodically scanning the physical material for backup in case the library is lost or destroyed.

Take particular care when referencing online resources in your project, as these sources may not be permanent. Any online material that is crucial to your project should be saved in your electronic library, as it is not necessarily permanent.

As much of the physical library material will be loose it would be appropriate to use a ring binder to store it. Ensure you separate individual contributions, e.g. using dividers, and that you keep an index at the start of what has been added.

Your supervisor will also want to see the project library regularly to ensure that background study is taking place in support of other project activities.

Appendix D

Additional Notes
PROJECT IDEA SELECTION

Your choice of project topic should "develop and extend" the material studied elsewhere on the course, should be a "significant" piece of work, and should be approached in a "structured" and "systematic" way.

For your Project idea you should:

Decide, in broad terms, what you want to do.

Submit a brief but informative Project Idea (up to 1 page) to gain approval to continue.

Create a formal Project Proposal, based on your Project Idea as detailed in Section 5.

Aims are a "wish list" for the project as a whole, and may be concerned with either your learning experience, or the functionality of your product. For example:

"I want to investigate 3D shader programming techniques for post processing effects"

"I want to create a game that demonstrates AI pathfinding"

"I want create a demo that procedurally creates small planets"

"I want to create a point-and-click application to help train paramedics how to assess the scene of an accident"

"I want to create a mobile application that uses navigation data to influence gameplay"

"I want to create a game with online multiplayer capabilities"

Objectives must be concise, achievable and measurable. Take care that the scope of your project is not too big or too small when choosing the objectives, this should be discussed with your project supervisor. A good approach would be to have a core set of objectives that have a reasonable chance of being fulfilled, and then have additional stretch goals that will allow you to increase the scope of your project if required.

When setting your objectives (roughly five) you should ask yourself:

How much time will I have to spend learning topics I have not done before?

What potential for research does this objective have?

At the end, how can I demonstrate that I have achieved this objective?

Is this feasible given the time I have available?

Will these outcomes allow me to satisfy ALL of the requirements for ALL of the submissions at the level I am hoping to achieve (2:1, 1st, etc.)?

You are expected to do some secondary research as part of your project, so ensure some or all of your objectives allow for this. Please ensure you understand the difference between research and learning, "I want to research Unity" is not research, it is learning. Secondary research is the process of investigating a topic or problem, using books, academic papers and other sources. The investigation should look at various approaches to the topic or problem, and a there should be a comparison between them to determine which are appropriate.

Suitable objectives might be:

"Determine the suitability of AI methods for improving interaction with NPCs."

"Implement a 2D physics engine to simulate collisions affected by acceleration, mass, friction, coefficient of restitution and spin."

"Create a tool to simplify the process of adding, and controlling the drift of smoke in 3dsMax."

"Create a series of sliding block puzzles that can be controlled by a game avatar interacting with in-game items."

"Access mobile location services to determine player position."

"Procedurally generate a landscape."

"Create and publish a mobile game."

Remember the Project is a **<u>double</u>** (40 CATS) unit, and you CANNOT be compensated for a marginal fail.

Appendix E

Document Formatting

FONT
Trebuchet, 12 point for text body.

MARGINS
Paper must have the margins set as below
Left   : 3.2cm (1.25inch)
Right : 2.5cm (1 inch)
Top   : 3.8cm (1.5inch)
Bottom: 3.8cm (1.5inch)

LINE SPACING
Set the line spacing to 1.5 lines.

ALIGNMENT
The document text body should use Left Justify for alignment. Section headings should be left-aligned.

INDENTS OR BREAKS
Leave a space of one line between paragraphs.
Do not indent the first line of each paragraph.

SECTION HEADINGS
Each new section must be started on a new page.
Sections headings should be left aligned, bold and numbered, matching that of the contents page.
Subheadings should be sub-numbered dependant on their parent. For example:

1.   Heading 1
1.2   Subheading 2
1.2.1 Sub Sub Heading 1
1.2.2 Sub Sub Heading 2

Appendix F

Submission of Document

Cover page
All Project Reports submitted at Southampton Solent University must be bound and have an official university cover page. The cover page is available from the SMAT School office.

The cover page has a 'window' in it (a rectangular hole). Make sure that the title page has the required information positioned correctly so that it displays clearly through the window.

The title page should contain the following information, easily readable through the cover page window:

- The award for which the project is submitted
- The academic year of submission
- The name of the author
- The title of the work

Submission details
One comb- or professionally-bound copy of the Project Report document must be submitted to the Assessment Office on the specified date.

Appendix J

Assessment dates

Proposal	w/c 29 January - Formative feedback with supervisor
Definition report	w/c 12 February - Formative feedback with supervisor
Progress report	Due: 23 February 2018
Final report	Due: 4 May 2018

Appendix K

Ethics Policy
All projects must be carried out within the framework of the University's Ethics Policy, see section 2S of the Academic Handbook (available via the portal), and must address the following five questions.

Q1.   Will the project involve human participants other than the investigator(s)?

Q2.   Will the project involve sensitive materials or topics that might be considered offensive, distressing, politically or socially sensitive, deeply personal or in breach of the law (for example criminal activities, sexual behaviour, ethnic status, personal appearance, experience of violence, addiction, religion, or financial circumstances)?

Q3.   Will the project have detrimental impact on the environment, habitat or species?

Q4.   Will the project involve living animal subjects?

Q5.   Will the project involve the development for export of 'controlled' goods regulated by the Export Control Organisation (ECO)?
"This specifically means military goods, so called dual-use goods (which are civilian goods but with a potential military use or application), products used for torture and repression, radioactive sources."

SCENARIO 1
'NO' to Q1, Q2, Q3, Q4, <u>and</u> Q5 an Ethics Release applies to the project.

SCENARIO 2
'YES' to Q1 and 'NO' to ALL other questions an Ethics Release applies to the project.

SCENARIO 3
Any other combination of 'YES' and 'NO' then the proposal must be submitted for a Full Ethical Review.

Appendix L

Specific Project Types
All students can choose a specific project type before they go into producing the required artefacts for the final submission. Choosing a specific project type will impact the way that the final submission will be marked as well as the requirements for the submission.

This can also help SD and Indie students identify what topics they can choose to work on.

Project List:

Project Type	Description	Types of End-Products

Game Project	You are required to make a full working game. It should be polished, published on the store and be market-ready.
	
	Eligible: SD, Indie
		• Game with:
		   o Marketing Plan
		   o Business Plan
		   o Final Product
		   o Published Game Link

Research Project	You are required to do thorough research on a specific topic and produce an artefact that supports the research. **Eligible: SD, Indie**	• Short White Papers • Journal Articles • eBook • Online Course on Moodle • Game Showcasing Research focus

Tool Project	You are required to work on a tool that supports other industry roles in game development. You are also required to submit a user manual and video tutorial alongside with it.
	
	Eligible: SD, Indie
		• Publish-Ready Tool:
		   o For an Artist
		   o For a Designer
		   o For a Programmer
		• System Integration
		• Game or Rendering Engine
		• Library/Plugin or Driver

Game Aspect Project (Technical)	You are required to work on a technical aspect of a game, focusing specifically on that aspect. It needs to be demonstrated thoroughly at the end and it must be reusable throughout many projects. In the end, a playable tech demo showcasing specific technical knowledge on a selected topic is submitted.
	
	Eligible: SD
		• Tech Demo with:
		   o AI Focus
		   o Audio Focus
		   o Procedural Generation Focus
		   o Networking Focus
		   o Physics Focus
		   o Gameplay Focus
		   o VR/AR Focus
		   o Mobile Focus
		   o Sensors/Robotics Focus

Game Aspect Project (Other)	You are required to work on an aspect of a game that could have either an Artistic or Game Design Focus, ultimately producing a demo that showcases your expertise on the specific field
	Eligible: Indie
		• Small Game Project that uses:
		   o a specific art style
		   o a specific game design technique

Social Impact Games	You are required to work on a game that has social Impact and can be used to make the world a better place. Social and Psychological aspects of games are	• Training Product • eLearning Game • Serious Game • Simulation

	encouraged to work on. Finally, you are required to provide a plan for getting your product to the market. **Eligible: Indie**	• Social Impact Game • Psychological Impact Game
Other forms of Gamified Media	You are required to work on a web-app or Windows application that is relevant to the goals of the course. **Eligible: SD, Indie**	• Gamified Web-App (PHP/ASP.NET) • Gamified Windows Application (WPF or UWP or Win10 App) • MOD for a Game

Business Case	You are required to do a thorough research on business and write a business model/plan as well as a marketing and funding guideline for your indie start-up.
	
	Eligible: Indie
		• Business Case for indie startup including:
		   o Business Plan / Model
		   o Marketing Plan
		   o Financial Documentation

Generic Note on all project types:

- You need to make sure that if you are buying or using a 3rd Party Plugin, that plugin will only be used to speed up your development process if applicable, and should **not** be part of the proposed work.

- Ensure that your final submission will be of the highest quality because that will be your biggest project so that will define your chances of getting your dream job! Treat your project as a product! You aim to make money from it.

- Make sure that you don't under any circumstance deviate from the proposed plan that you have made with your supervisor, else you will notice a marking penalty. If you are to change the features you will work on always consult your project supervisor.