Computer Science
ASSESSMENT DESCRIPTION 2021/22

MODULE DETAILS:

Module Number:	600090	Trimester:	2
Module Title:	Commercial Game Development Process		
Lecturer:	Neil Gordon and Simon Grey		

COURSEWORK DETAILS:

Assessment Number:	2	of	2
Title of Assessment:	Game Development Exercise		
Format:	Report	Program	Screencast
Method of Working:	Team		
Workload Guidance:	Typically, you should expect to spend between	50 and 65	hours on this assessment
Length of Submission:	This assessment should be **no more than:** *(over length submissions **will be** penalised as per University policy)*	1500 **words** *(excluding diagrams, appendices, references, code)*	

PUBLICATION:

Date of issue:	11 March 2022 (Week 6, TT Week 27)

SUBMISSION:

ONE copy of this assessment should be handed in via:	Canvas	If Other (state method)	Box
Time and date for submission:	**Time**	2pm	**Date**	See below
If **multiple hand–ins** please provide details*:*	1. Screencast and Demo: 2 May (as on timetable) 2. Report and supporting materials: 11 May 3. Peer assessement:18 May		
Will submission be scanned via TurnitinUK?	Yes	If submission is via TurnitinUK, these should be one of the allowed types e.g. Word, RTF, PDF, PPT, XLS etc. Specify any particular requirements in the subumission details Students MUST NOT submit ZIP or other archive formats. Students are reminded they can **ONLY** submit **ONE** file and must ensure they upload the correct file.	

The assessment must be submitted **no later** than the time and date shown above, unless an extension has been authorized. Canvas allows multiple submissions: only the **last** assessment submitted will be marked and if submitted after the coursework deadline late penalties will be applied.

MARKING:

Marking will be by:	Student Number

ASSESSMENT:

The assessment is marked out of:	100	and is worth	50	% of the module marks

N.B If multiple hand-ins please indicate the marks and % apportioned to each stage above (i.e. Stage 1 – 50, Stage 2 – 50). It is these marks that will be presented to the exam board.

ASSESSMENT STRATEGY AND LEARNING OUTCOMES:

The overall assessment strategy is designed to evaluate the student's achievement of the module learning outcomes, and is subdivided as follows:

Learning Outcome		Method of Assessment {e.g. report, demo}
LO1	Demonstrate a critical understanding of the computer-games industry in the context of the global market, including its history, its current status and the possible future trends.	Software, report and Screencast
LO2	Demonstrate a comprehensive understanding of the concepts and principles of Intellectual Property (IPR) and other relevant legal, social, ethical, and professional issues in the context of the computer-games industry.	
LO3	Formulate business plans and devise marketing strategies based on a critical evaluation of the information acquired.	
LO4	Systematically apply formal game design methods that are appropriate and relevant for a required purpose.	
LO5	Work as a team member, using industry standard methods, to produce a piece of entertainment software, which is appropriate and relevant for a suggested purpose, with a critical evaluation of the process and result.	

Assessment Criteria	Contributes to Learning Outcome	Mark
Game Design	4	20
Development Log (weekly diary of develpoment process), evidence of project management and overal time sheet	3, 4, 5	20
Final documentation (e.g. user manuals, installation guide, programmer documentation, IPR statement)	1, 2	20
Quality of Game Implementation (from screencast and code).	4	20
Team planning	5	20

FEEDBACK

Feedback will be given via:	Feedback Sheet	Feedback will be given via:	N/A

Feedback will be provided no later than 4 'teaching weeks' after the submission date.

This assessment is set in the context of the learning outcomes for the module and does not by itself constitute a definitive specification of the assessment. If you are in any doubt as to the relationship between what you have been asked to do and the module content you should take this matter up with the member of staff who set the assessment as soon as possible.

You are advised to read the **NOTES** regarding late penalties, over-length assignments, unfair means and quality assurance in your student handbook, which is available on Canvas.

Please be reminded that you are responsible for reading the University Code of Practice on Academic Misconduct through the Assessment section of the Quality Handbook (via the SharePoint site). This govern all forms of illegitimate academic conduct which may be described as cheating, including plagiarism. The term 'academic misconduct' is used in the regulations to indicate that a very wide range of behaviour is punishable.

In case of any subsequent dispute, query, or appeal regarding your coursework, you are reminded that it is your responsibility to produce the assignment in question.

Assignment Details

Aim

The goal is to produce a game based on the designs developed in ACW 1. Your group should discuss your individual designs from ACW1 and should choose one – or a combination - of them as the basis for your game. You may decide to alter the design but should document the evolution of the game proposal and concept.

See the module site for details of the group allocations. The group allocation has been chosen to mix specializations and reflects commercial practice where team allocation is done by management without necessarily having input from employees. One of the outcomes of this is to learn how to work with others.

Program Specification

The full specification of the program should be determined by the group in the first week of the development period, including the technology to be used to develop it. The groups should choose from the original game proposals of the group members as a starting point, but the chosen game may be developed differently to the original plan if desired.

Development Process & online Sessions

From Timetable week 28 (teaching week 7) onwards, the **timetabled times** for the module should be considered as **compulsory sessions** where groups can organise their work and provide regular updates of progress to the module staff. Attendance at these is considered is mandatory — see the module website for allocations of individuals to teams.

During the live sessions, each team will be required to provide a status update and to identify any concerns about development. The update should include a list of team members and their individual activity (in the form of weekly timesheets), a time plan showing completed & planned tasks, and a verbal overview of the progress towards the overall team goal. Staff may also request to see other evidence of progress, e.g. Code Repository logs or notes from group meetings recorded in the teams Canvas group.

In addition, each team will be required to deliver specified outputs according to the workshop schedule below. These outputs will receive a grade reflecting quality of teamwork and overall progress for that week, which will also contribute to the final group mark. Therefore it is important that you try to stay on schedule.

#The initial intention is to use GitHub classroom. If this proves problematic we will switch source code platforms: we will confirm this later in the module.

WORKSHOP SCHEDULE

Week 28
1. Decide on game concept and technology to be used
2. Decide on team roles: begin individual portfolios.

Week 29
1. Delivery of an **initial design document** (of 2-3 pages, excluding appendices), including:
    a) Rough game concept
    b) Breakdown of roles & tasks amongst group members
    c) Initial time plan (as an appendix)
    NB: This document should be updated continually over the project using tracked changes
2. Timesheets and individual portfolios.

Week 30
1. Delivery of an **updated design document** (of 3-6 pages, excluding appendices), now including:
    a) Refined game concept
    b) Analysis of target audience (and similar/competing games)
    c) Art/SFX concepts (e.g. sketches of sprites, UI layout etc)

       d) Initial UML design of code
       e) Updated time plan
2. Timesheets and individual portfolios

Week 31
1. Delivery of a **refined design document** (of 4-8 pages, excluding appendices), now including:
       a) Refined art/SFX concept linked to game design aspects (e.g. levels)
       b) Refined UML diagrams of the game architecture
       c) Updated time plan
2. Timesheets and individual portfolios

Weeks 32 and 33 are the Easter vacation. You should use these as your team agrees to continue to develop your project but there are no specific deliverables.

Week 34
1. Create trailer/advert of current version of the game (screencast or other);
2. Draft of the full **report**[#] (10 pages max, excluding appendices), including:
       a) Latest UML class or component diagrams of architecture (along with identification of class/component authors)
       b) Current timesheets for the whole project (including costings)
       c) Draft statements of individual contribution
       d) Brief evaluation of project: what could have been done differently in hindsight?
       e) Consideration of any Legal, Ethical, Social, and Professional issues
       f) Marketing plan
       g) Instructions/manual for the game
3. Timesheets and individual portfolios

Final submissions: Weeks 35, 36 and 37.
In this period, your team should ensure it has completed the following by the specific deadlines **stated above**[#].
1. Week 35: Created and uploaded trailer (screencast) to specified Box folder;
2. Week 35 : the demonstration/presentation etc and will take place in the timetabled lecture.
3. Week 35: Tagged the Source code on GitHub classroom (as 'Final'[#]) — commented and labelled by author;
4. Week 36: Finalised and submited the full **report**[#] (10 pages max, excluding appendices), including:
       a) Final UML class/component diagrams of architecture (along with identification of class/component authors)
       b) Completed timesheets for the whole project (including costings)
       c) Final statements of individual contribution and LINKs to portfolios.
       d) Brief evaluation of project: what could have been done differently in hindsight?
       e) Consideration of any Legal, Ethical, Social, and Professional issues
       f) Marketing plan
       g) Instructions/manual for the game
5. Week 37: Completed Peer Assessment (WebPA[$])

[#]*Failure to submit an element by the specific deadline may limit your marks as that reduces the evidence base for assessment*
[$]*The peer assessment is planned to be via WebPA, or an alternative equivalent system.*

Timesheets
These should take the form of a list of team members, their assigned tasks for that week, and the amount of hours worked on each of those tasks. The format is up to you but a table or spreadsheet is recommended.
The demonstration **requires** a group presentation of the final product: attendance is required for all group members. The presentation is on your timetables.

Individual portfolios
You are all expected and encouraged to create individual portfolios, with material relevant to your work on this development clearly available within your own portfolios. For examples and advice on portfolios, see
https://www.gamasutra.com/view/feature/131109/career_advice_creating_your_demo.php
http://www.mollyjameson.com/
http://hugo.fyi/#
https://www.gameindustrycareerguide.com/what-should-i-put-into-my-video-game-programming-portfolio/

You can host your "portfolio" on our systems – e.g. Box as a set of documents, or set up an actual portfolio. It is not required to be public – but should be easy for us to navigate and see the key evidence of your work, with the clear documentation based on this development project.

Team Working

Each group has been allocated a GitHub classroom repository for managing their project source code. Each group should make use of this repository during the development of their software, and proper usage will be reviewed during the lab sessions. Also note that the repository logs will be used to provide evidence of the individual contributions to the project. Each team will also have a Canvas group site to coordinate their team activity. The logs, discussions and other records in this site will also provide evidence for the moderation of the individual allocation of marks.

Submission Requirements

Software

i)   The final version of your source must be tagged in your GitHub classroom repository as 'Final'.

ii)   The source code should be *fully* commented and explained, and should also identify the author of each section of code. **Failure to comment your code may restrict the marks you can achieve.**

iii)   Your team needs to create a trailer/screencast of the game, for use in the final demonstration;

Report

A final short report (the working design document) of no more than 10 pages (main body) is required. The report should describe the design of the game code and the breakdown of tasks between group members. When creating the report in Word, use the "Track Changes" reviewing functionality to record the development of the report itself (note you can display text as final only, to hide the changes from view).

The main body of the report should include:
- A description of the game design (particularly the setting and game mechanics), key features and - if appropriate - how it evolved over the project;
- An explanation of the aesthetic choices — including art, music, and sound effects — made in the game, along with the UI design (concept sketches etc can be included in an appendix);
- A breakdown of the roles/tasks assigned to each team member and whether these were achieved;
- An evaluation of how the project was managed, including consideration of what could have been done better in hindsight.

The Appendices of the report (not included in the page count) should include:
- Instructions for a third party to run the program & any other program documentation/manuals;
- Outline plan for marketing — e.g. high concept descriptions, marketing imagery, detailed proposals for developing revenue from the game;
- A statement on the ethical and legal issues regarding your project and products: e.g. any licence or copyright issues (of your products, or resources they have used) and about the software use;
- The final time plan of the project as completed (e.g. as a Gantt chart or similar);
- Time sheets for group members indicating development costs incurred through staff time (assuming industry starting salary of £28,000);
- For each group member, a statement (maximum of half an A4 page) summarising their **individual** contribution to the delivered product (software and documentation or other roles), with a link to their portfolio;
- UML class/component or similar diagram that describes the game architecture along with a list of who developed which classes/components or subsystems.

The report should be submitted to Canvas through the *600090 report assignment* that will be available.

Presentation

Each group will demonstrate their game in week 35 to the lecturers and the other groups. This will be based on the screencast or a short demo (maximum of five minutes total) of the software and a chance for brief Q&A.

Peer and Self Assessment

Each team member will be asked to provide feedback on their own and their teammates' contributions using a suitable Peer Assessment tool (e.g. WebPA). This will provide data which will be used to weight the final mark for each student, with moderation by module staff based on the evidence within the Canvas site and GIT logs.

In the event of concerns about the contributions or weightings of the individuals within a group, individuals and/or groups may be asked to attend separate interviews to ensure that the final weightings are fair.

Ensure you will be available in week 35 for the presentation and possible interviews as described above.

We may use screencasts for Department webpages and other marketing purposes. If you (individually or as a team) do NOT wish us to do so, please email the module team.