Games Development Project (COMP09097) Trimester Two 17-18

Module Deliverers:

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This document explains what is required in the Year 3 CGD **Games Development Project** module so you should read the document carefully.

1) This module is team-based and a continuation of the Games Development Project trimester 1 module. On completion of this module, you should have produced a games document detailing the implementation, testing and evaluation of your proposed game.

2) During trimester 2, each group will meet every week with one/two academics who will act as the producers of your game. Attendance is mandatory at these meetings. Each group will be expected to organise roles for each group member and the meetings will ensure that the group and each group member are making adequate progress. Evidence should be provided at submission time that the group have worked closely. Typically this will include the various iterations of the project plan along with minutes of the internal group meetings (at least one per week with progress and actions noted) and minutes of the meetings with the academics (the producers), again with progress and actions noted. It will be each group's responsibility to minute these meetings.

3) As part of the final submission, each group will have produced a fully developed game and a games project report document that reflects both the original design and the final implementation of your game. As well as providing a brief discussion of the gameplay, storyline and characters, you should provide technical details of your implementation. This will be a working document that you update on a regular basis in conjunction with the progress meetings.

4) At the end of Week 13 of Trimester 2, each group will submit:

   a) A games project report document, giving the project plan (timescales, milestones, team roles), the iterations of the project plan, the minutes of internal project meetings and the minutes of meetings with academics (producers). In addition, **the project report should consist of all components relating to the marking scheme**.
   b) A final version of your implementation (code should be commented and follow good programming principles).

In addition, each group member will provide a Critical Appraisal of their work and the project as a whole.

For each group, there should be **one overall document** submitted that relates to the various components of the marking scheme. Each group's submissions should not consist of a collection of documents.

There will also be a presentation of your project in week 13.

Marking scheme

Full implementation (60%)

- Updated Technical Design Document (5%)
- Team/Project working (5%)
- Game Implementation (50%)

Testing and Evaluation (40%)

- Quality Assurance plan (5%)
- Testing (10%)
- Analysis report of user experience (10%)
- Critical appraisal (5%)
- Presentation (10%)

Submission Requirements & Weighting

Component	Weighting	Requirements
Updated Technical Design Document	5%	- Team list with updated responsibilities (i.e. for trimester two) - Overview of project (i.e. on how it will be implemented from a technical perspective) - Original design and final implementation details (i.e. document any proposed changes from original idea in trimester one) - Gantt chart for trimester two - Updated Risk Analysis for trimester two
Team/Project working	5%	- Updated iterations of project plan (i.e. any changes from trimester one) - Evidence of internal and external minutes - Project management approach identified - Communication strategy (e.g. website, Google Docs, Dropbox, Skype) - Maintaining version control (e.g. GitHub)
Game Implementation	50%	Identified software development methodology (e.g. Waterfall, Spiral, RAD, Agile: DSDM, Kanban, Scrum, TDD: review methodologies and justify your choice)

		- Production (assets and source code) - Documentation of coding practices and standards (e.g. evidence of documenting coding/scripting: C#, C++, HTML5, JavaScript) - Creation of developed levels (e.g. environment modelling, evidence of good level design – consider the following: form, space, light and shadow, texture, aesthetics, colour) - Documentation of fixing bugs - Documented examples of code (e.g. some with explanations of how the code works) - Art production (creation of sprites from art work, asset lists, aesthetics, document process of creation of sprites) - Audio production (document how this was achieved), evidence of audio in game - User Interface, HUD, Game Maps - Immersive quality, engagement of game, evidence of good mechanics, gameplay, AI - Evidence of cognitive flow and game balance - Full development of game - Video capture(s) of game (provide short video of game, e.g. YouTube, Vimeo, VLC)

Quality Assurance Plan	5%	- Review of iterations of project plan
		- Risk assessment (i.e. revised in conjunction with QA audit)
		- Quality assurance audit
		   - Quality of project documentation
		   - Testing coverage
		   - QA project strategy monitoring
		   - Review of process management structure
		   - Relevant testing process review

Testing	10%	- Creation of test plan and test log - Review of software testing methodologies (plus justification of testing approaches adopted)

		• Compatibility testing • Regression testing • Acceptance testing (user (play) testing, use of questionnaires, SurveyMonkey, Google forms) • Alpha and beta testing • Functional, structural and error orientated testing • White and black box testing
Analysis report on user experience	10%	• Analysis report on player experiences (i.e. evaluation of questionnaire results, user feedback) • Test log on player experiences • Analysis of data on player experiences • Plan of implementation and bug fixes – i.e. provide evidence of addressing user feedback with regards to game development

Individual Critical Appraisal	5%	• Details of how you felt the project went, including:
		  • Justified breakdown of contribution of each team member
		  • Any problems that occurred, and how/if they were resolved
		  • Overall account of the project experience from a critical perspective
		  • Reflections on your learning experience
		  • Skills acquired during the project
		  • Reflections on team working
		  • **Minimum of one page**

Presentation	10%	• Presentation to teaching staff • Show off what you've done • Screenshots • Video capture(s) • Illustration of working game CD-R with copy of *all* work

<u>Marking scale for all work:</u>

Note as the coursework is a team effort all team members will receive an equal mark. In exceptional circumstances, where there has been unequal contribution, we reserve the right to assign individual grades.

A1 (90-100%) – exceeds expectations of what is expected in a professional development environment
A2 (80-89%) – as would be expected in a professional development environment
A3 (70-79%) –covers all the issues, lacks professional touch in minor areas
B1 (60-69%) - covers all the issues well but lacks a final professional touch
B2 (50-59%) - covers all the issues, some well, but some less well
C (40-49%) - covers all the issues
D (30-39%) - insufficient coverage of all issues, but recoverable
E (0-29%) - insufficient coverage of all issues and must be redone

<u>Suggested Timeline</u>

Week 2 – Project coursework specification handed out, teams roles identified for trimester two (i.e. tasks and responsibilities), commencement of project planning, update overview of the project (i.e. any new developments post trimester one), comparison between original design and final implementation, update Gantt chart and risk analysis, continued development of game (tasks assigned to team members), completion of project minutes.

Week 3 – Updated technical design document completed, continued development of game, review of software development methodologies and identify chosen approach for game, team minutes update and completed, updating of website (if one has been created by the team), commence work on QA plan, research about software testing methodologies.

Week 4 – Continue working on the implementation of the game (ensure required tasks have been divided among team members), software development methodology identified and documented, continuation of research on software testing methodologies, team minutes completed, updating of website.

Week 5 – Continue working on the implementation of the game, finalise QA plan and audit, finalise software testing approaches adopted for game development, completion of team minutes, updating of website.

Week 6 – Progress with the implementation of the game, testing methodologies identified and documented, commence questionnaire design for initial user feedback for the game (e.g. general or pre-test questionnaire) use of SurveyMonkey or Google Forms, completion of team minutes, updating of website.

Week 7 – Continue with implementation of the game, begin 'in-house' testing of the game, documentation of errors, bugs etc., dissemination of questionnaire for user feedback on game, analyse of feedback undertaken with evidence documented on how the feedback has been addressed by the team (i.e. with regards to development of game), team minutes completed, updating of website.

Week 8 – Continue with implementation and 'in-house' testing of the game, commence work on user analysis (i.e. player experiences of the game), create and update test log on user feedback, experiences of playing the game, analysis of data on user experiences of game, documentation of bugs, errors. Completion of team minutes, updating of website.

Week 9 – Continue updating and revising documentation where necessary, ensure progress is ongoing with implementation of game, continue on analysis of user feedback about the game (if required), consider the dissemination of a post-test questionnaire (users' evaluate changes made to the game based on initial user feedback), completion of team minutes, updating of website.

Week 10 – Continue updating and revising documentation where necessary, ensure progress is ongoing with implementation of the game, continue analysis of data of initial user experiences of game, continue in the documentation of the game development, undertake analysis of post-test questionnaire (i.e. user feedback of final changes made to game based on initial questionnaire results), completion of team minutes, updating of website.

Week 11 – Final game developed and fully tested, working towards completion of relevant documentation, ensure project minutes are up-to-date.

Week 12 – Preparation towards team presentation, completion of presentation slides, rehearsal of presentation, continued testing and running of game, completion of critical appraisals.

Week 13 – Team presentations to be undertaken by each team, final coursework submission for **Friday of week 13**, **30th March**, via Moodle, **16.00pm**.