Big Project

You are to design and create an interactive experience using SFML. It may be a new game or a clone of an old one or an interactive media experience (graphic novel, Art Installation, Information Kiosk or whatever) The project should take 75 hours (per team) to develop. (don't do more than 200 hours) Must do at least 6 hours per week each.

The project will involve many elements with a degree of flexibility in where the emphasis is in your creation. The first part will be an individual concept I will organize pairs based on concept grades to progress to the design phase.

Those who don't get a passing grade in the concept phase must repeat the concept document again before they can partake in the design phase.

Two students will work together on the better of the two concepts and submit their GDD together. **The GDD should be saved as PDF.**

Only students who get a passing grade for their design can progress into the prototype phase.

The group of four will develop the project in code now. You should divide the work fairly taking each individual's strength into account. You should edit the grade breakdown sheet after the first week allocating percentages to each team member and updating these throughout the project.

The original concept designer will be the team lead and ensure the percentages are all entered in.

Timetable for project

Week Starting		Due	Hours
11-Mar	Concept doc	SunUp Mon 18/3	2
18-Mar	Design Doc	SunUp Mon 25/3	12
25-Mar	Easter		4 * ?
01-Apr	Easter		4 * ?
08-Apr	Prototype		24
15-Apr	Prototype		24
22-Apr	Prototype	SunUp Mon 29/4	24
29-Apr			
06-May			
13-May	Presentation	by appointment only	
20-May	Presentation	by appointment only	

Roughly speaking one hour of productive work is equal to 1 percent of the project grade.

Your Name Here					
	50		150		50
Element	min	Value	Max		Value
Video	5	5	5	ok	5
Visual Asset creation	0	0	25	ok	0
Audio Asset creation	0	0	5	ok	0
Menu system	0	0	15	ok	0
HUD	0	0	15	ok	0
Basic Game Play	20	20	20	ok	10
Graphics	20	20	20	ok	10
Advanced game play	0	0	20	ok	0
Project Management	5	5	5	ok	5
Advanced Graphics	0	0	20	ok	0

Concept Document

This must be produced in PDF format and intended to be read by the recipient (not presented to them by you) Can be slides or document.

It should promote your choice of game as suitable learning vehicle for 1st yr students in this class to help with their Game Design, Programming, HCI, Maths and & Art skill sets. The game will not be produced for retail (or free) to the public but might be used on open days. It should still promote the fun experience of playing & making the game while detailing the skills used and learned by the student.

It should contain sample assets/ concept art/ screen shots.

Pete will provided a sample concept doc for asteroids

Game Design Document

This will cover in detail all aspects of the game necessary to make the game, including screen flow diagram and detailed screen drawings and explanation of each interaction/gameplay screen, detailed explanation of interactions game mechanics and supporting systems, assets lists, work schedule. This must be saved as a PDF and include a date & version number every time is altered. You may keep a word document for your own purposes in the repo or use oneDrive/Google docs or similar cloud service.

Pete will provide a sample GDD for asteroids

Definitions

Visual Asset creation

This must include a PDF document detailing the process involved in creating the art and the material used for inspiration, the steps carried out, examples of intermediary work. It must be explicitly made clear what work was done and what existing work was used as a starter or inspiration failure to do so will result in no marks. You could also include a Pinterest mood board or similar.

Audio Asset creation

This will include a document detailing the process involved in creating the audio and the material used for inspiration and all iterations of the work failure to do so will result in no marks.

Menu System

Your game may have a menu system allowing for multiple settings, level selection, inventory, high score table, credits, load & save etc. (these sections may be static non-functioning pages) This grade is for the mostly for the coding of the menu system but an amount may be allocated to aesthetics asset selection/creation.

H.U.D.

Your game may include an enhanced HUD both artistically and functionality. Perhaps a speedometer gauge or compass rather than a text value may include audio feedback. This grade is for the mostly for the coding of the HUD system but a small amount may be allocated to aesthetics asset selection/creation.

Basic Game Play

The necessary game play mechanics required for the game. E.g. Bounding box collisions, simple AI, simple weapons, simple boundaries, key based orthogonal movement. [Similar to individual programming project]

Hit areas for mouse clicks, text input, timed delivery

Basic Graphics

Simple sprites and shapes, constant scaling, one texture per file, constant simple animations. [This is not drawing pictures]

Advanced Game Play

More complicated game play programming, and mechanics than the basics. More choice and interactions and more complicated implementations. Multiple instances of objects. Dynamic factors in interactions and properties. Upgrades, choice, multiple modes, non-bounding box collisions.

Dynamic content based on user input.

Advanced Graphics

Animated sprites, texture atlases, dynamic use of colour, dynamic scaling, tile sets, particle effects, views, render states, transforms, vertex arrays, shaders.

[This is not drawing pictures]

Video

A trailer / promotional / summary video presentation (30 -120 seconds). A mix of gameplay footage, screen stills, concept art, prototype scenes, voice overs and subtitles.

Project Management

Ensuring that all work is allocated, setting up communication network, scheduling and chairing team meetings. Ensuring all documentation is present and updated. Supporting team co-operation and co-ordination.