Coursework Brief

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Coursework Constituents

- Part A
  - A paper analysing/classification exercise
  - 30% of the overall module marks
  - Will be issued week 3 and should be completed by Week 8
- Part B
  - The design, implementation and evaluation of a serious game

Coursework Part 2: Developing a Serious Game

- Form yourselves into groups of 1–5
- Working individually is also permissible
- Choose a serious game to develop
  - Game must be for people who are aged 14 years or over.
- You can be provided with an assessment engine to help with assessing the learning outcomes
- If you use the assessment engine then your proposed solution must be capable of calling web services.

Coursework

- Choose a serious game to develop that addresses a problem area with traditional teaching (eg. maths, languages, project management)
- Start with the Learning Outcomes of the game
- You choose the technologies, how to get concepts across, game genre (FPS may be difficult!), graphics, etc
- Game has to be fun to play YET has to allow player(s) to learn/practice learning concepts
- You can utilise an assessment engine to handle basic assessment. Engine is web–service based so your technology needs to be capable of calling WSs.
- Design and implement game
- Evaluate game with intended audience
- Critically evaluate work (Individual)

Coursework

Introduction to Game and Learning Outcomes	15%
Analysis and Design	15%
Implementation	20%
Evaluation Plan of the game	5%
Demo of the game	5%
Individual Critical Appraisal	10%

Coursework

- Progress Meetings
  - During Lectures
- Pitch
  - Week 4 – 26th of September
- Reading Week
  - Week 6 – 16th of October
- Paper assignments and literature review
  - Week 8 – 31st of October
- Course work demonstration
  - Week 12 – 5th of December
- Course work hand in date
  - Week 14 – 14th of December

Deliverables Checklist

- Paper classification exercise
- Learning outcomes and introduction with 5 references from contemporary sources
- Analysis and Design
- Implementation
- Evaluation Plan
- Demo of Game
- Individual Critical Appraisal

Paper classification exercise

- Summarise a paper's findings
- Produce the reference
- Cite the paper appropriately
- Be able to answer the following
  - Is it qualitative/quantitative or both
  - Is it primary or secondary
  - Is it empirical or a discussion
  - What methodology was utilised
  - Was there a control group
  - What statistical analysis techniques
  - What are the limitations
  - How many participants were used
  - Is it generalizable
  - Is it relevant

Learning outcomes and introduction

- Introduce the game concept, subject area, genre and try to put a little bit of justification into why you are developing this particular game
- 3 to 5 learning outcomes
  - Examples
    - Allow the learner to identify user requirements
    - Allow the learner to identify system requirements
    - Allow the learner to identify areas of ambiguity and clarify the requirements
- 5 examples including references where these types of games have been used in the past and what general design you are going to attempt to adopt in light of these papers

Analysis and Design

- UML Diagram
- Some graphics
- Screen layout
- General Game Description
- Not a full blown GDD as you have produced for modules in the past
- Remember that it is worth 15%
- 4 – 5 pages maximum

Implementation

- Screenshots
- A playable executable of the game
- The underlying code/scripts etc
- A video of a play through of the game
  - Can be in any technology you want
    - Unreal
    - Unity
    - C++
    - C#
  - Just as long as it is relatively complex
    - No GameMaker
    - This is a level 10 module

Evaluation Plan

- Evaluation methodology
- Experimental design
- An instrument of some description
- Participants
- Analysis
- Acknowledgment of the weakness of the evaluation
  - Generalizability
  - RCT
  - 30 participants

Demo of the Game

- Verbal description
- Preferable for all group members to be present
- Possibly answer a few simple questions
- A very easy 5%

Critical Appraisal

- Should be reflective
- What have you learned?
- What did you consider to be beneficial from a learning point of view
- What would you do differently in hindsight
- What parts of the project were particularly useful
- What parts were disappointing
- Strengths and weaknesses
- What do you thing could be improved