**MAT3451\_1819\_520 Final Year Project**

**Student Name: Ming Hei LUI**

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**Programme: Computer games programming**

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**Project Title: 2D RPG game**

**Project Proposer: Self**

**Supervisor**

Supervisor name: Conor Fahy

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Affiliation: IMAT2608\_1718\_520 Mobile Games lab tutor

**Introduction**

In this Project will be make a 2D RPG game in unity. The game is about the character needs to escape the maze and find the exit. In the maze, the player needs use weapon or item to survive and fight with the enemies.

**Project Background**

In this game will make a unity game. This game will use unity, C# and java to program the game physics. The game is 2D action RPG game. This game will use PC platform. The target for the game is kids to adults. The play has five different chapters and map to play. The player has to step by step go through the chapters.

The game story is about the characters how to escape the maze. In the maze there are many different enemies and trap. To survive, the player can use different weapons to shot enemies. Also the player has health bar, level bar and buying system can buy some items to upgrade, heal and unlock more weapon.

In the 2D RPG planform have many different games. Those games are stimulate to this project make the new one. .The special of the game is the player can add the element each as fire, ice and lightning for the weapon. It can keep hurt, slow down and pause the enemies.

Choose RPG game can the make player step by step to know about the game world. The player can easier to enjoy playing the game, also the player can use the problem-solving skills to overcome the puzzle.

**Aim/****Objectives/****Deliverables**

Aims:

The project can be played 8-10min and has at least 4-5 maps.

Objectives:

Software Development project include the objectives as

1. To design and implement the game interface
2. To make a test and debug plan
3. To implement achievement by collection system
4. To implement the upgrade system by collecting the coin
5. To design the audio e.g. background music, hurt sound
6. To implement different chapters/map
7. To implement the character and enemies.

Deliverables:

|  |  |
| --- | --- |
|  | **Development Projects** |
| **Final Submission**  These are some examples: each project will need a complete set of objectives/deliverables  Week 27 | * Project contract * Ethics form * Project Plan * Global Checklist * Aim/Objectives * Use UML Diagrams/ Flow chart/ OO design * Story boards/ UI design * Audio * Game Art/ texture * Game design idea * Test/debug Plan * Appendices (e.g. Reference) * Final Year Project Report word count: >10.000 |
| **Viva examination:** attended by the supervisor and the 2nd marker  Weeks 31-33 | * Presentation(PPT) |

**Resources and Constraints**

1. Software: Unity, notepad++, visual studio, MonoDevelop
2. Hardware: windows 7 and above, 4GB RAM, storage 4GB available space

Constraints

1. Time, the project have six month make the job done.
2. Availability of the unity resources, it can help to program the game.

**Sources of Information**

1. Internet sources

YouTube <https://www.youtube.com/>

Unity3D <https://unity3d.com/learn/tutorials/s/2d-game-creation>

OpenGameArt <https://opengameart.org/>

Game Art 2D <https://www.gameart2d.com/>

1. De Montfort university blackboard:

IMAT2608\_1718 Mobile Games

IMAT1606\_1617\_520 Game Architecture Design & Develpt

**Risk Analysis**

The risk of the project is time management, it will not finish the objectives on the project plan. Also in the end the game may not be run as expected. In the develop process risk is programming problem, the program cannot merge and work together. It will get error and crash in the game. Also the program needs to always backup avoid lose data.**Schedule of Activities**

**Student\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Proposer** (if other from the student and/or the supervisor)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Supervisor\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Keep the signed copy somewhere safe: include it with your initial submission. Your supervisor will require a copy as well.