**Gameplay Programming**

Year 2017/18, Semester 4/6

**SCHOOL OF INFOCOMM TECHNOLOGY**

Diploma in Information Technology

**Gameplay Programming**

**ASSIGNMENT 1**

**Proposal**

Last Man Alive In Singapore (LMAS)

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| **Student Name** | **Student ID** | **Grade** |
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# **Game Title**

Last Man Alive In Singapore (LMAS)

# **Game Description**

*A player who is a human will fight hordes of zombies in a small area where he/she will start of with a simple gun at the start of the game.*

*The game will end when the player has reduced the health bar by 100.*

*The Artificial Intelligence (AI) varies according to the time stamp that the player is in currently.*

*When the player progress further into other levels, the AI will be tweaked where zombies can “run faster” to a certain extent and zombies could potentially have different “abilities” such as throwing other zombies around it to the player.*

*The game will be designed in such a way that the game will have a top down approach and the “levels” will be a rectangular/squarish/circle area and the “real player (us)” will be able to move the game camera when we make the player move around the area.*

The player is able to inflict damage to the zombies by shooting bullets at them. The zombie is also able to inflict damage on the player when the zombie is within the radius of the player.

There will be a zombie mini boss every 30 seconds which will have more health and the boss is able to throw surrounding zombies to the player as an attack mechanism.

# **Game Features/Functions**

***Player Features***

***Player Controls:***

*Movement: Up-Down-Left-Right*

*Action: Firing weapon*

***Enemy Features:***

*Type of zombies and human (Difficulty of enemies):*

1. *Zombie with more health ( the zombie will have a different colour )*
2. *Zombies are able to track the player’s last location*
3. *Zombies are able to inflict damage on the player*

***Environment Features:***

1. *There are oil barrels littered around the area/level where the player can shoot it and it will explode, killing surrounding zombies/humans*
2. *There are mini volcanoes littered around the map*

***Additional Features:***

1. *Heads-Up-Display(HUD) Should contain Time, Current health and Number of lives, Current Level.*
2. *Menu System ( Pause/Resume/Quit Game )*
3. *AI following player ( if time permits the AI will follow player’s last position )*
4. *Game camera*

# **Task Allocation Table**

**Darren**

1. **Creation of main player**
2. **Creation of bullets**
3. **Make player shoot bullets**
4. **Collision of bullets with zombies**
5. **Creation of player health bar mechanics**

**Lijun**

1. **Creation of in-game timer**
2. **Creation of game states - Pause and continue**
3. **Creation of ending the game**
4. **Displaying HUDs**
5. **Checking of game camera within the tileset width and height**

**Weixing**

1. **Creation of barrels**
2. **Collision of bullets with zombies**
3. **Creation of AI boss**
4. **Tossing of surrounding AI zombies by the AI boss to the player**

**Haiqel**

1. **Creation of Enemy AI**
2. **Making AI track player’s last position**
3. **Checking collision of zombies with environment objects**
4. **Creation of game camera**
5. **Checking collision of bullet with zombie and surrounding environment objects**