

Game Design Document

Section 1 - Game Overview

1.1 Game Title:

Mortals Meet the Undead

1.2 Game Genre:

Action/Adventure

1.3 Game Perspective:

Third person

1.4 Game Mode(s):

- Single player
- Multi player (optional)

1.5 Target Audience:

- Age 16-30
- Fans of survival horror games

1.6 Core Idea:

Manchester Metropolitan University (MMU) staff and students have turned into zombies. These zombies eat live humans. The character is a live student of MMU, and needs to navigate through levels, to defend themselves, with weapons found, in the hope of getting out of the building alive.

1.7 Goal:

To get out of the MMU John Dalton (JD) building alive

1.8 Topic of game:

Survival/Horror in the MMU JD building

Section 2 – Game Background & Game Flow

2.1 Background story:

The cafeteria in the MMU JD building has sold some exotic fruit. This exotic fruit is turning anyone that eats it into zombies. These zombies only know survival and that is to eat food, which is any live humans. If a zombie bites a human then this human turns into a zombie too. Due to this zombie infestation, the building is on lock down to stop the zombies getting out. There is only one way to get out of the building which is through the Chester Street exit, and staff ID cards are needed to get through any doors in the building, including this main exit.

2.2 Characters Starting Story:

The character (a student) has fallen asleep in a computing lab on the top floor of the central JD building. The computer makes a noise as it goes off (due to the building on lock down), and wakes the character up. The character is unaware of what has happened in the MMU JD building. The player must complete the tutorial in the room before continuing on with the game.

Section 3 – Game Play

3.1 Objective(s):

- Navigate through the building
- Defend yourself against zombies
- Collect objects that can be used as weapons
- Collect staff ID cards to gain access to different rooms and the exit
- Get health to keep alive

3.2 Game Logic:

- If a weapon is used too many times then it will break. Therefore, a weapon has a life which is the amount of times it can be used before it breaks
- Characters cannot pick up anything too big or heavy for them
- Characters cannot run faster than a typical human in real life
- Zombie characters are not agile
- Zombies cannot think – all they know is to get food (which is humans)
- Zombies cannot open doors

3.3 Mechanics:

3.3.1 Rules:

- Characters cannot jump out of windows
- If the character's health reaches zero then that character dies and that level needs to be repeated
- Characters can only use a weapon a certain amount of times. Different weapons have a different amount of times that they can be used
- Characters cannot get through doors without a staff ID card
- The player cannot progress to the next level without completing the previous level
- Characters cannot run through walls or doors that are closed
- The player's view is purely over the shoulder of their character – no 360 degrees
- Player starts with no weapons and collects weapons on the way
- If the player's character is killed by a zombie then the level must be started again
- There are only two options with the weapons collected:
 - Hit with the weapon
 - Throw the weapon

3.3.2 In-game Help and Info:

- When the game starts up the player is prompted to do the following actions (to help understand how to play the game):

- Move around
- Look around
- Punch
- Interact with objects
- Look for staff ID card in the room
- Interact with the staff ID card – pick it up and use it to open the door
- Hints:
 - When the character looks directly at an object that can be used as a weapon it glows
 - When the character looks directly at a staff ID card it glows
- Help can be accessed via the main menu. This will include help on the following topics:
 - What the different weapon colours mean
 - How to move around
 - Information on the different zombies
 - HUD explanation
 - Information on staff ID cards and doors
 - Goals of the game
 - Levels of the game
 - Difficulty levels

3.3.3 Statistics:

- High score – overall high score for the whole game
- High scores for each of the levels
- The highest amount of health that the character has at the end of a game
- Leaderboard

3.4 Game Resources (Score Strategy):

3.4.1 High Score:

- Score is determined by how many zombies the player kills
- Score is the amount of points awarded to the player for different tasks

3.4.2 Points:

- Different zombies are worth different amounts of points
- The larger staff zombies are worth more points than the smaller student zombies
- Points can be used to access items from the vending machine
- Items from the vending machine increase the characters health, however these points used in the vending machine are deducted from the players overall score

3.5 Game Progression:

3.5.1 Game Levels:

- The levels are the different floors of the central block of the MMU JD building
 - Floor 3 of the building is level 1 of the game
 - Floor 2 of the building is level 2 of the game

- Floor 1 of the building is level 3 of the game
- Ground floor of the building is level 4 of the game
- Different weapons are available on different levels of the game i.e. the higher the level the better the weapons
- To complete a level :
 - The player must of gone across the whole floor to the stairs at the other end of the floor
 - The player must of found a staff ID card to access the door to the stairs
 - The player must get onto the stairs

3.5.2 Difficulty Levels:

- Easy, medium and hard
- User can choose difficulty level to play at
- The harder the difficulty level the higher the zombies health – making them harder to destroy/escape
- The harder the difficulty level the lower the weapons health – weapons cannot be used as many times

3.6 Economies:

- Currency = points
- Payoffs = better weapons

Section 4 – Game Elements

4.1 Environment:

- The location of the game is the Manchester Metropolitan University, John Dalton building. It is the central block of this building
- Closed world
- There are different types of rooms in this central block:
 - Computer labs
 - Technicians offices
 - Lecture theatres
 - Cafeteria
 - Offices
- The lifts do not work due to the building being on lock down
- There are four floors of this building

4.2 Characters:

4.2.1 Players Characters:

- At the beginning of the game the player will choose their character from three choices:
 - Kyle
 - Emma
 - Zubin

4.2.2 Non-player characters:

- Zombies
 - Student zombies – smaller and easier to kill
 - Staff zombies – bigger and harder to kill
- Scared student

4.3 Collectable Weapons:

- Level One:
 - Keyboard
 - Mouse
 - Cups/Mugs
- Level Two:
 - Keyboard
 - Mouse
 - Cups/Mugs
 - Text books
 - Fire Extinguisher
- Level Three:
 - Keyboard
 - Mouse
 - Cups/Mugs
 - Text books
 - Fire Extinguisher
 - Broom
 - Chair
 - Laptops
- Level Four:
 - Keyboard
 - Mouse
 - Cups/mugs
 - Text books
 - Fire extinguisher
 - Broom
 - Chair
 - Laptops
 - Cutlery
 - Trays
 - Guitar
 - Tennis racket
 - Hockey sticks
 - Tennis ball

Section 5 – Game Play I/O Controls & GUI Interfaces

5.1 Game Play I/O Controls:

- Keyboard

- Mouse
- To move around the environment:
 - Arrow keys
 - W, A, S and D keys
- Special keys:
 - Space = jump
 - E = interaction (e.g. open doors)
 - Right click on mouse = throw weapon
 - Left click on mouse = hit with weapon
 - Esc = pause
- Possible to use a joystick

5.2 GUI Interfaces:

5.2.1 Main Menu Interface:

- Options:
 - Mode: single or multiplayer
 - Level: easy, medium or hard
 - Options: audio, volume, video, controls
 - Help: different help topics
 - Statistics: high score, other scores
 - Exit: exit the game

5.2.2 Pause Menu:

- Options:
 - Resume: resume the game
 - Options: audio, volume, video, controls
 - Exit: back to main menu

Section 6 – Visual & Audio Features

6.1 Visual Features:

- HUD:
 - Top left - current level and floor
 - Top right - points
 - Bottom left - health bar
 - Bottom right - weapons available, the condition of the weapon is colour coded (good=green, ok=orange, bad=red)
- Lights flicker on and off
- Lightning flashes through window
- Shadows due to different lights

6.2 Audio Features:

- Footsteps – different footsteps on different floors
- Zombie noises (closer to a zombie the louder the noise)
- Broken lift noise
- Opening doors

- Using weapons
- Dropping items
- Picking up items
- Lightning, thunder and rain
- Computer noise – starting up

Section 7 – System Parameters & Requirements

Section 7.1 System requirements:

- Keyboard
- Mouse
- Monitor
- 1GB RAM
- Dual-core processor
- Speakers (optional)
- Hard drive
- Graphics memory
- Windows XP or Windows Vista or Windows 7
- DirectX

Section 8 – Creativity & Special Enhancements in Game Concept

Section 8.1 Creativity & Special Enhancements Due to Third Person Perspective:

- Third person makes the game more complicated
- Dynamic shadows needed
- Avatar actually has to hold weapons/objects
- The view for the player is going to be wider
 - Can see a bit behind the avatar
 - Need to think about being attacked from behind
- Sound effects – for example when an avatar is walking sound effects will be needed in time to the footsteps being taken