**Project Night Terror**

By

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\*\*Consider putting sections into parts and note how it currently it is. I.e. Part 1: Intro, Part 2: Design Alternatives, etc.

**\*\*IMPORTANT\*\* -Gantt Chart, Proposal, Sub Systems, WHIMIS, Proposal (again), Log book (very important),**

https://ntrs.nasa.gov/archive/nasa/casi.ntrs.nasa.gov/20180003204.pdf?fbclid=IwAR0C4ZA8LkWesxezIl64Vs0h7dZElykaBXd79oN4wR-LCNPckbpanadFaq

**Risks**

Engine Updates (introduce bugs, new problems, unknown SW, etc.)

**Assumptions**

**Resource Requirements and Capabilites**

\*\*The ghost is the Mrs. Seymor of Camp Gilwell. She’s pissed about her dogs and is helping you.

**Milestone Notes:**

List changes, conflicts, problems, etc. here. Give a brief description of each milestone under each (talk about specific concerns/problems, what is accomplished, etc. there.

**Milestone 1:**

Landscape, buildings, environment

**Milestone 2:**

Character creation & AI

**Milestone 3:**

**Milestone 4:**

**Levels**

1. Opening Main Menu
2. Main Game (Valley Region)
3. WW1 Scene (Trenches)
4. WW2 Scene (D-day Beach)
5. Other (for recursive part)
6. End Credits

**Weapons**

1. M1 Garand (Semi-Automatic; WW2)
2. Lee-Enfield (WW1 Bolt Action; WW1)

**User Items (Usable)**

1. Flashlight (Throughout Game)
   1. Upgrade 1 (Battery Pack)
   2. Upgrade 2 (Infinite Battery)
2. Fdf

**User Items (Passive)**

1. Notebook
2. fdf

**Custom Objects (Blender)**

1. Barbed Wire (WW1/WW2)
2. Trenches (WW1)
   1. Planks
   2. Sandbags
3. Atlantic Wall (WW2)
   1. Hedgehogs
   2. Barbed Wire
   3. Ramps
   4. Gates
   5. Pill Boxes
   6. Turrets

**1.0 Introduction**

My project is to create a 3D, first person, horror game focusing on the themes of death, depression, and terror. The game will be single player and will be mainly story driven. It will also be based around and inspired by ghost stories, real locations, and real and/or fictional events in Saskatchewan; such as the ghost story of Camp Gilwell and stories around Fort San Sanitarium. The project, when finished, will have a game that can be played from the very start to a very end i.e. a finished product. Although there are plans to make the project accessible on different platforms, the main platform for this project will be for PCs.

**1.1 Main Requirements**

1. Realistic Landscape & Environmental Creation
2. Key buildings with interiors and/or exteriors
3. Qu’Appelle Valley area
4. Two main Non-Playable Characters (NPCs)
5. Passive ghost (guides player)
6. Mostly passive demon (main antagonist)
7. Multiple NPC with Varying AI
8. Passive NPC mostly minimum AI (walking around, etc.)
9. Various Enemy AI levels (Attacks, abilities, etc.)
10. Dynamic Menus
    1. Changes as player progresses: Ex. Main Menu environment changes from sunny to stormy
11. Multiple Items
    1. Flashlight
    2. Notebook
    3. Etc.
12. Upgradable Items
    1. Optional (Can complete game without them)
    2. Usually obtained in side objectives
    3. 0 to 3 upgrades per item
13. Save Game
    1. Ability to save progress and return to that point without penalty
14. Start to Finish Aspects
    1. Main menu
    2. Opening
    3. Main Game
    4. Credits
    5. At Least Some Music & Sound Effects
15. Collectables
    1. Letters, texts, messages, etc.
    2. Objects that relate to area
16. Set of side objective

**1.2 Secondary Requirements**

1. Easter eggs & references
2. Trophies, achievements, etc.
3. Multiplatform
   1. Currently only for CPU, hoping to expand to PS4, Xbox1
4. New game+ (second play through)
   1. Harder and different NPC AI
   2. Level changes
5. Complete Set of Music & Sounds
6. Voice Actin
7. More Items
8. More Details
   1. Environment (Nicer grass, water, etc.)
   2. Items (Intricate design)

**1.3 Scope**

-Have 3+ “nightmare” events

-Gets darker after each event

I plan on having two main non-playable characters (NPCs); one that guides the player and one that is the main antagonist. Along with these two, there will be enemy NPCs that will challenge and/or attack the player and passive NPCs that add to the game’s darker atmosphere or that assist in telling the story. The enemy NPCs will consist of at least 3 different demon characters that are all affected by light to some degree. The NPCs will also have varying levels of AI depending on their purpose.

The playable area will be a landscape that is similar to the landscape of the Qu’Appelle Valley. Other aspects of playable areas include the interiors and/or exteriors of popular haunted buildings inspired by different areas in Qu’Appelle Valley. A large portion of the game will take place outside with smaller interior areas.

The game will have items such as a gun or a flashlight. These are mostly used to defeat the enemies in the game, but can also aide the player in different locations. These items and the player’s health will be upgradable. The upgrades will be available as collectables in different areas and the player will be able to use them on any form of upgrade they wish. For example, the player may choose to upgrade maximum health or add regeneration to the health. Another example is to increase bullet damage or to increase ammo capacity.

Some other aspects in the game’s scope include dynamic menus i.e. main menu changes as the player progresses and also the ability to save the game at different points. Music and sound effects will be added to the best of my ability. Subobjectives will be used to add to the story and add a means of getting an upgrade. The story will be told by NPCs, collectibles, etc. The collectibles will be different things from sound files, letters, items, etc.

Accessibility options will also be added to allow for subtitles, brightness changes, speed of the playable character, etc. This will allow for a more user-friendly gameplay and also allow for a larger demographic to play the game.

If there is time, Easter eggs/references, trophies/achievements, and more items will be added. Multi-platforming, a new game+, better sound/music/graphics, and better detail will also be added if there is time after most, if not all the main requirements are complete.

I will segment my project by splitting tasks into different categories such as landscape, characters, menus, AI, etc. The core creation of these tasks will typically be created first so the functionality can be added, tested, and updated as development continues. For example, creating an NPC could have the following steps:

1) Creation 2) Adding to project 3) Test 4) Functionality 5) Test 6) Additions 7) Test

This allows for the core to be created, tested, etc. and details be added at a later time when it is needed.

Beyond the scope of this project is any form of multiplayer. There will also be a limit on quality of graphics, number of assets, in depth voice acting, sound track, etc. since many of these areas are done by experts with more time. For example, instead of having the newest most realistic graphics of a human talking I may implement subtitles to a character who looks real, but can be easily seen as created in the game.

Constraints of the project include time to complete tasks, having to learn new or more in-depth tools, money, etc. To get around these constraints I have been watching tutorials, using free programs, using easy to use programs, and using software that best fits my skills.

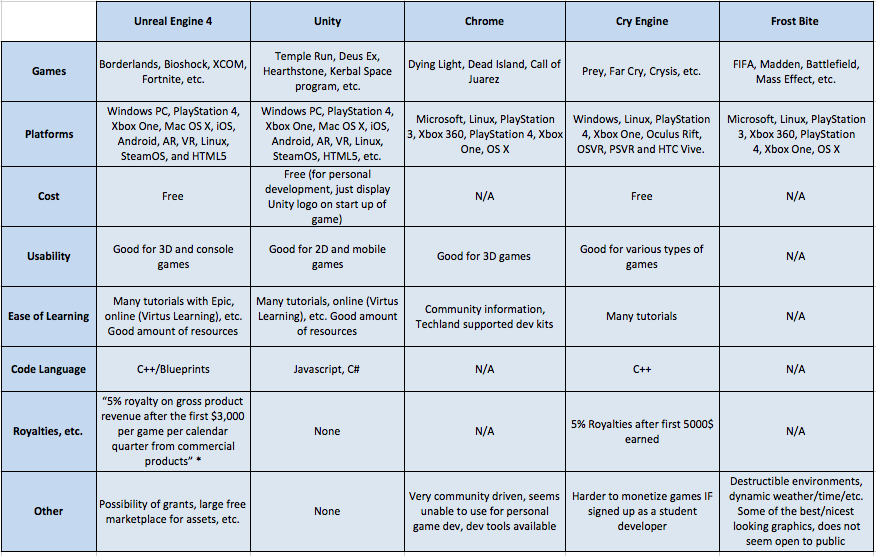
**2.0 Technologies Used**

**2.1 Game Engines**

Main reasons to pick a specific engine was:

1. What games were made using it
2. Platforms
3. Cost of software
4. Usability
5. Ease of learning
6. Language of code
7. Royalties, etc.
8. Other

***Table 2.1-1. Comparing Different Game Engines***



\*https://www.unrealengine.com/en-US/faq

**2.2 Animation Software**

**2.2.1 Unreal Engine 4**

**2.2.2 Mixamo**

**2.2.3 Other**

**2.3 Audio**

**2.3.1 GarageBand**

**2.3.2 Other**

**2.4 World Design**

**2.5 Collaborations**

**2.6 Other**

**3.0 Design Alternatives**

**3.1 Game Theme**

**3.2 World Design**

**3.3 Perspective**

**3.4 Genre**

Playing Styles: -Escape (unknown at first, but then knows), always known, amnesia style, story driven

Gameplay: -Difficulties (how does it change?)

-Saving (Auto save, anytime, etc.)

-Level up system (player level, weapons, equipment, passive, active, etc.)

-Unlocks (End game, achievements, additional content/locations, etc.)

**3.5 System**

**3.6 Button & Control Configurations**

**3.7 Characters**

**3.7.1 Enemies**

1. Imp
2. Recursive Demon
3. Main Demon
4. Long Demonic Animal
5. Slender Demon
6. Small Demon
7. Ghost (Hostile)
8. Light Demon
9. Heavy Demon
10. Priest

**3.7.2 NPCs**

1. Ghost (Benign)
2. Ghost (Main)
3. WW1 Soldier
4. WW2 Soldier
5. Crucified Person

**3.8 Extra Features**

**3.9 Game Name**

-The Nightmare Chronicles

-Asleep

-Awake

-Haunted

\*\*SW Names

-Deception Games

-Desolation

**4.0 Techniques & Algorithms**

**5.0 Knowledge Representation & Data Structures**

**5.1 Class Diagrams**

**5.2 Flow Chart of Program**

**6.0 Structure Diagrams**

**7.0 Game Story Line**

**8.0 Nightmare Events**

**8.1 War March**

**8.2 D-day Beach**

**8.3 Trench Warfare**

**8.4 Church Crucifixion**

**8.5 Repeated Dreams**

**Nightmare Events**

-Above bed, at church (cross), computer taken over, family graves, horse/buggy from window, explosion from remote, repeated dreams (still dreaming), poe, something to do with water, war related, orc related,

**9.0 References & East Eggs**

-Ghost BC, “Never shoulda come here”

-Reference that something is always watching at the start

**10.0 Music**

**11.0 How to Use**

**12.0 Sample Screenshots**

**13.0 Sample Sessions**

**14.0 Testing Sessions**

**15.0 Discussion**

9.1 Pros of Approaches & Methods

9.2 Cons of Approaches & Methods

**16.0 Cost**

**17.0 Environmental Impact**

**18.0 Conclusions**

**19.0 Future Work**

13.1) 2 games one in space, the other this game

**20.0 References**

Items: Flash light, notebook

Interface: -Notebook style, pause or not depending on difficulty (dying light, can add stress)

**4.1 End Credits**

Pro Memoria or Original