# CS 2053: Final Report Template

Current Group Members: Maxime Theriault, Josh Myers-LeBlanc, Alec Belliveau

Original Group Members (if different):

## **Game Design Requirements**

*Describe in the following sections how your game meets/supports each of the following project requirements:*

* 1. **Story Telling.** The game should contain storytelling with audio or text narration.

Our game meets this requirement by having storytelling done through notes that will be picked up by the player. They are glowing and in a place that the player will be attracted to make sure they read it. On our note we have a small paragraph dedicated to the story lore as well as a clue to beating each challenge that lay ahead. Each level has a note, so the player gets storytelling throughout the game.

* 1. **The number of levels**. The game should be a multi-level/scene game with 2N scenes (where N is the number of teammates). How many levels do you have an what do they represent (e.g., why is this scene important, what challenges exist technically or for the player).

We met this requirement by having our “Main Menu” scene as well as 6 playable levels.

## **Game Programming Requirements**

*Describe in the following sections how your game meets/supports each of the following project requirements (what parts of the game and how it was provided):*

The project and resulting game must include the following game programming technologies:

* 1. **Sound** (note that if your game did not contain sound because of limitations in the lab computers, please comment on this here).

Our game implements sound for different animations and actions including, unlocking a door, opening a door, player grunt, player hit by skeleton, player footsteps, skeleton bone rattling noise, spell noises and music among others.

* 1. **Physics**

The physics we have implemented on our Moving Props Spell which allows users to click on props and allow them to levitate as well as hit them causing them to fly across the room based on their weight meets the physics requirement. We also have a player who can move around and jump, with no double jumping.

* 1. **Cameras: should have dynamic (or multiple)**

Our camera is a First Person-Perspective camera that meets the requirement of a dynamic camera.

* 1. **User Interface** (menu).

For our user interface we have our “Main Menu” screen which is where players will start the game as well as change settings, look at the credits, and quit the game. Also, while in game players can pause, which will pause the game (timescale = 0), as well as let a game manager know to send a message to other scripts that the game is paused. While in this pause menu players can change or reset their settings or quit the game (and resume). The settings that players can change are “Master Volume”, and “Mouse Sensitivity”.

* 1. **AI:** AI game objects must have state-based behaviours and involve pathfinding. Note that for this point, you can use those provided by the game engine/platform which you will use for the project development and/or write your own.

For AI we have implemented skeleton enemies. When the level open skeletons will be patrolling an area, until either they become within range of the player or a player throws an object at them, killing them. When the player is within range of a skeleton it will start moving towards the player. Once in attack range, the skeleton will swing its sword and attack the player, if hit the player takes 40 damage, which will regenerate after 10s of being attacked, unless attacked again which will reset the timer. If a skeleton kills the player, the level will be reset.

## Describe what parts of the game you attempted to build or wanted to build, but were unable to

*Distinguish between the parts you were unable to implement, but would have satisfied a project requirements, from parts that you wanted to add additionally to improve gameplay or play experience.*

We wanted to add screen shake when the player was hit, better sounds and placing more sounds (more complete), more wand animations, better AI for the skeletons, better movement physics for the player, adding a boss battle, more complex levels.

## **How successful were you?**

## *Provide a description about how successful you were in creating a 'good' game with this project. There is no right or wrong answers, this is to help you reflect on your experience.*

We believe we were successful; we think our game turned out well, especially game idea and implementation.

## **Describe how you were able to work remotely with your team or individually.**

*Did you have any challenges? What worked well? Would you do something differently in the future?*

The only challenge we had throughout the term was communication. We think having scheduled meeting times and class check-ins would have been very helpful to make sure we are working at an appropriate pace as near the end we were under a lot of pressure to get a lot done.

## **Describe what external/third-party resources (or asset packs) you used**

*Please describe what third-party resources/scripts/objects/music/sprites/etc. you used, what functionality/features they provide and how you used them? You can provide urls for important libraries/assets, but leave out simple sprites.*

**Sounds:**

All Sounds and music were taken from: <https://freesound.org/>. These were used for actions and some animations, and the music was used for ambiance.

<https://freesound.org/people/Soundholder/sounds/425367/>

Ambient background noise

<https://freesound.org/people/magnus589/sounds/269467/>

Opening and closing door sound

<https://freesound.org/people/GlennM/sounds/386529/>

Jumping sound

<https://freesound.org/people/MrAuralization/sounds/158625/>

Door unlocking

<https://freesound.org/people/DWOBoyle/sounds/144248/>

Lever noise

<https://freesound.org/people/Migfus20/sounds/559853/>

Music on Boombox

<https://freesound.org/people/VABsounds/sounds/441650/>

Menu music / 3

<https://freesound.org/people/Andrewkn/sounds/482919/>

music 2

<https://freesound.org/people/Juandamb/sounds/430622/>

Paper noise

<https://freesound.org/people/MindlessTrails/sounds/509541/>

Player grunt from being hit

<https://freesound.org/people/nextmaking/sounds/86003/>

Sword Hitting player body

<https://freesound.org/people/spycrah/sounds/471097/>

Sword Swing sound

<https://freesound.org/people/Merrick079/sounds/566434/>

Prop being hit

<https://freesound.org/people/spookymodem/sounds/202102/>

Skeleton Bone rattling

<https://freesound.org/people/Worldmaxter/sounds/471204/>

Sound for moving object through time spell

<https://freesound.org/people/univ_lyon3/sounds/485792/>

Physic Spell sound

<https://freesound.org/people/ProjectsU012/sounds/341626/>

Small explosion sound used for time travel spell

<https://freesound.org/people/Galbenshire/sounds/464520/>

Footstep walking on stone sounds

**AI:**

To fix AI rotation up close (Brackeys): <https://www.youtube.com/watch?v=xppompv1DBg&t=2s>.

**Animations:**

Wand movement when moving mouse base (Welton King): <https://www.youtube.com/watch?v=nlcIz-czKyI>.

Skeleton animations from Comeback (Asset Store)

**Models:**

All models other than the wand and radio, these were used to build out our levels - (Asset Store) - JustCreate, BrokenVector, Comeback

Skeleton: <https://assetstore.unity.com/packages/3d/characters/creatures/low-pol-skeleton-188865>

Dungeon models: <https://assetstore.unity.com/packages/3d/environments/dungeons/low-poly-dungeons-lite-177937>

More Dungeon models: <https://assetstore.unity.com/packages/3d/environments/dungeons/ultimate-low-poly-dungeon-143535>