CS 2053: Final Report Template

Winter 2021

Please fill in your answers to the questions below. The main goal of this report is to make sure that the instructor is able to assess all aspects of your project and the at nothing is missed. Additionally, a few feedback questions will help us organize the course in the future.

Current Group Members: Adam Foster

GitHub Project URL: https://github.com/CS-2053-Winter-2021/course-project-2d-amfoster102.git

1. Game Design Requirements

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

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

In the Menu scene there is text explaining the backstory of each level. This text explains who the main character is, what he is doing and the setting of the level to come. The Dudley Stronghold is considered to be the first level, but players are free to do either level.

1.2. **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 and what do they represent?

I was working on this project alone therefore I have two levels. Level one is could Dudley Stronghold and level two is called Calford Palace. They are two different dungeons for the player to attempt. Dudley castle appears first in the story line however players are free to try either level.

2. 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:

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

There are three sounds in the game are the background music, the scream when the player dies, and the sound when the player picks up the key. (These can be toggled in the main menu if they get annoying)

2.2. **Physics**
To meet the physics requirement, I created a magic orb that bounces against the walls in both levels. This is the black circle that can be seen in my video demo close to where the key is. It sometimes gets stuck between objects but will eventually free itself.

2.3. **Cameras: should have dynamic (or multiple)**
One camera follows the player and the other camera is used for when the player holds down M and views the map.

2.4. **User Interface** (menu).
The first scene is my menu. It shows the title, controls, options, author, and level selection.

2.5. **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.-We removed the requirement for AI, but if you have some AI in your project, you may describe it here.

The AI in my project is the ghost that appears in both levels. He uses a nav mesh to track the player. As for the state-based behaviour the ghost will stop chasing the player if the distance gets too far. It will chase the player again if they get within range.

3. 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 requirement, from parts that you wanted to add additionally to improve gameplay or play experience.

I would have liked to implement some features that improved the game play. I think additional collectables like gold, or bandages would have improved the game. Another idea I had was to have a health bar system where you do not die immediately.

4. 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.

Overall, I am happy with the game I produced. I think with some fine tuning, and more collectables it could be a really fun game. One thing that could use some improvement is the enemies. I would have changed the skeletons to be a bit more dynamic and to be more interesting. It would be nice for them to follow a nav mesh like the ghosts.

5. 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?

I really enjoyed working from home. There were no challenges with collaboration as I was working individually. Spending time finding interesting sprites, sounds and artwork before starting the game gave me a lot of inspiration before even opening unity. In the future I would push to github more often. I ran into an issue where importing certain resources ruined part of my project and I had to redo it.

6. 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? Please provide urls for important libraries/assets, but leave out simple sprites and sound/music files.

The tile map was made with a free rogue fantasy castle on the unity store.
https://assetstore.unity.com/packages/2d/environments/rogue-fantasy-castle-164725

The key pick up and the scream where both found on a site called sound bible.
https://soundbible.com/

I found my main character here: http://michaelcummings.net/mathoms/creating-2d-animated-sprites-using-unity-4.3

The remaining sprites like the skeletons, ghost and the orb were all found on google images.