CMPT 276 Project Phase 4 Report

Group 10

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Links to the Presentation and Video

Access presentation here.

We have chosen to create a video instead of doing a tutorial in the report. You can access the video here.

Report

Game Description

Our game is called *Dungeon Escape*. The main goal is to collect all keys in order to unlock the door that takes the player to the next level. As the player moves along the game, they can collect coins for bonus points. Keys are 100 points each, and coins are 500 points. While in the game, the player must avoid bombs and enemies. If they hit a bomb, they lose 200 points. However, if their score decreases to less than zero, the game is instantly over. If they hit an enemy, the game also ends immediately. A key feature is that in some levels, you may have to “flip” the map with the “F” key or space bar in order to collect all keys and make it through a level.

Users are also able to customize between one of three avatars (knight, wizard, or dino), and can choose to turn the game audio on/off from the pages accessible via the main menu.

Changes From Original Plan

Over the course of the project, our game has diverged in various ways from our original plan. While the core ideas remain the same, there were numerous features that we ultimately did not include in the final product. The game primarily stayed true to our initial UML diagram, but we refactored some of the class and file locations for improved efficiency and ease of use. Our original plan involved having over twenty levels for the game, of which ten would be randomly selected for the player when they enter the dungeon. We had also planned for a fighting system and boss levels, which, due to time

constraints, we did not implement. The original game UI had the health, score, and time at the bottom of the screen, as well as a pause button to pause the game. All of these initial designs ended up being different from the game in phase 4. During production, we realized that as every level had a flip design, twenty levels would be impossible to complete within the time limit. Thus in the final game, we cut down the number of levels to six main levels. We also removed the health tracker, as we decided to use the score to determine a game over. The pause button and pause screen were designed, but ultimately not implemented as we found it to be difficult to include given the time limit. As for the rest of the original design, the game has retained the flip layouts, a scrolling camera, and various enemies and traps throughout maps. For a better and more immersive gameplay experience, we added an avatar selection and a settings and how-to-play screen along with various sound effects and soundtracks.

Lessons Learned

Throughout the project, our team did a decent job staying organized, which helped minimize challenges we had to deal with. Regardless, we learned some important lessons from working in a group on a project of this scale.

One of the most significant things we learned is time management. We learned that it is extremely important to leave enough time for errors and debugging, as well as planning out a timeline to prevent being rushed near deadlines. Another important lesson was the significance of communicating with each other. Furthermore, we learned that communicating through code comments is vital. Having proper comments allowed for much more clarity and less confusion when one of us was trying to work with code that another person had written.