## **Group-12 Phase 4 Report**

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## **Game Description**

The game we created was a top down shooter set in a dungeon setting. The objective of the game is to collect all the keys on the map before leaving through the exit. It includes enemies that attempt to kill the player. The player will have either a choice to move or shoot in a direction every tick of the game. Shooting an enemy will instantly destroy the enemy. However, if an enemy touches the player its health will go decrease. Traps are spread around the map which also deal damage to the player. There are also bonus treasure chests to increase the players score.

## Final Product

Our initial design included multiple weapons types, a currency, different enemy types, a collectible currency to spend at a shop, different punishment types(traps), multiple levels, high score, and a settings option. These functions were considered "luxuries", and were not added due to time constraints. However, we did complete our goal of a finished functioning base game. The final product includes player movement, player shooting, enemy ai movement, punishments, rewards, bonus rewards, a single level and win/lose/menu screens. We are proud of our accomplishments.

#### **Lesson Learned**

When we started this project early, we considered a lot of its entertainment and functionality so we ignored a lot of implementability. This causes a lot of difficulties when we write code. Furthermore, we were too determined to complete the project directly as a whole. This caused us to encounter many bugs. For a period, the codes Main function could not even run. Finally, we knew that we had to build the project starting from the most basic foundations, so we removed non-functioning elements and kept only the most basic elements such as MainChar, Enemy and Board. Once that was completed, we added and implemented the rest of the classes.

# **Tutorial**

# Operation

W: Move Up A: Move Left S: Move Down D: Move Right Up Arrow: Shoot Up Left Arrow: **Shoot Left** Down Arrow: **Shoot Down** Right Arrow: **Shoot Right** 

# Goal of the Game:

Avoid the punishment(skull icon) and Enemy(red cape) and collect all keys then move to the destination(red flag). The treasure chest will be randomly generated onto the board. If a treasure chest is collected the player will receive a bonus score.

(More tutorial/demo info can be found in the video)

Game Demo Video Link:

https://youtu.be/dLv3aRAhgdA