CMPT 276 Project Group 7

Overall Plan:

The goal for this project is to design, implement, test, and evaluate an arcade-style 2D game. To achieve our final goal of a functioning game, we plan to use Discord as our communication platform. For each project stage, we will distribute work evenly, give regular updates, and host weekly meetings. During each meeting, each member will give a debrief of their progress, express any concerns, and brainstorm as a group to determine our next steps forward. Ultimately, by the end of this term, we will not only have a running game, but improved our software development, communication, teamwork, and Java skills.

Game Description:

Our game "Rabbit Run" is a single player 2D arcade-style game. The objective for the main player is to navigate each map and reach the exit, while collecting all the regular rewards on the map and reaching the level's score goal. The game ends once the enemy catches up with the player or the player collects enough punishments to obtain a score of zero or less.

Main Character:
- The rabbit main character is controlled by user keyboard inputs and may move into an empty cell upon each tick

Enemies:
- Moving Enemy: A wolf character chases the player and moves to adjacent cells upon each click. The game is over once the wolf catches the main player.
- Punishment: Squirrels may show up in cells and the player must avoid them or else they will have points deducted. The squirrels stay stationary in their cells.

Rewards:
- Regular Reward: The regular reward is leaves and the player must collect all leaves on the board before moving on to the next level or completing the game. With each reward collected, the user's score also increases.
- Bonus Reward: A bonus reward of carrots is available for the player to collect. This reward will give double the points of a regular reward.

Barrier:
- There are walls surrounding and inside the board, preventing the user from moving freely throughout the board. The player may not move into a cell with a wall and must navigate around them.

Levels:
- There will be 3-5 levels the user must finish before completing the game. With each level the board becomes larger, the number of enemies, punishments, and speed of enemy increases. The amount of points required to win will also increase.