## Maze Project 16/11/13 (Due 10/01/14)

## **Objective**

Make a maze game in C that:

- · Has a player that faces in the direction that it's moving
- Has walls that send the player back to the beginning if the player touches them
- A victory condition
- A score
- A scoreboard that gets scores from a .txt file and reads and writes them as necessary Other things we will add are:
  - Things that give you more points
  - · Walls that are initialized from a text file
  - Walls around the maze that allow for an area around the maze.

## How to do it

I will have 2 different functions that I will use to achieve the objective:

- collide()
  - This will be used to see if a collision\_box is colliding with another collision\_box.
- collideFromPointer()
  - · This will call collide() but with a pointer arg.
- randomNumber()
  - This finds a random number suitable for placement of items.
- setUpItem()
  - This finds a location for an item that doesn't collide with the walls.
- setUpWalls()
  - This returns an array with all of the walls.
- getScores()
  - This returns the scores in the highscore table
- setScores()
  - This changes scores.txt to include the score if it is included inside the highscore table

## How to test it

To test this program, first type 'make pi' into your console window, and then './game.pi'. The game will start, allowing you to do these particular things:

- Walking in all directions, to test if the player faces the way it is moving
- Touching one of the walls, to see if they send the player back to the beginning
- Getting to the end (shown by the checkered flag), to test the victory condition
- · Looking at the score, to show that there is a score
- Looking at the scoreboard and checking the scores file, to make sure the scoring works.