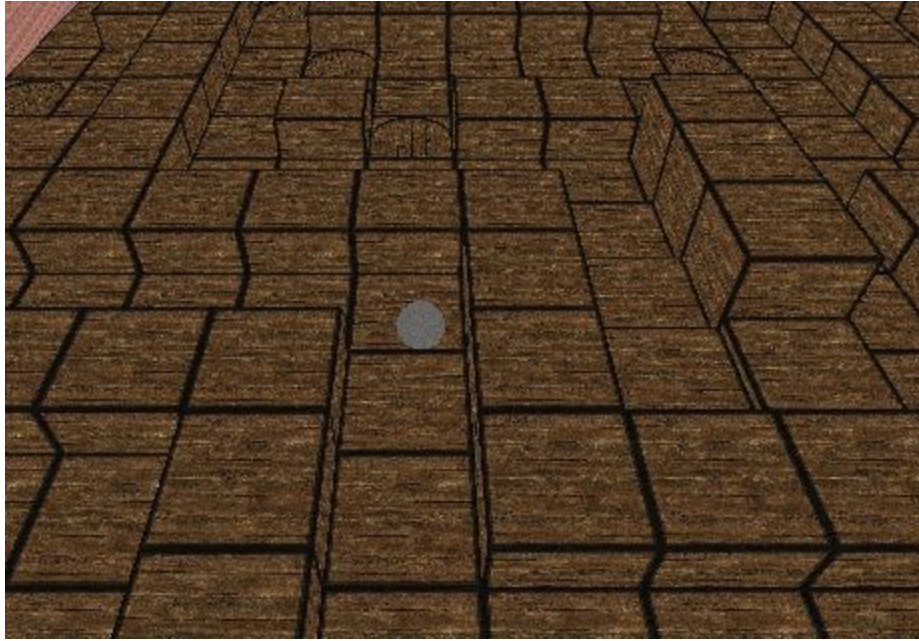# User Manual
PA 11 - Labyrinth

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To compile/run the program from the PA11 bin folder:
```
make -C ../build
```
Then
```
./Lab
```

Objective
To win, the player must navigate the ball to the end of the labyrinth by tilting the board with the arrow keys. Falling into a hole restarts the ball at the start of the labyrinth.

Extra Credit
For extra credit, we have sound effects, a top 10 scores history, multiple balls, multiple levels, day/night mode for difficulty, walls that can change height based on distance from ball, and the ability to load custom levels from text files.

Required Libraries
In order to compile and run this program, some additional programs/libraries must be downloaded and installed. For more information on these programs/libraries, see the Technical Manual. These programs/libraries are:
Magick++, Assimp, OpenGl, Bullet, Irrklang Audio Library

Compiling the Program
To compile the program, from the build folder: `make`
Or from the bin folder type: `make -C ../build`

Executing the Program
To run the program, from the bin folder, type: `./Lab`
To change player's name, type the player's name as the first command line argument e.g.
`./Lab Vance`

User Controls

Right-click: Brings up our menu

Start - Unpause the game.
Stop - Pauses the game while playing.
Quit - Ends the program, writing the top scores to a file before exiting.

Camera controls:
The camera follows the ball and does not need to be manually controlled.
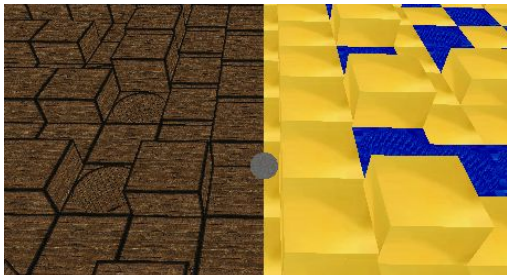
Esc Key: Quits the game entirely
'1': Toggles day and night mode (changes lighting)
'2': Toggles between normal walls and moving walls
'3': Toggles a second ball that also has to complete the maze
'4': Changes the theme to "Golden Age" (right side of image)
'5': Changes the theme to "Stylish Wood" (left side of image)

'R': Resets the current level
'N': Skips to the next level (for demoing/testing purposes)
'Q': Starts the game from the title screen
'.': Goes back to the Title Screen(from certain screens)
'9': Shows the Top Score screen from the Title Screen

'Arrow Keys':
Up key tilts the board forward.
Down key tilts the board back.
Right key tilts the board right.
Left key tilts the board left..

Strategy: The player must tilt the board to navigate the ball from the green starting point to the red end point without falling into any holes along the way. The faster the player completes the maze, the better the score.

Difficulty: To increase difficulty. enable night mode (press 1), enable moving walls (press 2), or enable second ball (press 3), or any combination of the three