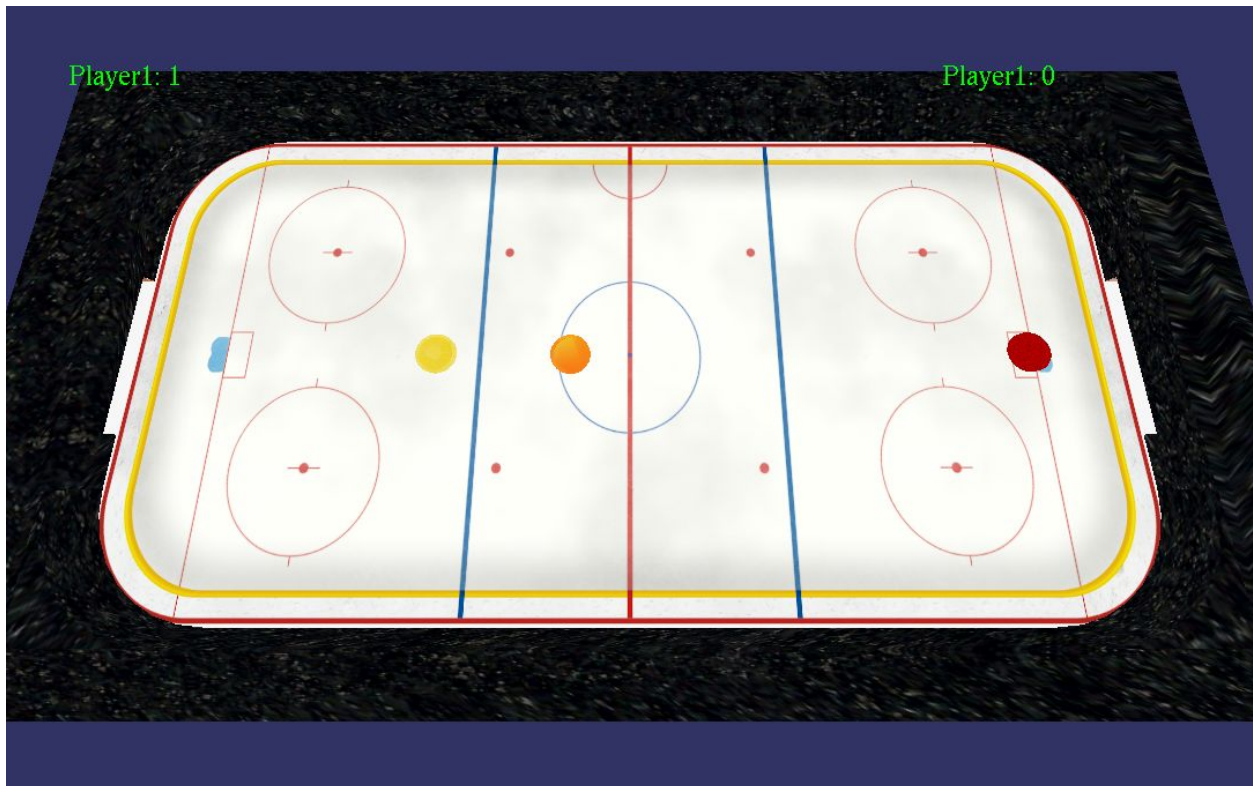


User Manual

PA 9 - Air Hockey

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To compile/run the program from the PA9/bin/ folder:

```
make -C ../build
```

Then

```
./Hockey
```

Objective

To win, a player must be the first to score three goals on the other player's goal. Goals are made by hitting the puck with the player's paddle such that it moves into the goal. An AI can be enabled to play as the yellow puck.

Extra Credit

For extra credit, we have sound effects, a top 10 scores history, Text2D displayed, Game replay, changeable puck shape with correct physics, changeable paddle shape, a simple AI that is toggleable, and changeable player names.

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:

```
./Hockey
```

To change players' names, type the left player's name as the first command line argument and the right player's name as the second command line argument e.g.

```
./Hockey Vance Zeeshan
```

User Controls

Right-click: Brings up our menu

Start - Can start the game from the title menu, or unpause the game while playing

Stop - Pauses the game while playing, pieces do not move

Replay - Starts a new game allowing the player to replay the game without exiting.

Change paddle/Puck shape - Toggles puck/paddles between circles and squares.

Show Top Scores - Shows the topScore menu if and only if user is on the title Screen

Reset Board - Resets the board, but not the scores.

Quit - Ends the program, writing the top scores to a file before exiting.

Camera controls:

'U': Increments the X-position of the camera

'J': Decrements the X-position of the camera

'I': Decrements the Y-position of the camera

'K': Increments the Y-position of the camera

'O': Increments the Z-position of the camera

'L': Decrements the Z-position of the camera

Esc Key: Quits the game entirely

'9': Goes to the top Score menu

'r': Goes back to the title menu at any point and resets the game

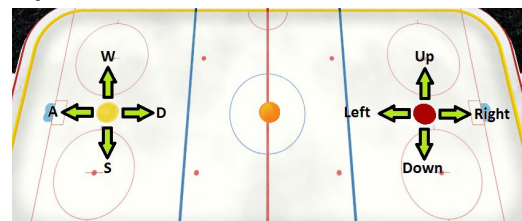
'Space': Goes to game screen

'p': Changes paddles to squares

',': Changes puck to a square

'\': Disables ai or enables

Keyboard:



'WASD':

The 'W' key moves the yellow paddle up.

The 'A' key moves the yellow paddle left.

The 'S' key moves the yellow paddle down.

The 'D' key moves the yellow paddle right.

The 'F' key stops the yellow paddle.

The 'G' key speeds up the yellow paddle.

'Arrow Keys':

Up key moves the red paddle up.

Down key moves the red paddle down.

Right key moves the red paddle right.

Left key moves the red paddle left.

The '/' key speeds up the red paddle.

The '.' key stops the red paddle.

Mouse controls:

While left clicking, the mouse controls the direction of the right (red) paddle.

Changing Views

'1': Top-down view

'2': Angled view

'3': Angled view and follows puck