



COZMONAUTS

CODING



Robotic Music Game

Programmers

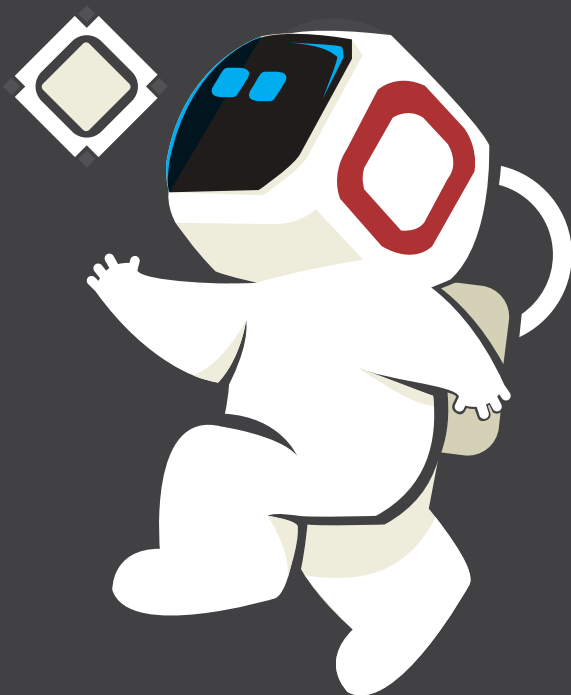
Team Members:

Kevin Blank

G Roques

Ricky Wilson

Briton Powe



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What is Needed



Cozmo Robot

1



In order to play Cube Jam, you will need the following items:



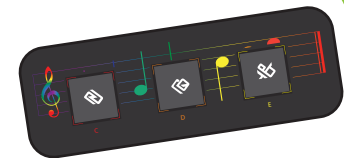
3 Cozmo Cubes

2



3

Smartphone



5

Game Mat

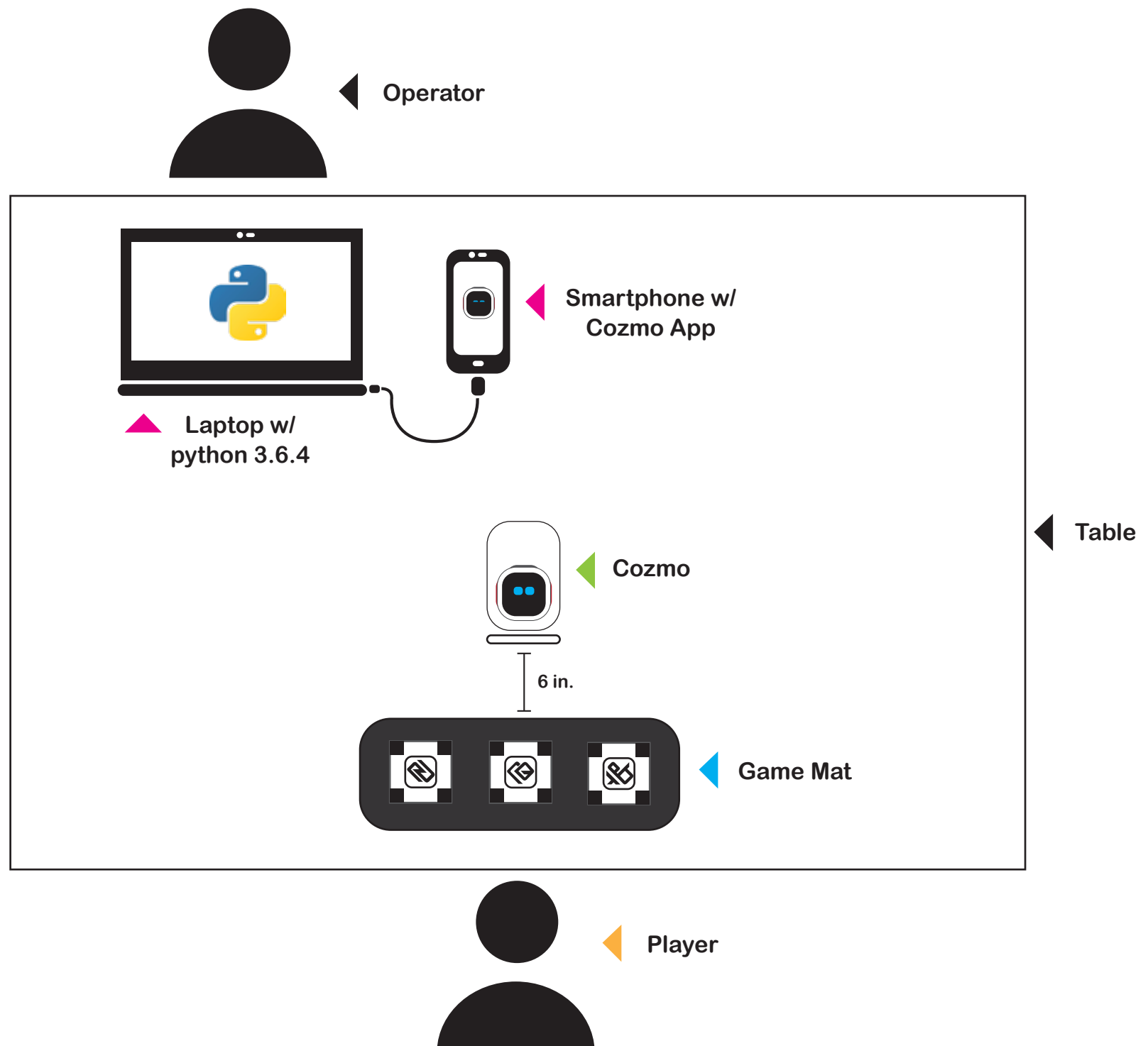


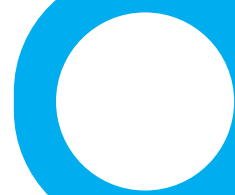
4

Computer

- The phone will need the cozmo app installed.
- The computer needs python 3.6.4 installed

Basic Set-up





Set-up Instructions

1

With the computer connected to the smartphone, launch the SDK, and run the bat file.

2

Have Cozmo placed roughly 6 inches in front of the cubes.

3

Have the blocks placed on top of the corresponding symbols on the game mat.

4

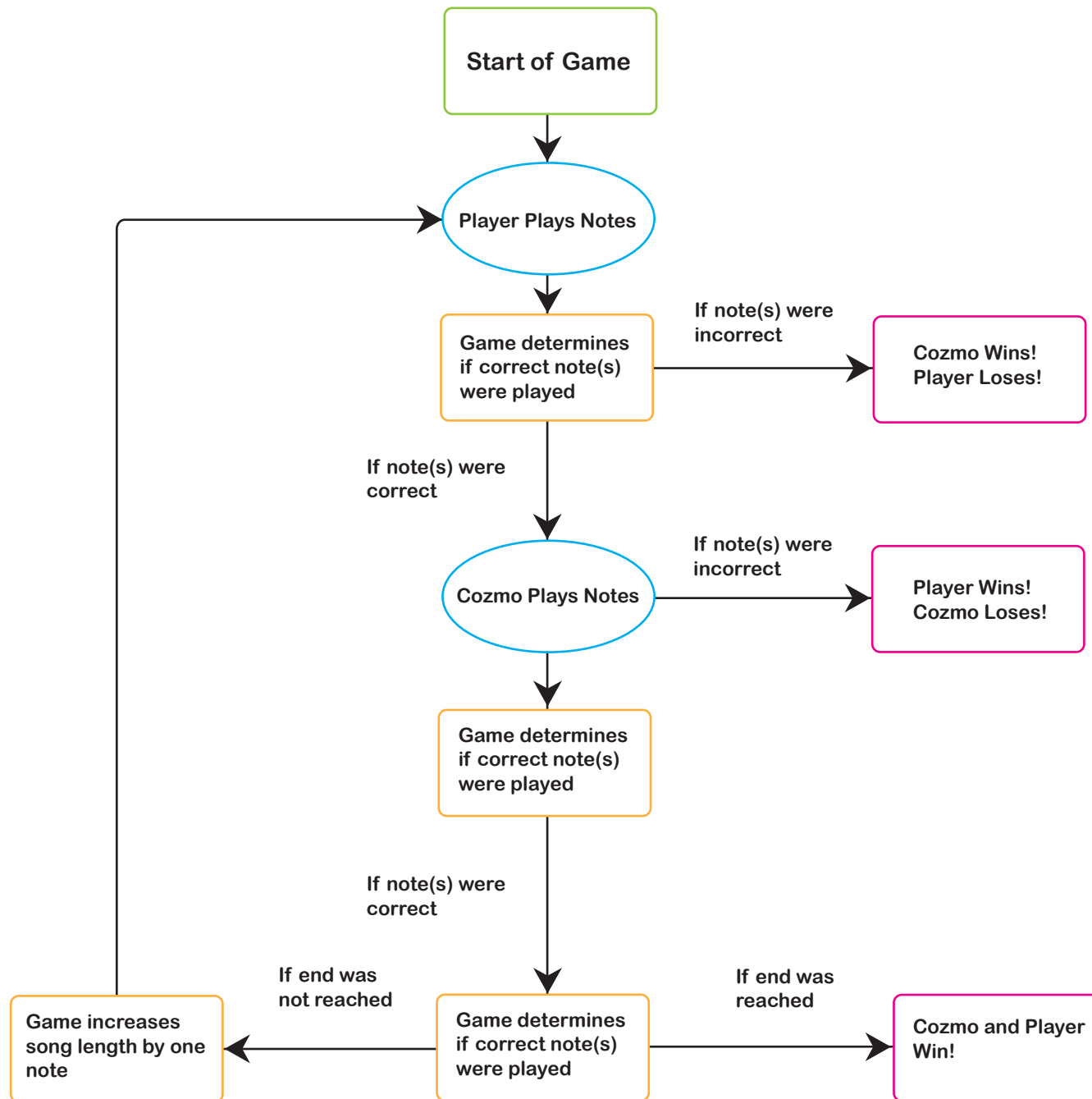
The player should be positioned in front of the cubes, facing Cozmo.



For additional information on how to setup and configure your computer, please look at the projects documentation page at:

<http://cozmo-song-match.readthedocs.io/en/latest/index.html>

Cube Jam Game Flow



Rules of the Game

Game Start

1

The cubes start the game by playing three notes of a song. The player must then mimic the notes in the order that the cubes played them. After the player has finished, Cozmo tries to play the same order of notes. If the player and Cozmo play the correct order of notes, the cubes flash green and the length of the sequence will increase by one for the next round. The cubes will repeat the previous sequence plus the next note.

Player's Turn

2

On the player's turn, the player must repeat the notes played by the cubes. To play a note, the player must tap the corresponding cube. When tapped, the cube will light up and sound. Each round, the game will increase the notes needed to be played by one. This will continue until the game reaches the end of the song, or the player plays the wrong note.

Cozmo's Turn

3

On Cozmo's turn, he will try to repeat the correct sequence of notes. Cozmo plays a note by turning towards the cube and tapping his lift bar. Same with the player, the game will increase the notes needed to be played each round. This will continue until the game reaches the end of the song, or Cozmo plays the wrong note.

Game End

4

If the player and Cozmo complete the entire song together, both win the game. If either player or Cozmo play a wrong note, then the cubes flash red and the game is over. Who ever played the wrong note loses the game.

Common Issues



Problems with Cozmo

If Cozmo becomes out of alignment with the cubes, place him roughly 6 in. from the center cube, facing the last cube he played.

If Cozmo becomes unresponsive, close the instance of the application and re-run the bat file to restart the game.

Problems with Cubes

If the Cubes are not detected by Cozmo, the game will not begin. Try moving Cozmo slightly further away from the cubes as mentioned in the [Basic Set-up Instructions](#) on page 5.

If the batteries in the cubes are low, refer to the Anki Cozmo guide book to change them

Problems with the Application

If the program encountered an error and unexpectedly stops, close any instance of the program still open and re-run the application.



Additional Help

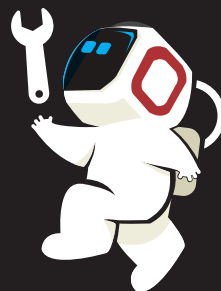
Additional information for this game, can be found online at: <http://cozmo-song-match.readthedocs.io/en/latest/index.html>

The code for this game can be found on the project's GitHub page:

<https://github.com/gbroques/cozmo-song-match>

Additional information on Cozmo can be found on Anki's website at:

<https://www.anki.com/en-us/cozmo>



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