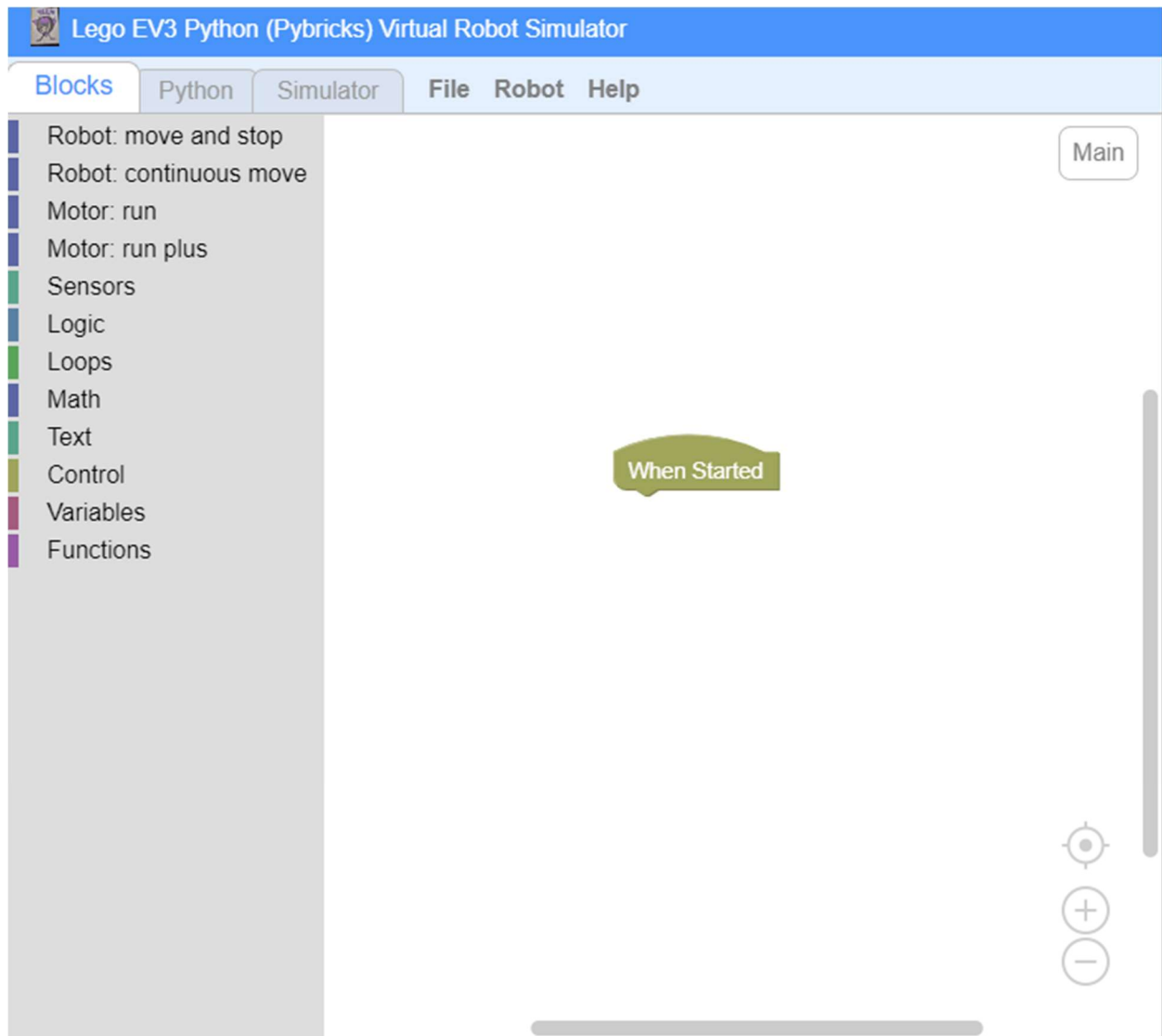


# Welcome to the Simulator!

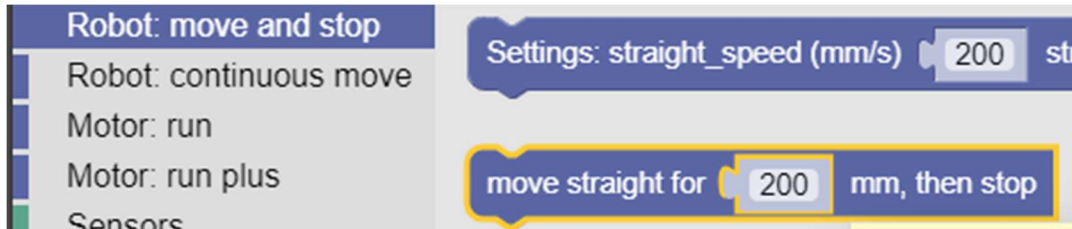
While we will be doing this with the physical robots too, this is a good time to get an understanding of how the simulator works. If you haven't already, open the simulator link on my website, or click here:

<https://fll-pigeons.github.io/gamechangers/simulator/public/>

You will be presented with something close to what you're used to seeing. Take a minute to explore, look at what blocks are available.



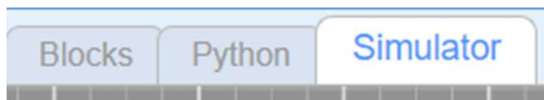
Specifically, let's make our robot move forward and stop. Drag the highlighted block shown below onto the main window:



So it looks like this.



Then click the **Simulator** tab



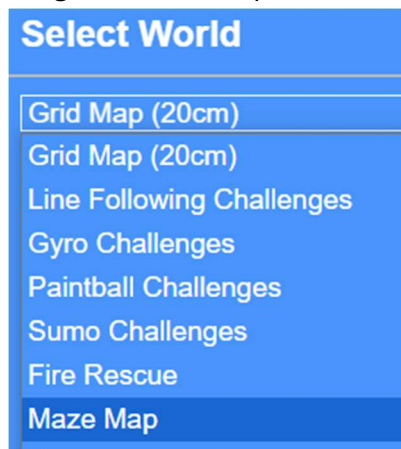
And click the play button!

(Is this window black for you? Use Chrome instead)



# Your missions:

- As before, make your robot drive three (big) blocks forward (60cm)
- Make your robot drive three blocks forward and then BACKWARD for the same to return to the starting position.
- Experiment with implementing the three kinds of turns (SPIN, PIVOT, CURVE)
- Make your robot drive a square (60cm on one side, any type of turn of your choice)
- Make your robot drive the same square, but this time do three in a row, using one kind of turn for each square
  - Ex: One square using spins for turns, one square using pivots, and one square using curves
- If you're all done that, change the world map to "Maze Map".
  - Click "World"



- BEWARE: This will automatically generate a new map each time, so it'll be hard to code! You need to set the "Maze Seed" to your name in order to always have the same maze.
- Have three different programs, one to arrive at each colour. Or one program to sequentially drive to each of the corners.

