

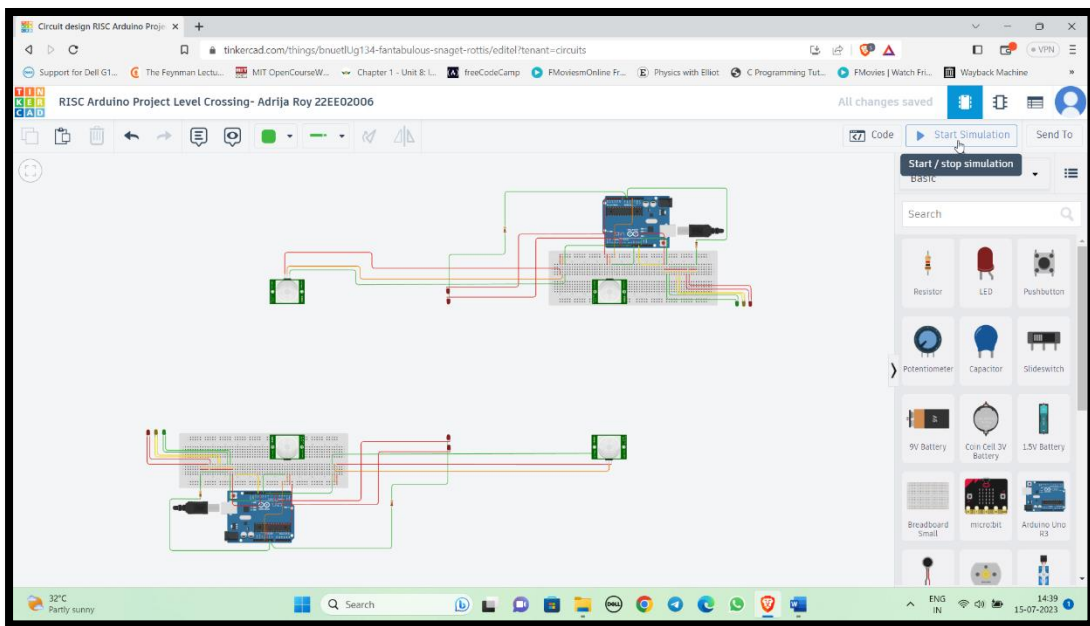
INSTRUCTIONS MANUAL

RISC Arduino Project Level Crossing

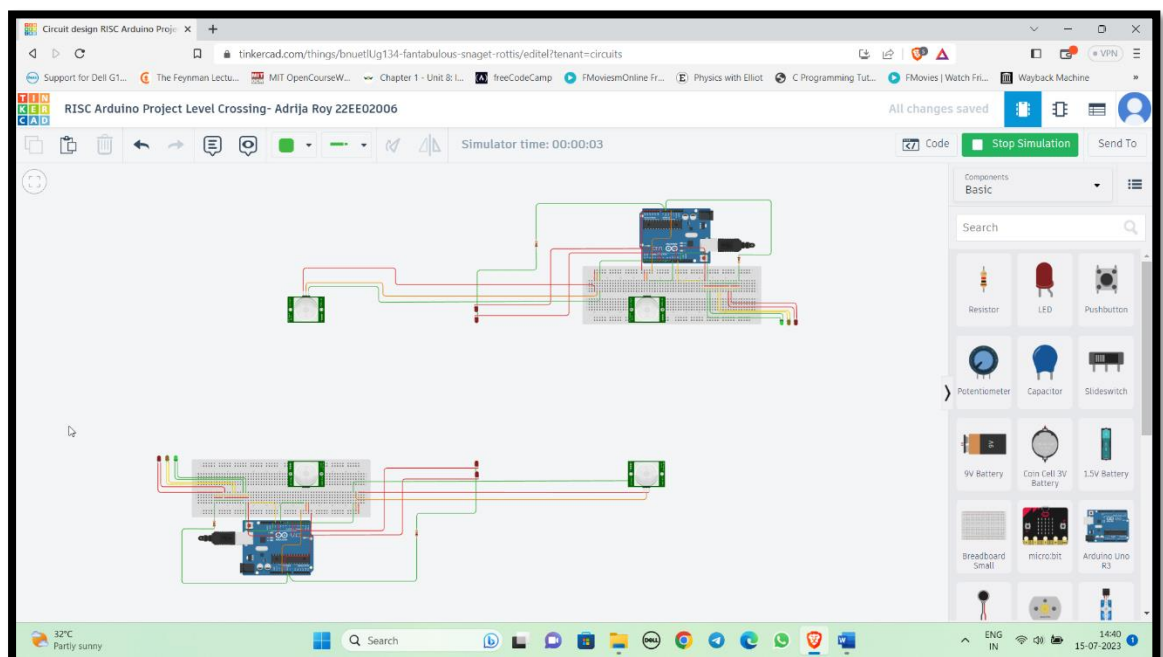
How to Operate:

(Observe **cursor** position in images for demonstration)

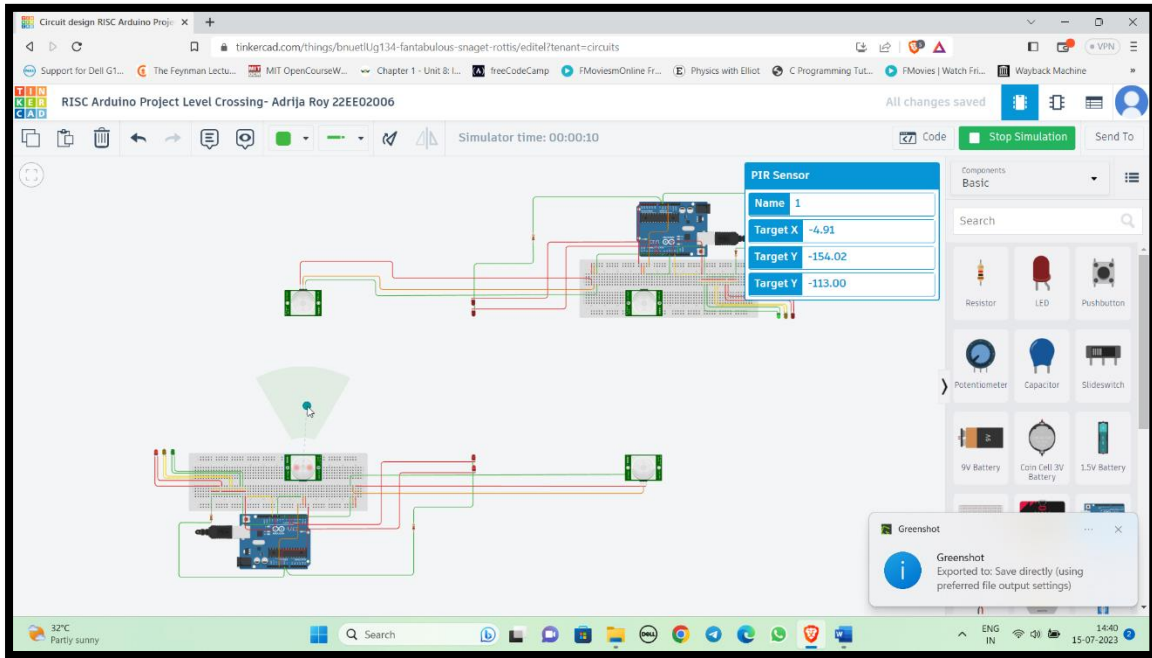
- Click on Start Simulation. The USB is connected to the Arduino Board and Home Signals turn **GREEN**.



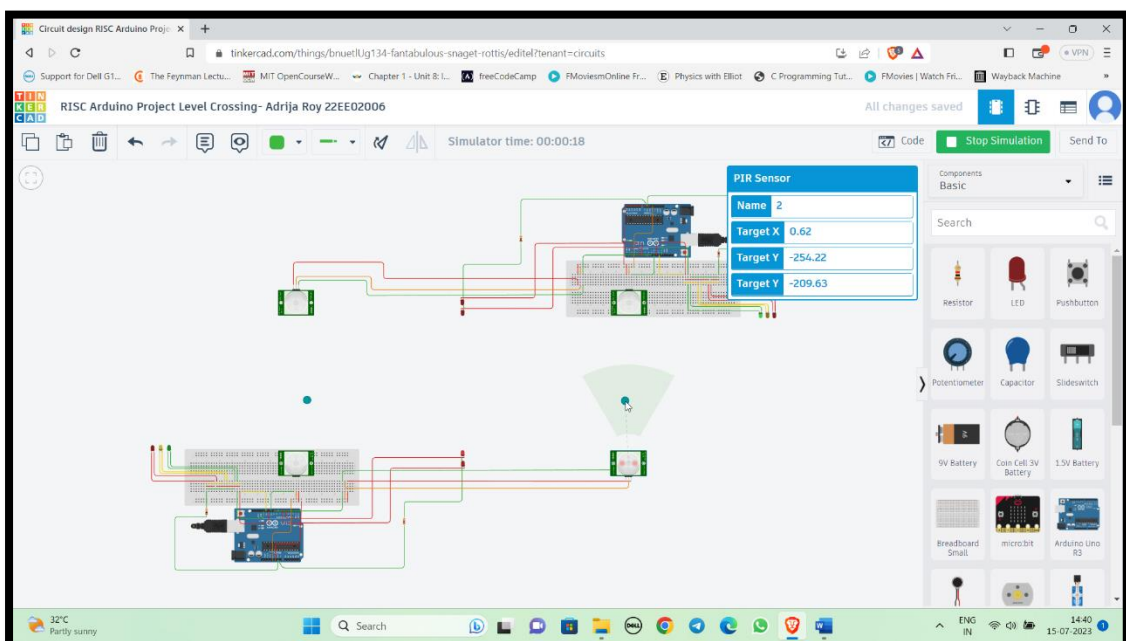
- Assume a train approaching the level crossing along the **UP LINE** (Arduino Board 1).



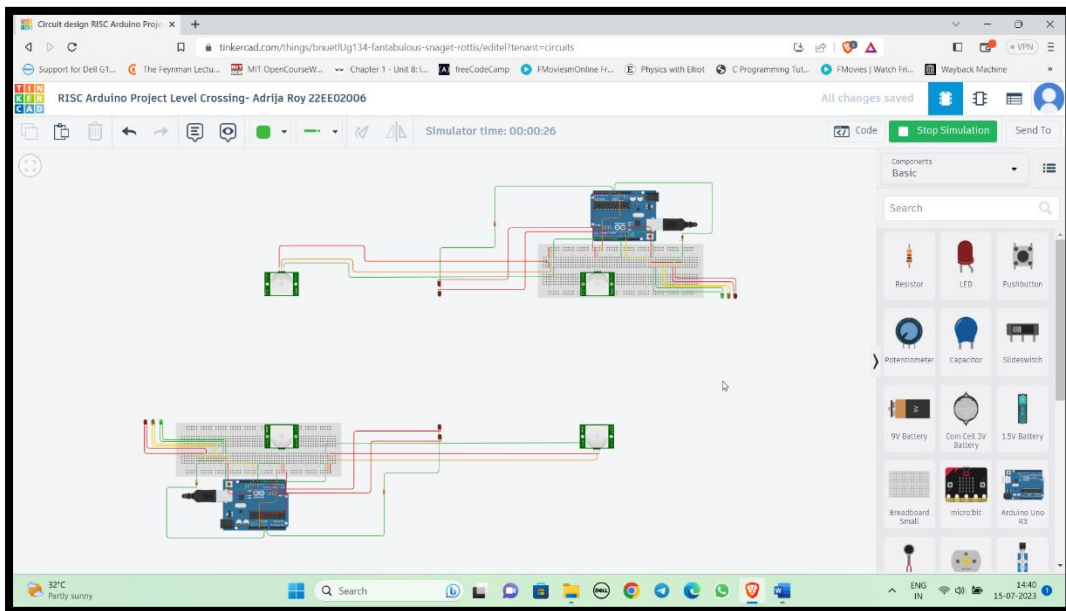
- Click on **PIR SENSOR 1** to activate it (necessary to run TinkerCAD Simulation).
- Select and move the **Circular Object** (Train) to observe sensor activity. **Home Signal 1** will turn **RED** and **Level Crossing Signal 1** will start blinking **RED**. This implies that train is **ENTERING** the level crossing zone.



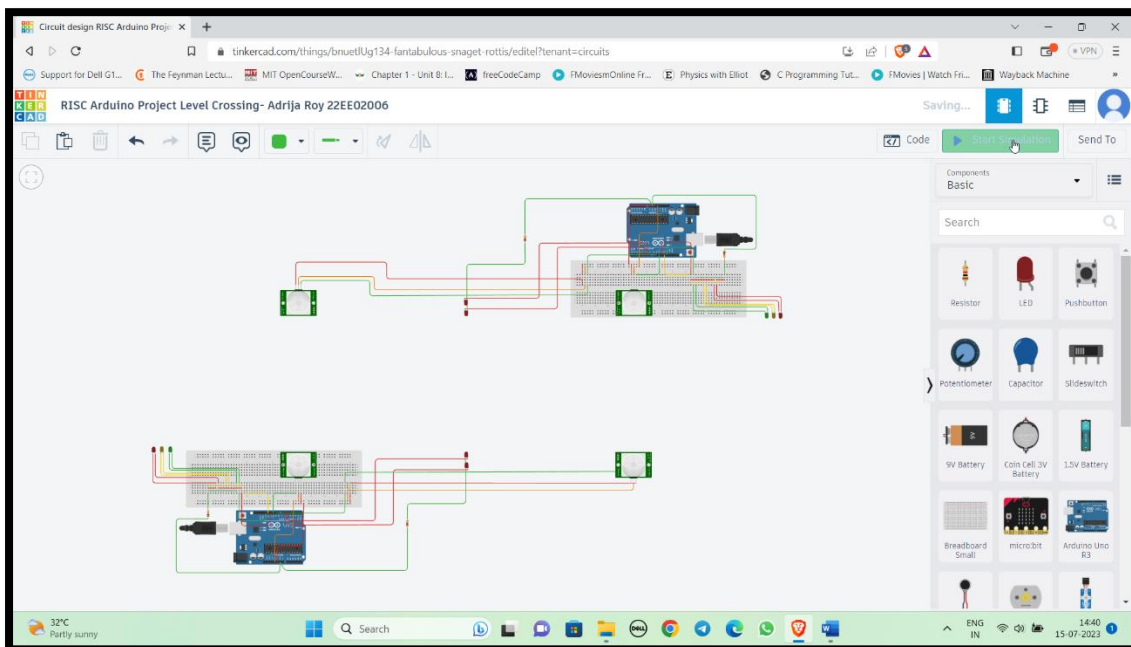
- Click on **PIR SENSOR 2** to activate it.
- Select and move the **Circular Object** (Train) to observe sensor activity. **Home Signal 1** will turn **YELLOW** and **Level Crossing Signal 1** will continue blinking **RED**. This implies that train is **EXITING** the zone.



- On deselecting the **PIR SENSOR 2**, **Home Signal 1** turns **GREEN** again and **Level Crossing Signal 1** stops blinking. This implies the track is clear now.



- Similarly, operate the level crossing along **DOWN LINE** (Arduino Board 2), using **PIR SENSOR 4** and **3**, respectively.
- Click on Stop Simulation.



*****THANK YOU*****