## Project 17, Team 1(LQR)

# Cycle Bot Day 5

## 15 May 2020

## **Team Members**

Shreya Rastogi, Jai Garg, Chinmay Palaye

## **Daily Report**

## Important points

- The model of reaction wheel inverted pendulum at a pivot point was created on V-rep.
- The code to stabilize the V-rep model with LQR was created.
- A meeting was conducted with mentors to give the report and ask queries.
- Design for cycle bot was finalized on fusion 360.

## Tasks Done by each teammate

### Shreya Rastogi

- Balanced the inverted pendulum with a prism pivot point in V-Rep.
- Read research papers about the modelling of BIcycle bot with a reaction wheel.
- Saw videos about path creating in V-rep.

#### Jai Garg

- Finalized the 3d model of cycle bot on fusion 360.
- Helped in stabilizing the simulation of the bot in V-rep.

#### **Chinmay Palaye**

- Worked on balancing prism-based robot, tested its robustness
- Learned to create path and line tracing in VREP

• Made model of final cycle bot in VREP

## Tomorrow's Agenda

- 1. Final Simulation of Cycle bot on V-rep.
- 2. Compilation of weekly report.