Project Name: Automatic gear changer for cycle

Project Description:

We plan to make a mechanism that will change the gear of cycle according to speed and altitude. The gear will be changed according to the values collected by the accelerometer.

Implementation Steps:

1st week: Talk to seniors and mentors, decide plan of action and the required materials and plan the design of the model.

2nd week: Buy the materials required and start making the model plus decide how we will write the code.

3rd week: Test the working of accelerometer by taking test values.

4th week: Try to make algorithms to manage the functions of our model. 5th week: Connect the interface and to the gear mechanism of the cycle.

6th week: Complete the construction and perform test runs to optimize the device.

Learning objectives:

Learn Arduino coding and how the gear mechanism in cycle works. We will have to collect data and analyse it accordingly.

Components required and approximate cost:

Arduino, Gears, accelerometer, speedometer etc