**Team Members: -**

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**Project Name:** Autonomous Car

Our goal is to create an autonomous car that follows a predetermined path that is decided by the user and controlled by the remote control.

Our car would be powered through a rechargeable battery that has enough power to run the car for a few minutes at minimum. To avoid crashing or driving into obstacles, the car would use distance sensors to detect whether something is in front of it, allowing it to follow the path that we intend. To get the wheels moving, we would install servo motors that can support the entire weight of the car. We will be using a remote control in order for us to control the robot even if it follows the track. The remote controller will make the robot move right, left, forward, backwards and could stop when needed. In order for the robot to follow the track, we need to use sensors which one could light the surface and the other reads the surface. If the light hits a white surface, the light is reflected back but when the light hits black surface, the light is absorbed. If the light was not reflected it means that the light is absorbed by the track which is made out of the black color. It means the sensor passes a signal that it didn’t read any reflection therefore the robot has to follow the track which is made out of the black color.

base objectives:

* car - controls motors and steering
* path detection and reaction

stretch goals:

* remote control
* variable speed, reverse gear motor control
* obstacle detection
* obstacle reaction
* reading road signs
* collision avoidance



Our goal is to make the car follow the track using sensors.