# Title

GABOT (GPS Autonomous Bot) using image processing for obstacle identification.

# Scope

GABOT is a primary stage of the driverless motor vehicles that are being developed. The primary stage of the project will include building a robotic car that’ll be equipped with a video camera, proximity sensors, processing unit-a laptop, in this case (which will be connected via a cable to provide power, and data and signal transfer).

The bot will move along a path defined in the pre-fed GPS still image, over a straight line. The car will analyse its surrounding only up to a particular distance, using the front camera of the car, and then will cover the analysed distance based on the situation, repeating the above mentioned steps every time the analysed distance is covered. The car will be made to change its course upon obstacle identification and follow the further defined course.

Analysis of the surrounding will be done by splicing the video feed into frames and then identifying the obstacle from the image.

Hardware and software requirements are specified in the main form.