What makes us unique?

We created a unique design with higher ground clearance than other bots in the competition. We did this while maintaining its COM as low as possible so that it won't topple. It looks aesthetically great and at the same time not compromising on functionality. We even planned to implement the feature to change the height of the bot on the controller's wish, which only failed due to a slight imperfection in the size of the gear we were to use.

Motivation

We wanted to create something unique and did not just want to add 4 motors to a frame, we wanted to go a further step and learn something. We pondered upon several ideas and decided the final design of the bot.

Resources used

Making Lego Car CLIMB Obstacles - YouTube

This video gave us the idea for the frame of the bot. The idea was to use servo motors to change the angle between the legs of the bot and thus increase or decrease the height of the bot at will.

We used the provided electrical and mechanical ppt to learn and went to some more videos to learn codes for servo.