All Terrain Bot

Motivation:

There has been a lot of development in the field of surveillance and exploration. We just thought of making another contribution in this field by making an all-terrain robot which can survive in harsh conditions where humans couldn't and can be used as an exploration device. This type of robot can be used by the armed forces when developed at a larger scale. Our robot can be thought of as a prototype in that direction.

Final demonstration:

In the final demonstration we will have our bot climb stairs, it will be able to move on any kind of surface like sand, rocky path etc.

Timeline:

- Week 1: Designing of the bot using solidworks
- Week 2: Creating the chassis of the bot and implementing basic movement related parts
- Week 3: Design the circuit board for the bot as well as the remote
- Week 4: Incorporating the chassis with the circuitry.
- Week 5: Aesthetics and bot completion
- Week 6: Buffer week

Components required:

Servo motors, belt, gears, basic components for circuitry, battery, connecting wires etc.

Cost estimate:

Nearly 6K.

Reference:

YouTube

https://www.youtube.com/watch?v=OdJpDXZEkU0&index=83&list=WL