Week 10 Senior Design

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# Plan for the Project

Purpose: Agricultural rover for monitoring the field like for crops condition, infestation, temperature, moisture level etcetera. ( this is subject to change)

# Project Implementation

## Hardware

PCB, solar panels, battery, PSoc, Accelerometer, Open MV camera, Hydrometer,

## Software

GPS, AI, API

## Mechanical

Rover, 3D designs, Motor, Good traction wheel,

### **1st Draft Feature**

1. **Feature 1: Solar Capacitor charging and discharging**
2. **Feature 3: Wireless Transmission and Receiver (Antenna)/ Bluetooth.**
3. **Feature 4: Sleep mode if the battery is not being used! \*\*\***
4. **Feature 5: Remote Control Rover that is solar powered. Long distance radio control(PWD signal to PC library and API available in software).**
5. **Feature 6: Video data stream.**
6. **Solar energy harvest (secondary battery)**
7. **Notify the user regarding the battery condition and location (GPS)**

# Overall Responsibility

| **Team Members** | **Roles** |
| --- | --- |
| Aakansha Bhatt | Hardware, software, mechanical |
| Anshu Paudyal | Hardware, Software and some mechanicals too |
| Ingmar Diaz | Hardware, Software, Firmware, Mechanicals |
| Michael Foster | Mechanical, Hardware, can contribute to software |
| Raunaq Chopra | Mechanical, can contribute in hardware/software |
| Yang Ye | Software, Hardware, Mechanical |

## Tentative Schedule/Weekly Responsibility

| Weeks (Date) | Things to do | Aakansha | Anshu | Ingmar | Michael | Raunaq | Yang |
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