**PROJECT VOICE ROVER**

**BASIC BLUEPRINT**

**OBJECTIVE:** To develop a moving voice-controlled robot

There will be 3 main components, hence 3 sub-teams:

Software Sub-Team: Shravan, Prakadeesh

Hardware Sub-Team: Somesh, Abaan

Mechanical Sub-Team: Abu Bakr, Raza

**MID-TERM DATES:**

**Software Sub-Team:**

* Shravan
* Prakadeesh

**Hardware Sub-Team:**

* Somesh
* Abaan

**Mechanical Sub-Team:**

* Abu Bakr
* Raza

The project will be divided into 4 stages as follows:

* **STAGE 1- Due date: 25th January**

1. Research
2. Constraints
3. Documentation

* **Ordering/ outsourcing hardware components- 26th January**
* **STAGE 2- Due date: 8th February**
  + **Mechanical Sub-team:**

1. Developing a basic design on CAD
2. Designing based on the constraints and hardware specifications
3. Propulsion Mechanism
4. Basic 3-D printing
5. Basic Material Research (week 1)
6. Material selection (week 2)
   * **Software Sub-Team:**
     1. App layout
     2. Basic functions
   * **Hardware Sub-Team:**
     1. Setting up each component such as motors, microcontrollers etc.
     2. Communication between different components

* **STAGE 3- Due date: 2-3 weeks**
  + **Mechanical Sub-team:**
    1. Improve/ finalize the CAD design for printing
    2. Developing the prototype after printing the components
    3. Finalize/Change the material selected
  + **Software Sub-Team:**
    1. Setting up Bluetooth connectivity with the app and the hardware components such as micro controllers
    2. Passing text commands
    3. Research on voice command
  + **Hardware Sub-Team:**
    1. Connecting all the components and testing
    2. Integration with the software sub team regarding Bluetooth connectivity and text commands
    3. Research on voice command
* **STAGE 4- Due date: 2 weeks (1st April)**
  + **Mechanical Sub-team:**
    1. Finalize the prototype with the selected materials
    2. Fix all the hardware/ electrical components on the model (week 1)
    3. Debug if any issues arise and build the model again (week 2)
  + **Software/ Hardware Sub-Team:**
    1. Integrating voice commands
    2. Debugging
    3. Finalize everything
* **FINAL PRESENTAION ON 5TH APRIL**