#### TODO:

- You should create an API server.
- It should implement CRUD (**create**, **read**, **update**, **delete**) operations on a related set of data stored in a database.
- You should be able to deploy the project to the cloud using CI/CD.
  - Pipeline
  - continuous integration and continuous deployment
    - There will always be a stable version and the new version must pass all tests and successfully build
- There should be a dozen or more **endpoints**.
  - o "an endpoint is simply one end of a communication channel"
  - "An endpoint is a URL pattern used to communicate with an API."
- Each endpoint as well as all other functions should have unit tests.
  - "Unit testing takes source code, data, and testing procedures and executes a computer process that checks the source code's ability to perform its purpose."
- Each endpoint should be thoroughly documented for Swagger.
  - "Swagger is a set of open-source tools built around the OpenAPI Specification that can help you design, build, document and consume REST APIs"

# **Meeting Notes**

# Meeting 2: 10/13/23

Problem with the current idea (Rover)

- not sure of getting dozen endpoints
- too board to approach

### **New Topic Ideas**

- Medical related?
  - Use 2D xray images and convert to 3D model
  - o telemedicine platform
  - medication management
  - o mental health + wellness
- discuss more for new topic
  - o 14th 8:30pm

#### TO DOs

- Schedule New Meeting Time
- everyone commit ...
  - o 1 Rover research
  - 1 New Topic research
- George
  - o Rover Diagram Update & database structure
- Nishma
  - research on MongoDB
- Christy
  - o API Research
- Semi
  - Meeting Note & API Research

## Meeting 1: 10/6/23

### **Endpoints**

- Video Streaming Video
- Sensory data database
- Users (view/send request permissions)
- Rover (database of rovers and their collected information)
- Telemetry display

### **Project Final Look**

- Rover needs to move to a specified location autonomously
- Send packages to the server as a continuous update as well as a request for its next instruction
- Should have a live video feed
- Telemetry Display
- A user login system
- Live update of rover position

#### **Timeline**

## **Design Documents**

### **Diagrams**

#### **Endpoints**

- Video Streaming
- Sensory data database
- Users (view/send request permissions)
- Rover (database of rovers and their collected information)
- Telemetry display
- Navigation Control
- Package Management
- User Profile & Authentication
- Alerts/Notifications/Feedback

### **Product Description**

Rocket specification sheet: (friendsofamateurrocketry.org)

### Work Division (for 10/8)

- Semi
  - Initial commit for README
  - Rough Timeline
- George

- Rover End-to-End Diagram
- Project Components Diagram
- Christy
  - Document meeting notes
  - Research (Locomotion? API)
- Nishma
  - Brainstorm more endpoints + uses
  - Research (Streaming?) PDF