**Steps to Deploy API**

1. Install Python and flask
   * It is mandatory to make sure that Python is installed on the system,else you can download from python.org
   * Install Flask and Flask CORS by running the commands on terminal:
     + - **pip install flask**
       - **Pip install flask-cors**

2) Creating a project Directory

* + - Created a folder on my local machine where all the files will be saved.
    - Inside the folder, create two files named: **app.py**

**index.html**

3) Run the flask Application

* You can either go to the project directory and open VS code from there or can directly open the project folder from the VS code.
* After opening the project folder,type the below command in the terminal: **python app.py**
* You can see that the web app will be running on: [**http://localhost:5000**](http://localhost:5000)
* Now,for testing the API,open the browser and enter the below URL and check weather API is responding or not:

[**http://localhost:5000/hello?language=English**](http://localhost:5000/hello?language=English)

* You will be able to see the ‘**Hello World’** message on the browser window.
* For Different languages, you can change the language ie. French or Hindi.

5) Open the HTML file

* Now, Open the hello\_world\_api.html file in the browser. Hence, it is a static html file, so you need to double click on the file to open it.
* Now, after opening the html file, select the language from the dropdown and after selecting you will be able to see the greet message as required.

**AWS Deployment**

1. **Deploying the Flask API on AWS**
   * **Step 1:** Create an AWS account and configure the necessary IAM roles to manage EC2 instances.
   * **Step 2:** Launch an EC2 instance with the desired operating system (Ubuntu/Windows) from the AWS Management Console.
     + Select the appropriate security group settings to allow HTTP/HTTPS traffic (port 80) and SSH (port 22).
   * **Step 3:** Connect to the EC2 instance using SSH from your terminal:

**ssh -i "your-key.pem" ec2-user@my\_Ec2\_instance\_public\_key**

**Step 4**: Update the system packages and install Python, Flask, and Git:

**sudo apt update**

**sudo apt install python3-pip**

**sudo pip3 install flask flask-cors**

**Step 5:** Upload the project files (app.py and index.html) to the EC2 instance using SCP or clone your project from GitHub

**Step 6:** Navigate to the project directory on the EC2 instance, then run the Flask app:

**cd /home/ec2-user/Ignite**

**python3 app.py**

**Step 7:** Access the running Flask app via the EC2 instance's public IP address:

**http://your-ec2-instance-public-ip:5000/hello?language=English**

***The API has been successfully deployed on AWS. You can now test the API by selecting different languages from the dropdown in the index.html file. The Flask API will return the appropriate greeting message.***