API setup

We will be using FastAPI for this project and setup as per the following steps

Prerequisites:

1. Python installed on your machine.

2. Pip installed (comes with Python by default).

3. Use and IDE for example Visual Studio Code

Setup Instructions:

1. **Clone or Download the API Project:** Clone or download the API project. Then save it to a preferred location on your machine.

2. **Navigate to the Project Directory:** Open a terminal or command prompt and navigate to the directory where the API project is saved using the `cd` command. For example:

   ```
   `cd C:\Users\Admin\Api`
   ```

3. **Create and Activate Virtual Environment (Optional but Recommended):** It's a good practice to create a virtual environment to isolate the project dependencies. Users can create a virtual environment using the following command:

   ```
   `python -m venv myenv`
   ```

Then, they can activate the virtual environment:

- On Windows:

  ```
  myenv\Scripts\activate
  ```

- On macOS and Linux:

```
source myenv/bin/activate
```

1. **Install Required Dependencies:** Users should install the required Python dependencies listed in the `requirements.txt` file using pip:

```
`pip install -r requirements.txt`
```

2. **Run the API using Uvicorn:** To run the API using Uvicorn, users can execute the following command in the Terminal:

```
`uvicorn app:app --reload`
```

- `app:app` specifies the location of the FastAPI application object.
- `-reload` enables automatic reloading of the server when code changes are detected, which is helpful during development.

1. **Accessing the API:** Once the API server is running, users can access it using a web browser or tools like Postman. By default, the API will be accessible at `http://localhost:8000`.

2. **Making Predictions:** Users can make predictions by sending HTTP requests to the API endpoints defined in the FastAPI application.