Documentation for the Fruit Quality Grading Application

The fruit quality grading application developed by Bello Oluwatomisin is called the more web application. It is a 2-tier application developed using the following stack

- Python - The Python programming language is used to build the machine learning model and the backend API server
- Javascript - The Javascript programming language is used to build the frontend server
- Tailwindcss - Design the interface of the frontend server

Morewebapp

Morewebapp is a full-stack application built for classifying and grading the quality of banana, oranges and apples.

TechStack

- Python
- Javascript
- TailwindCss

GitHub Link

- https://github.com/t-bello7/more

How to Setup

Prerequisite

The following tools need to be installed on your machine to run the application

- Python - You can go [here](https://www.python.org/downloads/) to download and install
- NodeJS - You can go [here](https://nodejs.org/en/download/current) to download and install
- Anaconda - You can go [here](https://www.anaconda.com/products/individual) to download and install
- Yarn package manager - You can go [here](https://yarnpkg.com/getting-started/install) on how to install

Get your computer's IP address by running the command below on your terminal.

- On Windows

```
ifconfig | findstr IPv4
```

- On Linux

```
hostname -I | awk '{print $1}'
```

- On Mac

```
ipconfig | grep "inet" | grep -v 127.0.0.1 | awk '{print $2}'

```

Start the backend server

- From the root directory of the folder change directory in the terminal to the backend folder

```
cd backend
```

- Create a virtual environment with the Python 3.7 version

```
conda create -n <your_env_name> python=3.7.x
```

- If you already created a virtual environment you can start the virtual environment with the command

```
conda activate <your_env_name>
```

- Install project dependencies

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

- Replace the host address in the app.py file with your computers ip address
    ```
    app.run(debug=True, host='<your_computer_ip_address>')
    ```
- Run the command to start the server

```
python app.py
```

Start the frontend server

- From the root directory of the folder change directory to the frontend

```
cd frontend
```

- Install project dependencies

  ```
  yarn install
  ```

- Replace the host address in the hooks/uploadHook.js file with your computers ip address

```
  const response = await axios.post(`http://<your_computer_ip_address>${url}`, formData, {
```

- Run the command to start the server

```
yarn dev

```

- Go to the URL - http://localhost:5137 to view the page