Requirements:

* Android Phone (Main device)
* Laptop/Desktop (Acting as server for Flask API, running the React Native Application code)
* JavaScript/NodeJS v20.12.2 installed [Node.js — Download Node.js® (nodejs.org)](https://nodejs.org/en/download/prebuilt-installer)
* Python 3.11.7 installed [Python Release Python 3.11.7 | Python.org](https://www.python.org/downloads/release/python-3117/)
* Ensure that Laptop/Desktop and Android Phone are in the same LAN
* Have the source code set-up on Laptop/Desktop. Ensure that the project structure is specifically like this. “C:\\Users\\placeholder\\Documents\\FoodExpiryDetectorApp\\FoodExpiryDetectorApp\\” by downloading the source code to the Documents folder

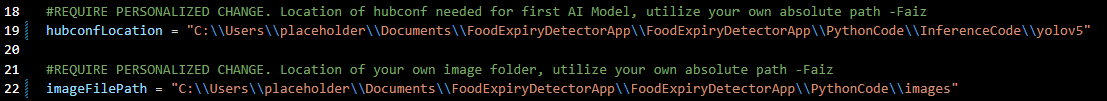
**Step One:** Install Python dependencies and React Native dependencies. Open the source code in your IDE. Navigate to FoodExpireTracker and install the dependencies using command, ‘pip install -r requirements.txt’. Install React Native dependencies using, ‘npm install’.

A black background with white text

Description automatically generated

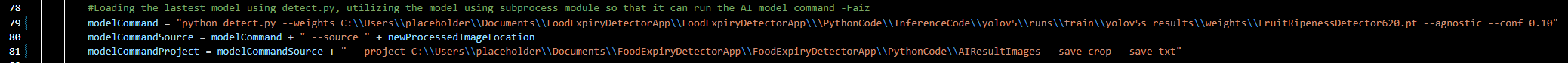


**Step Two:** Change the placeholder in the directory to that of your username in app.py to that of your own laptop workspace.







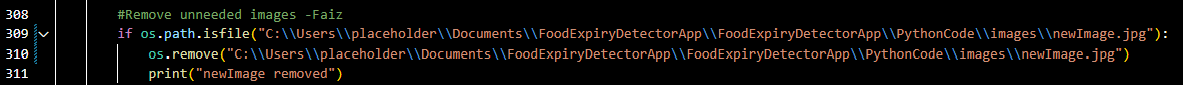


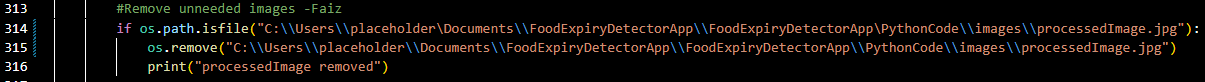












**Step Three:** Install Expo Go Application (SDK 49 compatible version) on the [Install Expo Go for SDK 49 on an Android device - Expo](https://expo.dev/go?sdkVersion=49&platform=android&device=true) website, on your phone.

A screenshot of a device

Description automatically generated

**Step Four:** Configure Flask code IP address settings to reflect those of your laptop/desktop.

A screen shot of a computer program

Description automatically generated

Change the code here in AddFoodScreen.js file, under the handleInference function, line 75 in AddFoodScreen.js.

A computer screen with text

Description automatically generated

Also change this line in app.py, at the end of the code, line 333 in app.py.

**Step Five:** Run both React Native Application and python backend code. Run the React Native Application by using the command, ‘npx expo start’, in the FoodExpireTracker directory. Run the app.py code using the run button in VSC or ‘Python app.py’ command in the PythonCode directory. Ensure that React Native Application is using expo go configuration.



Running React Native Application



Running Python backend

A black background with white text

Description automatically generated

Ensure that React Native Application is using expo go configuration.

**Step Six:** Run Expo Go application on phone and scan the QR code that is displayed on the Laptop/Desktop from the Expo CLI. Application should run and ready to be used.

A screenshot of a phone

Description automatically generated

Select Scan QR Code

A black background with a black square

Description automatically generated with medium confidence

Example QR Code to scan on Expo CLI

A white background with black dots

Description automatically generated

Application loaded.