project/

├── backend/

│ ├── app.py

│ ├── disease_info.py

│ └── trained_model.h5

│

├── frontend/

│ └── website code

## 1 Overview (What is this?)

This system provides **plant disease detection from images** using a **deep learning model**.

- The **model** is served using **FastAPI**
- The **website** sends an image to the API
- The API returns:
  - Disease name
  - Description
  - Treatment recommendations

⚠ The system runs **locally / internally only** (no public deployment).

**Website + API on the SAME machine**

This is the cleanest setup.

**2. Run FastAPI**

uvicorn app:app --port 8000 #MOST IMPORTANT RUN THIS IN Terminal

```
fetch("http://localhost:8000/predict", {
 method: "POST",
 body: formData
})
```

**3. API Endpoint Specification**

**Endpoint**

POST /predict

**Request**

- **Type:** multipart/form-data
- **Field name:** image
- **Accepted formats:** JPG, PNG

**Example Request**

POST http://localhost:8000/predict

FormData:

image: plant_leaf.jpg

---

**Response (Success – 200)**


```
{
  "predicted_label": "Tomato___Late_blight",
  "title": "Late blight (Tomato)",
  "description": "Water-soaked lesions that quickly turn brown or black.",
  "advice": [
    "Remove infected plants immediately",
    "Apply recommended fungicides",
    "Use certified seed"
  ]
}
```

### 4 Test in browser

Open:

**http://127.0.0.1:8000/docs**

Upload an image and test /predict