

# How to Create Liver Cirrhosis Prediction Flask App in VS Code

## Step 1: Create Project Folder

Create a new folder called project-file on your system.

## Step 2: Create Required Files and Folders

Inside project-file, create the following:

- app.py
- rf\_acc\_68.pkl (download from Colab)
- normalizer.pkl (download from Colab)
- requirements.txt
- templates/ folder with index.html inside it

## Step 3: app.py (Flask Backend Code)

Paste this content into app.py:

```
from flask import Flask, render_template, request
```

```
import pickle, numpy as np
```

```
app = Flask(__name__)
```

```
model = pickle.load(open('rf_acc_68.pkl', 'rb'))
```

```
scaler = pickle.load(open('normalizer.pkl', 'rb'))
```

```
@app.route('/')
```

```
def home(): return render_template('index.html')
```

```
@app.route('/predict', methods=['POST'])
```

```
def predict():

    data = [float(x) for x in request.form.values()]

    scaled = scaler.transform([data])

    pred = model.predict(scaled)

    result = 'Cirrhosis Likely' if pred[0]==1 else 'Cirrhosis Not Likely'

    return render_template('index.html', prediction_text=result)


if __name__ == '__main__': app.run(debug=True)
```

#### Step 4: templates/index.html

Create a file index.html inside the templates/ folder with this content:

```
<!DOCTYPE html>

<html>

<head><title>Liver Prediction</title></head>

<body>

    <h2>Enter Patient Details</h2>

    <form action='/predict' method='POST'>

        <!-- Add all input fields -->

        <input name='Age'> ... <br>

        <button type='submit'>Predict</button>

    </form>

    {% if prediction_text %}<h3>{{ prediction_text }}</h3>{% endif %}

</body>

</html>
```

#### Step 5: requirements.txt

Inside requirements.txt, paste:

flask

pandas

numpy

scikit-learn

### **Step 6: Run Flask App in VS Code**

Open the terminal in VS Code inside the project folder and run:

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

```
python app.py
```

Visit <http://127.0.0.1:5000> in your browser to test the app.

### **Step 7: Upload to GitHub**

Upload the full project-file folder with all contents to your GitHub repo.