

# ML\_Web

September 7, 2023

Need to install flask-ngrok, pyngrok to run Flask in google colab. ngrok will tunnel localhost 127.0.0.0 -> external url

```
[ ]: !pip install flask-ngrok
      !pip install pyngrok
```

You need to replace 'Your ngrok token' with your ngrok token. Token can be achieved from ngrok after registering

```
[2]: !ngrok authtoken 'Your ngrok token'
```

Authtoken saved to configuration file: /root/.ngrok2/ngrok.yml

## Step 7 - Deployment

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model exported during earlier step will be loaded and entegagred with web framework (we will use Python Flask as a integration framework)

```
[3]: from flask import Flask, jsonify, request
      from flask_ngrok import run_with_ngrok
      import pickle

      app = Flask(__name__)
      #below step is required only when application is hosted in google colab
      run_with_ngrok(app)

      with open('/content/drive/MyDrive/Python/AI/models/model.pkl', 'rb') as file:
          model = pickle.load(file)

      @app.route('/')
      def home():
          return '<p>Hello World</p>'

      @app.route("/predict", methods=['POST'])
      def predict():
          content_type = request.headers.get('Content-Type')
```

```

if content_type == 'application/json':
    json = request.json
    age = json.get('age')
    distance = json.get('distance')
    nos = json.get('nos')
    price = model.predict([[age, distance, nos]])
    return f"{price}"
else:
    return 'Content-Type not supported!'

if __name__ == "__main__":
    app.run()

```

```

* Serving Flask app '__main__'
* Debug mode: off

```

```

INFO:werkzeug:WARNING: This is a development server. Do not use it in a
production deployment. Use a production WSGI server instead.

```

```

* Running on http://127.0.0.1:5000

```

```

INFO:werkzeug:Press CTRL+C to quit

```

```

* Running on http://b72b-34-135-29-173.ngrok-free.app

```

```

* Traffic stats available on http://127.0.0.1:4040

```

```

INFO:werkzeug:127.0.0.1 - - [07/Sep/2023 06:29:32] "GET / HTTP/1.1" 200 -

```

```

INFO:werkzeug:127.0.0.1 - - [07/Sep/2023 06:29:33] "GET / HTTP/1.1" 200 -

```

```

INFO:werkzeug:127.0.0.1 - - [07/Sep/2023 06:29:33] "GET /favicon.ico

```

```

HTTP/1.1" 404 -

```

```

INFO:werkzeug:127.0.0.1 - - [07/Sep/2023 06:29:50] "GET / HTTP/1.1" 200 -

```

```

/usr/local/lib/python3.10/dist-packages/sklearn/base.py:439: UserWarning: X does
not have valid feature names, but LinearRegression was fitted with feature names
warnings.warn(

```

```

INFO:werkzeug:127.0.0.1 - - [07/Sep/2023 06:32:24] "POST /predict HTTP/1.1" 200

```

```

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```

```

/usr/local/lib/python3.10/dist-packages/sklearn/base.py:439: UserWarning: X does
not have valid feature names, but LinearRegression was fitted with feature names
warnings.warn(

```

```

INFO:werkzeug:127.0.0.1 - - [07/Sep/2023 06:38:43] "POST /predict HTTP/1.1" 200

```

```

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```

Testing API

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```

curl -d '{ "age": 15, "distance": 500, "nos": 10 }' -H "Content-Type: application/json" -X POST
https://b72b-34-135-29-173.ngrok-free.app/predict

```