In [1]:

```
!pip install fastapi
!pip install uvicorn
!pip install pickle5
!pip install pydantic
!pip install scikit-learn
!pip install requests
!pip install pypi-json
!pip install pyngrok
!pip install nest-asyncio
```

```
om pypi-json) (1.4.1)
Requirement already satisfied: packaging>=21.0 in c:\programdata\anaconda3\lib\site-packages (from pypi-json)
(21.3)
Requirement already satisfied: requests>=2.26.0 in c:\programdata\anaconda3\lib\site-packages (from pypi-json)
(2.28.1)
Requirement already satisfied: apeye-core>=1.0.0b2 in c:\users\user\appdata\roaming\python\python39\site-packa
ges (from apeye>=1.1.0->pypi-json) (1.1.5)
Requirement already satisfied: domdf-python-tools>=2.6.0 in c:\users\user\appdata\roaming\python\python39\site
-packages (from apeye>=1.1.0->pypi-json) (3.10.0)
Requirement already satisfied: platformdirs>=2.3.0 in c:\programdata\anaconda3\lib\site-packages (from apeye>=
1.1.0->pypi-json) (2.5.2)
Requirement already satisfied: pyparsing!=3.0.5,>=2.0.2 in c:\programdata\anaconda3\lib\site-packages (from pa
ckaging>=21.0->pypi-json) (3.0.9)
Requirement already satisfied: charset-normalizer<3,>=2 in c:\programdata\anaconda3\lib\site-packages (from re
quests>=2.26.0->pypi-json) (2.0.4)
Requirement already satisfied: idna<4,>=2.5 in c:\programdata\anaconda3\lib\site-packages (from requests>=2.2
6.0->pypi-json) (3.3)
Requirement already satisfied: urllib3<1.27,>=1.21.1 in c:\programdata\anaconda3\lib\site-packages (from reque
sts>=2.26.0->pypi-json) (1.26.11)
Requirement already satisfied: certifi>=2017.4.17 in c:\programdata\anaconda3\lib\site-packages (from requests
```

In [2]:

```python
from fastapi import FastAPI
from pydantic import BaseModel
import pickle
import json
import uvicorn
from pyngrok import ngrok
from fastapi.middleware.cors import CORSMiddleware
import nest_asyncio
from fastapi.responses import FileResponse
```

In [3]:

```python
app = FastAPI()

@app.get("/")
def read_root():
    return {"message": "Welcome to my FastAPI app!"}
```

In [4]:

```python
origins = ["*"]

app.add_middleware(
    CORSMiddleware,
    allow_origins=origins,
    allow_credentials=True,
    allow_methods=["*"],
    allow_headers=["*"],
)
```

In [5]:

```python
class model_input(BaseModel):

    Pregnancies : int
    Glucose : int
    BloodPressure : int
    SkinThickness : int
    Insulin : int
    BMI : float
    DiabetesPedigreeFunction : float
    Age : int
```

In [6]:

```python
# loading the saved model
diabetes_model = pickle.load(open(r"c:/Users/user/Desktop/Machine learning pratice/Deploy diabtes prediction M
```

In [7]:

```python
@app.post('/diabetes_prediction')
def diabetes_predd(input_parameters : model_input):

    input_data = input_parameters.json()
    input_dictionary = json.loads(input_data)

    preg = input_parameters.Pregnancies
    glu = input_parameters.Glucose
    bp = input_parameters.BloodPressure
    skin = input_parameters.SkinThickness
    insulin = input_parameters.Insulin
    bmi = input_parameters.BMI
    dpf = input_parameters.DiabetesPedigreeFunction
    age = input_parameters.Age


    input_list = [preg, glu, bp, skin, insulin, bmi, dpf, age]

    prediction = diabetes_model.predict([input_list])

    if (prediction[0] == 0):
        return 'The person is not diabetic'
    else:
        return 'The person is diabetic'
```

In [8]:

```
!ngrok authtoken 2y2QB4cLo06u9gSfz48ujoz2COd_2NM22i989Qy1kdRv4S292

```

```
Authtoken saved to configuration file: C:\Users\user\AppData\Local/ngrok/ngrok.yml
```

In [*]:

```python
@app.get("/favicon.ico")
def favicon():
    return {"message": "Welcome to my FastAPI app!"}

# Step 1: Connect to ngrok tunnel on the specified port
ngrok_tunnel = ngrok.connect(8000)
print('Public URL:', ngrok_tunnel.public_url)

# Step 2: Apply nest_asyncio for compatibility in notebooks
nest_asyncio.apply()

# Step 3: Run your FastAPI/Uvicorn app
uvicorn.run(app, host="0.0.0.0", port=8000)
```

```
such host"
t=2025-06-08T10:56:39+0100 lvl=eror msg="failed to reconnect session" obj=tunnels.session err="failed to dial
ngrok server with address \"connect.us.ngrok-agent.com:443\": dial tcp: lookup connect.us.ngrok-agent.com: no
such host"
t=2025-06-08T10:57:09+0100 lvl=eror msg="failed to reconnect session" obj=tunnels.session err="failed to dial
ngrok server with address \"connect.us.ngrok-agent.com:443\": dial tcp: lookup connect.us.ngrok-agent.com: no
such host"
t=2025-06-08T10:57:39+0100 lvl=eror msg="failed to reconnect session" obj=tunnels.session err="failed to dial
ngrok server with address \"connect.us.ngrok-agent.com:443\": dial tcp: lookup connect.us.ngrok-agent.com: no
such host"
t=2025-06-08T10:58:09+0100 lvl=eror msg="failed to reconnect session" obj=tunnels.session err="failed to dial
ngrok server with address \"connect.us.ngrok-agent.com:443\": dial tcp: lookup connect.us.ngrok-agent.com: no
such host"
t=2025-06-08T10:58:39+0100 lvl=eror msg="failed to reconnect session" obj=tunnels.session err="failed to dial
ngrok server with address \"connect.us.ngrok-agent.com:443\": dial tcp: lookup connect.us.ngrok-agent.com: no
such host"
t=2025-06-08T10:59:09+0100 lvl=eror msg="failed to reconnect session" obj=tunnels.session err="failed to dial
ngrok server with address \"connect.us.ngrok-agent.com:443\": dial tcp: lookup connect.us.ngrok-agent.com: no
such host"
t=2025-06-08T10:59:39+0100 lvl=eror msg="failed to reconnect session" obj=tunnels.session err="failed to dial
```

In [ ]: