

Wireframe Documentation

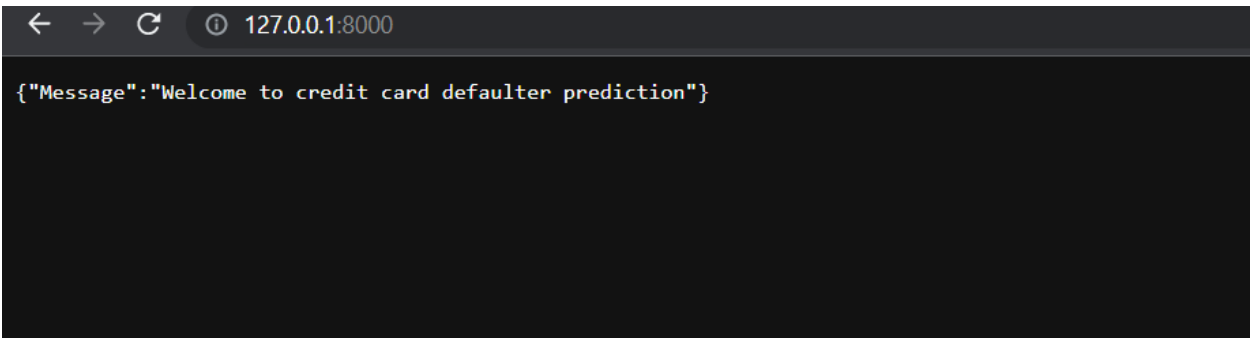
Credit Card Default Prediction

Home page

The model is deployed in FastAPI as an API and after running the link to the connection at 127.0.0.1:8000, the user is greeted with a home page as seen below

```
if __name__ == '__main__':  
    uvicorn.run(app, host = '127.0.0.1', port = 8000)
```

```
INFO:      Started server process [16252]  
INFO:      Waiting for application startup.  
INFO:      Application startup complete.  
INFO:      Uvicorn running on http://127.0.0.1:8000 (Press CTRL+C to quit)
```

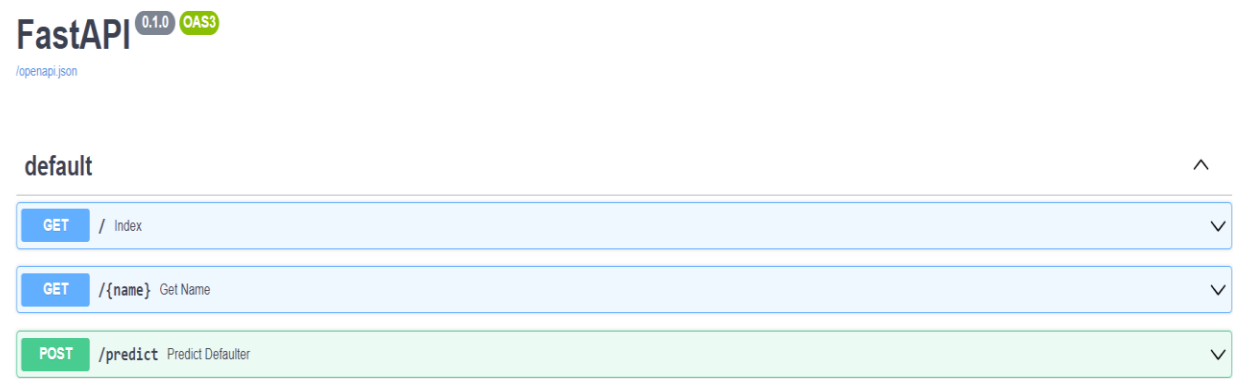


The screenshot shows a web browser window with the address bar displaying "127.0.0.1:8000". The main content area of the browser shows a JSON response: {"Message": "Welcome to credit card defaulter prediction"}. The browser interface includes back, forward, and refresh buttons, as well as a search icon.

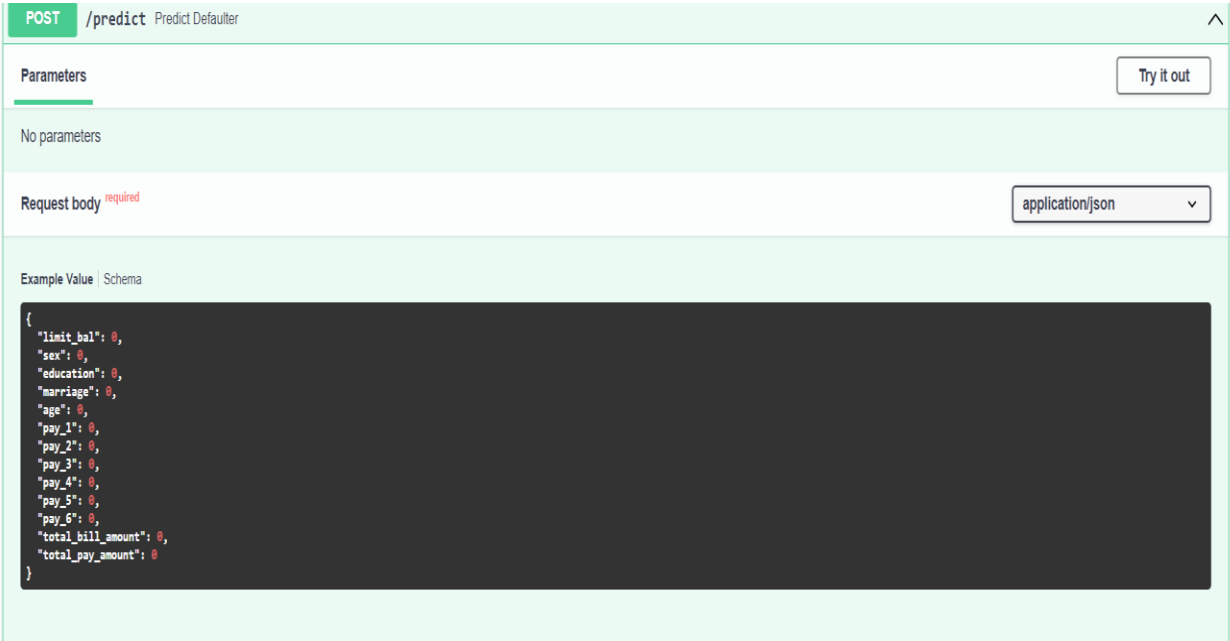
```
{"Message": "Welcome to credit card defaulter prediction"}
```

Prediction Page

The link can be diverted to the Swagger UI by typing “/docs” at the end of the link



The user can start the prediction by selecting the predict pane and can input values so that the model can classify the customer as a defaulter or not



The values can be entered to the model by pressing on the “Try it out” button

Request body required application/json

```
{
  "limit_bal": 50000,
  "sex": 2,
  "education": 2,
  "marriage": 1,
  "age": 37,
  "pay_1": 0,
  "pay_2": 0,
  "pay_3": 0,
  "pay_4": 0,
  "pay_5": 0,
  "pay_6": 0,
  "total_bill_amount": 231334,
  "total_pay_amount": 8388
}
```

Execute

After pressing the “Execute” button, the model outputs the prediction below, and it can be seen that the customer is not a defaulter

Responses

Curl

```
curl -X 'POST' \
  'http://127.0.0.1:8000/predict' \
  -H 'accept: application/json' \
  -H 'Content-Type: application/json' \
  -d '{
    "limit_bal": 50000,
    "sex": 2,
    "education": 2,
    "marriage": 1,
    "age": 37,
    "pay_1": 0,
    "pay_2": 0,
    "pay_3": 0,
    "pay_4": 0,
    "pay_5": 0,
    "pay_6": 0,
    "total_bill_amount": 231334,
    "total_pay_amount": 8388
  }'
```

Request URL

http://127.0.0.1:8000/predict

Server response

Code	Details
200	<div><div>Response body</div><div><pre>{ "prediction": "Not defaulter" }</pre></div><div>Download</div></div>

The model can be used to make predictions again by re-entering the relevant values as seen below

The screenshot shows a REST client interface for a POST request to the endpoint `/predict` on a server named `Predict Defaulter`. The interface includes a `Parameters` section with `Cancel` and `Reset` buttons, and a `Request body` section with a `required` label and a dropdown menu set to `application/json`. The request body contains a JSON object with the following fields: `limit_bal` (120000), `sex` (2), `education` (2), `marriage` (2), `age` (26), `pay_1` (-1), `pay_2` (2), `pay_3` (0), `pay_4` (0), `pay_5` (0), `pay_6` (2), `total_bill_amount` (17077), and `total_pay_amount` (5000). A green circular icon with a plus sign is visible in the bottom right corner of the request body area. At the bottom of the interface is a large blue `Execute` button.

```
{
  "limit_bal": 120000,
  "sex": 2,
  "education": 2,
  "marriage": 2,
  "age": 26,
  "pay_1": -1,
  "pay_2": 2,
  "pay_3": 0,
  "pay_4": 0,
  "pay_5": 0,
  "pay_6": 2,
  "total_bill_amount": 17077,
  "total_pay_amount": 5000
}
```

The model again outputs the prediction and it can be seen that the customer is a defaulter