**API Testing Instruction**

1. Create an environment in your machine:

For Linux/MacOS:

mkdir projectname

cd projectname

Python3 -m venv venv

For Windows:

mkdir projectname

cd projectname

python3 -m venv venv

1. Activate the environment

For Linux/MacOS:

. venv/bin/activate

For Windows:

venv\Scripts\activate

1. Install packages

pip install flask

conda install pandas

pip install numpy

pip install -U scikit-learn

1. Run flask, open url on web browser and upload test dataset

Once packages are installed, run flask by using “flask run” command on terminal and open url: <http://127.0.0.1:5000/> in a web browser.

Graphical user interface, text, application

Description automatically generated with medium confidence

upload any test dataset that is a subset of adult\_test.csv (could be a single row of data or a batch) and click “predict” to obtain model predictions for every single row of the test data. Two sample test datasets (test\_df1.csv and test\_df2.csv) are provided.

Sample result is shown below. For each row, the original columns and prediction results are displayed in JSON format.

Text

Description automatically generated

1. Another option to test API is to use curl command in terminal:

curl --location --request POST 'http://127.0.0.1:5000/process' \

--form 'data\_file=file\_path/test\_df1.csv'

file\_path will need to be changed to the correct path. Terminal will then output the response in json format.

Text

Description automatically generated