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Model link: <https://us-central1-magazeti-1a594.cloudfunctions.net/function-1>

Introduction

Using a toy dataset (Iris dataset) from sklearn, we will deploy a model using google cloud function. Our model has 4 feature values: "sepal length (cm)", "sepal width (cm)", "petal length (cm)" and "petal width (cm)". Our target value has 3 classes: 'setosa', 'versicolor' and 'virginica'.

Step 1: Go to google cloud function and create a new function, choose python3.8

✓ **function-1** 1st gen
us-central1

Trigger

⌕ HTTP

Trigger type
HTTP ▼

URL 📄

<https://us-central1-magazeti-1a594.cloudfunctions.net/function-1>

☐ Require HTTPS ?

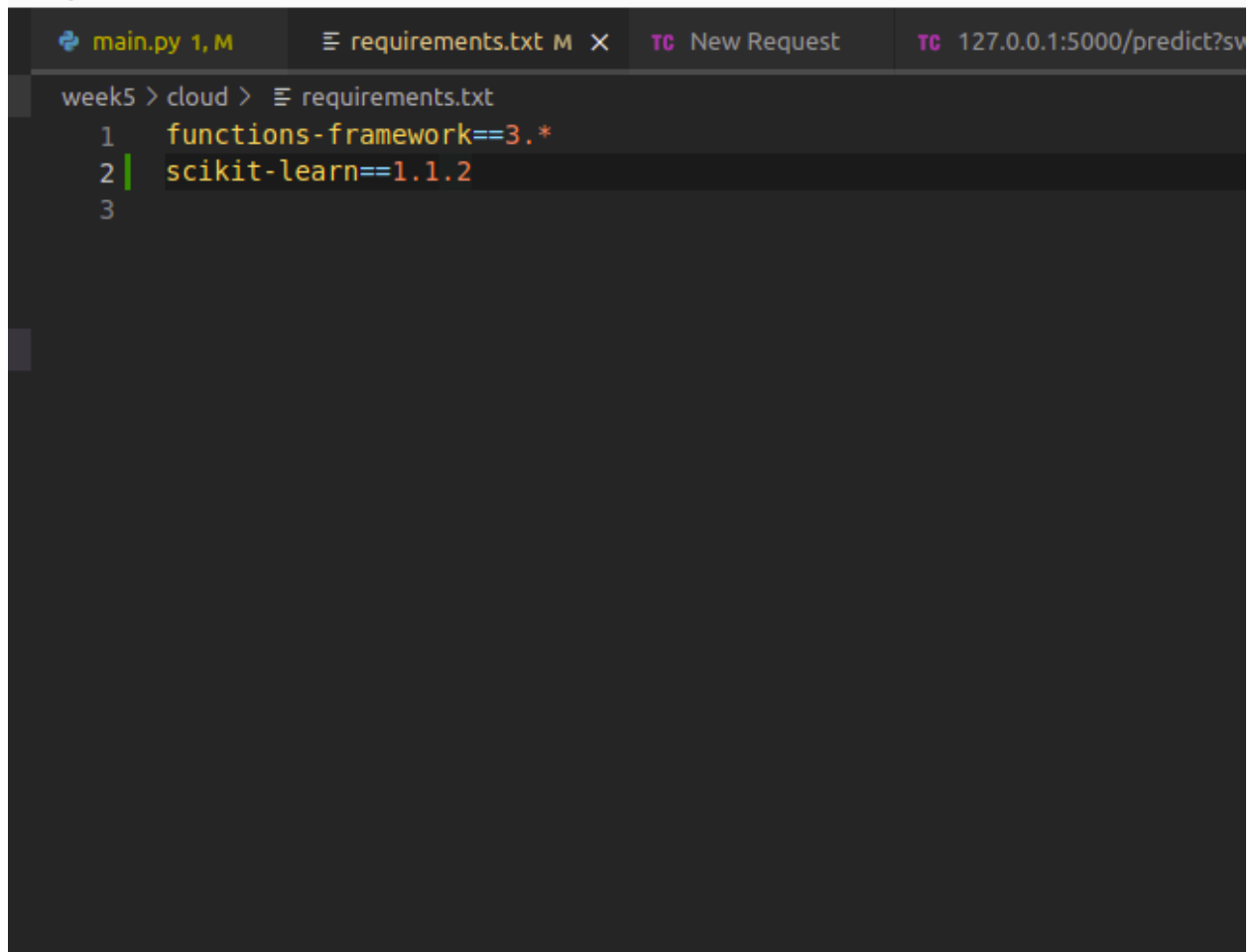
SAVE

CANCEL

Step 2: Go to vs code and create main.py with the following code, extracted from week 4

```
main.py 1, M X requirements.txt M TC New Request TC 127.0.0.1:5000/predict?sv
week5 > cloud > main.py > hello_world
1 import functions_framework
2 import pickle
3
4 targets = ["setosa", "versicolor", "virginica"]
5
6
7 @functions_framework.http
8 def hello_world(request):
9     model = pickle.load(open("model.pickle", "rb"))
10
11     slength = float(request.args.get("slength"))
12     swidth = float(request.args.get("swidth"))
13
14     plength = float(request.args.get("plength"))
15     pwidth = float(request.args.get("pwidth"))
16
17     res = model.predict([[slength, swidth, plength, pwidth]])
18     return targets[res[0]]
19
20
```

Step 3: create requirements.txt



The screenshot shows a code editor with a dark theme. At the top, there are four tabs: 'main.py 1, M' (with a blue icon), 'requirements.txt M' (with a hamburger menu icon), 'New Request' (with a purple icon), and '127.0.0.1:5000/predict?sv' (with a purple icon). The 'requirements.txt' tab is active. The editor content shows the path 'week5 > cloud > requirements.txt' followed by two lines of code: 'functions-framework==3.*' on line 1 and 'scikit-learn==1.1.2' on line 2. A green cursor is positioned at the end of line 2. Line 3 is empty.

```
week5 > cloud > requirements.txt
1  functions-framework==3.*
2  scikit-learn==1.1.2
3
```

Step 4: zip three files: requirements.txt, main.py and model.pickle(we created in week 4) into a zip file called model.zip



Step 5: upload zip file to google cloud function console

Configuration — 2 Code

Runtime
Python 3.8

Source code
ZIP Upload

Entry point *
hello_world

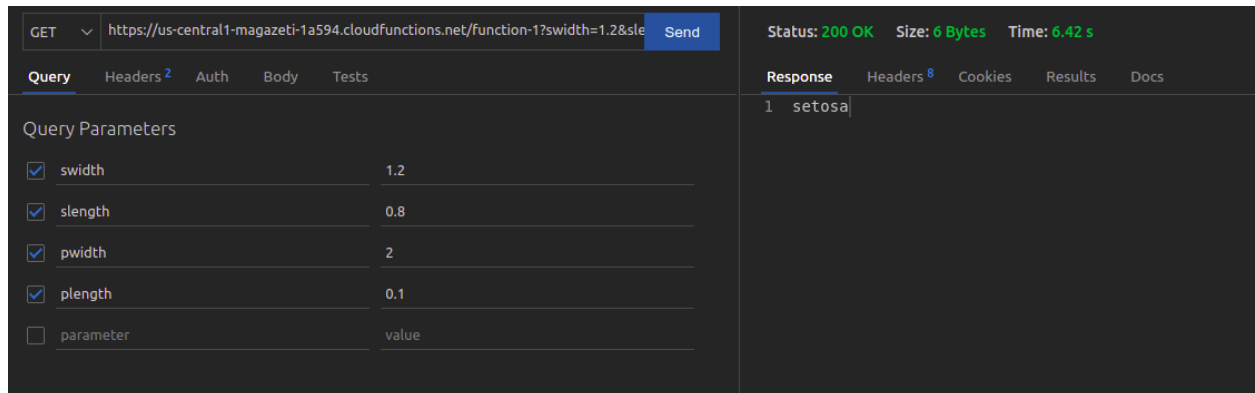
ZIP upload

ZIP file *
model.zip × [BROWSE](#) ?

Local file for upload

Stage bucket *
lisum11/ [BROWSE](#) ?

Step 6: Test our new function using Thunderclient



Conclusion

A toy model was successfully deployed on the web using google cloud functions, and we tested it by providing 4 feature values, and we got “setosa” as predicted class.