



Module 10 exercises – Deploying Models and Insights

Part 1 – Deploying a ML model

1. In JupyterLab, navigate the file browser to 10_Deploying Models & Insights.
2. Click the blue + icon.
3. Open a new Terminal.
4. Paste the following command: `uvicorn main:app --reload --no-use-colors`
5. In a new browser tab, enter the following URL:
<http://127.0.0.1:8000/predict/5?ds=BARCELONA&vc=Turista&fr=Promo&dur=160>
6. Inspect the output. What format is it in?

JSON format

Extensions

7. In the url, change BARCELONA to SEVILLA. How did that affect the prediction?

The predicted price changes

8. Change 160 to 250. How did that affect the prediction?

The predicted price decreases

Hard extension

1. Using the requests library, display the data returned by the API in Python

```
import requests
```

```
result = requests.get(r"http://127.0.0.1:8000/predict/5?ds=BARCELONA&vc=Turista&fr=Promo&dur=160")
```

```
eval(result.content.decode())[ 'model_out' ]
```

```
74.33
```



Part 2 – Model deployment considerations

1. Consider the following ML powered applications. How might it be best to deploy each model? What would influence your decision?
 - Mobile text autocompletion model – **On Device**
 - Mortgage eligibility predictor – **Client Side**
 - Sensor based personal health prediction – **Federated**

Part 3 – Checks

2. What checks might you put in place for the model we deployed in part 1?
 - *Input checks – Check input is valid and reasonable*
 - *Output Checks – Check price predictions are reasonable*