

# Read me

1. Environment: **Python** 3.7.7

2. Needed packages:

**Flask** 1.1.2

**Numpy** 1.18.2

**Pandas** 1.0.3

**Scikit-learn** 0.23.2

**Plotly** 4.10.0

3. Structure:

<b>UI</b>	<b>The main folder of the web application</b>
<b>templates</b>	The folder to store UI's pages
index.html	The feature selection interface
result.html	The recommendation interface
<b>static</b>	The folder to store the necessities for the UI
images.jpg	The background image of index.html
Slimbits.ttf	The font package of index.html
predict.py	The functions for getting the recommendations and showing them on the map
ui.py	The interactions between the HTML page and Python script
rec.model	The saved model for the recommendations
result.csv	The data used for the feature selection, recommendations, and popularity filtering
11.model	The model used in special situations
1.csv	The data used in special situations

4. Usage:

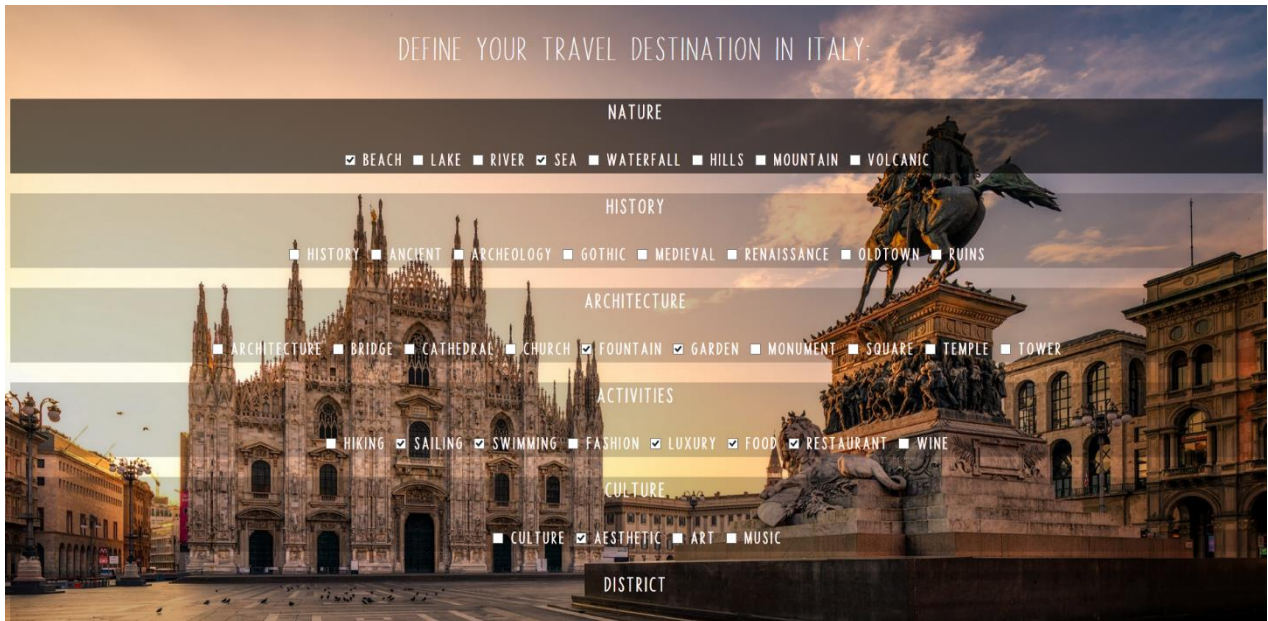
- I. Change the current path of the terminal to the 'UI' folder.  
The 'UI' folder locates inside the folder where you extracted the **italytravel.zip**.

For example, C:\Users\<username>\<your\_folder>\UI

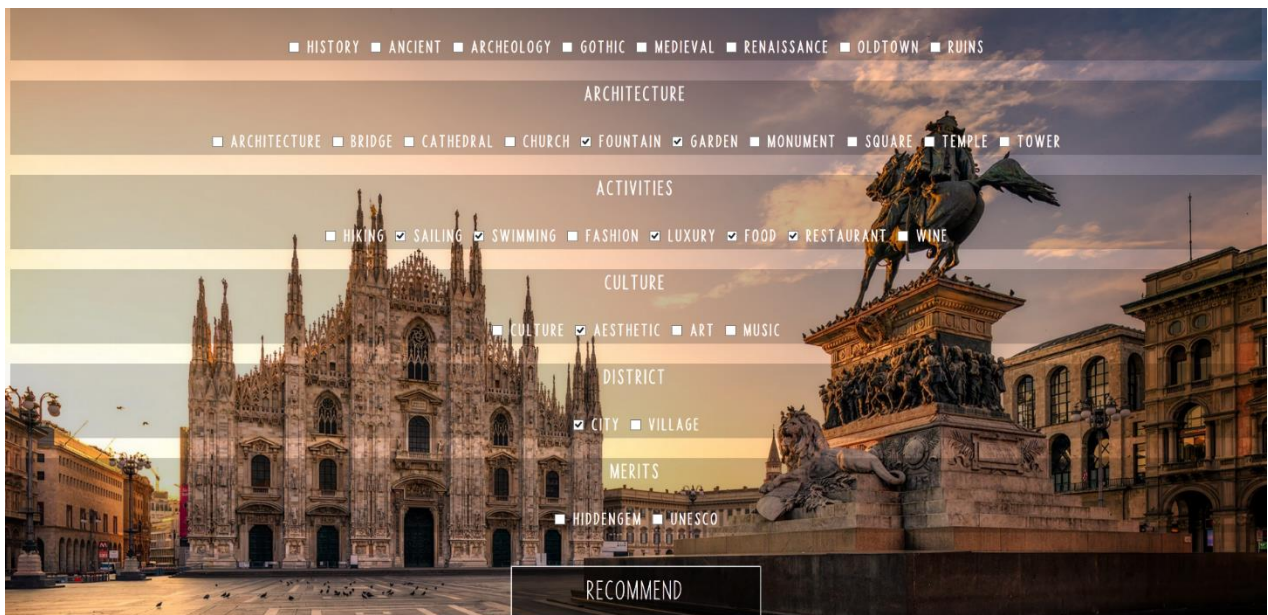
II. After that, run the **ui.py** file with the command: **'python ui.py'**

```
(base) C:\Users\Markku\hel_uni\other\italytravel\UI>python ui.py
* Serving Flask app "ui" (lazy loading)
* Environment: production
  WARNING: This is a development server. Do not use it in a production deployment.
  Use a production WSGI server instead.
* Debug mode: off
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
127.0.0.1 - - [18/Oct/2020 19:10:41] "←[37mGET / HTTP/1.1←[0m" 200 -
```

III. Pick the features you wish for your travel destinations in Italy.



IV. Finally, click the **'RECOMMEND'** button at the bottom of the feature selection page to see the recommendations.



- V. Use **the popularity filter** at the top right corner of the map page to reveal or hide different popularity levels of the recommended locations on the map. **By double clicking** any of the popularity levels of the filter menu, you can choose the level you clicked plus all the other levels or not any other level but that you clicked.

