My Perfect Meal  
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"My Perfect Meal" is an interactive, personalized recommendation system for choosing a restaurant. It combines Machine Learning with location, weather and emotional data to offer users individually tailored meal suggestions. A short setup captures preferences such as taste, nutrition, price preferences and emotional mood. This information, together with previous user interactions, flows into a learning random forest model that continuously improves recommendations. Real-time data is integrated via APIs such as Google Maps, Openweather and IPinfo. The results are clearly displayed on a map. The system thus provides targeted support with the question: What am i eating today - and where does it suit me best?

Instructions

Step 1: Save all the files (**LAUNCHER.py**, **data\_ml.py**, **random\_forest\_model.pkl**, **recommendation.db**) in one folder on your device. Make sure that you have the file path for **LAUNCHER.py** ready to paste later.

* On **MacOS**, do this by **right-clicking** the file and selecting **Get Info**. Under **Where**, copy the file path.
* On **Windows**, **right-click** the file and select **Properties**. Copy the path from the **Location** field.
* On **Linux**, **right-click** the file and select **Properties**. Under the **Basic** tab, copy the path next to **Parent Folder**.

Step 2: Open the terminal on your device.

* On **MacOS**, press **Cmd + Space**, type Terminal, and hit **Enter**.
* On **Windows**, press **Windows + R**, type cmd, and hit **Enter**.
* On **Linux**, press **Ctrl + Alt + T** or search for **Terminal** in your applications menu.

Step 3: Install the required libraries/modules by entering the following commands into your terminal:

pip install ipinfo  
pip install streamlit

pip install folium  
pip install googlemaps

*Make sure you have Python and pip installed on your system. If not, install Python first from* [*https://python.org*](https://python.org/)*.*

Step 4: Run the application by entering the following command:

streamlit run "your\_file\_path"

→ Replace "your\_file\_path" with the actual path to **LAUNCHER.py** (e.g., "~/Documents/project/LAUNCHER.py").  
→ Don't forget the quotation marks around the path.

Step 5: Fill in your username and preferences as prompted.  
Please note: due to **Streamlit** limitations, you may need to enter certain inputs twice.