INTRODUCTION

Welcome to RouteHunter!

RouteHunter is a client-side climbing route querying system that uses real-time MountainProject.com data to find all the best lines around!

It is an easy (with minor programming experience) to use software application that allows users to request climbing routes within a given geographic region and maximum grade.

RouteHunter will provide the HIGHEST reviewed climbs for that region and let the user search across dozens of crags within an area, all at once!

RouteHunter is only to be used for personal data requests.

Please refer to the "example.pdf" provided for visual-assisted explanations and various examples of use cases.

CREDITS:

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Data Source: https://www.mountainproject.com/data , public API

CONTENTS

Below is a short description of each file and directory contained in this download:

/routehunter: directory containing all materials for RouteHunter

- README.pdf: Markdown file containing Introduction, Contents, Instruction, and Credits
- routehunter.py: Main RouteHunter Python file; contains the substance of the code
- rh_gui.py: User interface content and formatting for RouteHunter
- example.pdf: Walkthrough with images and more examples

/templates: directory containing all styling materials for RouteHunter

- rh_style.css: CSS formatting for pandas dataframe query written in html
- routes_df.html: HTML file for dataframe containing the most recently searched query
    - (default contains: College Park, 50 miles, 5.10 query)

- climber.png: stock photo for UI, available at: https://www.cleanpng.com/png-climbing-man-software-climbing-man-463269/

/_pycache_: directory to host UI window processing (only accessible after first query, rewrites itself with each additional query to minimize quantity of necessary files)

- rh_gui.cpython-38.pyc: byte code Python file of compiled UI window data

(further explanation of code within each file's comments)

INSTRUCTIONS

Below you will find all necessary information to run the software:

REQUIREMENTS:

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1. User must have Python 2 >=2.7.9 or Python 3 >=3.4

IF USER DOES NOT HAVE APPLICABLE PYTHON VERSION INSTALLED:

- MAC OS X: https://www.python.org/downloads/mac-osx/
- WINDOWS: https://www.python.org/downloads/windows/
- OTHER: https://www.python.org/download/other/

2. The following libraries installed:

a. pandas……size: 214 MB
b. geopy……size: 219 KB
c. PySimpleGUI……size: 487 KB

TOTAL SIZE OF 3 EXTERNAL LIBRARIES: 214.7 MB

All of the above are available through the pip package installer,
pip is available automatically for the above specified Python versions

IF USER DOES NOT HAVE ANY OF THE ABOVE LIBRARIES:

MAC OS X:

- in Terminal, type:

```
pip install insert_name_of_library
```

WINDOWS:

- in Command Prompt, type:

```
pip install insert_name_of_library
```

3. Any web browser and a connection to the internet; browser does not need to be open

PROCEDURE:

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1. Keep all files and sub directories from downloaded zip in a single directory

- see above "CONTENTS" for example file path setup,
- "single directory" in this example is called "/routehunter"
- default zip download will have files/sub-directories organized properly

2. In Terminal (MAC OS X) or Command Prompt (WINDOWS), navigate to the routehunter directory, wherever you downloaded it to,
type:

python routehunter.py

...this will launch the software, and provide the UI to begin a search.

3. USER INTERFACE INSTRUCTION:

- Input query, below are valid inputs: (ALL input boxes are NOT case-sensitive)
  - **City:** Any recognized city or township - global scale
    examples: College Park, Yosemite, Boston, Madrid
  - **State:** Any recognized State (USA-50), or country if not in the USA
    examples: Maryland, California, Massachusetts, Spain
  - **Max Radius:** A specified maximum distance away from the given city or town to search, in miles with a maximum of 200 miles
    examples: 50, 10, 100
  - **Max Grade:** using the Yosemite Decimal System, the maximum climbing grade the user wishes to find routes of, maximum of 5.15
    examples: 5.9, 5.10c, 5.12d-, 5.14d+
    YDS explained: https://climber.org/data/decimal.html

- Select "GO" button
- Select "QUIT" anytime to exit the query window

4. Optionally, make a copy of the produced route_df.html file if user wishes to reference queries at another time and still make more searches

5. Climb on!

Thank you!
