Google Reviews Scraper

User Guide

Group 1

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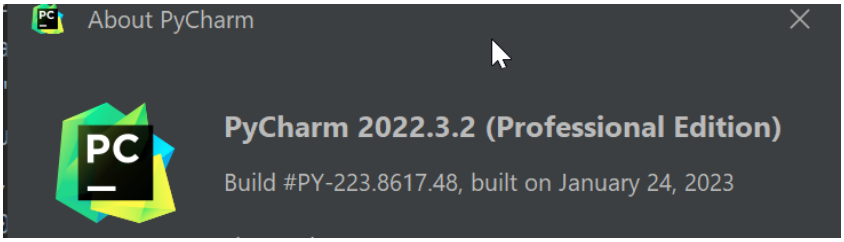
1.SOFTWARE SET-UP

1) Installing PyCharm

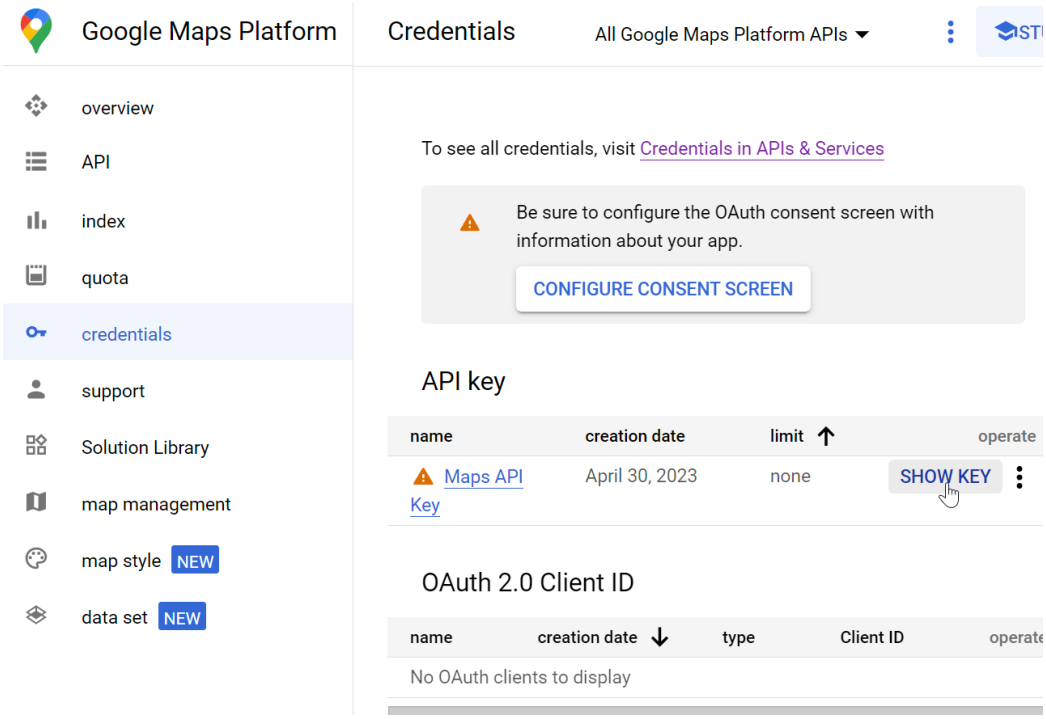
   Download link: https://www.jetbrains.com/pycharm/download/?section=windows.

   (We didn't try PyCharm Community Edition, but it might work as well)



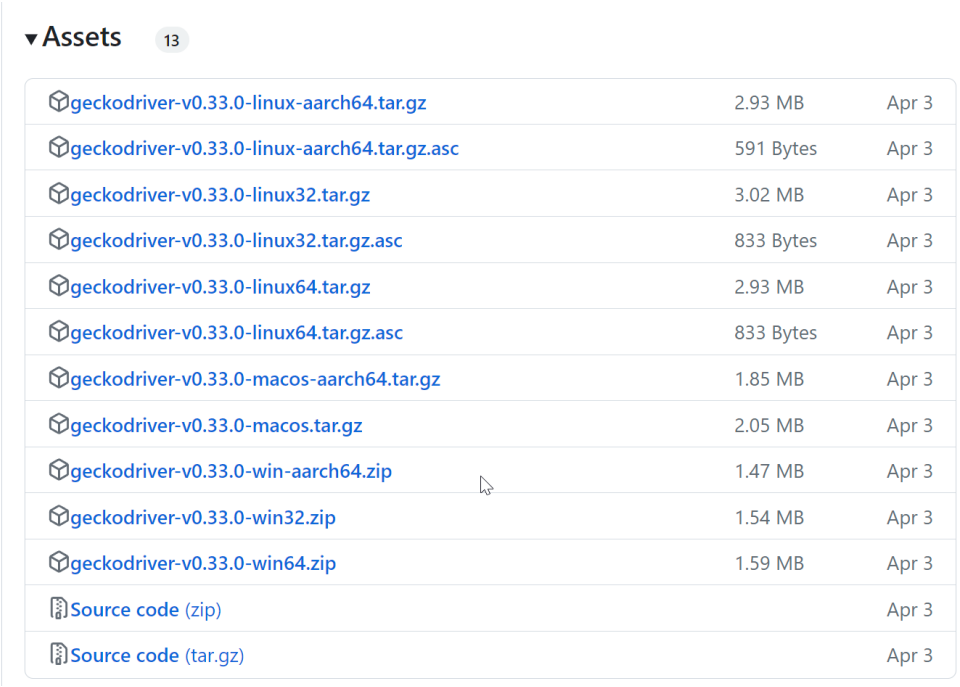
2) Create your own google API key if you don't have one.

   a. Go to the Google Cloud Console: https://console.cloud.google.com/
   b. Sign in with the Google account you want to associate with the API key.
   c. Create a new project or select an existing project from the project dropdown in the top navigation bar.
   d. In the sidebar, click on "APIs & Services" and then click on "Credentials."
   e. On the Credentials page, click on the "Create Credentials" button and select "API Key" from the dropdown menu.
   f. A dialog box will appear displaying your newly created API key. Take note of this key as it will be used to authenticate your requests to Google APIs.
   g. You can further customize the API key by restricting its usage to specific IP addresses, HTTP referrers, or API restrictions. These settings provide an added layer of security and control over the key's usage.
   h. Once you have created and configured the API key, make sure to securely store it. Do not expose your API key publicly, such as in public repositories or client-side code, as it can lead to unauthorized usage and potential security issues.
   i. For more detailed instructions and information, you can refer to the official Google Cloud documentation on creating an API key: https://cloud.google.com/docs/authentication/getting-started#creating_the_api_key
   a. Replace 'Your_API_Key' with your real google API key in app.py line 35.




```
# Replace 'Your_API_Key' with your real google API key for testing
gmaps = googlemaps.Client(key='Your_API_Key')
```

3) Download Firefox browser and geckodriver that matches your computer.
   b. **Firefox Brower download page:** https://www.mozilla.org/en-CA/firefox/new/
   c. **geckodriver** download page: https://github.com/mozilla/geckodriver/releases. Please choose the one that matches your computer, i.e. if you are using windows 64-bit operating system, you should choose win64.zip.

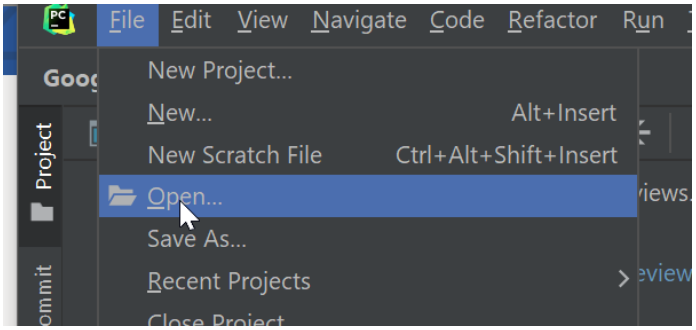


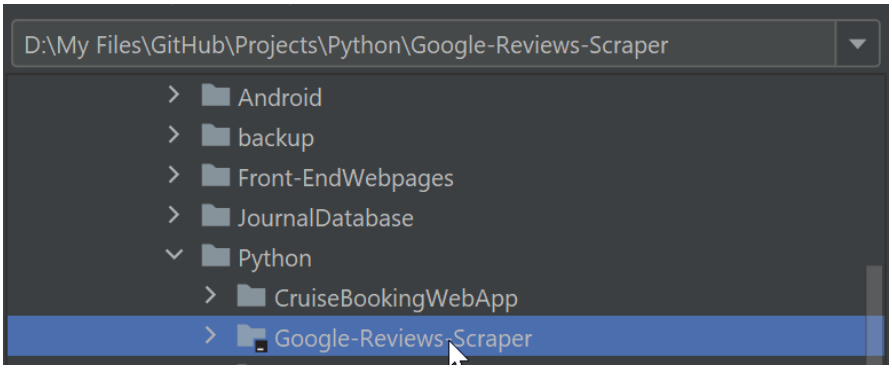
d. You could use **test_selenium.py** to check if you installed a matched version. If so when you run it, you will see it open a Firefox browser window on google (it will be closed quickly which is expected).
e. Also set path to **geckodriver** as per your configuration, change it to your path where you save the **geckodriver** accordingly in app.py line 257.

```
257     # Set path to geckodriver as per your configuration, change it to your pat
258     webdriver_service = Service(r'D:\My Files\download\geckodriver.exe')
```

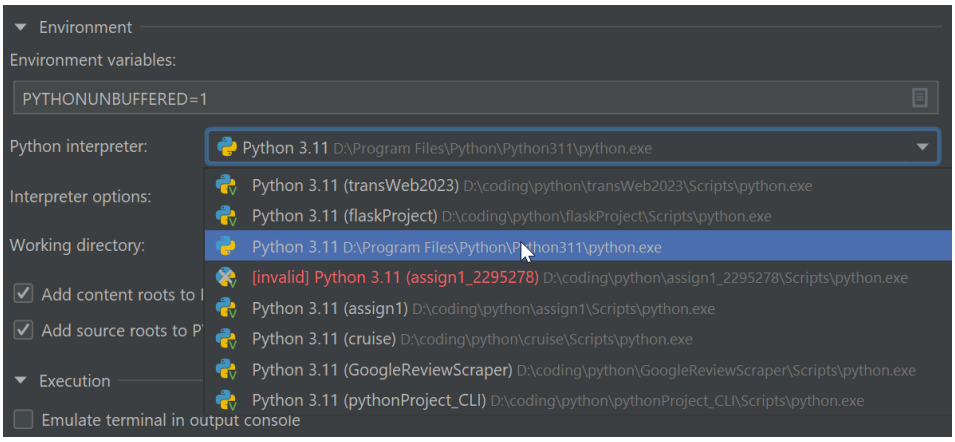
2. SCRAPING STEPS

1) Open this scraper with PyCharm

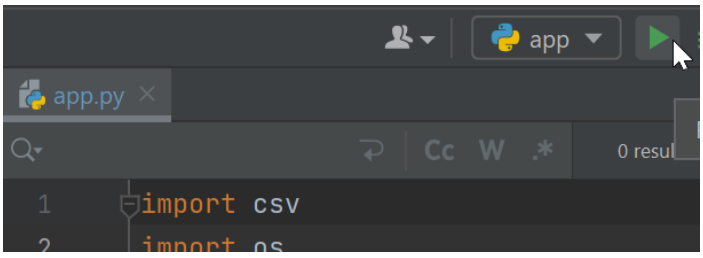




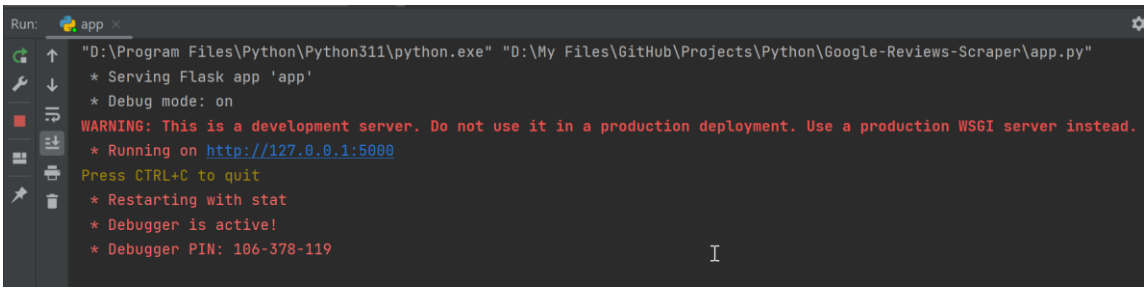
2) Set the configuration and install all necessary packages.



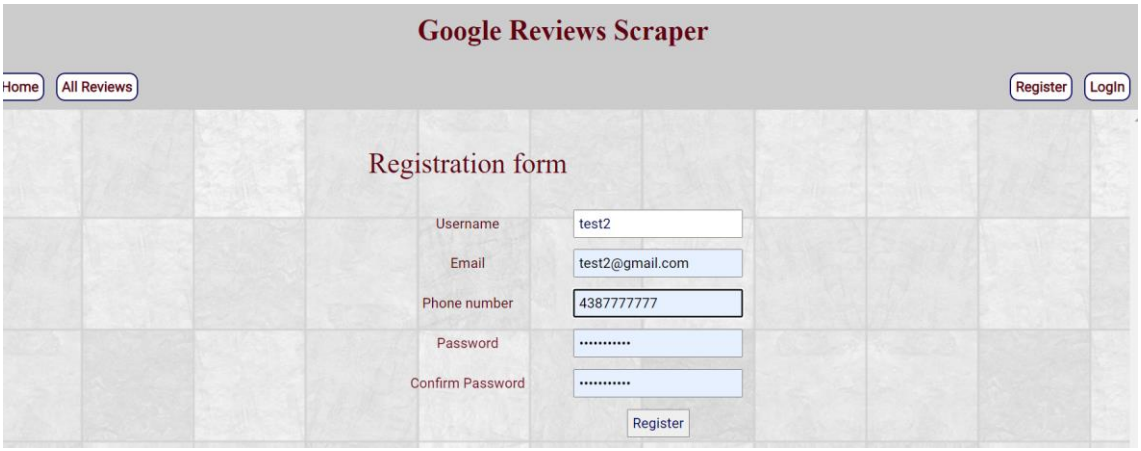
3) Open app.py and click the “run” button on the right top

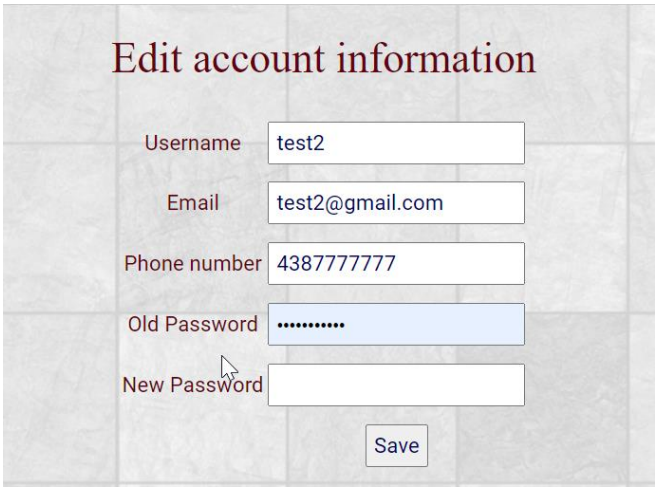


4) Click the development server link in app console (http://127.0.0.1:5000).

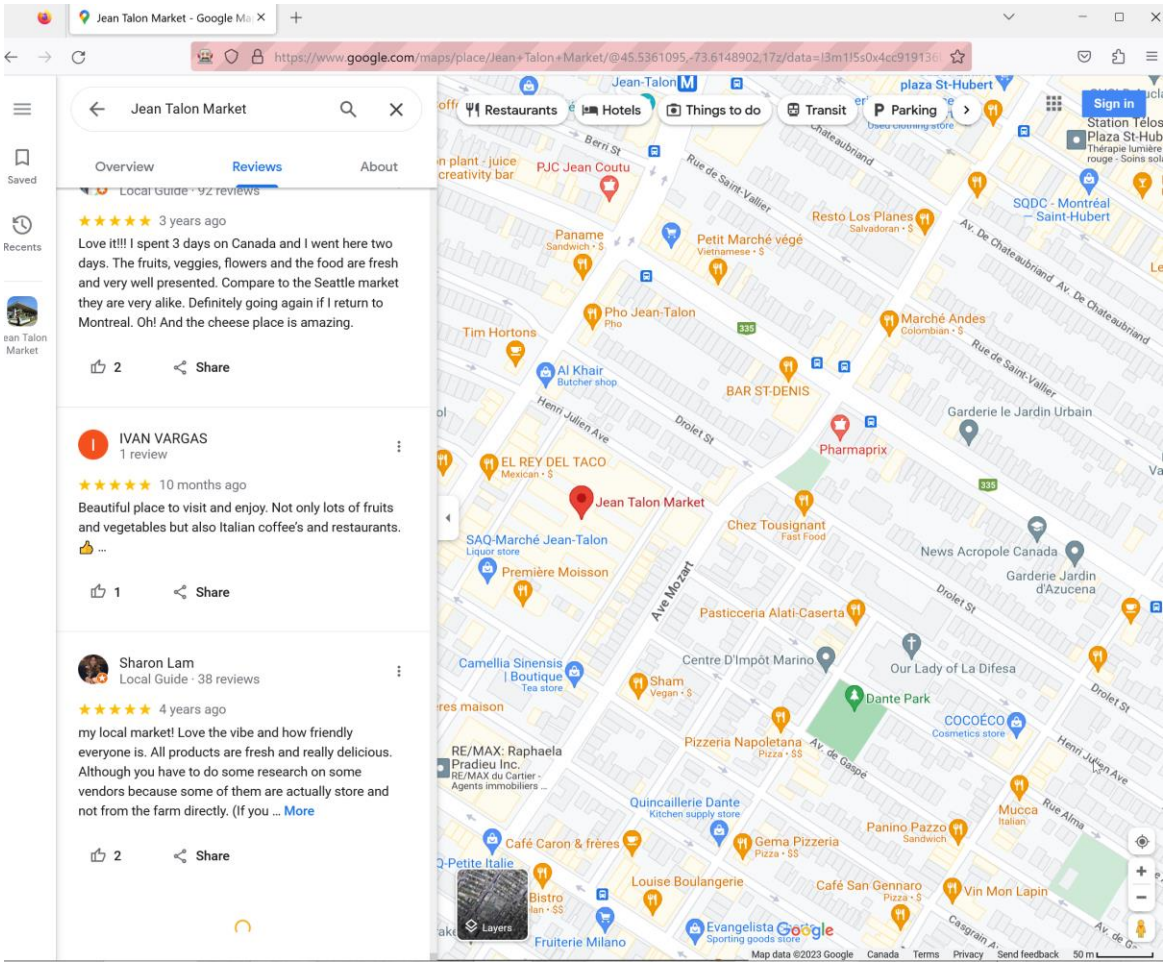


5) Register and login. You could edit your account information if you want with the "Account" button and "/account" page.

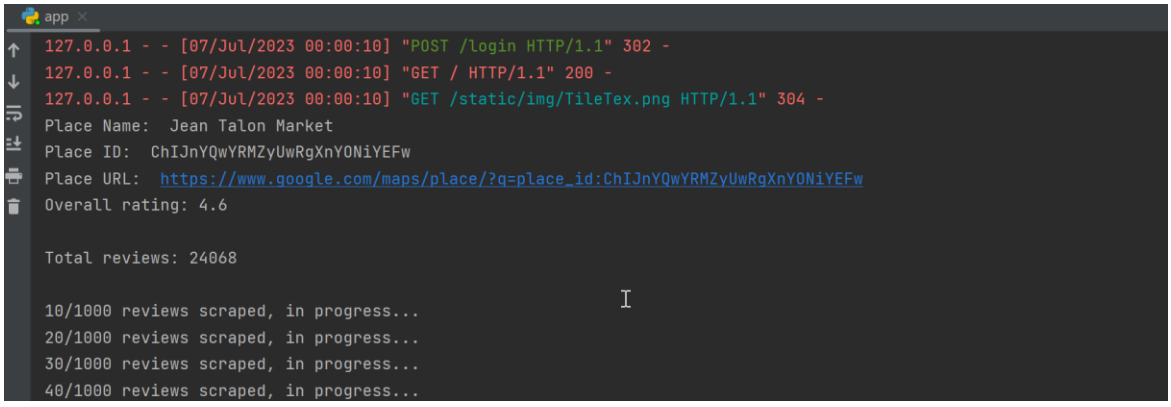




6) Input the **place name** which you want to scrape reviews for and the **number of reviews** you want. The default value of the reviews' number would be 1000. For example, now I'm inputting "Jean Talon Market" with the default value. Once you click the "Scrape Reviews" button, the scraper would begin to work and open an auto scrolling google map webpage for "Jean Talon Market" open by Firefox brower. And in the app console, you could see the working progress of the scraper. Once it's done. The scraped review would be saved as a csv file as shown below. And they will be listed on front page as well. You could double check the Place URL to confirm it's the right place.

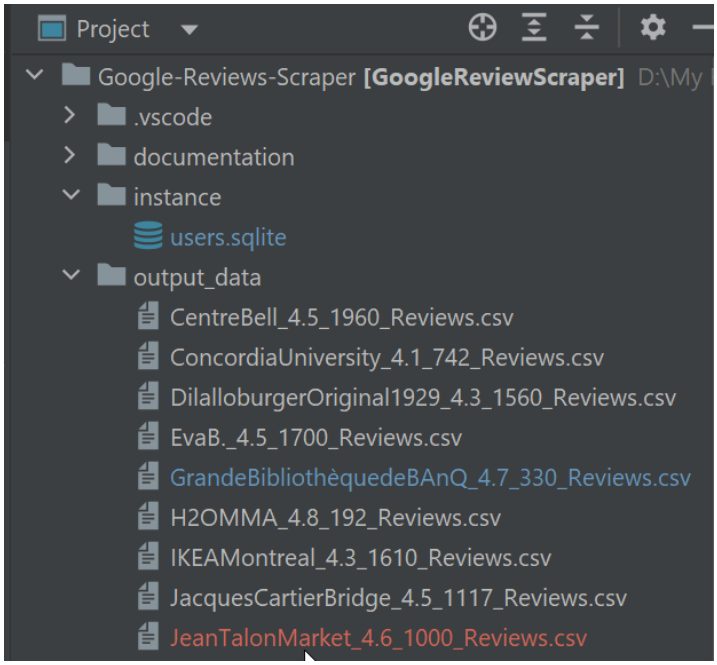

Jean Talon Market - Google Ma
https://www.google.com/maps/place/Jean+Talon+Market/@45.5361095,-73.6148902,17z/data=!3m1!5s0x4cc919136
Jean Talon Market
Overview
Reviews
About
Local Guide · 92 reviews
3 years ago
Love it!!! I spent 3 days on Canada and I went here two days. The fruits, veggies, flowers and the food are fresh and very well presented. Compare to the Seattle market they are very alike. Definitely going again if I return to Montreal. Oh! And the cheese place is amazing.
2
Share
IVAN VARGAS
1 review
10 months ago
Beautiful place to visit and enjoy. Not only lots of fruits and vegetables but also Italian coffee's and restaurants.
1
Share
Sharon Lam
Local Guide · 38 reviews
4 years ago
my local market! Love the vibe and how friendly everyone is. All products are fresh and really delicious. Although you have to do some research on some vendors because some of them are actually store and not from the farm directly. (If you ... More
2
Share
Restaurants
Hotels
Things to do
Transit
Parking
Sign in
Saved
Recents
Jean Talon Market
Jean Talon Market
Pharmaprix
Dante Park
Layers
Map data ©2023 Google
Canada
Terms
Privacy
Send feedback
50 m

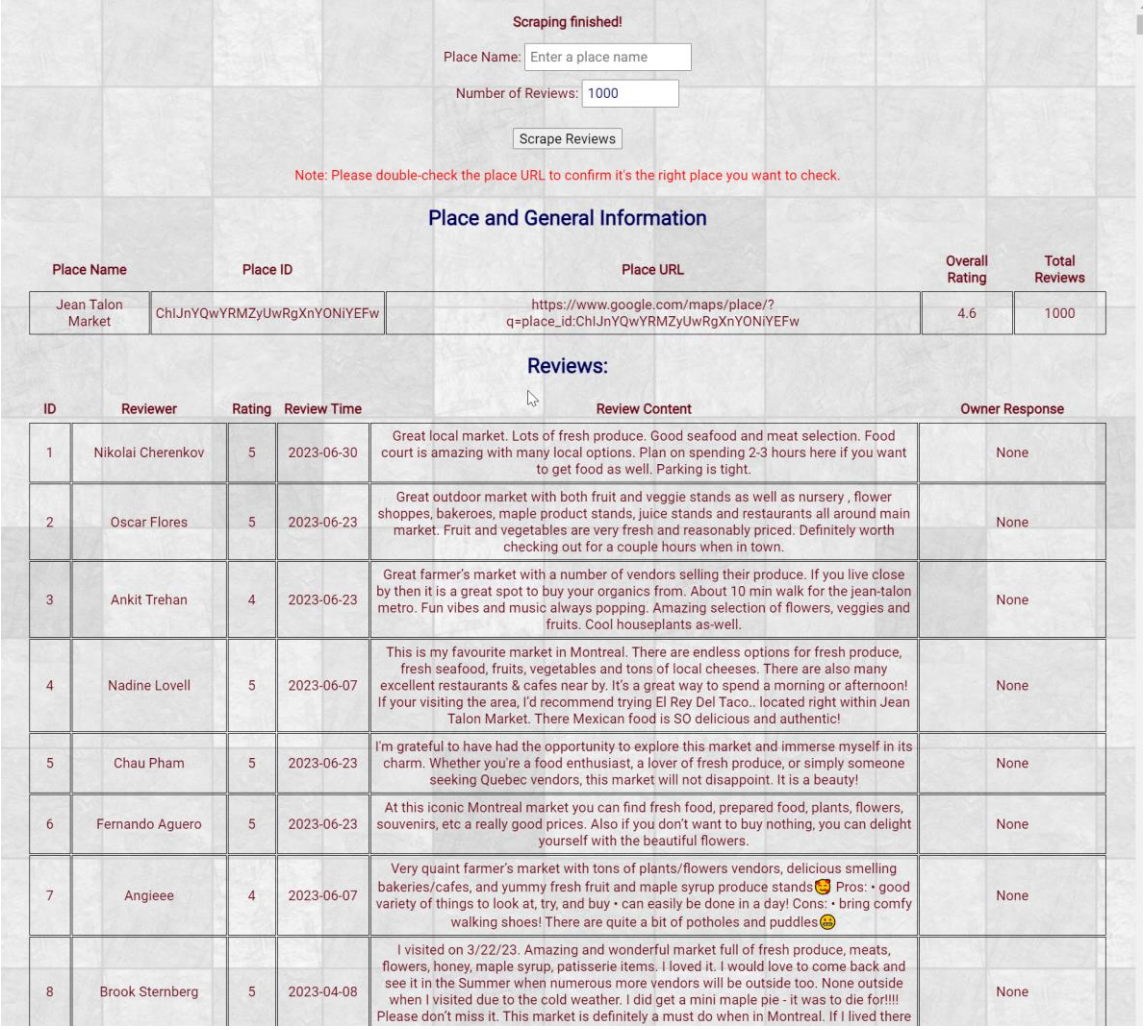
Logged in successfully.
Place Name: Jean Talon Market
Number of Reviews: 1000
Scrape Reviews
Note: Please double-check the place URL to confirm it's the right place you want to check.


app
127.0.0.1 - - [07/Jul/2023 00:00:10] "POST /login HTTP/1.1" 302 -
127.0.0.1 - - [07/Jul/2023 00:00:10] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [07/Jul/2023 00:00:10] "GET /static/img/TileTex.png HTTP/1.1" 304 -
Place Name: Jean Talon Market
Place ID: ChIJnYQwYRMZyUwRgXnYONiYEFw
Place URL: https://www.google.com/maps/place/?q=place_id:ChIJnYQwYRMZyUwRgXnYONiYEFw
Overall rating: 4.6
Total reviews: 24068
10/1000 reviews scraped, in progress...
20/1000 reviews scraped, in progress...
30/1000 reviews scraped, in progress...
40/1000 reviews scraped, in progress...

```
970/1000 reviews scraped, in progress...
980/1000 reviews scraped, in progress...
990/1000 reviews scraped, in progress...
1000/1000 reviews scraped, in progress...
1000/1000 reviews scraped, done.

Reviews exported to output_data\JeanTalonMarket_4.6_1000_Reviews.csv
```





Scraping finished!

Place Name: Enter a place name

Number of Reviews: 1000

Scrape Reviews

Note: Please double-check the place URL to confirm it's the right place you want to check.

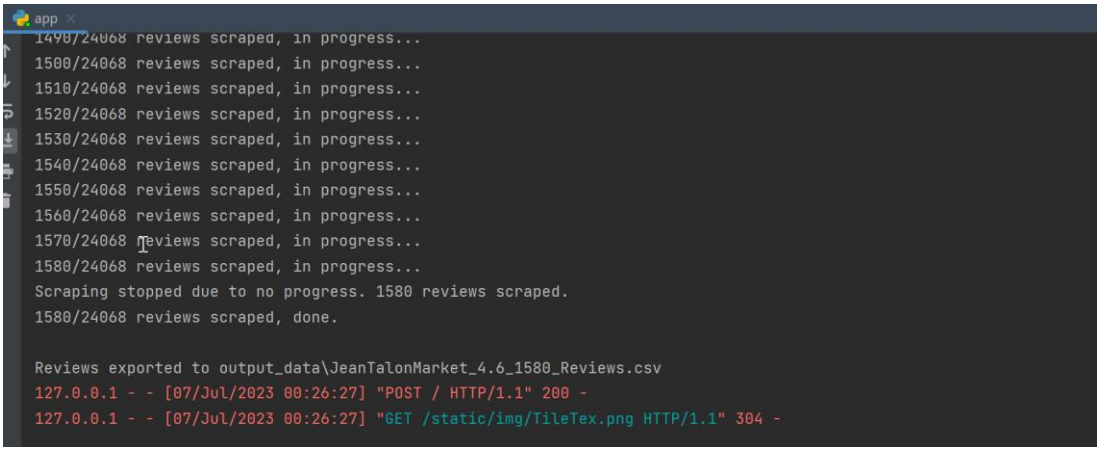
Place and General Information

Place Name	Place ID	Place URL	Overall Rating	Total Reviews
Jean Talon Market	ChIJnYQwYRMZyUwRgXnYONiYEFw	https://www.google.com/maps/place/?q=place_id:ChIJnYQwYRMZyUwRgXnYONiYEFw	4.6	1000

Reviews:

ID	Reviewer	Rating	Review Time	Review Content	Owner Response
1	Nikolai Cherenkov	5	2023-06-30	Great local market. Lots of fresh produce. Good seafood and meat selection. Food court is amazing with many local options. Plan on spending 2-3 hours here if you want to get food as well. Parking is tight.	None
2	Oscar Flores	5	2023-06-23	Great outdoor market with both fruit and veggie stands as well as nursery , flower shoppes, bakeroes, maple product stands, juice stands and restaurants all around main market. Fruit and vegetables are very fresh and reasonably priced. Definitely worth checking out for a couple hours when in town.	None
3	Ankit Trehan	4	2023-06-23	Great farmer's market with a number of vendors selling their produce. If you live close by then it is a great spot to buy your organics from. About 10 min walk for the jean-talon metro. Fun vibes and music always popping. Amazing selection of flowers, veggies and fruits. Cool houseplants as-well.	None
4	Nadine Lovell	5	2023-06-07	This is my favourite market in Montreal. There are endless options for fresh produce, fresh seafood, fruits, vegetables and tons of local cheeses. There are also many excellent restaurants & cafes near by. It's a great way to spend a morning or afternoon! If your visiting the area, I'd recommend trying El Rey Del Taco.. located right within Jean Talon Market. There Mexican food is SO delicious and authentic!	None
5	Chau Pham	5	2023-06-23	I'm grateful to have had the opportunity to explore this market and immerse myself in its charm. Whether you're a food enthusiast, a lover of fresh produce, or simply someone seeking Quebec vendors, this market will not disappoint. It is a beauty!	None
6	Fernando Aguero	5	2023-06-23	At this iconic Montreal market you can find fresh food, prepared food, plants, flowers, souvenirs, etc a really good prices. Also if you don't want to buy nothing, you can delight yourself with the beautiful flowers.	None
7	Angieee	4	2023-06-07	Very quaint farmer's market with tons of plants/flowers vendors, delicious smelling bakeries/cafes, and yummy fresh fruit and maple syrup produce stands😍 Pros: • good variety of things to look at, try, and buy • can easily be done in a day! Cons: • bring comfy walking shoes! There are quite a bit of potholes and puddles😅	None
8	Brook Sternberg	5	2023-04-08	I visited on 3/22/23. Amazing and wonderful market full of fresh produce, meats, flowers, honey, maple syrup, patisserie items. I loved it. I would love to come back and see it in the Summer when numerous more vendors will be outside too. None outside when I visited due to the cold weather. I did get a mini maple pie - it was to die for!!!! Please don't miss it. This market is definitely a must do when in Montreal. If I lived there	None

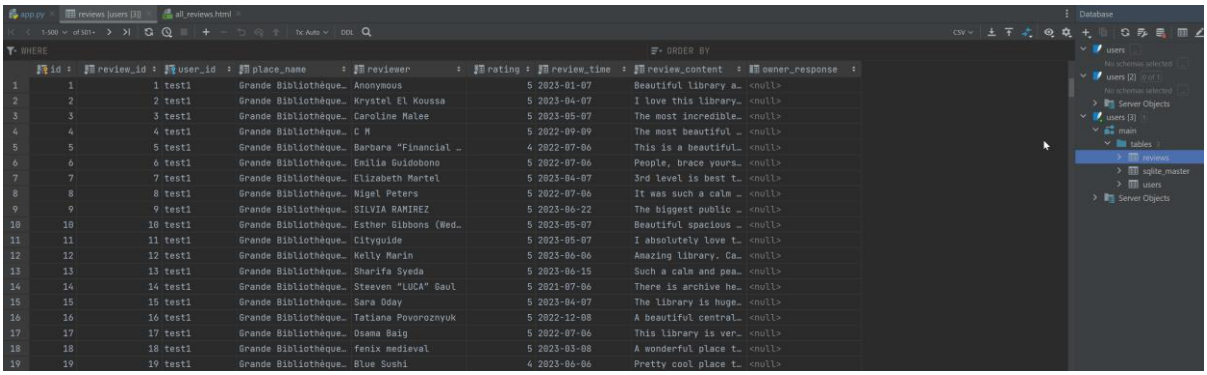
7) As you could see in app console, this place has 24068 reviews. If you want to scrape as many reviews as possible, you could input a large number, for example in this case, you could input 30000. However, google seems to have a limitation for the scroller bar to load more reviews at a certain point, for example, in the following case it stopped at 1580 reviews, so our scraper will stop trying and save 1580 reviews.

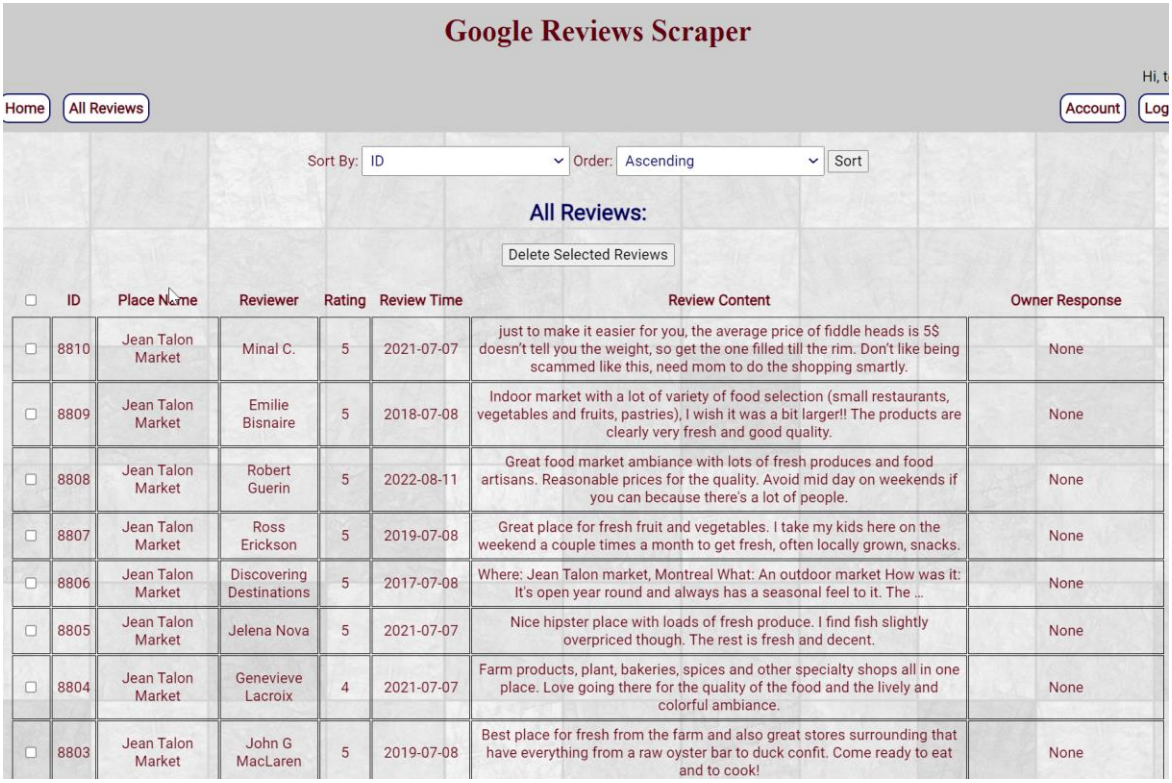


```
app
1490/24068 reviews scraped, in progress...
1500/24068 reviews scraped, in progress...
1510/24068 reviews scraped, in progress...
1520/24068 reviews scraped, in progress...
1530/24068 reviews scraped, in progress...
1540/24068 reviews scraped, in progress...
1550/24068 reviews scraped, in progress...
1560/24068 reviews scraped, in progress...
1570/24068 reviews scraped, in progress...
1580/24068 reviews scraped, in progress...
Scraping stopped due to no progress. 1580 reviews scraped.
1580/24068 reviews scraped, done.

Reviews exported to output_data\JeanTalonMarket_4.6_1580_Reviews.csv
127.0.0.1 - - [07/Jul/2023 00:26:27] "POST / HTTP/1.1" 200 -
127.0.0.1 - - [07/Jul/2023 00:26:27] "GET /static/img/TileTex.png HTTP/1.1" 304 -
```

8) Every time you finish scraping, the scraped reviews will be saved in our database. You could check them using “All Reviews” button and “/all_reviews” page. You could delete the reviews you don’t want from there. Or you could check or delete the reviews from the database directly.





	ID	Place Name	Reviewer	Rating	Review Time	Review Content	Owner Response
☐	8810	Jean Talon Market	Minal C.	5	2021-07-07	just to make it easier for you, the average price of fiddle heads is 5$ doesn't tell you the weight, so get the one filled till the rim. Don't like being scammed like this, need mom to do the shopping smartly.	None
☐	8809	Jean Talon Market	Emilie Bisnaire	5	2018-07-08	Indoor market with a lot of variety of food selection (small restaurants, vegetables and fruits, pastries), I wish it was a bit larger!! The products are clearly very fresh and good quality.	None
☐	8808	Jean Talon Market	Robert Guerin	5	2022-08-11	Great food market ambiance with lots of fresh produces and food artisans. Reasonable prices for the quality. Avoid mid day on weekends if you can because there's a lot of people.	None
☐	8807	Jean Talon Market	Ross Erickson	5	2019-07-08	Great place for fresh fruit and vegetables. I take my kids here on the weekend a couple times a month to get fresh, often locally grown, snacks.	None
☐	8806	Jean Talon Market	Discovering Destinations	5	2017-07-08	Where: Jean Talon market, Montreal What: An outdoor market How was it: It's open year round and always has a seasonal feel to it. The ...	None
☐	8805	Jean Talon Market	Jelena Nova	5	2021-07-07	Nice hipster place with loads of fresh produce. I find fish slightly overpriced though. The rest is fresh and decent.	None
☐	8804	Jean Talon Market	Genevieve Lacroix	4	2021-07-07	Farm products, plant, bakeries, spices and other specialty shops all in one place. Love going there for the quality of the food and the lively and colorful ambiance.	None
☐	8803	Jean Talon Market	John G MacLaren	5	2019-07-08	Best place for fresh from the farm and also great stores surrounding that have everything from a raw oyster bar to duck confit. Come ready to eat and to cook!	None

3. OTHER NOTES

1) The scraping and scrolling are all auto but sometimes it might get stuck at a certain point, for the picture or response from owner taking up too much space in different browser/screen ratio. In this case you could try to scroll it a little bit manually to help it load more reviews. If not, the scraper will stop loading after a certain amount of trial and save the current scraped reviews.
2) To fit more screen size, we have set the ratio of scraper Firefox browser ratio as 50%. You could customize it for your own preference.

```
257     # Set the browser's zoom level to 50%
258     firefox_options.set_preference("layout.css.devPixelsPerPx", "0.5")
```

Please check our repo for more details: **https://github.com/raeDV/Google-Reviews-Scraper**