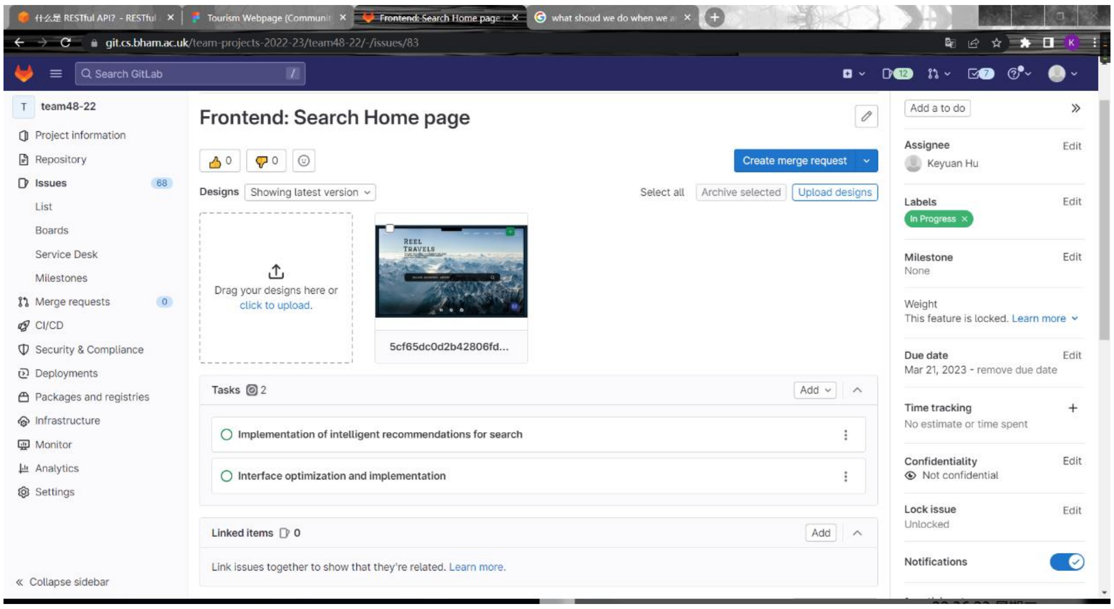
Agile Estimation of Cards


什么是 RESTful API? - RESTful | Tourism Webpage (Communit | Frontend: Search Home page | what shoud we do when we a

git.cs.bham.ac.uk/team-projects-2022-23/team48-22/-/issues/83

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Frontend: Search Home page

👍 0 👎 0

Create merge request

Designs Showing latest version | Select all | Archive selected | Upload designs

Drag your designs here or click to upload.

5cf65dc0d2b42806fd...

Tasks 2 | Add

- Implementation of intelligent recommendations for search
- Interface optimization and implementation

Linked items 0 | Add

Link issues together to show that they're related. Learn more.

Add a to do

Assignee: Keyuan Hu

Labels: In Progress

Milestone: None

Weight: This feature is locked. Learn more

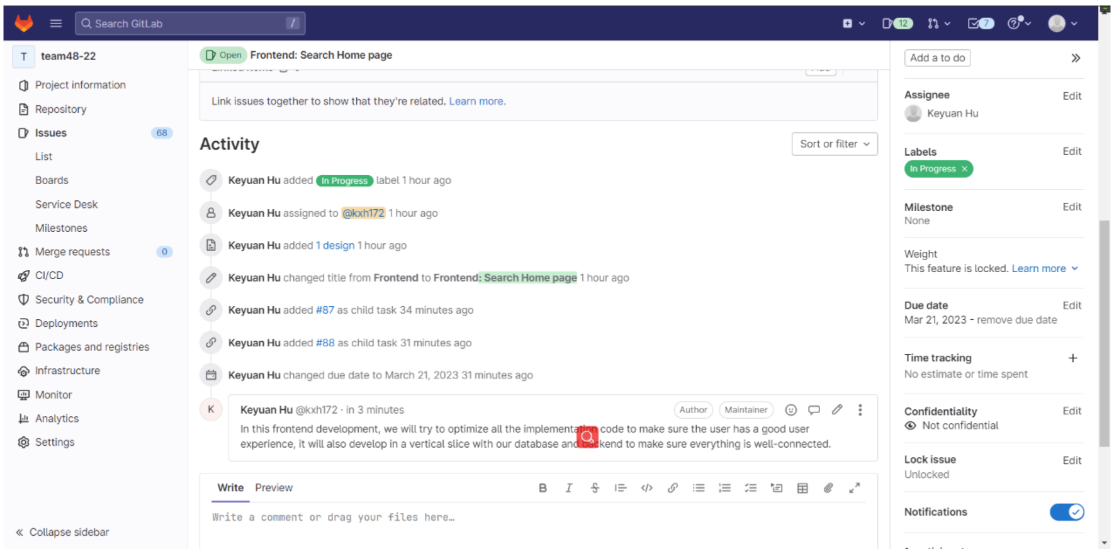
Due date: Mar 21, 2023 - remove due date

Time tracking: No estimate or time spent

Confidentiality: Not confidential

Lock issue: Unlocked

Notifications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Open Frontend: Search Home page

Link issues together to show that they're related. Learn more.

Activity

Sort or filter

- Keyuan Hu added In Progress label 1 hour ago
- Keyuan Hu assigned to @kxh172 1 hour ago
- Keyuan Hu added 1 design 1 hour ago
- Keyuan Hu changed title from Frontend to Frontend: Search Home page 1 hour ago
- Keyuan Hu added #87 as child task 34 minutes ago
- Keyuan Hu added #88 as child task 31 minutes ago
- Keyuan Hu changed due date to March 21, 2023 31 minutes ago

Keyuan Hu @kxh172 · in 3 minutes | Author | Maintainer

In this frontend development, we will try to optimize all the implementation code to make sure the user has a good user experience, it will also develop in a vertical slice with our database and backend to make sure everything is well-connected.

Write | Preview

Write a comment or drag your files here…

Add a to do

Assignee: Keyuan Hu

Labels: In Progress

Milestone: None

Weight: This feature is locked. Learn more

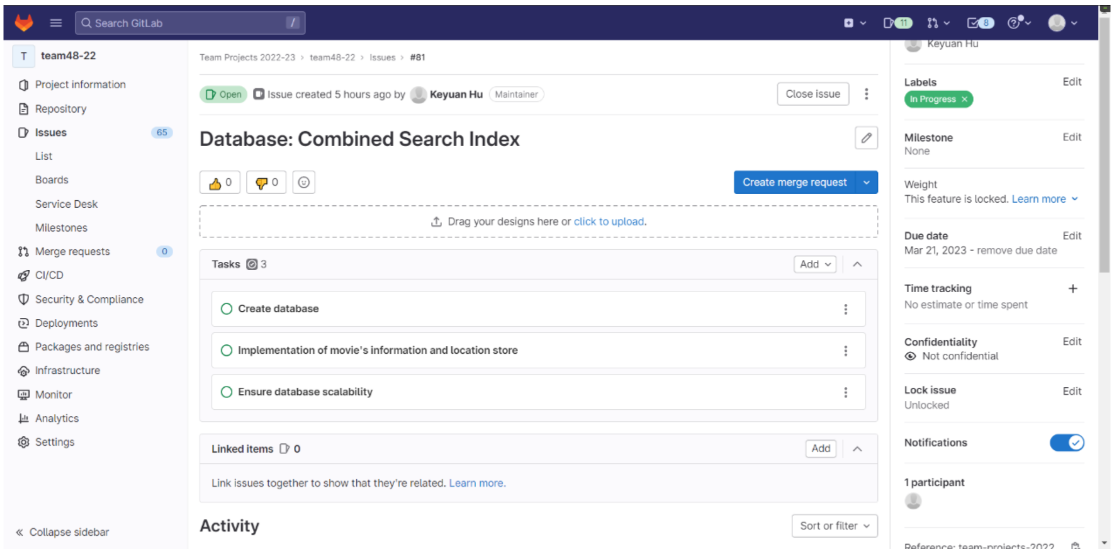
Due date: Mar 21, 2023 - remove due date

Time tracking: No estimate or time spent

Confidentiality: Not confidential

Lock issue: Unlocked

Notifications



Team Projects 2022-23 › team48-22 › Issues › #81

Open · Issue created 5 hours ago by Keyuan Hu (Maintainer)

Database: Combined Search Index

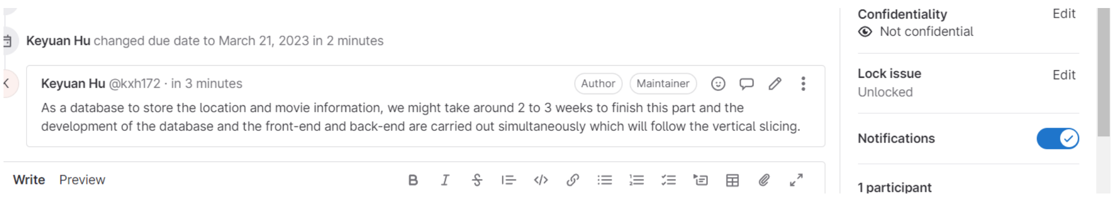
Tasks 3
- Create database
- Implementation of movie's information and location store
- Ensure database scalability

Linked items 0

Link issues together to show that they're related. Learn more.

Activity

Labels: In Progress
Milestone: None
Weight: This feature is locked. Learn more
Due date: Mar 21, 2023 - remove due date
Time tracking: No estimate or time spent
Confidentiality: Not confidential
Lock issue: Unlocked
Notifications
1 participant

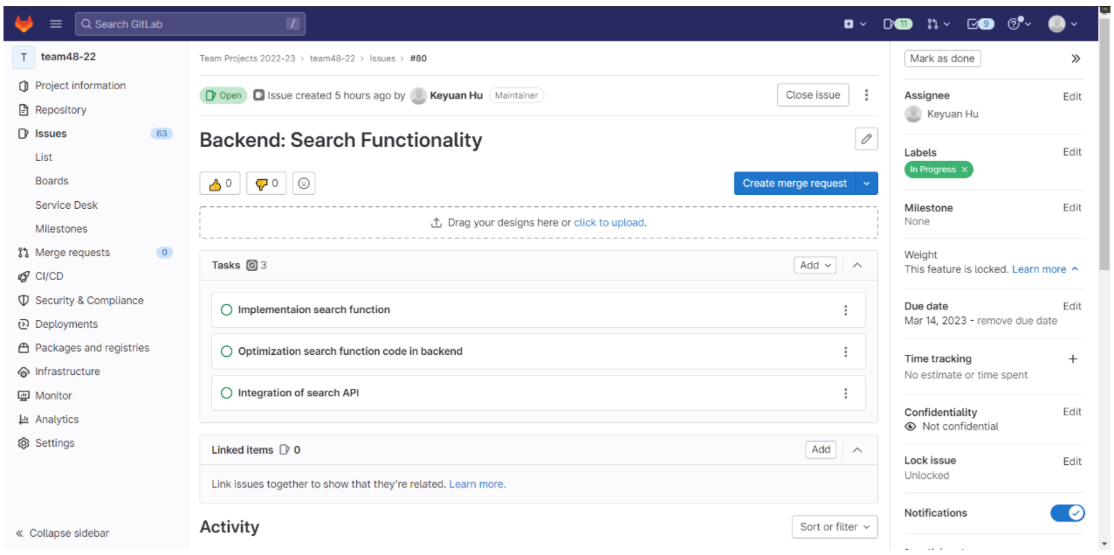


Keyuan Hu changed due date to March 21, 2023 in 2 minutes

Keyuan Hu @kxh172 · in 3 minutes (Author) (Maintainer)

As a database to store the location and movie information, we might take around 2 to 3 weeks to finish this part and the development of the database and the front-end and back-end are carried out simultaneously which will follow the vertical slicing.

Confidentiality: Not confidential
Lock issue: Unlocked
Notifications
1 participant



Team Projects 2022-23 › team48-22 › Issues › #80

Open · Issue created 5 hours ago by Keyuan Hu (Maintainer)

Backend: Search Functionality

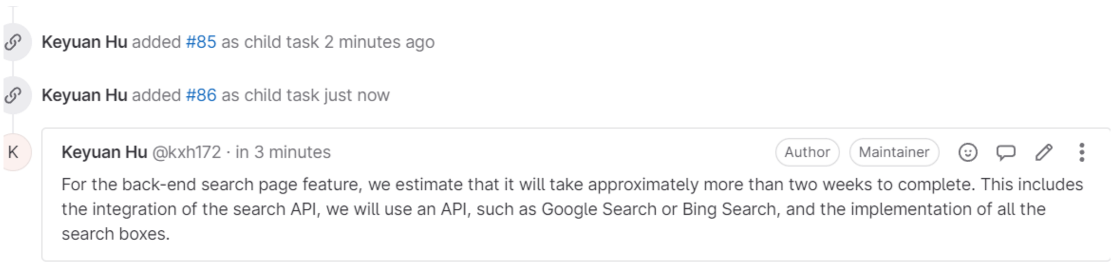
Tasks 3
- Implementaion search function
- Optimization search function code in backend
- Integration of search API

Linked items 0

Link issues together to show that they're related. Learn more.

Activity

Assignee: Keyuan Hu
Labels: In Progress
Milestone: None
Weight: This feature is locked. Learn more
Due date: Mar 14, 2023 - remove due date
Time tracking: No estimate or time spent
Confidentiality: Not confidential
Lock issue: Unlocked
Notifications



Keyuan Hu added #85 as child task 2 minutes ago

Keyuan Hu added #86 as child task just now

Keyuan Hu @kxh172 · in 3 minutes (Author) (Maintainer)

For the back-end search page feature, we estimate that it will take approximately more than two weeks to complete. This includes the integration of the search API, we will use an API, such as Google Search or Bing Search, and the implementation of all the search boxes.

Tech report about Search page

When building a website, there are many options to choose from for the frontend and backend. For our website, we decided to use React.js for the frontend because it's a popular JavaScript library that allows us to create reusable components for the user interface.

For the back-end, we chose Django, a powerful Python web framework that offers many built-in features such as authentication and routing.

And to store our data, we went with PostgreSQL, a free and highly performant relational database management system.

To create a search page for our website, we looked into various APIs and libraries that could help us out. We found that there were two great options that could provide high-quality search results for our users.

1. Google Custom Search: let us develop websites and programs to retrieve and display search results from programmable search engine programmatically.
2. Bing Web Search: It provides a list of related searches made by others, which can help end users refine their online search.

We also decided to use RESTful APIs to connect our front-end, back-end, and database together. RESTful APIs allow different applications to communicate with each other using HTTP requests and responses.

To make things even easier, we looked into several libraries that could help us build our search page.

1. React-Search-Box: It provides an input field for searching and filtering data.
2. React-InstantSearch: It is an open-source UI library for React that let us quickly build a search interface in our frontend application.
3. React-Elasticsearch: It is a highly scalable open-source full-text search and analytics engine which allows us to store, search and analyze big volumes of data quickly and in near real time.

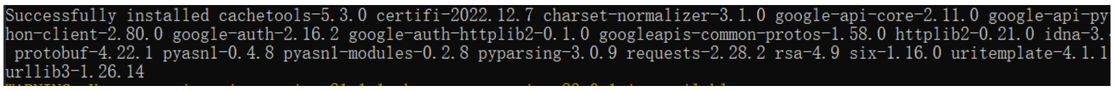
The following is a quick overview of how we put it all together.

1. we can define our data models using Django. We need to create a Movie model and a Location model to represent the data we wanted to search for.
2. Then we built RESTful APIs using Django Rest Framework to allow our frontend to query the backend for movie and location data.
3. In the React.js, we created a search component that allowed users to enter search terms and sent those terms to our Django backend using HTTP requests.
4. In the Django, we used the search terms to query our PostgreSQL database for movie and location data using Django ORM.
5. Finally, we returned the search results from our Django back-end to the React.js front-end, where we displayed results to the user.

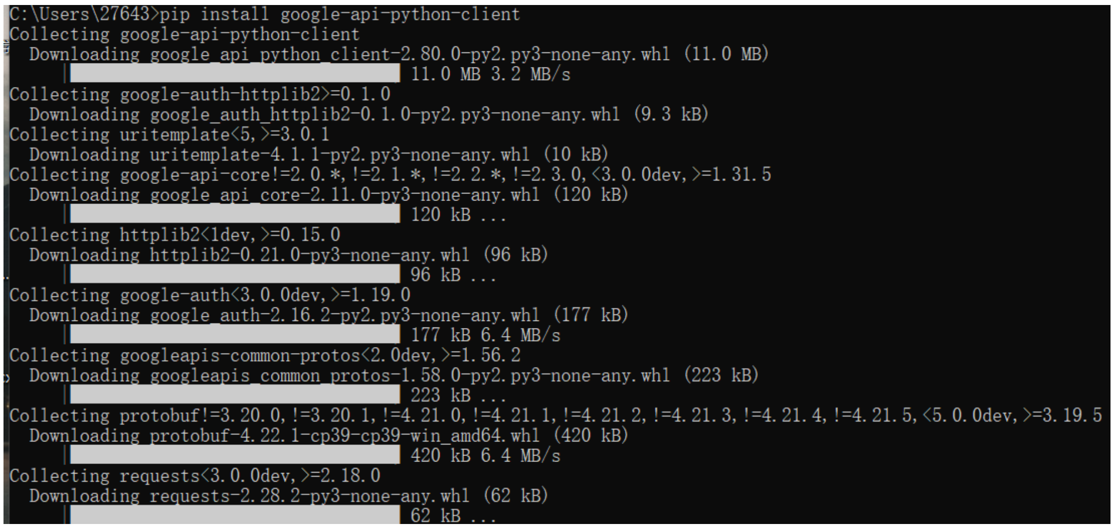
Overall, by using React, Django, and PostgreSQL, along with various APIs and libraries, we were able to create a powerful search page for our website that provided accurate and relevant search results for our users.

Tech Stack/CI

Install the google-api-python-client to make sure that we can use the Google search API in our

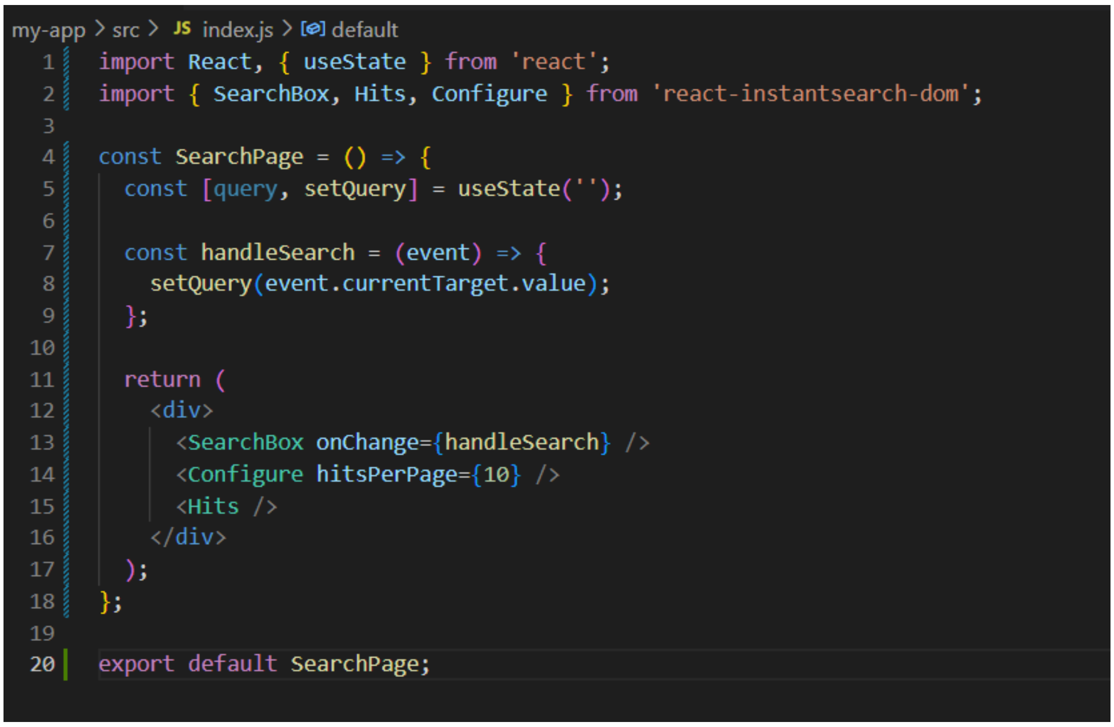


```
Successfully installed cachetools-5.3.0 certifi-2022.12.7 charset-normalizer-3.1.0 google-api-core-2.11.0 google-api-py
hon-client-2.80.0 google-auth-2.16.2 google-auth-httplib2-0.1.0 googleapis-common-protos-1.58.0 httplib2-0.21.0 idna-3.
 protobuf-4.22.1 pyasn1-0.4.8 pyasn1-modules-0.2.8 pyparsing-3.0.9 requests-2.28.2 rsa-4.9 six-1.16.0 uritemplate-4.1.1
urllib3-1.26.14
```



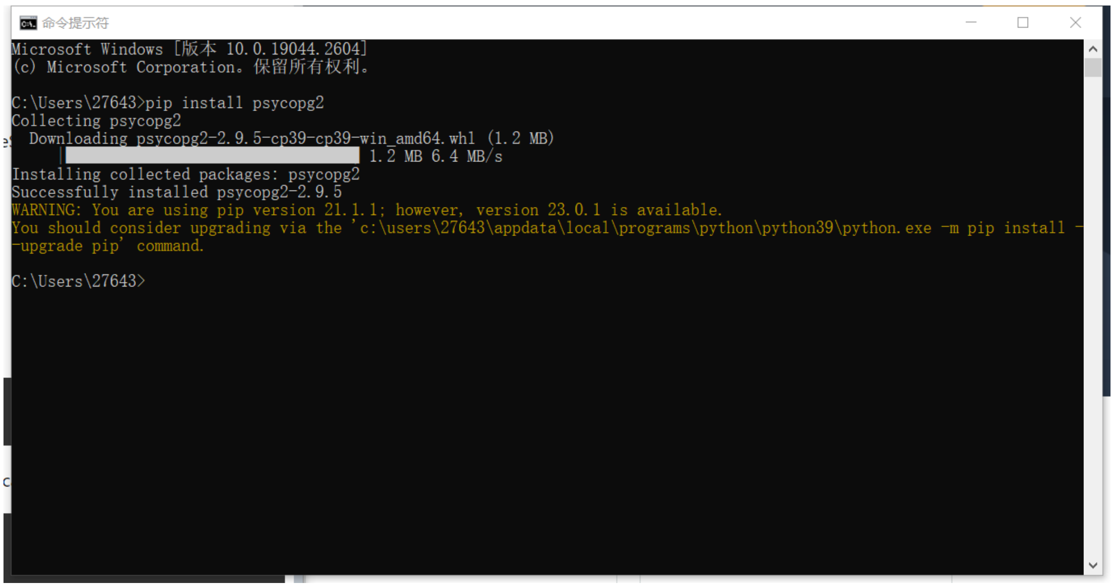
```
C:\Users\27643>pip install google-api-python-client
Collecting google-api-python-client
  Downloading google_api_python_client-2.80.0-py2.py3-none-any.whl (11.0 MB)
     |████████████████████████████████| 11.0 MB 3.2 MB/s
Collecting google-auth-httplib2>=0.1.0
  Downloading google_auth_httplib2-0.1.0-py2.py3-none-any.whl (9.3 kB)
Collecting uritemplate<5,>=3.0.1
  Downloading uritemplate-4.1.1-py2.py3-none-any.whl (10 kB)
Collecting google-api-core!=2.0.*,!=2.1.*,!=2.2.*,!=2.3.0,<3.0.0dev,>=1.31.5
  Downloading google_api_core-2.11.0-py3-none-any.whl (120 kB)
     |████████████████████████████████| 120 kB ...
Collecting httplib2<1dev,>=0.15.0
  Downloading httplib2-0.21.0-py3-none-any.whl (96 kB)
     |████████████████████████████████| 96 kB ...
Collecting google-auth<3.0.0dev,>=1.19.0
  Downloading google_auth-2.16.2-py2.py3-none-any.whl (177 kB)
     |████████████████████████████████| 177 kB 6.4 MB/s
Collecting googleapis-common-protos<2.0dev,>=1.56.2
  Downloading googleapis_common_protos-1.58.0-py2.py3-none-any.whl (223 kB)
     |████████████████████████████████| 223 kB ...
Collecting protobuf!=3.20.0,!=3.20.1,!=4.21.0,!=4.21.1,!=4.21.2,!=4.21.3,!=4.21.4,!=4.21.5,<5.0.0dev,>=3.19.5
  Downloading protobuf-4.22.1-cp39-cp39-win_amd64.whl (420 kB)
     |████████████████████████████████| 420 kB 6.4 MB/s
Collecting requests<3.0.0dev,>=2.18.0
  Downloading requests-2.28.2-py3-none-any.whl (62 kB)
     |████████████████████████████████| 62 kB ...
```

InstantSearch library, we might use in the frontend.



```javascript
import React, { useState } from 'react';
import { SearchBox, Hits, Configure } from 'react-instantsearch-dom';

const SearchPage = () => {
  const [query, setQuery] = useState('');

  const handleSearch = (event) => {
    setQuery(event.currentTarget.value);
  };

  return (
    <div>
      <SearchBox onChange={handleSearch} />
      <Configure hitsPerPage={10} />
      <Hits />
    </div>
  );
};

export default SearchPage;
```

Install psycopg2 which might use to connect database server in the Python program.



```
Microsoft Windows [版本 10.0.19044.2604]
(c) Microsoft Corporation。保留所有权利。

C:\Users\27643>pip install psycopg2
Collecting psycopg2
  Downloading psycopg2-2.9.5-cp39-cp39-win_amd64.whl (1.2 MB)
     |████████████████████████████████| 1.2 MB 6.4 MB/s
Installing collected packages: psycopg2
Successfully installed psycopg2-2.9.5
WARNING: You are using pip version 21.1.1; however, version 23.0.1 is available.
You should consider upgrading via the 'c:\users\27643\appdata\local\programs\python\python39\python.exe -m pip install -
-upgrade pip' command.

C:\Users\27643>
```