1. Prerequisites:

* PyCharm

Install [PyCharm 2019.3.2 (Professional Edition)]

* MongoDB Atlas

Register for an account on the **MongoDB Atlas** and set up your account by following https://docs.atlas.mongodb.com/getting-started/

* pylint

Run “pip install pylint” in Terminal.

1. Environment Setup and configurations:

In file app.py, click in green triangle button, and click on “Run ‘app’”.

A screenshot of a computer screen

Description automatically generated

Then you can see

A screenshot of a cell phone

Description automatically generated

1. Operations and the results:

GET

Get book info with title:

* Input correct title

A screenshot of a social media post

Description automatically generated

* Input wrong title

A screenshot of a social media post

Description automatically generated

Get book info with author:

* Input correct author name

The author may have several books. In following pictures, you can see Martin Fowler has two books.

A screenshot of a social media post

Description automatically generated

* Input wrong author name

A screenshot of a cell phone

Description automatically generated

Get book info with related book:

Maybe lots of books have this specific book as their related book, then GET from http://127.0.0.1:5000/books?related\_book="Working Effectively with Legacy Code" will return a list of books.

* Input correct name of the related book

A screenshot of a social media post

Description automatically generated

* Input wrong name of the related book

A screenshot of a social media post

Description automatically generated

Get author info with name:

* Input correct name

A screenshot of a social media post

Description automatically generated

* Input wrong name

A screenshot of a cell phone

Description automatically generated

1. Operations and the results:

PUT

Update title

A screenshot of a social media post

Description automatically generated

Update id

A screenshot of a social media post

Description automatically generated

Update isbn

A screenshot of a social media post

Description automatically generated

Update rating

A screenshot of a social media post

Description automatically generated

Updating rating count

A screenshot of a social media post

Description automatically generated

Updating review count

A screenshot of a social media post

Description automatically generated

1. Dashboard

List of books

A screenshot of a computer screen

Description automatically generated

List of authors

A screenshot of a computer screen

Description automatically generated

1. Manipulate

Manipulate books

A screenshot of a computer screen

Description automatically generated

A screenshot of a computer screen

Description automatically generated

A screenshot of a computer screen

Description automatically generated

Manipulate authors

A screenshot of a computer screen

Description automatically generated

A screenshot of a social media post

Description automatically generated

A screenshot of a computer

Description automatically generated

1. Test cases

A screenshot of a cell phone

Description automatically generated