Metadata

```
Course:  DS 5100
Module:  09 Python Packages
Topic:   HW Package Booklover
Author:  R.C. Alvarado (adapted)
Date:    7 July 2023 (revised)
```

Student Info

- Name: David Hernandez
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- URL of this file in GitHub: https://github.com/david-hernandz/booklover

Instructions

In your **private course repo on Rivanna**, use this Jupyter notebook and the data file described to write code that performs the tasks below.

Save your notebook in the `M09` directory.

Remember to add and commit these files to your repo.

Then push your commits to your repo on GitHib.

Be sure to fill out the **Student Info** block above.

To submit your homework, save your results as a PDF and upload it to GradeScope. More information about how to create the PDF for this assignment are included at the end of this document.

TOTAL POINTS: 8

Overview

Follow the following recipe we used in class to package the code you wrote for `HW08` -- `booklover.py` and `booklover_test.py`.

- Create a new git repo for your package.
- Create and edit the required files and directories for your package and move the booklover modules there.
- Stage, commit, and push all the files you've created.
- Install your package with pip.
- Outside of your package dir, write a script to test your method.

Put this notebook in your repo. This will allow you to execute bash commands and capture the outpunt directly in the notebook.

TOTAL: 8 POINTS

Tasks

Task 1

(5 points)

Show the directory structure of your repo by running this command from the root of your repo:

In [14]:
```
!ls -lR /home/fxj5fe/Documents/MSDS/DS5100/booklover
```

```
/home/fxj5fe/Documents/MSDS/DS5100/booklover:
total 20
-rw-r--r-- 1 fxj5fe users 1246 Mar 29 19:10 booklover.py
-rw------- 1 fxj5fe users   59 Mar 29 19:11 __init__.py
-rw------- 1 fxj5fe users 1072 Mar 29 22:31 LICENSE
drwx--S--- 2 fxj5fe users 1024 Mar 29 22:33 __pycache__
-rw------- 1 fxj5fe users   11 Mar 29 22:31 README.md

/home/fxj5fe/Documents/MSDS/DS5100/booklover/__pycache__:
total 12
-rw------- 1 fxj5fe users 2088 Mar 29 22:33 booklover.cpython-311.pyc
-rw------- 1 fxj5fe users  299 Mar 29 22:33 __init__.cpython-311.pyc
```

Task 2

(1 point)

Put the URL of your GitHub repo here. Just paste it into a Markdown cell.

URL: https://github.com/david-hernandz/booklover

Task 3

(1 point)

Show the results of installing your package.

```
!pip install -e .
```

bash-4.4$pwd /home/fxj5fe/Documents/MSDS/DS5100 bash-4.4$python book_lover_demo.py Setup Successful! Number of books read: 1 bash-4.4$pwd /home/fxj5fe/Documents/MSDS/DS5100 bash-4.4$pip install -e . Defaulting to user installation because normal site-packages is not writeable Obtaining file:///sfs/qumulo/qhome/fxj5fe/Documents/MSDS/DS5100 Preparing metadata (setup.py) ... done Installing collected packages: booklover Attempting uninstall: booklover Found existing installation: booklover 0.1 Uninstalling booklover-0.1: Successfully uninstalled booklover-0.1 Running setup.py develop for booklover Successfully installed booklover-0.1 bash-4.4$python book_lover_demo.py Setup Successful! Number of books read: 1 bash-4.4$python Python 3.11.3 (main, Apr 19 2023, 23:54:32) [GCC 11.2.0] on linux Type "help", "copyright", "credits" or "license" for more information. >>> import booklover Setup Successful!

Task 4

(1 point)

Create a file outside your repo to test your package by running it.

To do this, import the package into your file and create a BookLover object.

Then add a book and then print number books read.

Then run the file.

Show the output of running the file below, using a command like the following:

```
!python ../book_lover_demo.py
```

Successfully installed booklover-0.1 bash-4.4$python book_lover_demo.py Setup Successful! bash-4.4$cd /home/fxj5fe/Documents bash-4.4$python book_lover_demo.py python: can't open file '/sfs/qumulo/qhome/fxj5fe/Documents/book_lover_demo.py': [Errno 2] No such file or directory bash-4.4$pwd /home/fxj5fe/Documents bash-4.4$cd /home/fxj5fe/Documents/MSDS/DS5100 bash-4.4$python book_lover_demo.py Setup Successful! 1 bash-4.4$pwd /home/fxj5fe/Documents/MSDS/DS5100 bash-4.4$python book_lover_demo.py Setup Successful! Number of books read: 1 bash-4.4$

In [ ]: