Metadata

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

Student Info

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- URL of this file in GitHub: https://github.com/jkenzak/HW9/blob/main/hw09.ipynbs

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 [1]:
```
!ls -lR
```

```
total 40
drwxr-xr-x  6 jackkenzakowski  staff   192 Jul  2 12:22 BookLovers
drwxr-xr-x  6 jackkenzakowski  staff   192 Jul  2 12:25 BookLovers.egg-info
-rw-r--r--  1 jackkenzakowski  staff  1073 Jul  2 12:12 LICENSE
-rw-r--r--  1 jackkenzakowski  staff     5 Jul  2 12:12 README.md
drwxr-xr-x  4 jackkenzakowski  staff   128 Jul  2 12:25 build
-rw-r--r--  1 jackkenzakowski  staff  5299 Jul  2 12:08 hw09.ipynb
-rw-r--r--  1 jackkenzakowski  staff   280 Jul  2 12:25 setup.py

./BookLovers:
total 24
-rw-r--r--  1 jackkenzakowski  staff    29 Jul  2 12:22 __init__.py
-rw-r--r--  1 jackkenzakowski  staff  1034 Jul  1 16:32 booklover.py
-rw-r--r--  1 jackkenzakowski  staff  1941 Jul  1 16:29 booklover_test.py

./BookLovers.egg-info:
total 32
-rw-r--r--  1 jackkenzakowski  staff  210 Jul  2 12:25 PKG-INFO
-rw-r--r--  1 jackkenzakowski  staff  238 Jul  2 12:25 SOURCES.txt
-rw-r--r--  1 jackkenzakowski  staff    1 Jul  2 12:25 dependency_links.txt
-rw-r--r--  1 jackkenzakowski  staff   11 Jul  2 12:25 top_level.txt

./build:
total 0
drwxr-xr-x  2 jackkenzakowski  staff  64 Jul  2 12:25 bdist.macosx-10.9-x86_
64
drwxr-xr-x  3 jackkenzakowski  staff  96 Jul  2 12:25 lib

./build/bdist.macosx-10.9-x86_64:

./build/lib:
total 0
drwxr-xr-x  5 jackkenzakowski  staff  160 Jul  2 12:25 BookLovers

./build/lib/BookLovers:
total 24
-rw-r--r--  1 jackkenzakowski  staff    29 Jul  2 12:22 __init__.py
-rw-r--r--  1 jackkenzakowski  staff  1034 Jul  1 16:32 booklover.py
-rw-r--r--  1 jackkenzakowski  staff  1941 Jul  1 16:29 booklover_test.py
```

Task 2

(1 point)

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

URL: https://github.com/jkenzak/HW9

Task 3

(1 point)

Show the results of installing your package.

`!pip install -e .`

In [7]:
```
!pip install -e .
```

```
Obtaining file:///Users/jackkenzakowski/HW9
  Preparing metadata (setup.py) ... done
Installing collected packages: BookLovers
  Running setup.py develop for BookLovers
Successfully installed BookLovers-0.1
```

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`

In [9]:
```
!python ../Desktop/book_lover_demo.py
```

```
Welcome to BookLover
1
```