

DSC 430: Python Programming  
Assignment 0802: Plot Viewer

Please look at the DieRollExample on the D2L.

Write a class called PlotViewer. It will serve as both the view and the controller for the plot generator classes. The PlotViewer class will be able to register any plot generator.

```
>>pv = PlotViewer()
>>pv.registerPlotGenerator( SimplePlotGenerator() )
>>pv.generate()
Something happens
>>pv.registerPlotGenerator( RandomPlotGenerator() )
>>pv.generate()
Aaliyah Mosley, a abiding alabasterer, must acknowledge the
assuming assassin, Acheron Redwood.
>>pv.registerPlotGenerator( InteractivePlotGenerator() )
>>pv.generate()
Chose a hero's name from the following list:
...
```

A critical concern is how the generator classes handle input/output. When they are connected to a view/controller they must use the i/o of the view/controller. It may be simple text i/o. It may be a complicate GUI. It may be a cell phone app. It may be a webpage. The generator (model) should not know or care.

Record a three minute video in which you run the code. Then, present your code. Specifically, answer the following questions:

- Show how the PlotViewer registers the generators.
- Show how the PlotViewer sends the request to generate plots to the plot generator.
- Show how the PlotViewer is able to accept requests for user input from the plot generators.
- Show how the PlotViewer accepts and presents the plots created by the plot generators.

Submission: Submit a single .py file containing all the code to the D2L. Do not zip or archive the file. Your code must include comments at the top including your name, date, video link, and the honor statement, "I have not given or received any unauthorized assistance on this assignment." Each function must include a docstring and be commented appropriately.