CS 323-Capstone Project

Spring 2023

You will create a program that requires user input to not only branch into different decisions but output specific result depending on those decisions. You may use one of your miniprojects as a starting point, but this program will be much larger than either of those and require several additional components. However, the instructions are fairly flexible to allow you to be creative in what you would like to accomplish.

Jupyter Notebook file must be uploaded to Blackboard by the due date and time.

**Requirements:**

* Input - Program must read input from file, scraped website, or API.
* List, Dictionary, or Data Frame
  + Make use of a list, dictionary, or pandas data frame, to sort and work through inputs
* At least three functions must be defined outside the previously listed exception requirements
* Program must have a substantial print output (useful data, multiple print statements, etc) or write to a file.
* Program must make substantial use of logical conditions, branching etc. The program should be significantly more detailed and complex than any mini project or work we have done in class.
* Iteration or Recursion must be used at some point in the program. For iteration for/while/until is acceptable.
* Program should utilize at least two different skills from the mini-projects (Data Frames, Matplotlib, Web Scraping, APIs).
* Bonus – define and use a class within the program.