In this lab, you will use the fundamental Python skills we've learned to create an interactive application.

You will have the entire day to complete the lab. At the end of class, you’ll share your final deliverable with your instructor for review. You can choose to work on the lab individually or with your classmates, but each person must turn in their own work.

| **Application** | **Problem Statement** |
| --- | --- |
| **Study Review App** | Finally, it's the most exciting season of the year: standardized testing season! Create an app that allows users to create and manage review questions in preparation for an upcoming exam. |

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### **Deliverables**

You will submit a Python program containing:

* A Python application that accepts user input to interact with users

## **Specific Requirements:**

#### **User Stories**

1. When I start up the application, I am given a choice between the following options:
   1. Begin a review session
   2. Add a new question to the list
   3. Quit the application
2. If I choose to add a new question, I am asked to provide:
   1. The question text
   2. A list of possible responses separated by commas
   3. Designation of which response is correct
   4. A list of topic tags separated by commas
3. If I choose to start a review session:
   1. The program presents a random question from the question list
   2. I am provided the question text and all response options with labels
   3. I am prompted to provide my response using the labels presented
   4. The program informs me of the correct answer
   5. I am prompted to choose whether to continue the session or quit

#### **Technical requirements**

-Develop your code using **Classes** and Object Oriented Programming Principles

-Stretch Goal: Add test cases to test your functions. Your test cases should run the function with 1 or more predefined input variables and validate the correct response is returned as expected. The test cases should return “Pass” if the correct response is returned from the function and “Fail” if an incorrect response is returned.

-Store the list of created questions dictionary

#### **Stretch goals**

The program allows you to limit the session to questions from a specific topic

The program keeps track of your right and wrong answers to each question

The program uses some logical system for giving you questions you've answered wrong

The program allows you to load questions from different tests, tracked in different files

The program tracks the average time you've taken to answer each specific question