Dear Participant,

Welcome to the final stage of **Python Development** track of Spectrum Internship Drive. After the two stages, you will surely be having your basics strong and confident to move into the end game of this internship drive.

Welcome to the **Stage 3.**
This task is based of Tkinter and Structured Query Language. This task is interesting and is also equally tough. So check the resources, learn thoroughly and then proceed on to do the task.

Google stuff, explore the web and have fun completing this stage. All the best!!

TASK 3:
Prerequisites:

- Python
- Knowledge on tkinter
- Knowledge on sqlite or MySQL.

Task :

With the emergence of e-education, online classes and tests are the new normal. In such an urgent situation, the teachers need a fast as well as effective method to take online tests. You being the Software Development Head of your school and a veteran Python developer have been tasked to create **QuizzIT** - **an interactive GUI application to conduct quizzes, using python's tkinter library and sqlite3 or MySQL.**

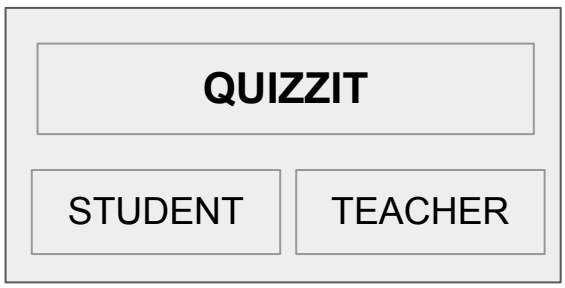
Your application must have two parts. One for the teaches where he/she can set questions and the other part where the students can appear the quiz. Further details on the different sections are mentioned below.

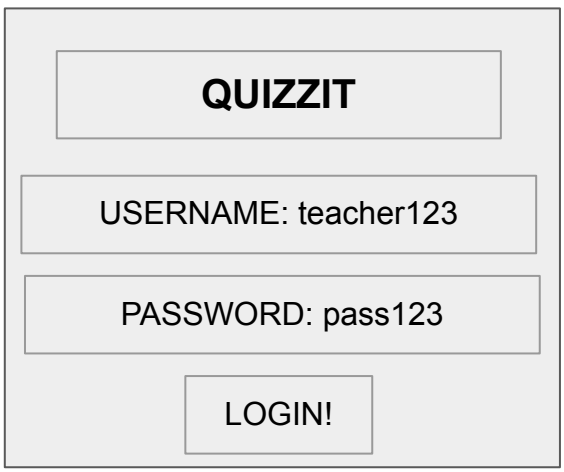
The layouts given here are demo layouts. You are free to explore your creativity. But you have to include the features and functionality mentioned.

Task explanation:

You have to create a **GUI** (Graphical User Interface) application using **tkinter** and **sqlite3 or MySQL**. This application will have **2 sections.**

Start Window: This will be the start window where the person has to select if he/she will login as a student or as a teacher.



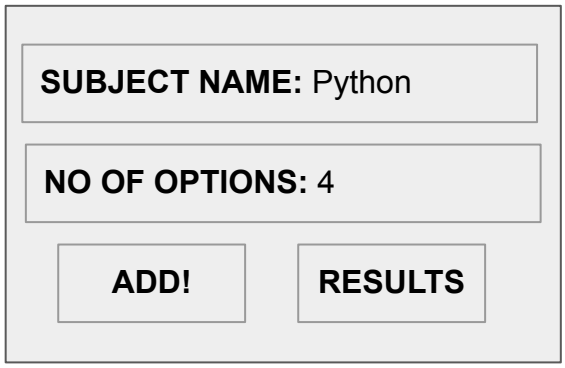


IF TEACHER:

Here, teacher can login. Set some default values for login e.g.- teacher123 for username and pass123 for password.

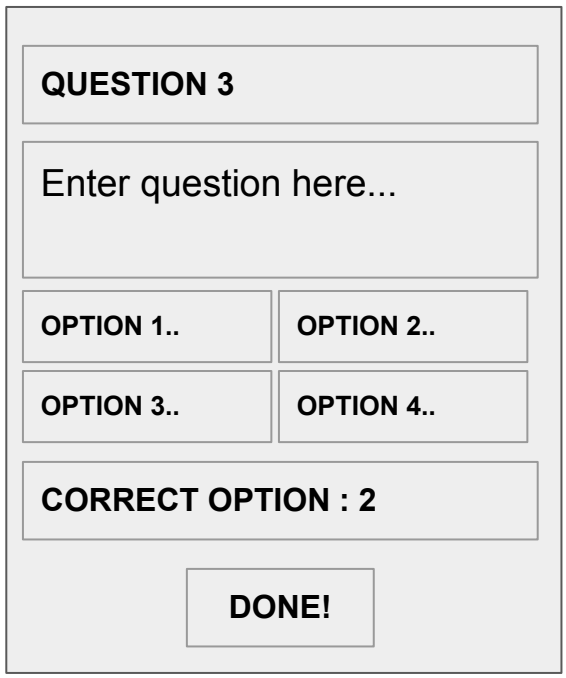
UPON LOGGING IN:

Here the teacher can create questions for the students. On clicking add the teacher can add new questions. Clicking on Results will show the names with scores of students fetched from the scores database.



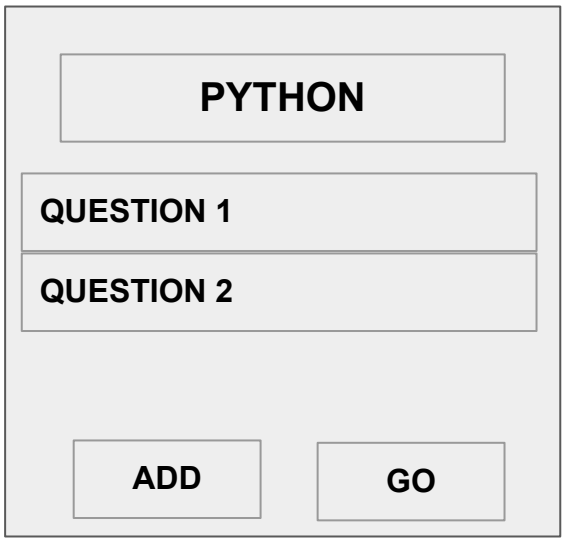
ON CLICKING ADD:

A page with an option to create question appears.



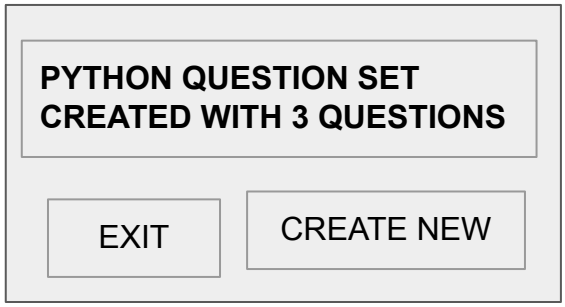
ON CLICKING GO:

This page will show the no of questions created. Create new will take back to the post login window.

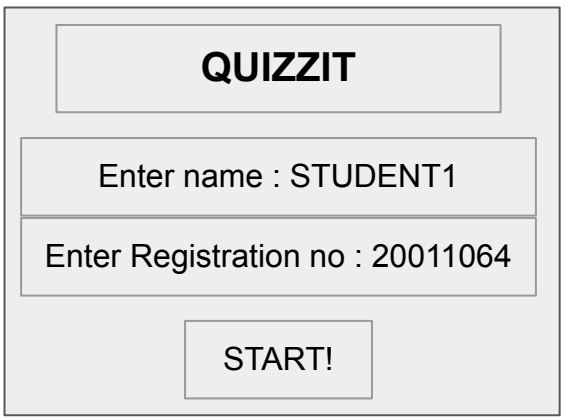


ON CLICKING ADD:

A new window will appear which allows the teacher to enter the question, its options and the correct answer.



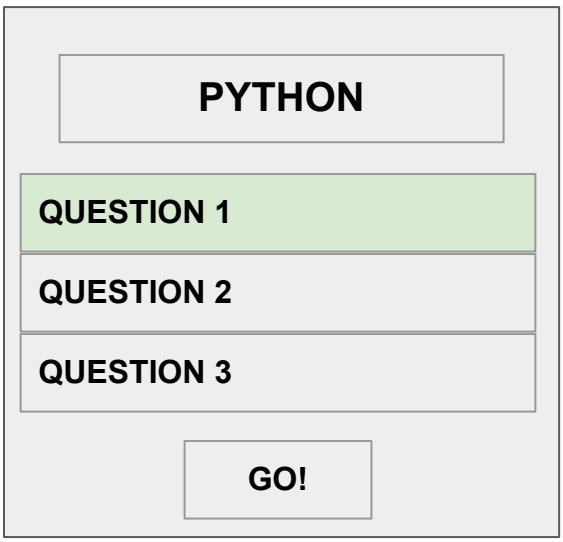
IF STUDENT:

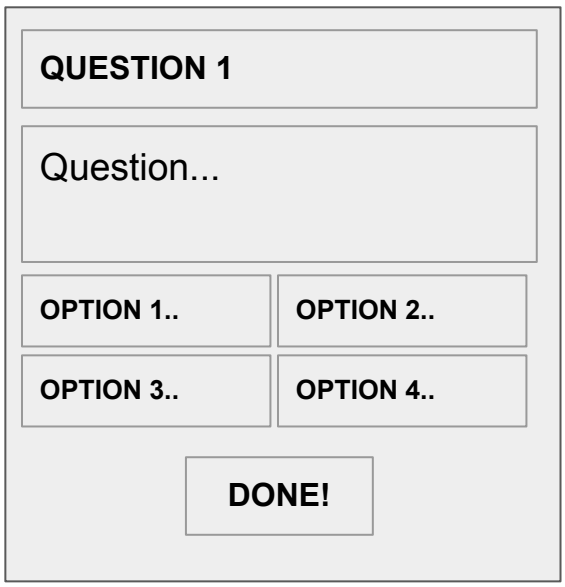


Here, the student can take the test. Firstly he/she should enter his/her name and registration number and click start!

ON CLICKING START:

The test will start now. Clicking on each Question will take you to a new page where you can select the option.Answered Questions will have a different colour.
Min. 4 questions must be included





ON CLICKING GO:

It takes the student to a different page that shows his/her **result** and an option to **start a new quiz.**

Database part:

You can create your database using MySQL or Sqlite3
You have to create two databases.

1. Quiz Database:-
   Here you will have the columns: Ques., option 1, option 2, option 3, option 4, correct ans.
2. Score Database:
   Here you will have the columns: Student name, Regd. No, Score

You can choose any type of database and SQL of your choice.

NOTE:- You can make the layout as much creative and beautiful you can. You can also add as many features and functionality you feel like but the given features must be present in your application. Doing such things will increase your chances of getting an actual internship post SID in the partnered companies.

Resources:

Setup:-

1. Tkinter :- How to install Tkinter in Python?
2. For SQlite:- https://sqlitebrowser.org/

Reading:

- Tkinter: Python Tkinter Tutorial
- SQL: 1. https://www.w3schools.com/sql/
  2. https://www.tutorialspoint.com/sql/index.htm

Watching:

1. Tkinter Python Tutorial | Python GUI Programming Using Tkinter Tutorial
2. Tkinter Course - Create Graphic User Interfaces in Python Tutorial

SQL and Database Tutorial:

1. https://www.youtube.com/watch?v=HXV3zeQKqGY
2. https://www.udemy.com/course/the-complete-sql-bootcamp/

Submission Guidelines:-

The above tasks are to be submitted by:

- **Files to be submitted:-**
  1. Your code file
  2. The two Database file you used.
  2. Screen Recorded video of the output of maximum 5 minutes.

Create a Folder named as "**your name_Pydev_task3**" For eg.- "Sam_Pydev_task3" , keep the above files in that folder and then upload the folder into Google Drive. Then right click on the uploaded folder, click Share, then click on **"Change to anyone with the link"**, then Copy Link, and submit that link in the Dashboard.

Note:- Read the Submission instruction properly and share the drive link which can be accessed.

In case of any confusion or queries, you can drop a text in the Python Development group in Telegram which you would have joined by now. Or if you haven't joined, log in to your dashboard at https://internship.spectrumcet.com , and click on the bottom right telegram button.

LAST DATE OF SUBMISSION:

30/07/2021

Warm regards,

SPECTRUM, CET-B