Task for Phase 1 (Deadline - 5th June, 2021)

Make a Quiz console app.

Main project will carry 50 points and 15 points for each additional task completed. Same program could be made in Java and Dart

Note: Dart doesn't support Interface so you need to use abstract class instead of interface.

User Flow.

- 1. Select a topic for the Quiz app.
- 2. Then, on selecting a particular topic for the quiz, based on the topic of the quiz, questions should be displayed in random order with options in randomized order.
- 3. Score count should be maintained i.e. on selecting the correct answer, appropriate points should be added and on for all incorrect answers, the correct answers and final score should be displayed at the end.
- 4. After the completion of a quiz of one topic, there should be an option to start the next topic or repeat the same.

Code hints

- 1. A Main class which will be an entry point for your program. This Main class will have all the Topics for quiz.
- 2. Each topic (eg. Maths, Java) will extend an abstract class (eg. Topic) and override its properties which are unique for each topic (eg. Topic name and questions).
- 3. Also make a data class which will have fields for question, options and answer to encapsulate data in a class (eg. QuestionModel).
- 4. Results for the answer should be handled by an Interface (eg. Results) with functions which will be called if the response is correct or incorrect.

Min Criteria: 2 Topics for MCQ's, 3 Questions per topic and 4 Options per Question

Additional Points/Idea

- Instead of hard coding questions and options for quiz, you can store the quiz data in JSON or CSV format. (<u>Gson</u> and <u>json_serializable</u> for JSON file and <u>OpenCSV</u> and <u>csv</u> for CSV file)
- 2. A console timer can be generated i.e. each question will have a specified amount of time for its attempt. (reference)
- 3. More than one option could be correct for a question.

Submission Criteria

- 1. Since, by then, you would also have learned VCS like Glt/Github. Also attach some screenshots in README.md.
- 2. You would have to create a single repo for both Java and Dart.

Submission form - https://forms.gle/aKRkXMBiePqXRjkf9