Comp 319 Programming Assignment #1 QuickQuiz Game

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1 Objectives and Definition

The objective of this assignment is to make a simple quiz game, namely QuickQuiz, on Android platform. To implement this assignment you need to cover Android Studio, Activity, Multiple Activities, Intent, States of Activity and usage of Handler. QuickQuiz is a simple game that users can test their knowledge on different categories. These categories can be; economy, food, history and etc. Each category contains different questions and questions are listed under the category based on the points. Points represent the difficulty level of the question on the correlated category. Students are responsible to find categories and correlated reasonable questions and answers.



Figure 1: QuickQuiz Game Design (a) App-1 (b) App-2

Fig. 1 demonstrates the two possible screenshots of QuickQuiz that show the different category of questions. When the user selects the question, the application displays the question and four possible answers to the user. The user needs to select the answer within a predefined amount of time that is controlled by a timer. Timer needs to be shown to the user to warn the user when the time is over. If given answer is correct, the user gains the correlated point and question returns to green in page where categories are listed. If the answer is wrong, then this question is marked as red. If the user cannot give an answer to question within the time limit or user pushes a back button then the question is marked as blue. The game is over when there is no question in each category. When the game is over, the user is informed with his/her nickname and points up to now. Application has the following properties;

- Application starts with an initial screen and user needs to enter a nickname.
- After nickname entrance, users will be prompted a screen where the different categories
 of the topic are listed. Users can select one of the questions that are listed below the
 each category.
- After question selection, the question and four possible answers are presented with a timer that counts down.
- When the time is over or user gives answer to this question, application returns back to page where categories are listed and question is controlled. If the answer is correct, the question returns to green. If the answer is wrong then the question becomes red. If no answer is given or user pushes a back button when the timer is counting, question return to blue.
- When user pushes home button or user gets call, application is suspended. When the user opens the application, the application needs to start from the point that was on before suspended.
- The game is over when there is no question left in categories of question. When the game is over, the user is informed with the total point that he/she gains.

2 Requirements

The application needs to be designed in object oriented manner. User, Question, and Categories have to be separate classes. Students have to be aware of the underlying class model and the relation of classes. The application has to be designed in multiple activities and needs to satisfy the defined objectives and properties in Section 1. Each of the objectives and properties is tested before submission. Students need to aware of the relation in activities that is demonstrated on the lecture.

3 Submission

Students need to submit their source code and screenshot of the working demo to Blackboard web site. The missing or corrupted files, nonworking demos are not accepted. Students are expected to explain the code details or show working demo when it is requested.

4 Demo and Grading

In grading, each group or student needs to demonstrate the working copy of the code with the submitted files. Each defined objectives and properties is evaluated separately. Students will be asked different kind of questions related to the application, class model and application structure. Group members can take different points based on the evaluation. The doodle poll for demo session will be announced by TAs.