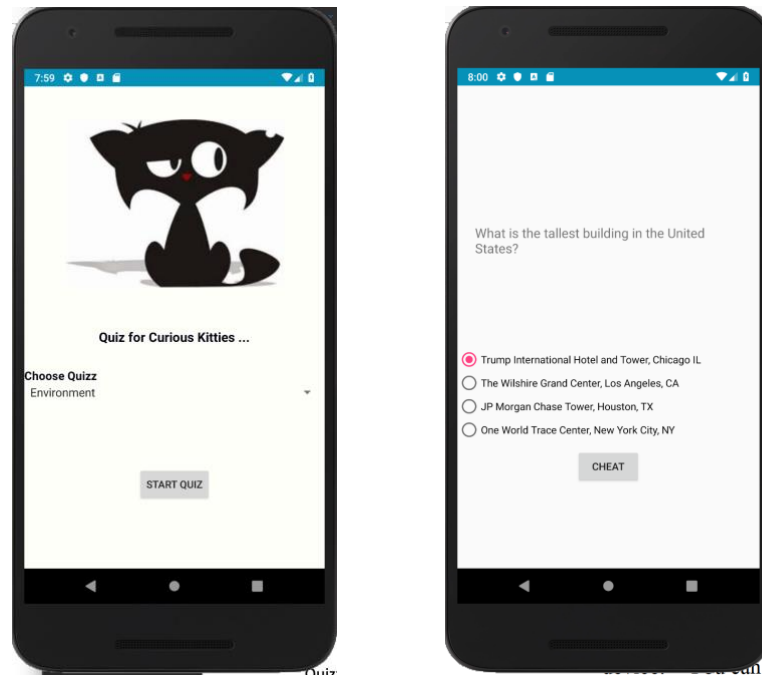


Project 2 - Design Report

Dhakshayini Koppad

App Name: CuriousKitty

Objective: To make multiple choice quiz android app that takes inputs from JSON file. The quiz should also give the user an option to cheat and peek at the answer(if he wishes to).



Design: The below **Pseudo code** gives the highlights of the algorithm and how the code is structured.

Pseudo Code:

Icon Change – The icon image customized (not the default android icon)

- Loaded the new image into the image assets
- Changed the background image and resized



MainActivity:

- Add background image – image view
- Add the spinner dropdown option for user to select which question he wants to take.
- Add start button to start quiz after the quiz has been chosen

- Pass the user chosen quiz information from MainActivity to QuizActivity

QuizzActivity:

- Read the quiz chosen from the MainActivity.
- loadAllQuestion method:
 - passes the quiz file name to be opened to loadJSONFromAssets.
 - loadJSONFromAssets :
 - loads the JSONfile with readAssets
 - loads the contents to a buffer.
 - Passes the buffer content to a variable of string type.
 - Look for the keyword “questions”.
 - Load the list associated with “questions” into an array.
 - Loop through the list of key : value pairs and store the below variables for each index value –
 - Question
 - Answer
 - Load the choices into an array
 - Store the values at each index in the choices array into option1,option2,option3,option4 variables’.
 - Pass the above variables as arguments to the Questions class.
- Retrieve the questions through getters from the Questions class and store in an quiz page variables.
- Set text for question, answer and options on screen.
- Create onClick listener for all the buttons and wait for user input.
- When button pressed - check if the option selected is same as the answer text.
- Once press detected, automatically change to the next question(no next question).
- Increment current question index.
- If same increment correct counter, else increment the wrong counter.
- Save the values of current question index, correct, wrong counters.
- Create intent to pass value of correct answer in case the user presses the cheat button to CheatActivity.
- Create intent to pass value of correct, wrong counter values to ScoreActivity after the list of questions is exhausted.

CheatActivity:

- Receive the answer from QuizAcvtivity to CheatActivity.
- Set the screen with the answer.

ScoreActivity:

- Receive the correct, wrong counters from QuizAcvtivity to Score activity.
- Set the screen with the counter values.
- Create Intent to loop back to MainActivity page if restart button is pressed.

Extra Features:

- Next button eliminated. Once any onclickListner is activated the screen navigates to the next question automatically (To go back to previous question, user has to press the back button).
- Added animation for the Splash Screen for the image in the background for the MainActivity page.
- All the text strings for the layout are stored in the Strings.xml of the res folder.

References:

- BNRG book
- <https://abhiandroid.com/programming/json>
- <http://developer.android.com/index.html>