CS 499-007: Advanced Mobile Application Development Spring 2020

Homework-01

Due Friday January 31 30 Points Total

Instructions:

- 1) This is an individual assignment. It is okay to exchange ideas with other people or review external material on the assignment topics but the work you submit should be your work.
- 2) Include a header in your assignment sheet including your name, the section number, and the homework number.
- 3) Cite any external sources you use to help you with your assignment.
- 4) Submit your assignment as a <u>PDF file</u> on the assignment page on BBLearn. Submissions via email will not be accepted.

Android Application Requirements:

Implement a Flutter mobile application modeled based on the *i-am-rich* application implemented in the *Flutter: Part2* LinkedIn training. Requirements for the application are listed below:

- 1. The application will have a single screen displaying an icon. It does not have any functionality.
- 2. Use a distinct personalized topic for your application. Examples are: *i_am_happy*, *i_like_hiking* or *i_love_programming*.
- 3. Use *Scaffold* widget for the basic material design structure of your application screen display.
- 4. Include an *AppBar* widget for the screen display and set its title to your application topic.
- 5. Include an *AssetImage* widget to display an image in the middle of the screen display.
- 6. Use an image file to display an image consistent with the application topic in the *AssetImage* widget.
- 7. Use unique choice of Material colors for the *Scaffold* and *AppBar* widgets *background* colors. Select colors from collection of Material colors available here.
- 8. Use a custom *app icon* for your application for the iOS and Android phone homepage.
- 9. Be creative and aim for an elegant and visually appealing screen display.

Implementation:

- 1. Implement your application using Android Studio, Flutter platform and Dart programming language.
- 2. Create your Flutter application project using *Flutter Application* template.
- 3. Use image file in *PNG* or *JPG* format.

Testing: Use *Nexus 6* virtual device with API level 28 to run your application.

Deliverables:

Include snapshots of the following artifacts as displayed in the Android Studio. Paste the snapshots in a copy of this document.

- 1. Components of your program including:
 - a. The Dart file under the *lib* directory. Expand all the code to show the complete Dart code including the *import* instructions.
 - b. The Android Studio Project Pane showing any directories and components that you have added/changed for your application. Expand android, images, ios and lib directories to show all application components.
 - c. Show at least one android *mipmap* image and one iOS *icon-App* image displayed in the Android Studio Editor pane.
 - d. The *pubspec.yaml* file after removing all comments.
- 2. View of your application when it is run on the *Nexus 6* virtual device.
- 3. View of Android Nexus 6 home page including display of your *app icon*.

Reference:

LinkedIn Learning Video

Flutter: Part 1 - Introduction Flutter: Part 2 - Building Apps