National University of Sciences and Technology (NUST)
School of Electrical Engineering and Computer Science

Department of Computing

EC-303: Mobile Application Development

Class: BESE 8AB + BSCS 7ABC

Lab 09:Building Layouts for rich application Interfaces.

Date: 21st April 2021

Time: 9:00 AM - 12:00 PM

Instructor: Dr. Hassan Ali Khattak

Lab Engineer: Mr. Aftab Farooq

Lab 9: Building Layouts for rich application Interfaces

Objectives

The objective of this lab is helping students to familiarize themselves that how to design layouts for rich application Interfaces.

Tools/Software Requirement

Flutter, Android Studio, XCode, Any Editor

Helping Material:

- Flutter official Documentation
- https://www.solutelabs.com/blog/flutter-tutorial-for-beginners-step-by-step-guide.
- Stack overflow
- Flutter Community

Helping Link for Icons & Logo:

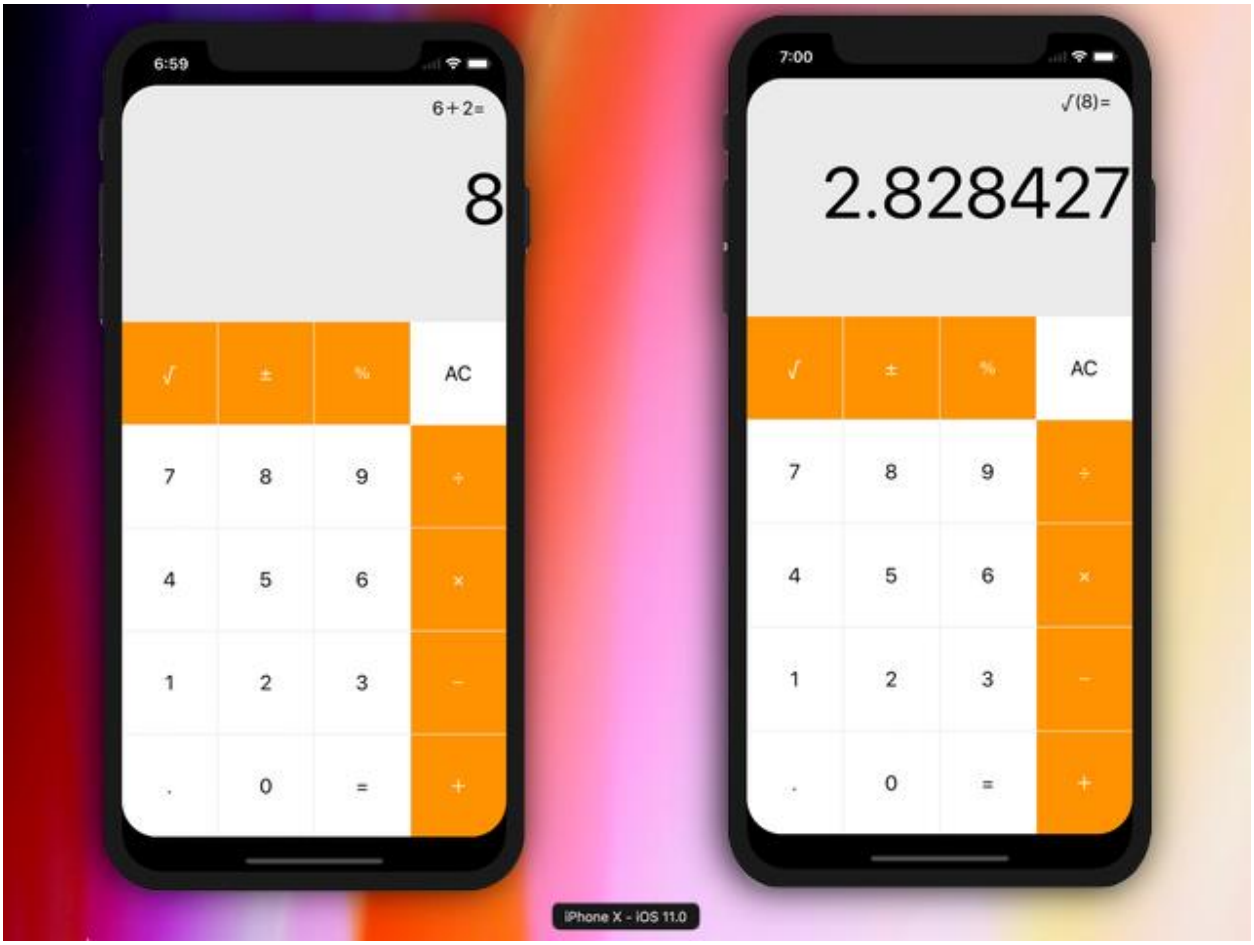
- https://icons8.com/icons/set/mobile-app

Lab Task

Create a Simple Calculator Application and Implement Different Operations:

A). Following are the important functionalities of the calculator:

1. Whenever a user presses any number (0-9) or operations (+,-,x,/,±, .), it must be shown in the input text field (see example image below).
2. In case of '.' button pressed, a '0' must be added at the end of the string as shown in above image.
3. When '=' button is pressed result is shown in the text field.
4. 'AC' button must clear and reset everything (text field, any storage variables).
5. The square root button, $\sqrt{\ }$,should calculate the square root of the input.
6. The '±' button should add/remove a '–' sign to the input value.



Solution
Task Code: **Task Output Screenshot:**

Deliverable

Compile a single word document by filling in the solution part and submit this Word file on LMS. This lab grading policy is as follows: The lab is graded between 0 to 10 marks. The submitted solution can get a maximum of 5 marks. At the end of each lab or in the next lab, there will be a viva/quiz related to the tasks. You must show the implementation of the tasks in the designing tool, along with your complete Word document to get your work graded. You must also submit this Word document on the LMS. In case of any problems with submissions on LMS, submit your Lab assignments by emailing it to Mr. Aftab Farooq: aftab.farooq@seecs.edu.pk.