

Subject: Fundamentals of Mobile Programming(Div B)

Assignment: 1

Date:28th Dec 2022

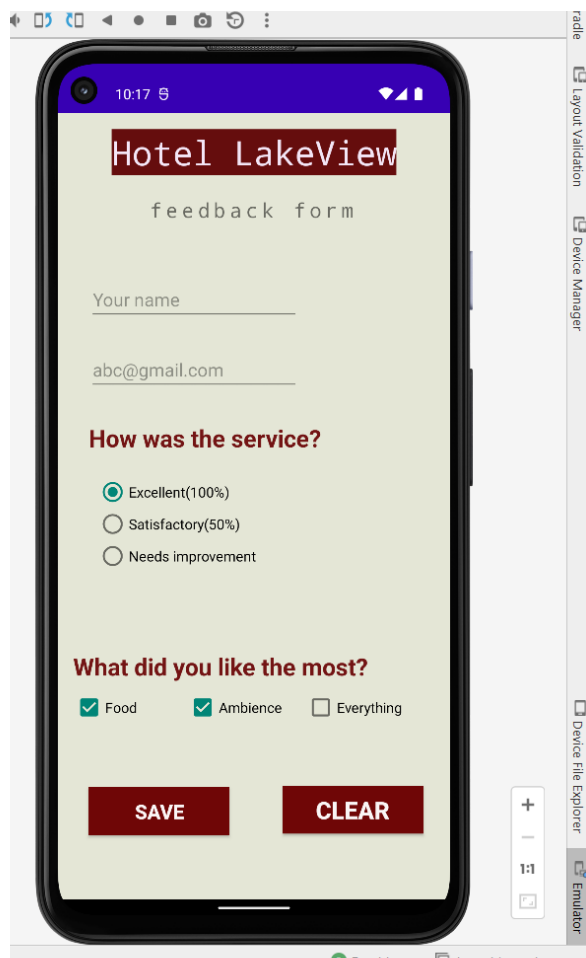
Aim: To make students understand the android studio user interface and different input controls.

Instructions:

- 1) Don't create multiple AVDs. AVD once created must not be deleted.
- 2) Select Nexus S/ or Nexus 5 for creating AVD in the college lab.

Q: Develop an android application that displays a feedback form for a Hotel.

Note: You can also take input according to your convenience.

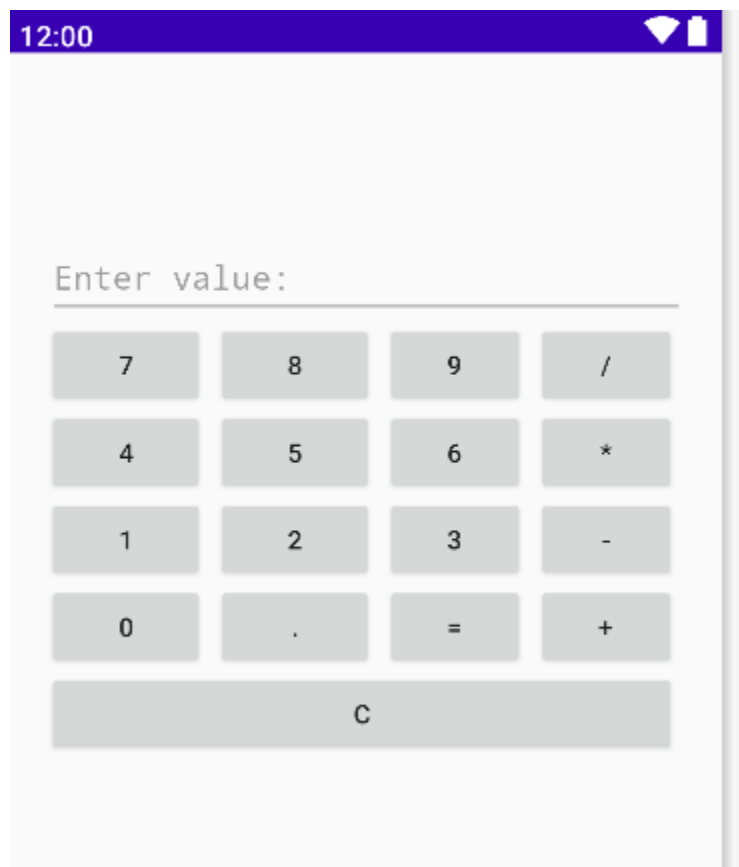


Assignment: 2

Date:4th Jan, 2022

Aim: To develop knowledge of various layouts in Android application development.

Q: Create a simple calculator app in Android Studio using Linear, Table, and Relative Layouts. However, write java code for only one of the layouts



Assignment 3:

Date: 25th Jan, 2023

Aim: working with Toast, RadioButtons, and CheckBox

NOTE: perform spinner.getSelectedItem() on button click event and not on spinner setonitemselectedlistener

FROM HERE, A SINGLE PROJECT WILL BE CREATED

Q: Create a new “Student App” project in Android Studio.

Note: You can use the layout of your choice.

1) The application must contain activity for Student Registration.

A) It must display a “Welcome to SRKI” message on launching. (*Use toast*)

B) Post-launching, it must display the following controls:

All the controls must position on the left or Center of the screen.

Create an appealing background.

1) A text view positioned in the center that displays the “**SRKI Registration Form**”

2) Edit texts that would ask:

- a) Full name of the applicant
- b) Mobile number
- c) Email
- d) Password
- e) Age

Note: Use suitable text types, hints, ems, text, and font style and size for option 2

3) RadioButton for asking HSC Stream.

Options: Science, Commerce

4) Checkboxes for Bachelor courses.

Options: CS, IT, MB, BT, ES (Select multiple options while displaying)

5) Spinner for asking Education Medium:

Options: English, Gujarati, Others

6) Button for submitting and clearing the details

7) TextViews for displaying Stream and course

After clicking the submit button, details from ***RadioButton, Spinner, and CheckBox*** as entered by the employee must be displayed in text views :

Output

HSC stream: Science

Course: CS

Education Medium: English

Assignment 4:

Date: 1st Feb 2023

Aim: Performing CRUD on ListView along with validation and function

Create a new activity named “MainActivity_Clubs” that would ask students to provide their area of interest in Emerging technologies.

Options:

- a) Machine learning
- b) IOT
- c) Web Application Development
- d) Block Chain
- e) Advanced Database Technologies

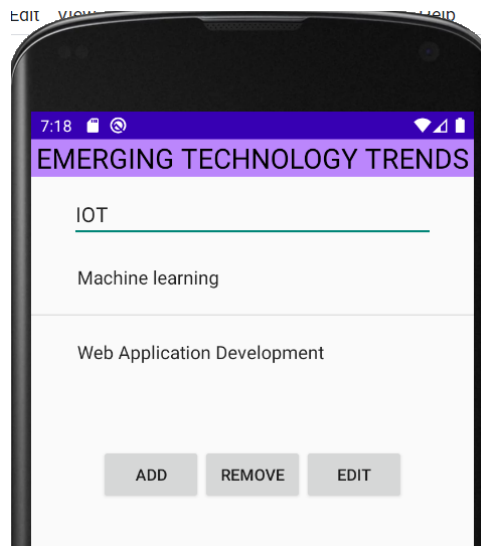
The activity must contain :

EditText - to enter the area of their interest

ListView - to display a list of areas entered by the user

Buttons (Add, Edit, Remove) to perform CRUD operations on the listView

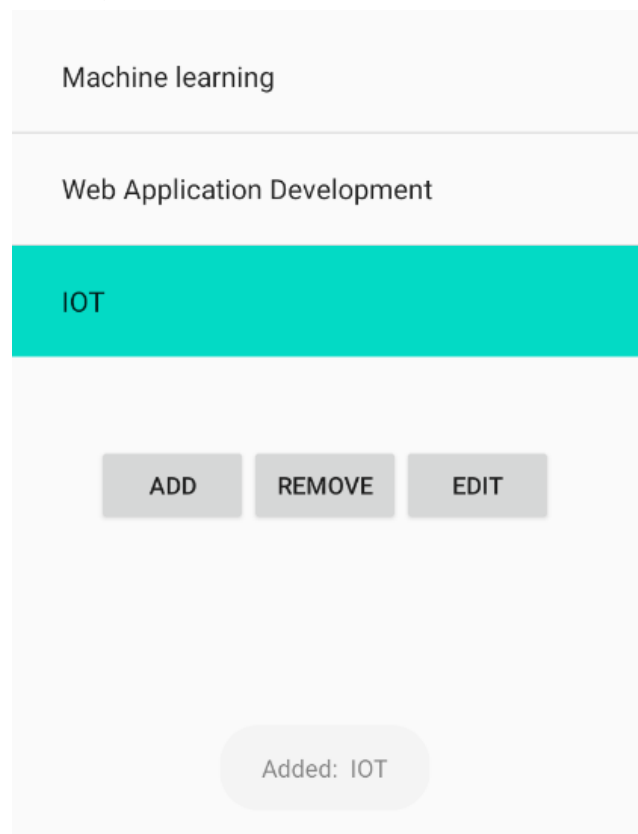
CHECK FIGURES FOR REFERENCE PURPOSE ONLY



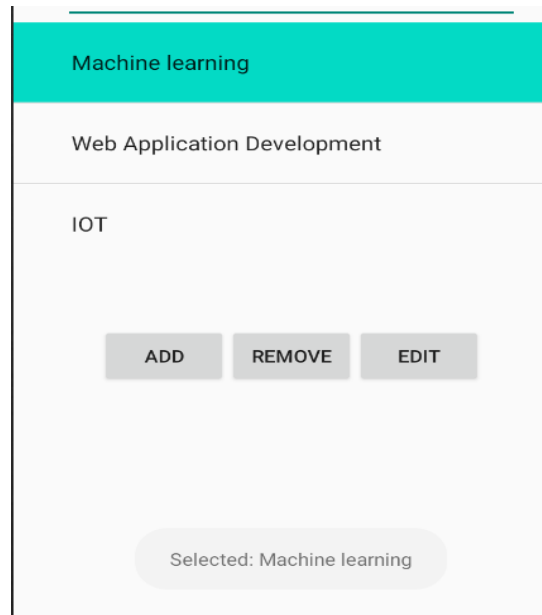
Perform the following operations once the activity is designed:

Note: For toast, create a user-defined function `CallToast(String s)` which must be invoked every time one of the CRUD operations is performed

- 1) Add and display the area of interest in the listView as entered by the student in the edit text.**
 - a) The appropriate message must be displayed in the Toast if the students try to insert it while the textbox is empty
 - b) On Insertion display the appropriate message in Toast (Check figure for reference)



- 2) On selection of a particular option from the listview, the color of the selected option must be changed and it must also be displayed in the toast**



- 3) Remove a particular selection from the list when long-pressed and generated the appropriate message in a toast
- 4) Update a particular selection and generate an appropriate message in the toast. Display appropriate message in the Toast if the students try to Update while the textbox is empty

Assignment 5:

Date: 9th Feb 2023

Aim: Working with Intent

Q Implement intent in your “Student App” project

- a) Add an edit text in the **registration activity** created in **Assignment 3**, that would allow the student to enter his age. It must also contain a “NEXT” button. Clicking on this button should allow the student to go to the activity, “**MainActivity_Clubs**” created in **Assignment 4**.
 - i) On traversing, pass the following information in intent and display in labels on activity, “**MainActivity_Clubs**”.
 - 1) Name
 - 2) Age (int value)
 - 3) Email
 - 4) Course
- b) **MainActivity_Clubs** must contain a button “PREVIOUS” which should land the student in the registration activity.

Assignment 6:

Date: 23rd Feb 2023

Aim: Creating, Preserving, and retrieving data from Shared Preference along multiple activities.

Create a *new activity* in your existing application with the name “Registered details”. The newly created activity must retrieve and display the information preserved in shared preferences from the following mentioned activities:

- 1) From the **registration activity** created in **Assignment 3**, create and preserve the following information in Shared Preferences:

- i) Name
- ii) Email

2) From the **MainActivity_Clubs** created in assignment 4, select an area of interest from the listview and preserve it in Shared Preferences

Output:

Name: Tony Stark

Email: iamTony@avengers.com

Area of interest: IOT

: