Agenda

- creating menus from xml
- ListView
- Taking the input and adding in ListView
- Handling the click event in listview
- Multiple Dependend Spinner

App1 -> Create the menus from xml

- 1. Add the toolbar in the activity_main.xml
- 2. Attach the toolbar as action bar
- 3. implement the method onCreateOptionsMenu
- 4. Cretae new android resource file main_menu inside menu resource directory
- 5. create the menus in this main_menu.xml

```
<item android:title="Settings" />
<item android:title="profile" />
```

- 6. We need to inflate this main_menu file to attach all the menus to the toolbar

```
MenuInflater menuInflater = getMenuInflater();
menuInflater.inflate(R.menu.main_menu,menu);
```

App2 -> Creating menu icons

- follow all the 6 steps of App1.
- 1. Right click on res directory and select new->vectorasssect
- 2. Choose the icon that you want give proper name to it and save it.
- 3. into the main_menu xml file add the icon that you have created.
- 4. Also we can add the id to evey menu item which we can use to verify it in the onOptionsItemSelected()

ListView (App3)

- 1. Add the ListView into activity_main.xml
- 2. get the object of the listView
- 3. create the array of countries
- 4. create the array adapter and pass the arry of countries to it.
- 5. set the adapter to the listview

```
ListView listView;
String  []countries = new String[]{"India","USA","China","UK","Japan"};
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        listView = findViewById(R.id.listView);
        ArrayAdapter arrayAdapter = new ArrayAdapter(this,
android.R.layout.simple_list_item_1,countries);
        listView.setAdapter(arrayAdapter);
    }
```

- 6. To add the onclick event on evey item into tthe listview set the setOnItemClickListener() Oon the listview

```
 listView.setOnItemClickListener(new AdapterView.OnItemClickListener() {
            @Override
            public void onItemClick(AdapterView<?> parent, View view, int
position, long id) {
                Toast.makeText(MainActivity.this, countries[position],
Toast.LENGTH_SHORT).show();
            }
        });
```

App4 -> Implementation of dynamic list

- 1. Create the UI for the app which is going to have edittext, button and a listview
- 2. cretae the object of arraylist of type string where we want to add the car company names
- 3. Create the ArrayAdapter reference on the class level and add the object of array adapter in the onCretae Method
- 4. Handle the click event of that add button and inside it fetch the contents from edittext and add it into the arraylist.
- 5. once the array list is changed referesh the adapter by calling the method on adapter notifyDataSetChanged().

App5 -> Adding Student object in List

- 1. Cretae UI as per the requirement
- 2. Create the student class and implement it from serializable
- 3. Create array list of students.
- 4. attach the adapter to the listview with this students list.
- 5. on add click event fetch the data from edit text and useit t cretae the student object and then add the student object into the array list.

- 6. refresh the adapter.
- 7. handle the onItemclick of listview .
- 8. pass the student object to the Details Activity through this intent
- 9. get the object of student from intent into details activvity and show it into textviews(TODO for labwork)

App6 -> Application to de designed as the image provided

- 1. Created all the UI for all the activities
- 2. create the main_menu xml for the options menu
- 3. Fetch all the view objects into all activities
- 4. set the toolbar as action bar
- 5. Create the student class and create an array list of students into main activity
- 6. Create the array adapter and set it on listview.
- 7. register your activity for result and navigate to the input activity to get the data.
- 8. create the array of courses for the spinnerCourse, set the adapter and handle the selection event
- 9. whatever selection of spinnner course is done switch that selection and create the respective array of subcourses.
- 10. call user defined the method setSpinnerSubCourse(String []subCourse)
- 11. Add the subcourses to the adapter and set it on to spinnersubCourse, also handle its selected event.
- 12. Add the course and the sub course into the student object.
- 13. Implement the onclick of button save where fetch the name and mobile,add it in the intent, setResult(0,intent) and finish the activity
- 14. In MainActivity inside onActivity resukt check for the intent and get the student data and addd it in the arraylist of student.
- 15. set the onItemClickListner on the listview and navigate to the DetailsActivity to display the student
- 16. implement the logic for diplaying the stduent on the textviews in the details activity
- 17. Implement the popup menu in the onclik event of listview
- 18. handle the onclick of the pop up menus and do the respective changes(navigation or deletion)