

Assignment 303

Ques 1: what are view explain in detail?

Ans: View is the basic building block of user interface (UI) in android. View can be considered as a rectangle on the screen that shows some type of content. It can be an image, piece of text, a button or anything that an android application can display.

The size of a view is expressed with a width and a height. A view actually possess two pairs of width and height values. Size of a view can be set by specifying the exact size or by using some predefined values.

A view is also known as widget in android. Any visual and interactive is called a widget.

Ques 2: write a short note on text view?

Ans: The class is used to display text on the android application screen. It also allows user to optionally edit it. Although it contains text editing operations, the basic class does not allow editing. Some of the attributes are:
android:id

This is the ID which uniquely identifies the

control.

android:family

Font family (named by string) for the text.

android:hint

Hint text to display when text is empty.

android:maxHeight/width

Makes the text view be at most this many pixels tall/wide.

android:minHeight/width

Makes the text view be at most least this many pixels tall/wide.

Ques 3: State the various attributes of edit text view?

Ans: Some of the attributes are:

android:autoText

If set, specifies that this Text view has a textual input method and automatically corrects some common spelling errors.

android:editable

If set, specifies that this text view has an input method.

android:text

This is the text to display.

Ques 4: Explain the button views in detail.

Ans:

Button is a component which can be pressed or clicked by the user to perform an action. The main usage of the button view is that whenever we click a button, we can set a method that will handle that specific button request and will carry out the necessary action.

Some of the attributes are:

android:text size: To set text size inside button

android: Background: To set the background color of the button.

android: gravity: This can be used to set the position of any view on the app screen. The available values are right, left, center, center vertical etc. You can also use two values together, using the | symbol.

Ques:

Write a short note on auto complete text view?

Ans:

An auto complete text view is a view that is similar to Edit text, except that it shows a list of completion suggestions automatically while the user is typing. The list of suggestions is displayed in drop down menu.

Some of the attributes are:

android:completionHint

This defines the hint displayed in the drop down menu.

android:popupBackground

This sets the background.

android:dropdownHeight

This specifies the basic height of the dropdown.

Que 60 What are menus. Explain commonly used menus in android applications.

Ans Menus are a common user interface component in many types of applications. To provide a familiar and consistent user experience, Menu is a part of user interface component which is used to handle some common functionality around the application.

Following are the commonly used in menus in android application.

- Option menu.
- Context menu.
- Popup menu.

• Android options menu

In android, options menu is a primary collection of menu items for an activity and it is useful to implement actions that have a related context. The app, such as

Settings, Search etc. By using options menu, we can combine multiple actions and other options that are relevant to our current activity.

- Android Context menu

Context menu is a floating menu that appears when the user performs a long click on an element and it is useful to implement an action that effect the selected content or context frame.

Ques How we can send and receive SMS in android applications.

Android Send SMS using Intent

Ans In android, Intent is a messaging object which is used to request an action from another app component such as activities, services, broadcast receivers and content providers. Intent filter to receive SMS

We also need to tell android that we want to handle incoming SMS messages. In order to do this, we will add a <receiver> to register a broadcast receiver to the manifest XML. We will also add an <Intent-filter> to let android know that we want to launch a specific class when an SMS comes in.

Ques 8: State the steps for creating the analog and digital clock in android applications.

Ans 1:

Step 1: Firstly create a new Android application. This will create an XML file "activity_main.xml" and a Java file "MainActivity.java".

Step 2: Open "activity_main.xml" file and add following widgets in a relative layout.

- An analog clock.
- A digital clock.

This will make the UI of the application. There is no need for assignment of IDs as these widgets will display the time by themselves.

Step 3: Leave the Java files as it is.

Step 4: Now run the app. Both clocks are displayed on the screen.

Ques 9: Write short note on time picker view.

Ans:

Android time picker allows you to select the time of the day in either 24 hours or AM/PM mode. The time consists of hours, minutes and clock format. Android provides this functionality through timepicker class.

In order to use timepicker class, you have to first define the timepicker component in your activity.xml. It is define below-

```
<TimePicker
    android:id="@+id/timepicker1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"/>
```

After that you have to create an object of Timepicker class and get a reference of the above defined xml component. Its syntax is given below.

```
import android.widget.TimePicker;
private TimePicker timepicker1;
timepicker1 = (TimePicker) findViewById
(R.id.timepicker1);
```

In order to get the time selected by the user on the screen, you will use `getCurrentHour()` and `getCurrentMinute()` method of the timepicker class. Their syntax is given below.

```
int hour = timepicker1.getCurrentHour();
int min = timepicker1.getCurrentMinute();
```

Ques 108) What are phone calls and dialog boxes?

Ans 108) Phone calls:

Android provides Built in applications for phone calls, in some occasions we may need to make a phone call through our application. This could easily be done by using implicit Intent with appropriate actions. Also, we can use PhoneStateListener and TelephonyManager classes, in order to monitor the changes in some telephony status on the device.

Dialog boxes:

In android, Dialog is a small window that prompt messages to the user to make a decision or enter additional details.

In android, we have different type of dialog available, those are
Alert dialog:

This dialog is used to display prompt to the user with title, upto three buttons, list of selectable items or a custom layout.

Datpicker Dialog: This dialog is a predefined UI control. and it allow user to select date.

Timepicker dialog: It is predefined UI control and it allow user to select time.