

Android Application Development – Practical

Practical 7: Grid View with XML based animation and Thread Demo

AIM: Create an Android application to demonstrate: Grid View and XML based animation

GridView:

A GridView is a type of Adapter View that displays items in a two-dimensional scrolling grid. Items are inserted into this grid layout from a database or from an array.

The adapter is used for displaying this data, `setAdapter()` method is used to join the adapter with GridView.

The main function of the adapter in Grid View is to fetch data from a database or array and insert each piece of data in an appropriate item that will be displayed in GridView.

Animations:

Android Animation is used to give the UI a rich look and feel. Animations in android apps can be performed through XML or android code.

In this practical we'll go with XML codes for adding animations into our application.

Following are common types of Animations

1. Fade In Animation
2. Fade Out Animation
3. Blink Animation
4. Zoom In Animation
5. Zoom Out Animation
6. Rotate Animation
7. Move Animation
8. Slide Up Animation
9. Slide Down Animation
10. Bounce Animation

Important attributes of animation

android:duration : Duration of the animation in which the animation should complete.

TRANSFORMATION : is the transformation that we want to specify. In our case we start with an x and y scale of 1 and end with an x and y scale of 5 in Zoom.xml

android:startOffset : It is the waiting time before an animation starts. This property is mainly used to perform multiple animations in a sequential manner

android:repeatCount : This defines number of repetitions on animation. If we set this value to infinite then animation will repeat infinite times

Programs:

1. Create an android application to demonstrate Grid view with animations.
2. Create and android application to demonstrate threading.