

Days	Topic	Assignments
1	Introduction to Android & Environment Setup	
2	Introduction to Application Components	
3	Creating Hello World app and Understanding app folder structure	Create app to display hello text msg within app screen
4	Activities and Lifecycle events	
5	Resources and Assets	
6	Supporting different screen sizes	Create an app with different layout for each screen size
7	Layouts and Views	Create app UI using different layouts
8	Text , Images , and other Widgets	Create an app UI with an image and some text description
9	ListViews , GridViews and other scrolling views	Show dummy food items and their prices in grid and list
10	Saving persistent data using SharedPreferences	Create notes app
11	Saving persistent data using SQLite databases	Create ToDo list app
12	Services and Intent Services	
13	Broadcast Receivers	Create a digital clock using time tick broadcast
14	Android Fragments	Create a app with 2 pane UI - left pane with Thumbnail list and right pane with image description
15	Intents and Intent filters	Select an image using intent and show within app UI
16	Android Notifications and Pending Intents	Create an app to show notification and open app again on notification touch
17	Capturing images using camera	Capture an image using intent based camera and show within app
18	Android gestures like zoom , pan , swipe , rotate , drag and drop.	
19	Android alert dialogues with custom layouts	Display an alert dialog with a layout showing good morning message with a picture
20	Android Event Handling	Create a UI with 5 different UI widgets and show widget name in toast on click event
21	Creating option menu and handling menu events	Create an app with 3 menu options as : 1)show flut names , 2)show movie names and 3)close app
22	Understanding Canvas API and Custom Views	Create a custom view and paint the background with green color
23	Drawing basic shapes and borders in Canvas	Create a UI with custom view and draw various geometrical shapes on screen using canvas
24	Drawing images using canvas	Create an app to display an image in custom view kept in resources using canvas api
25	Android MultiTouch handling	Create app to detect and show number of finger touching the screen and leaving the screen in onscreen text
26	Drawing over canvas using finger gestures	Create a doodle app with facility to save drawing
27	Android Styles and themes	Create an app with multiple widgets and apply look and feel using xml styles
28	Background operations using AsyncTask	Create an app to compute factorial of an 11 digit number using async task and display result using its callback methods
29	Scheduling alarms in android and Alarm Manager	Create an app to show a hello msg in notification after 10 mins from app launch
30	Connecting to Internet and Downloading files	Create an app to check network connection and download an image file using a public internet url
31	Permissions , performance and security	Add feature to request storage permission before saving drawing to external storage in doodle app
32	Content Providers and data sharing	Add option to share drawing saved using doodle app we created in previous session
33	Querying system data using Content Resolvers	Read list of images in device using media content query and display in grid view
34	Android Contacts and PhoneQuery	Create an app to read and display contacts stored in the app with contact picture , name and number