**\*\*Beginner Level:\*\***

1. \*\*Display a Toast Notification:\*\*

- Create a simple Android app that displays a toast notification when a button is clicked.

2. \*\*Notification Basics:\*\*

- Learn how to create a basic notification using `NotificationCompat.Builder` and show it when a button is clicked.

3. \*\*Customizing Notifications:\*\*

- Explore customization options such as setting different icons, colors, and text for notifications.

4. \*\*Add Action Buttons:\*\*

- Add action buttons to your notification, allowing users to perform actions directly from the notification.

5. \*\*BigTextStyle Notification:\*\*

- Implement a notification using `BigTextStyle` to display longer text content.

6. \*\*InboxStyle Notification:\*\*

- Create a notification using `InboxStyle` to display a list of messages.

**\*\*Intermediate Level:\*\***

7. \*\*Notification Channels:\*\*

- Implement notification channels to categorize and manage different types of notifications in your app.

8. \*\*Grouped Notifications:\*\*

- Group multiple notifications together using `NotificationCompat.Builder.setGroup()`.

9. \*\*Notification Priority and Importance:\*\*

- Understand the importance and priority levels of notifications, and set them accordingly.

10. \*\*Custom Notification Layout:\*\*

- Create a custom layout for your notification using `RemoteViews`.

11. \*\*Foreground Service with Notification:\*\*

- Implement a foreground service with an ongoing notification.

12. \*\*Scheduled Notifications:\*\*

- Schedule notifications to be shown at a specific time using `AlarmManager` or `WorkManager`.

**\*\*Advanced Level:\*\***

13. \*\*Notification Styling:\*\*

- Create custom notification styles using `NotificationCompat.DecoratedCustomViewStyle`.

14. \*\*Media Notifications:\*\*

- Implement media notifications for audio or video playback in your app.

15. \*\*Custom Heads-up Notifications:\*\*

- Create custom heads-up notifications for important messages.

16. \*\*Notification Preferences:\*\*

- Allow users to customize notification preferences within your app.

17. \*\*Custom Gesture Actions:\*\*

- Implement custom actions triggered by specific gestures on the notification.

18. \*\*MessagingStyle Notification:\*\*

- Create a messaging-style notification for chat or conversation-like interfaces.

**\*\*Expert Level:\*\***

19. \*\*Notification Interactions:\*\*

- Implement custom actions that interact with your app when the notification is clicked.

20. \*\*Notification Channels Configuration:\*\*

- Allow users to configure notification channels preferences within your app.

21. \*\*Dynamic Notifications:\*\*

- Create notifications with dynamic content based on real-time data or user interactions.

22. \*\*Custom Notification Animations:\*\*

- Add custom animations to your notifications for a polished user experience.

23. \*\*Notification Testing:\*\*

- Implement automated tests for your notification logic using frameworks like Espresso.

24. \*\*Notification Analytics:\*\*

- Integrate analytics to track user interactions with your notifications.

25. \*\*Push Notifications:\*\*

- Implement push notifications using Firebase Cloud Messaging (FCM) or other push notification services.

26. \*\*Background Notifications Handling:\*\*

- Manage notifications in the background, ensuring proper handling and user engagement.

27. \*\*Notification Security:\*\*

- Implement security measures to prevent abuse of notifications and ensure a secure notification environment.

28. \*\*Notification Accessibility:\*\*

- Ensure your notifications are accessible to users with disabilities by testing with accessibility tools.

29. \*\*Advanced Notification Lifecycles:\*\*

- Understand and handle advanced scenarios like notification dismissal, snoozing, and timeout.

30. \*\*Notification Optimization:\*\*

- Optimize your app's notification system for performance, battery efficiency, and overall user satisfaction.