

# Understanding Material Design

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# Material Design Features



## Material Design Themes

**Lists and Cards** – RecyclerView and CardView

## Views and Shadows

- Elevation
- Clipping Views

## Animation

- Touch Feedback
- Circular Reveal
- Activity Transitions



# API 21 Specific Features

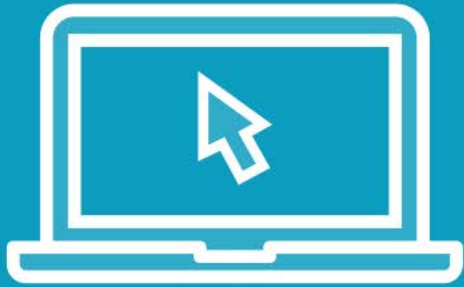


## Features available only in Android 5.0 and above

- Activity Transitions
- Touch Feedback
- Circular Reveal Animations
- Path-based Animations
- Vector Drawables
- Drawable Tinting



# Demo



**Apply Theme to your application**



# Applying Theme

## Default Material Themes

### Material theme (API 21+)

`android:style/Theme.Material` (dark version)

`android:style/Theme.Material.Light` (light version)

`android:style/Theme.Material.Light.DarkActionBar`

`android:style/Theme.Material.NoActionBar` (No Action Bar)

## Themes with Backward Compatibility

### AppCompat (API 7+)

`Theme.AppCompat`

`Theme.AppCompat.Light`

`Theme.AppCompat.Light.DarkActionBar`

`Theme.AppCompat.NoActionBar`



# Maintaining Compatibility by XML

## For MinSDKVersion >= 21

Resource Directory →

drawable ( For API 21 and above )

values ( For API 21 and above )

layout ( For API 21 and above )

## Backward Compatibility : MinSDKVersion < 21

Resource Directory →

drawable ( For below API 21 )

drawable-v21 ( For API 21 and above )

values ( For below API 21 )

values-v21 ( For API 21 and above )

layout and layout-v21



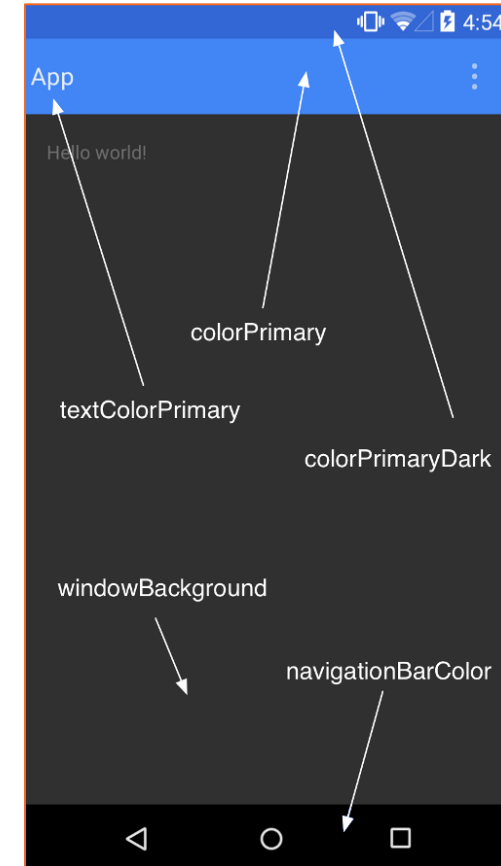
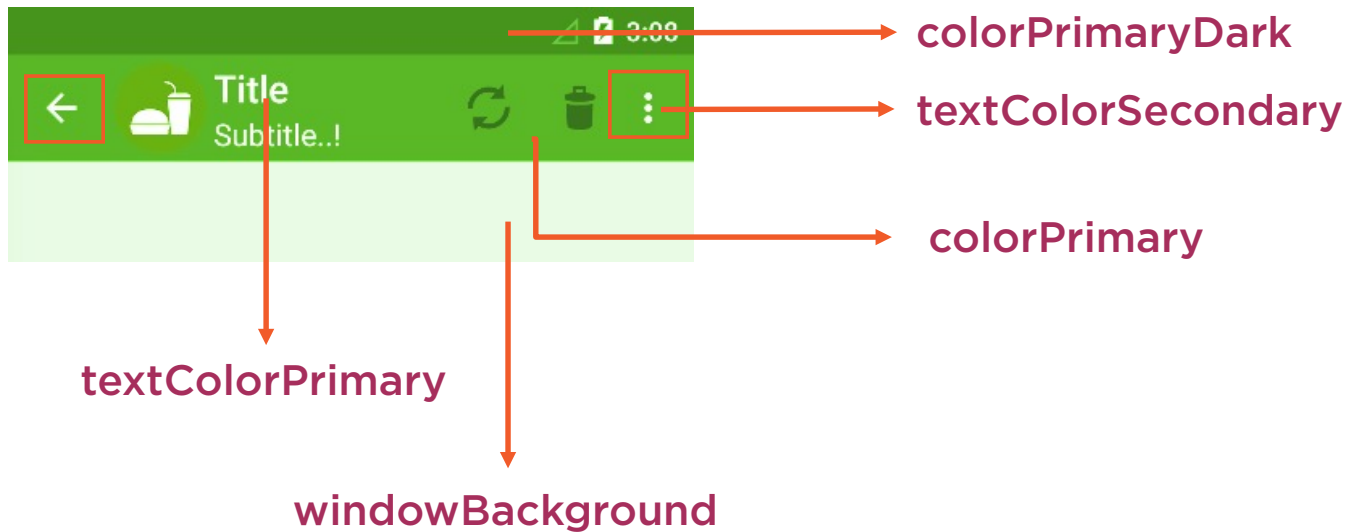
```
// Check if we're running on Android 5.0 or higher
if (Build.VERSION.SDK_INT >= Build.VERSION_CODES.LOLLIPOP)
{
    // Call some material design APIs here
} else { // For Below API 21
    // Implement this feature without material design
}
```

## Maintaining Compatibility by Java

**A Snippet to maintain compatibility of Material Design Features in Java code**



# Color Palette

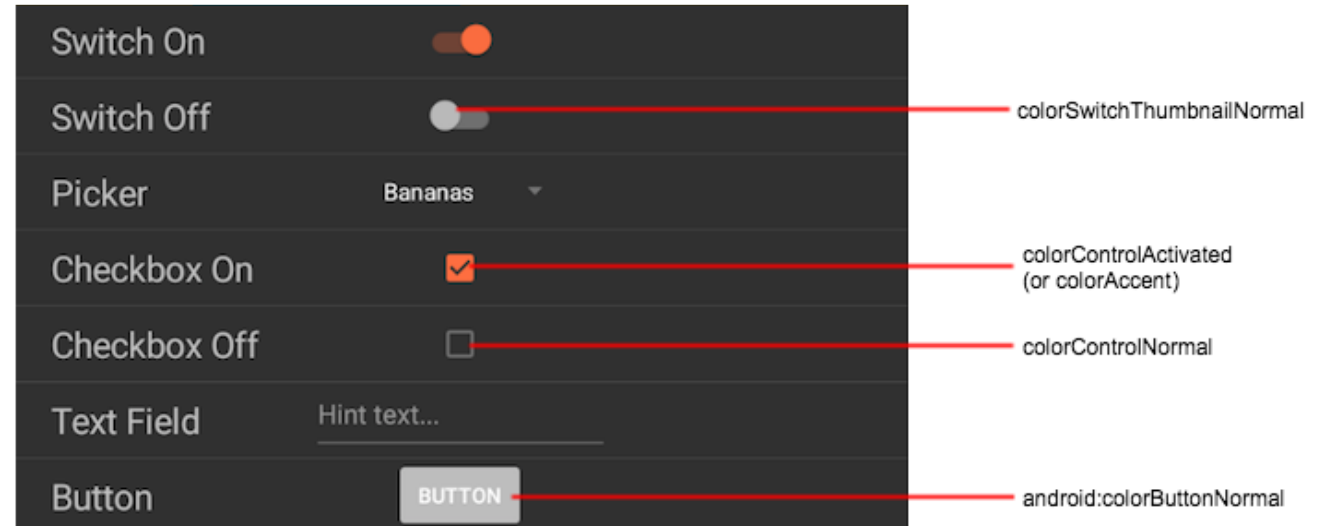




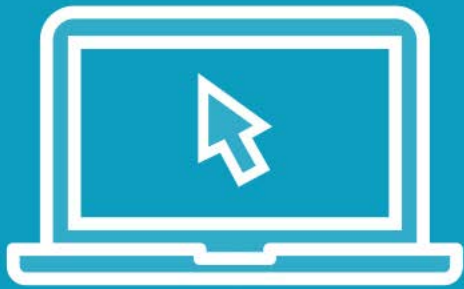
# Color Palette



colorControlHighlight



# Demo



## Color Palette

