

# Elements of Material Design



THE DEPARTMENT OF  
**COMPUTER SCIENCE & ENGINEERING**  
計算機科學及工程學系



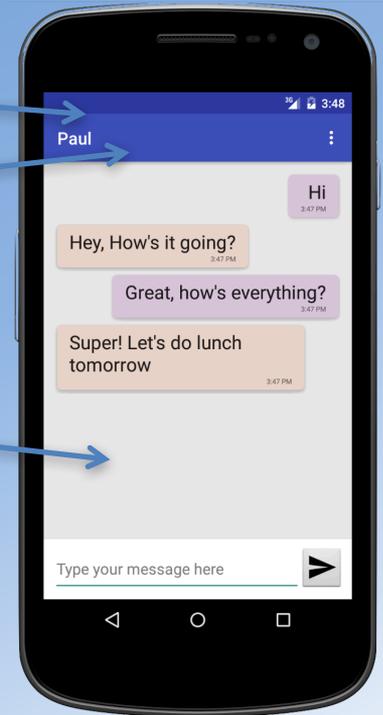
香港科技大學  
THE HONG KONG UNIVERSITY OF  
SCIENCE AND TECHNOLOGY

# Material Design in Android

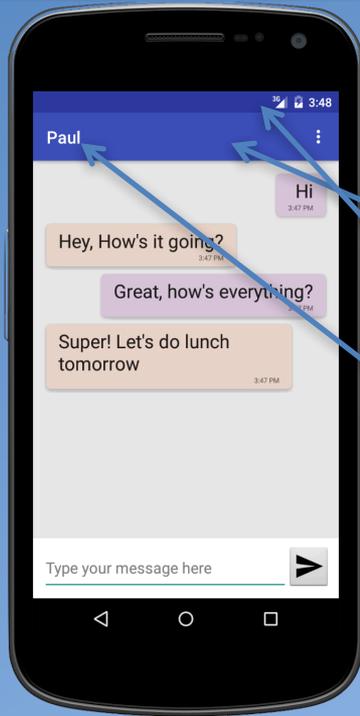
- Many of the Material design features are supported only on Android 5.0 (API 21) and higher.
- Some features are supported on previous platforms through the v7 support libraries
  - Material design styles available for some widgets by using the Theme.AppCompat
  - Color palette theme attributes and Palette class to extract prominent colors from images
  - RecyclerView and CardView

# Applying Material Design Elements

- The AppCompatActivity theme
- New UI Widgets:
  - Toolbar
  - RecyclerView
- We are using AppCompatActivity to use some of these features in the ChatClient Colors app



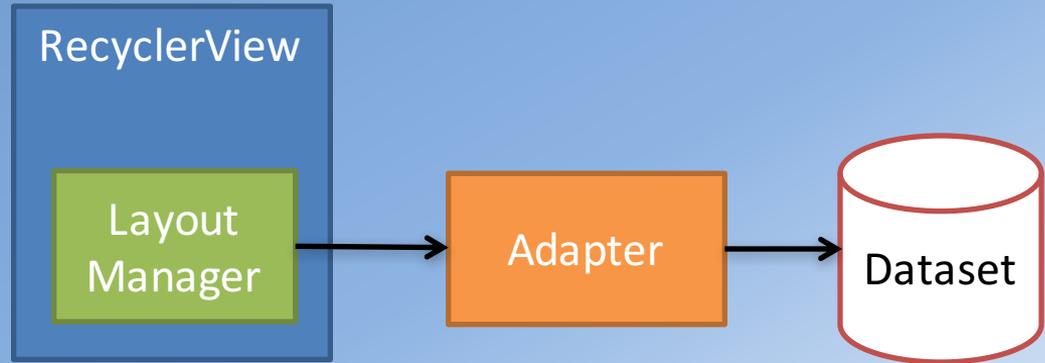
# Color Palette



- Using the Color Palette to specify various colors for use
  - `colorPrimary`
  - `colorPrimaryDark`
  - `textColorPrimary`
  - `windowBackground`
  - `navigationBarColor`

# RecyclerView

- Layout Manager for positioning views
  - LinearLayoutManager
  - GridLayoutManager
  - StaggeredGridLM
- Default animations
- Implement RecyclerView.Adapter



# Toolbar

- Generalization of ActionBar
  - Can be placed anywhere in the layout, as a view
  - Can be set to act like the ActionBar using `setSupportActionBar()`

# Basic Graphics Exercise

- Off to our next exercise
  - Understanding 2D graphics with Canvas
  - Drawing items onto the canvas and displaying it on the UI