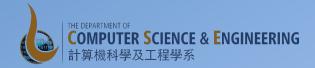
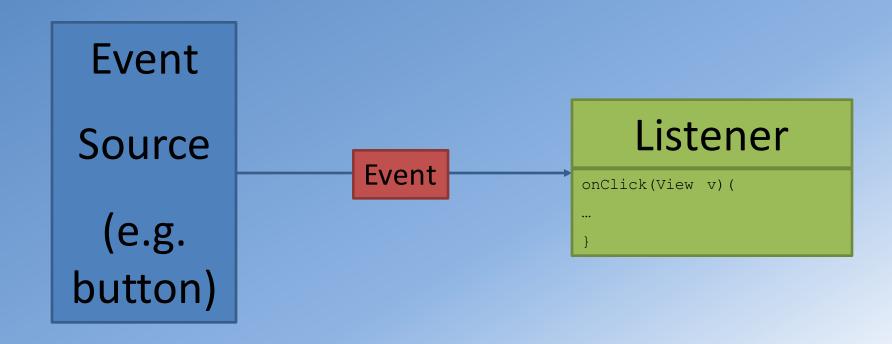
# **Android Handling UI Events**





## **Event Driven Programming**



## **Event Driven Programming**

- An UI event is an action that is triggered by the user interacting with the UI
  - A button pressed or released
  - A key is pressed or released
  - An area of a touch screen is touched, etc.
  - Gestures

### **Event Listeners**

- View class defines the (Java) interface that contains a single callback method
- Activity implements the interface callback method
- Called by the Android framework when the View to which the listener has been registered is triggered by user interaction with the item in the UI
- Several callback methods available: onClick(), onLongClick(), onFocusChange(), onKey(), onTouch(), onCreateContextMenu()

#### Resources

- Resources are additional files and content that is kept independent of the source code
- Used by the code in implementing the app
- Resources include: layouts, images, menus, strings, launcher icons, animation
- Separating the resources from code enables customization of the app for different devices, locales, languages
  - Code can make use of appropriate resources based on configuration

### **Accessing Resources**

#### From code:

- [<package\_name>.]R.<resource\_type>.<resource\_id>
- e.g., R.layout.activity\_main, R.id.textMessage

#### From XML:

- @[<package\_name>:]<resource\_type>/<resource\_id>
- e.g. @string/greeting, @android:color/blue

### **Greet Friend Extended**

- Time for an assignment:
  - Modify greeting based on the time of the day