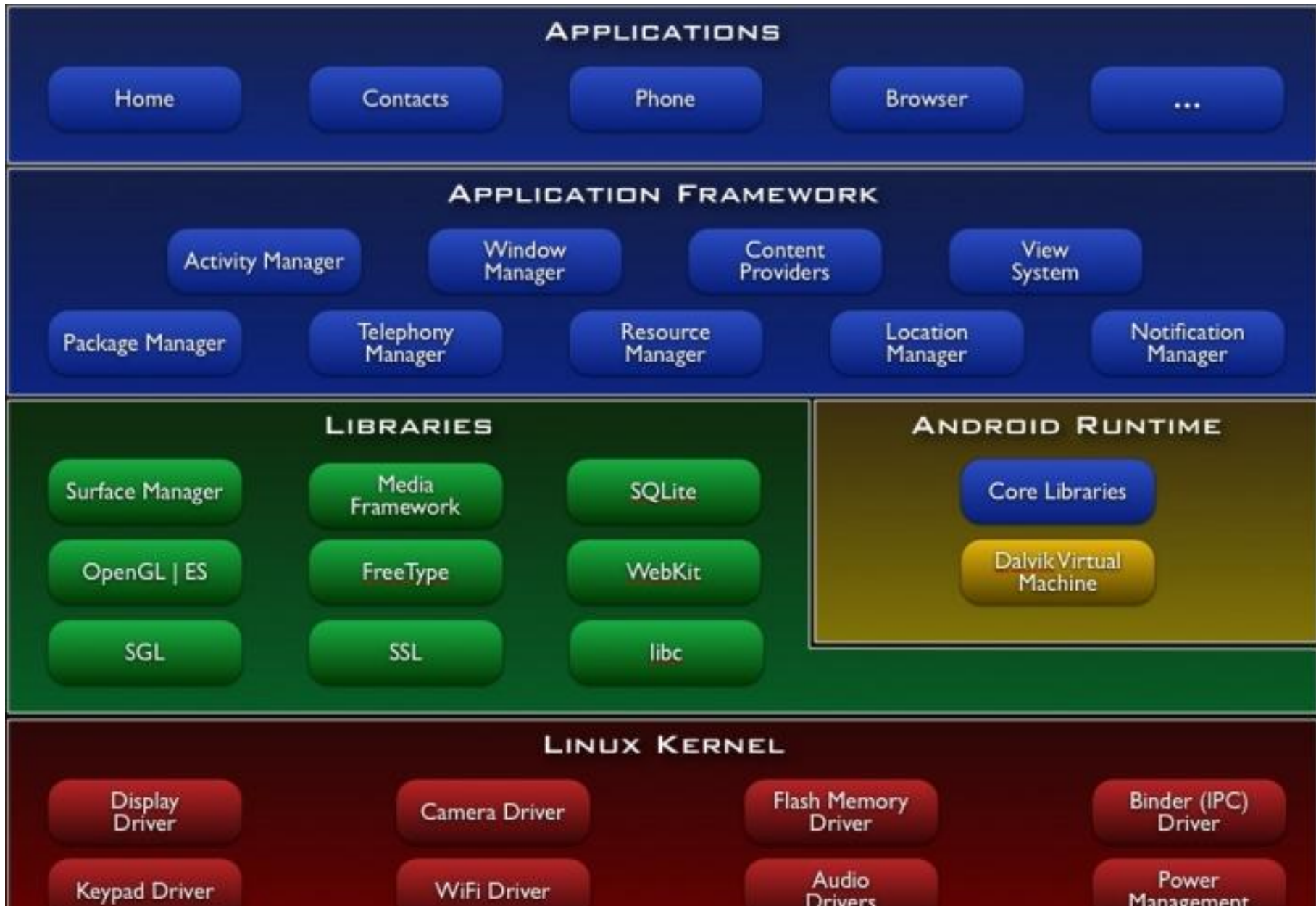# Android Development

An Introduction

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Hello World

```java
public class HelloWorld extends Activity {
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);

        TextView textView = new TextView(this);
        textView.setText("helooo!");

        setContentView(textView);
    }
}
```
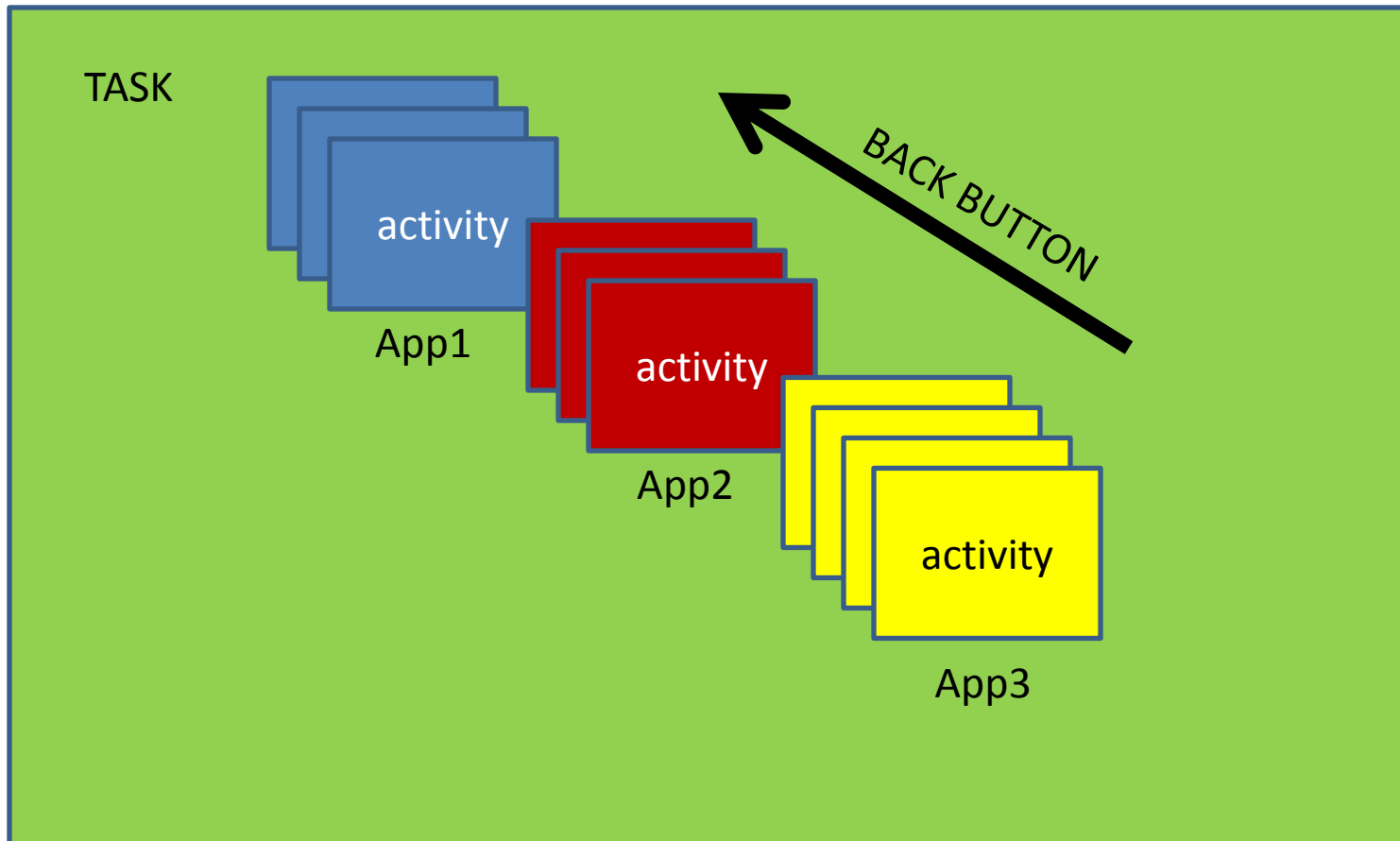
What is Android

Application Fundamentals

- Java
- Android Package === .apk === One Application
- Every app has its own Linux Process
- Each process has its own JVM
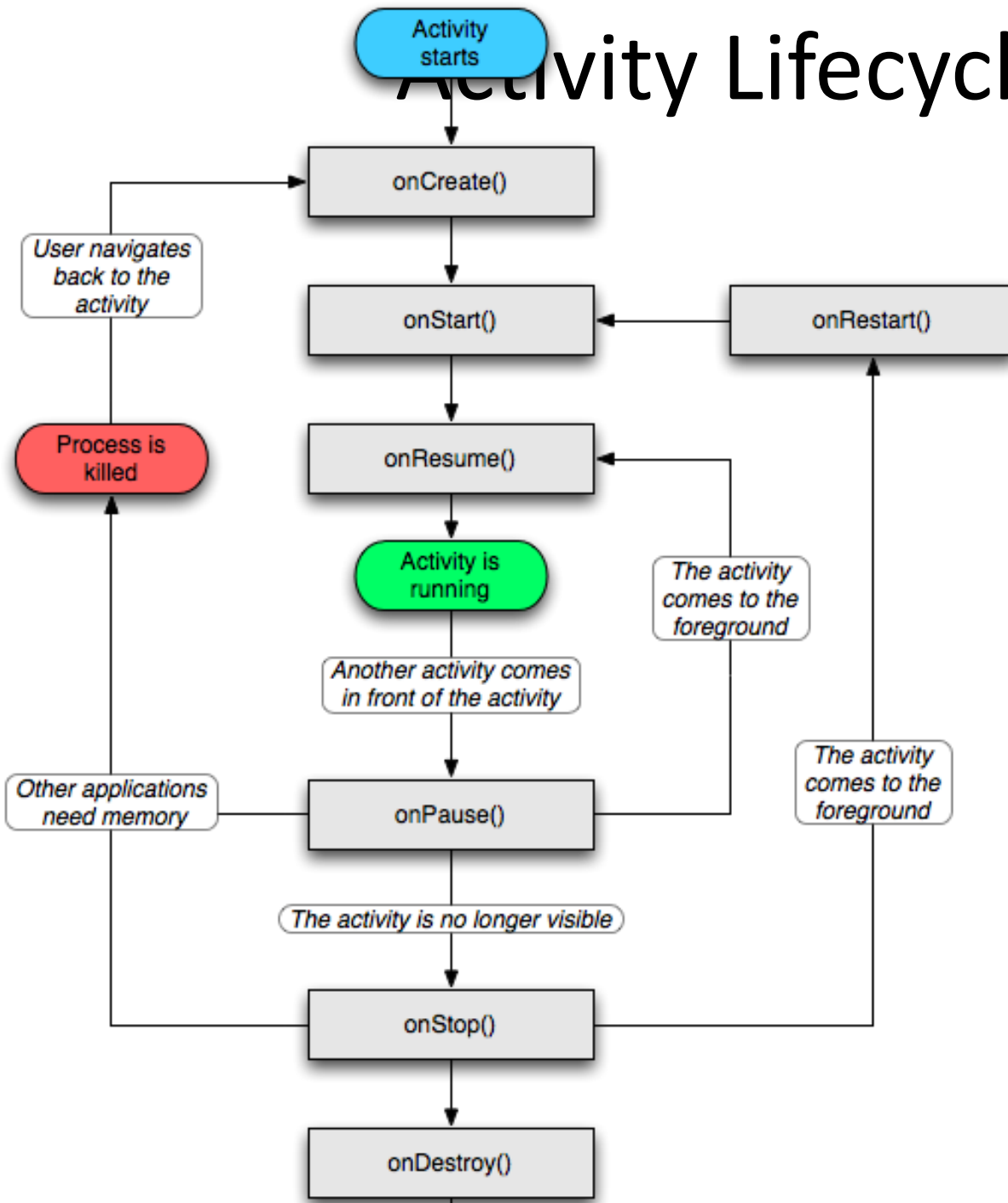- Every app has a unique Linux user id

Components

- **Activities** - UI
- **Services** – Background tasks
- **Broadcast Receivers** – picture taken, timezone changed, battery low, network location changed
- **Content Providers** – Database (SQLite, Phonebook)
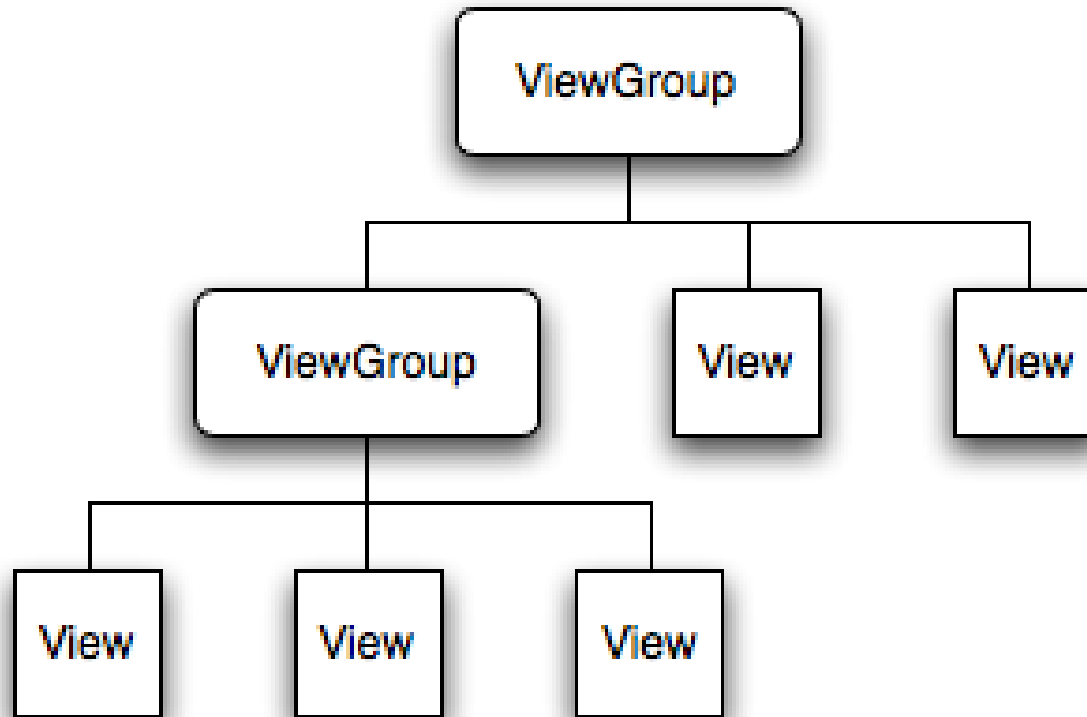- **Intents** – Events / Messages
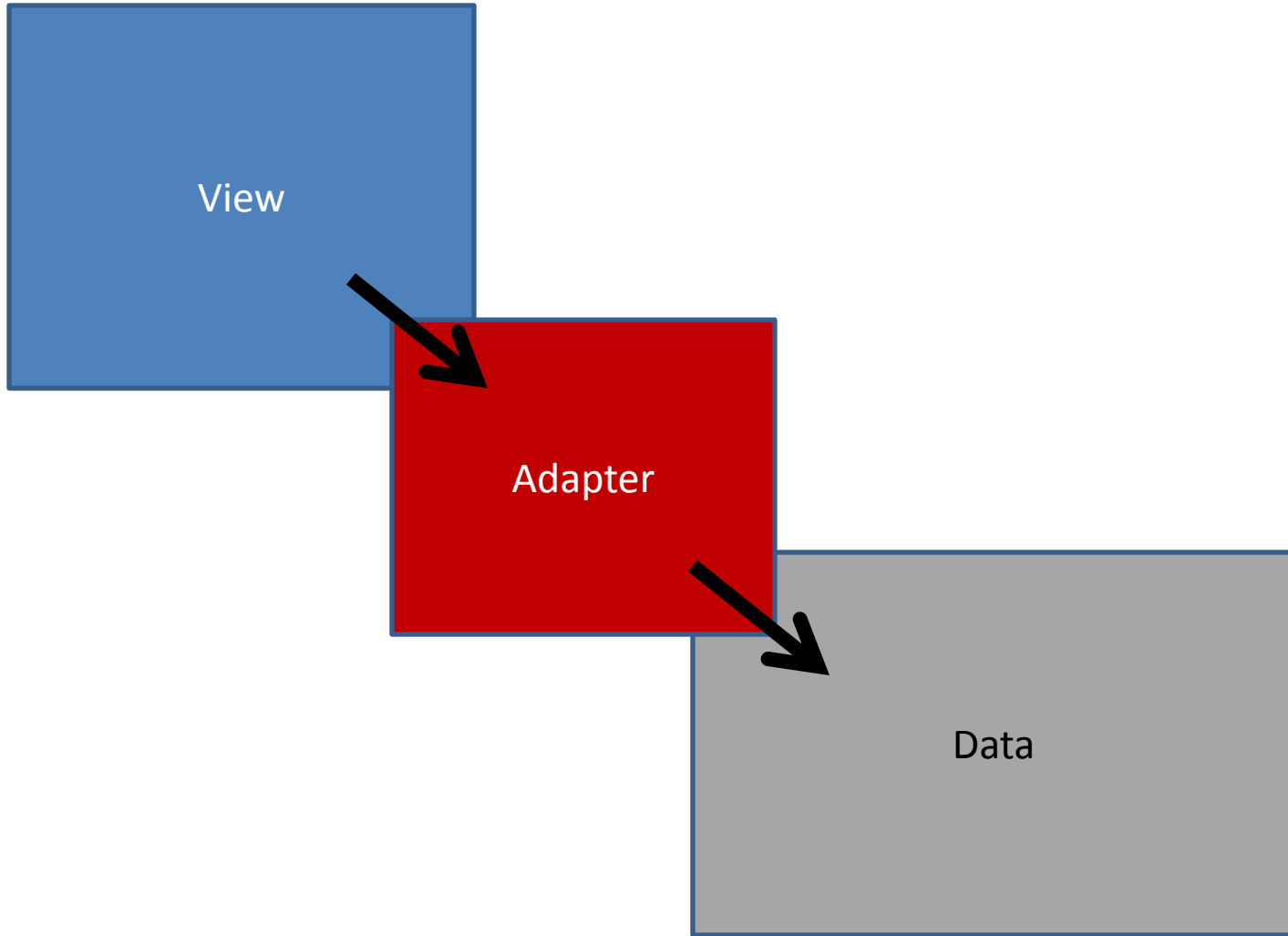
Activities And Tasks

Activity Lifecycle

UI

UI Events

- onClick
- onLongClick
- onFocusChange
- onKey
- onTouch
- onCreateContextMenu

Adapters

View

Adapter

Data

Installation

- Java
- SDK
- Eclipse (classic)
- Android Plugin

Setup

- Download kits (eg. 1.5)
- Create a device
- Create a project in Eclipse

Example Applications

Tips & tricks

- adb logcat
- adb shell
- Create packages using Eclipse Export
- Eclipse shortcut-keys
  - **Ctrl-1** Quick Fix
  - **Ctrl-Space** Auto-complete
  - **Crtl-Shift-L** List of shortcuts