

My First Android Application



Session: 13FD
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Agenda

Software required to start

Eclipse in 60 seconds

Java in 360 seconds

Android Hello World

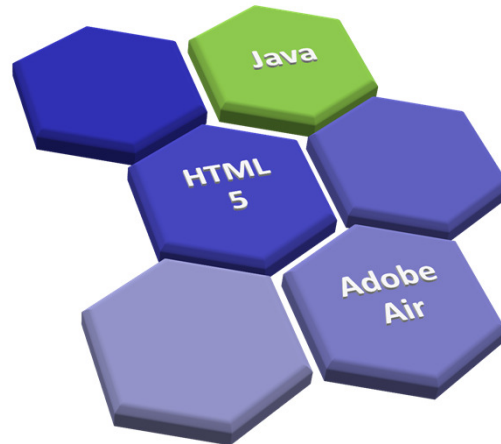
Android main elements & concepts

My first application

Conclusion

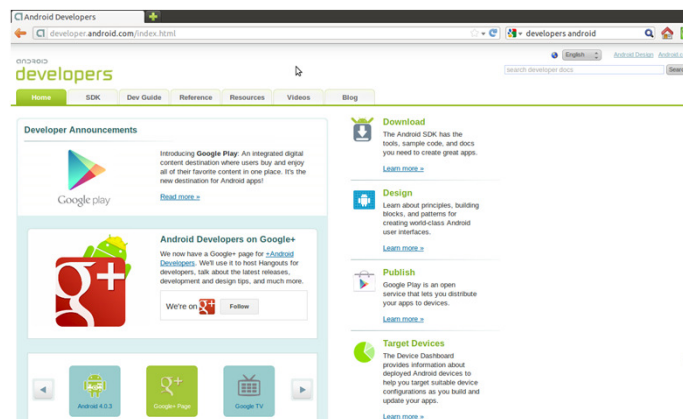


Ways to develop for Android

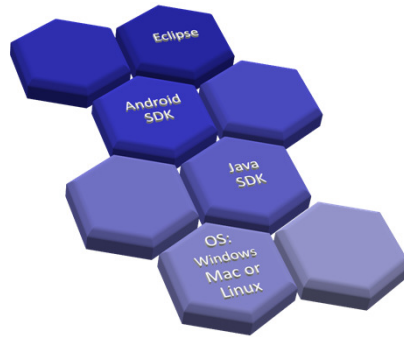


Resources

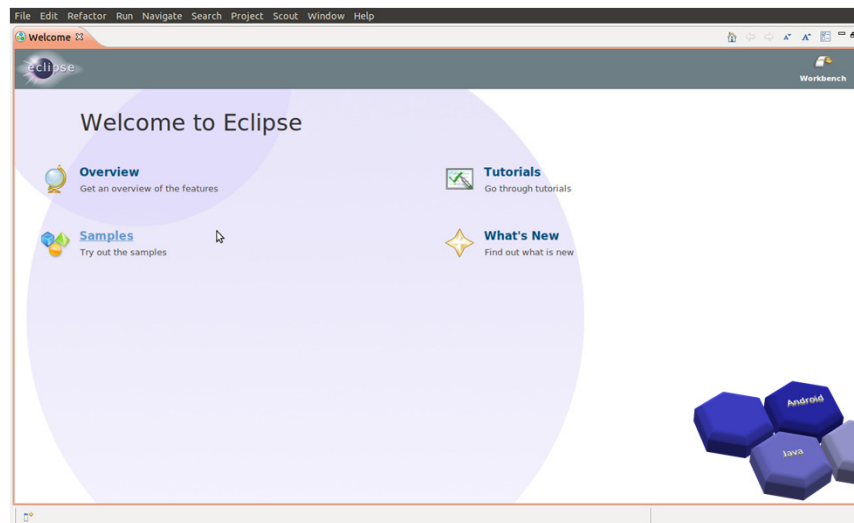
Android Developer Web Site



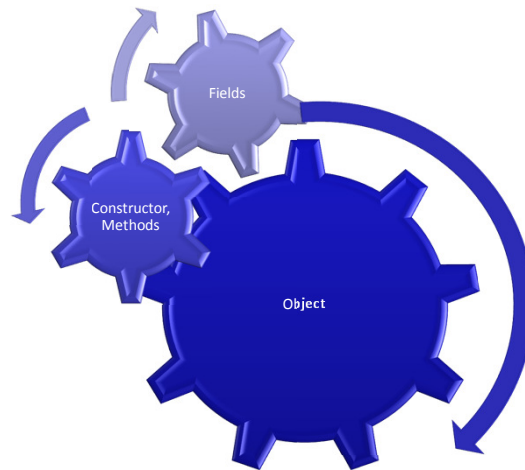
Software Required to Start



Eclipse in 60 seconds



Java in 360 seconds



Java Demo

The screenshot shows an IDE with the following components:

- Package Explorer:** Shows a project named 'ActivityDemo' with a sub-project 'Javademio' containing a package 'com.common.javademio'.
- Editor:** Displays the code for 'Person.java' in the 'com.common.javademio' package. The code defines a 'Person' class with two constructors and two methods.
- Outline:** Lists the class 'Person' and its members: 'firstName: String', 'lastName: String', 'Person(String, String)', 'Person(String)', 'getFirstName(): String', 'setFirstName(String): void', 'getLastName(): String', 'setLastName(String): void', and 'getConcatName(): String'.
- Console:** Shows the output of running the application: 'First name : Taylor Last Name : Swift'.

```
package com.common.javademio;

public class Person {
    // Class Attributes
    private String firstName;
    private String lastName;

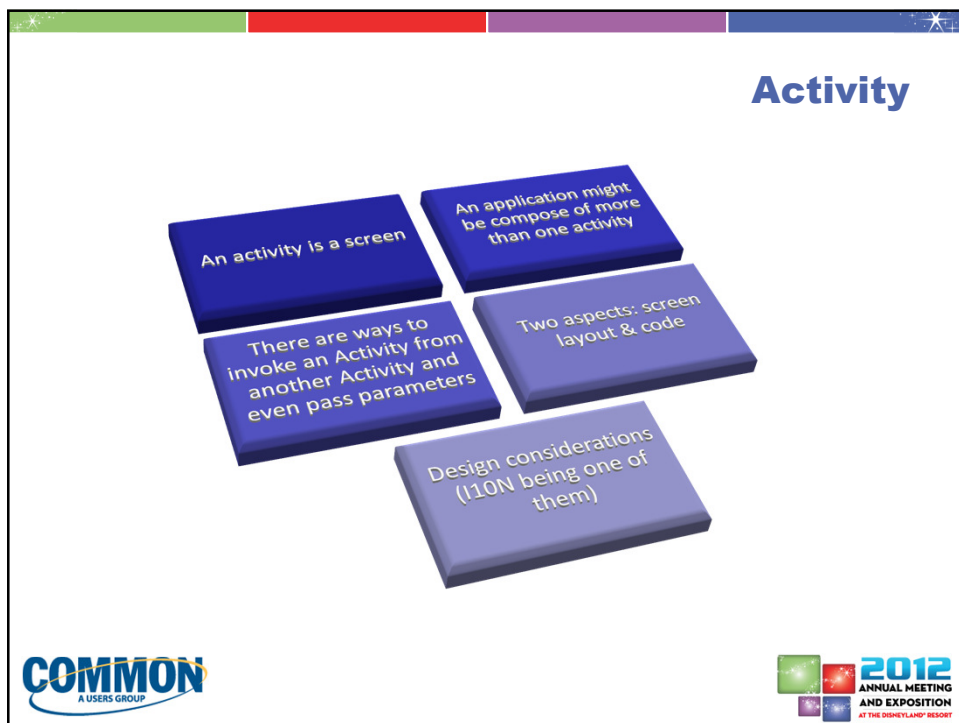
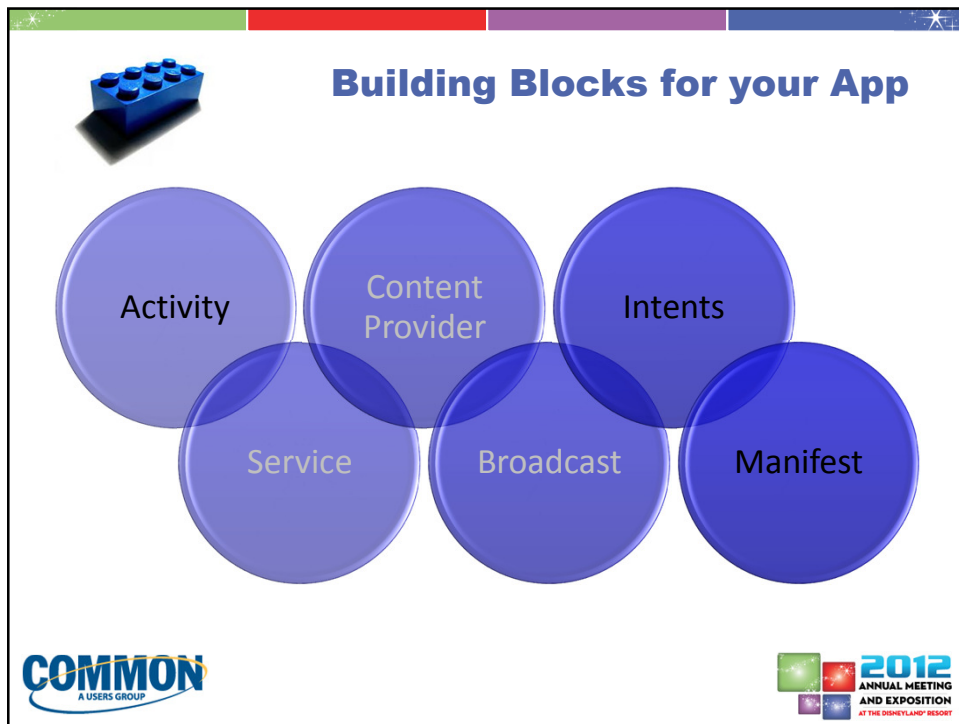
    // Class Constructor
    public Person(String firstName, String lastName) {
        this.firstName = firstName;
        this.lastName = lastName;
    }

    // Another Class Constructor
    public Person(String concatName) {
        // Separate the first name from last name assuming 1 blank separation
        int end = concatName.indexOf(" ");
        this.firstName = concatName.substring(0, end);
        this.lastName = concatName.substring(end + 1, concatName.length());
    }

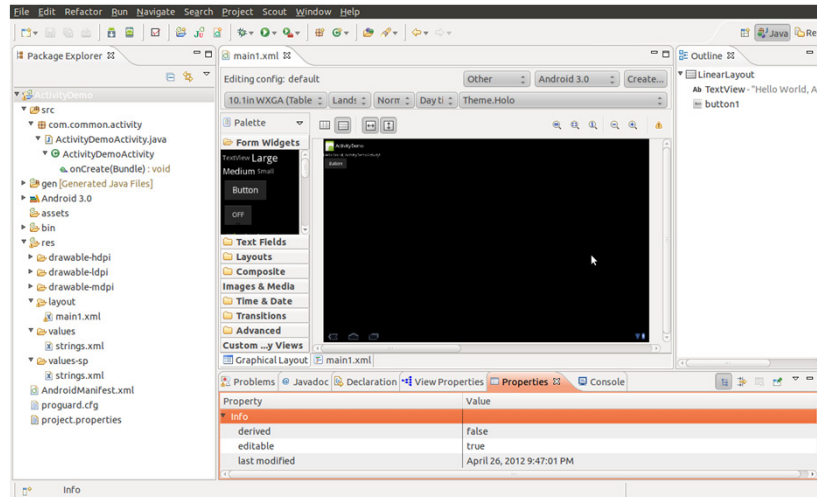
    // Class Methods
    public String getFirstName() {
        return firstName;
    }

    public void setFirstName(String firstName) {
        this.firstName = firstName;
    }

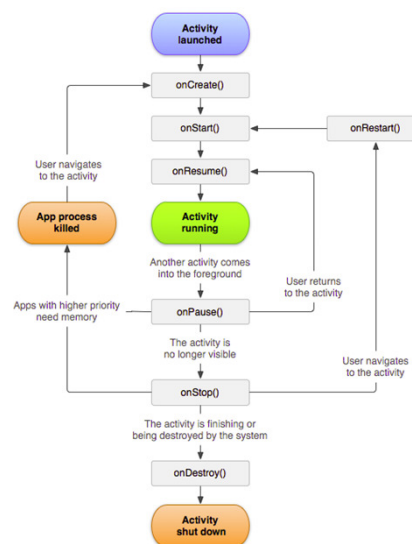
    public String getLastName() {
        return lastName;
    }
}
```



Activity Demo



Activity Lifecycle from <http://developer.android.com>



Intents and Manifest

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.common.activity"
    android:versionCode="1"
    android:versionName="1.0">

    <uses-sdk android:minSdkVersion="11"/>

    <application
        android:icon="@drawable/ic_launcher"
        android:label="@string/app_name">
        <activity
            android:name=".ActivityDemoActivity"
            android:label="@string/app_name">
            <intent-filter>
                <action android:name="android.intent.action.MAIN"/>

                <category android:name="android.intent.category.LAUNCHER"/>
            </intent-filter>
        </activity>
    </application>
</manifest>
```

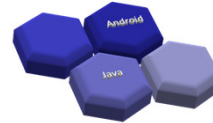
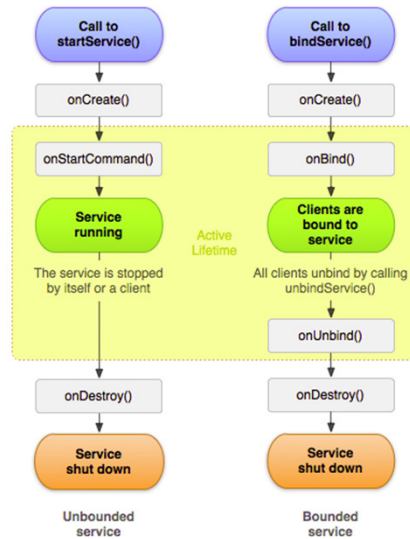


Service



Service Lifecycle

from <http://developers.android.com>



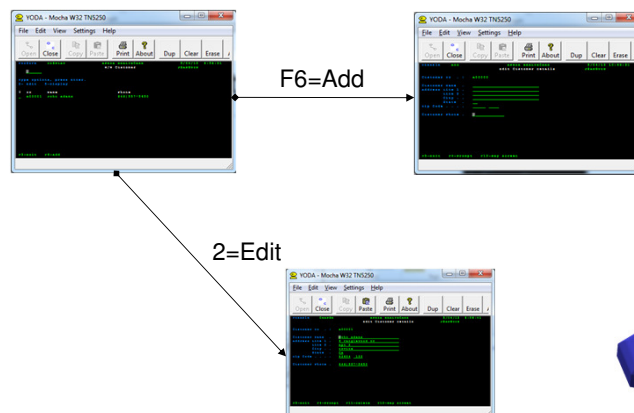
Broadcast Receiver

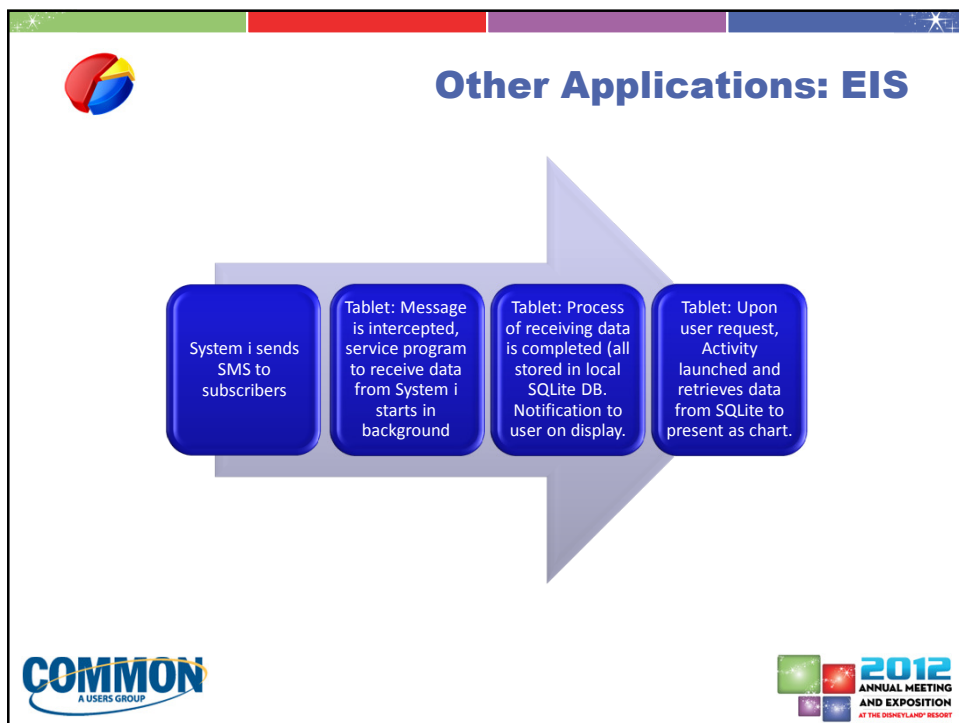


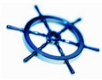
My first Android application

- Record name and address of individuals in local database
- Show that we can manage more than one activity and pass values from one to another
- Use Google Maps and overlays to show address location.

A 5250 look at the application







Other Applications: Deliveries

System i : sends list of all the deliveries to truck driver's tablet.

Truck driver consults his tablet for orders to be delivered, map and navigation support him to find next place

Truck driver confirms delivery in tablet, along with recorded signature of docs.

Tablet service program transmits information to System i.

System i: records new status of order and reports this to subscribers.

System i: sends new orders received in meantime, based on computed driver availability/progress.



Recommended Reading



Questions



Contact

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