



# ANDROID

UNIVERSITAS KOMPUTER INDONESIA

# BAB II.

## MEMULAI PROYEK ANDROID PERTAMA

**Dosen Pembina :**

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# JDK

Download JDK terbaru dari link dibawah ini

<http://www.oracle.com/technetwork/java/javase/downloads/index.html> (tanggal akses : 7 Maret 2013)

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### Java SE Downloads

Latest Release Next Release (Early Access) Embedded Use Previous Releases

**Java Platform (JDK) 7u17** **DOWNLOAD**

**JavaFX 2.2.7** **DOWNLOAD**

Here are the Java SE downloads in detail:

Java Platform, Standard Edition		
<b>Java SE 7u17</b> This release includes important security	<b>JDK</b> <b>DOWNLOAD</b>	<b>JRE</b> <b>DOWNLOAD</b>

**Java SDKs and Tools**

- Java SE
- Java EE and Glassfish
- Java ME
- JavaFX
- Java Card
- NetBeans IDE

**Java Resources**

- New to Java?
- APIs
- Code Samples & Apps
- Developer Training
- Documentation
- Java.com
- Java.net
- Student Developers
- Tutorials

# Eclipse

Download Eclipse terbaru dari link dibawah ini

<http://www.eclipse.org/downloads/> (tanggal akses : 7 Maret 2013)

The screenshot shows the Eclipse Downloads page. At the top, there is a banner for EclipseCon Boston 2013, which starts in 3 weeks (March 25-28), with a 'Register Now' button. Below the banner is a navigation bar with links: Home, Downloads, Users, Members, Committers, Resources, Projects, and About Us. A Google Custom Search bar is also present. The main heading is 'Eclipse Downloads'. Below this, there are tabs for 'Packages', 'Developer Builds', and 'Projects'. The 'Packages' tab is selected, and a dropdown menu shows 'Eclipse Juno (4.2) SR2 Packages for Windows'. The first package listed is 'Eclipse IDE for Java EE Developers, 228 MB', which is circled in red. It has been downloaded 147,957 times. Other packages listed include 'Eclipse Classic 4.2.2, 183 MB', 'Eclipse IDE for Java Developers, 150 MB', 'Eucalyptus Private and Hybrid Cloud Software' (a promoted download), 'Eclipse IDE for C/C++ Developers, 130 MB', and 'Eclipse for Mobile Developers, 144 MB'. On the right side, there is a section 'Installing Eclipse' with links to 'Install Guide', 'Compare/Combine Packages', 'Known Issues', and 'Updating Eclipse'. At the bottom right, there is a large advertisement for JRebel, stating 'STOP REDEPLOYING IN ECLIPSE' and 'JRebel INSTALLED OVER 45,000 TIMES'.

**Eclipse IDE for Java EE Developers, 228 MB**  
Downloaded 147,957 Times [Details](#)

**Eclipse Classic 4.2.2, 183 MB**  
Downloaded 96,310 Times [Details](#) [Other Downloads](#)

**Eclipse IDE for Java Developers, 150 MB**  
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**Eucalyptus Private and Hybrid Cloud Software** [Promoted Download](#)  
Develop and deploy Java applications faster to your private cloud.

**Eclipse IDE for C/C++ Developers, 130 MB**  
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**Eclipse for Mobile Developers, 144 MB**

**Installing Eclipse**

- [Install Guide](#)
- [Compare/Combine Packages](#)
- [Known Issues](#)
- [Updating Eclipse](#)

**STOP REDEPLOYING IN ECLIPSE**

**JRebel**

**INSTALLED OVER 45,000 TIMES**

# Android SDK (1)

Download Android SDK terbaru dari link dibawah ini

<http://developer.android.com/sdk/index.html> (tanggal akses : 7 Maret 2013)



The screenshot shows the 'Get the Android SDK' page from the Android developer website. On the left is a sidebar with navigation links: Developer Tools, Download, Setting Up the ADT Bundle, Setting Up an Existing IDE, Exploring the SDK, Download the NDK, Workflow, Tools Help, Revisions, Extras, Samples, and ADK. The main content area is titled 'Get the Android SDK' and explains that the SDK provides API libraries and developer tools. It recommends downloading the ADT Bundle for new developers, which includes the Eclipse IDE, SDK tools, platform tools, the latest Android platform, and the latest system image. A large blue button labeled 'Download the SDK ADT Bundle for Windows' is prominently displayed. Below this, there is a section for 'USE AN EXISTING IDE' which mentions downloading SDK tools and adding the ADT plugin. A red circle highlights a button labeled 'Download the SDK Tools for Windows' at the bottom of the page. The footer of the page shows 'SYSTEM REQUIREMENTS' and a small '111' icon.

Developer Tools

Download

Setting Up the ADT Bundle

Setting Up an Existing IDE

Exploring the SDK

Download the NDK

Workflow

Tools Help

Revisions

Extras

Samples

ADK

## Get the Android SDK

The Android SDK provides you the API libraries and developer tools necessary to build, test, and debug apps for Android.

If you're a new Android developer, we recommend you download the ADT Bundle to quickly start developing apps. It includes the essential Android SDK components and a version of the Eclipse IDE with built-in **ADT (Android Developer Tools)** to streamline your Android app development.

With a single download, the ADT Bundle includes everything you need to begin developing apps:

- Eclipse + ADT plugin
- Android SDK Tools
- Android Platform-tools
- The latest Android platform
- The latest Android system image for the emulator

If you prefer to use an existing version of Eclipse or another IDE, you can instead take a more customized approach to installing the Android SDK. See the following instructions.

**USE AN EXISTING IDE**

If you already have an IDE you want to use for Android app development, setting up a new SDK requires that you download the SDK Tools and then install the Android SDK packages to install (such as the Android platform and system image). If you'll be using an existing version of Eclipse, you can add the ADT plugin to it.

**Download the SDK Tools for Windows**

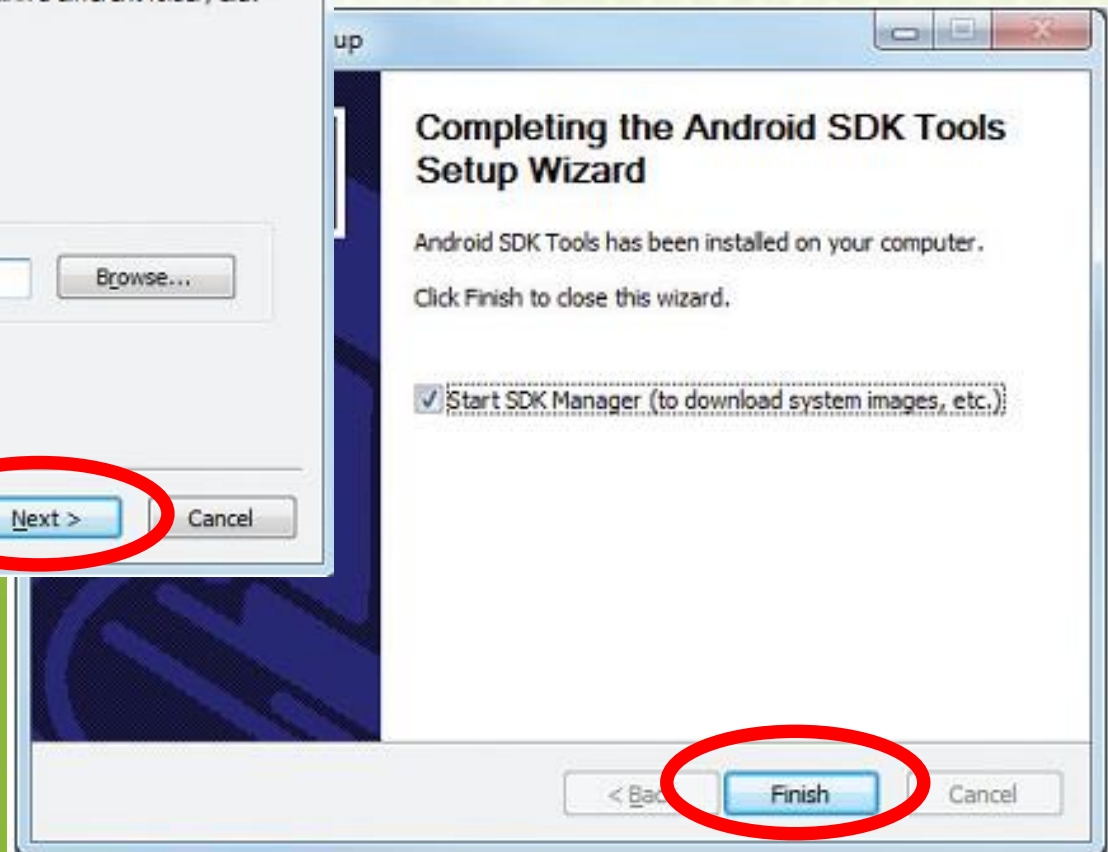
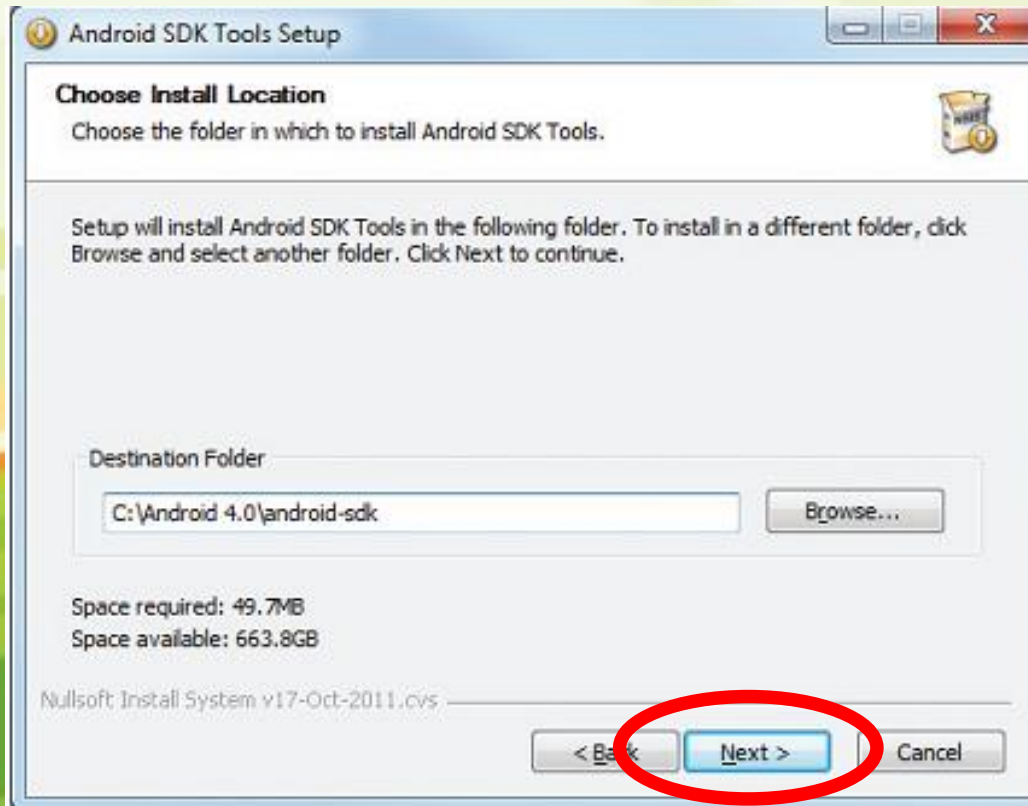
**SYSTEM REQUIREMENTS**

111



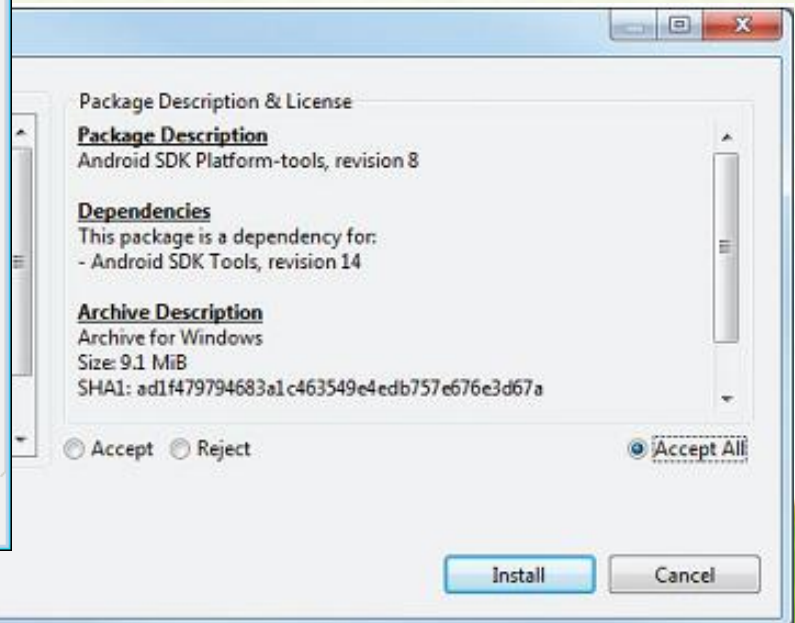
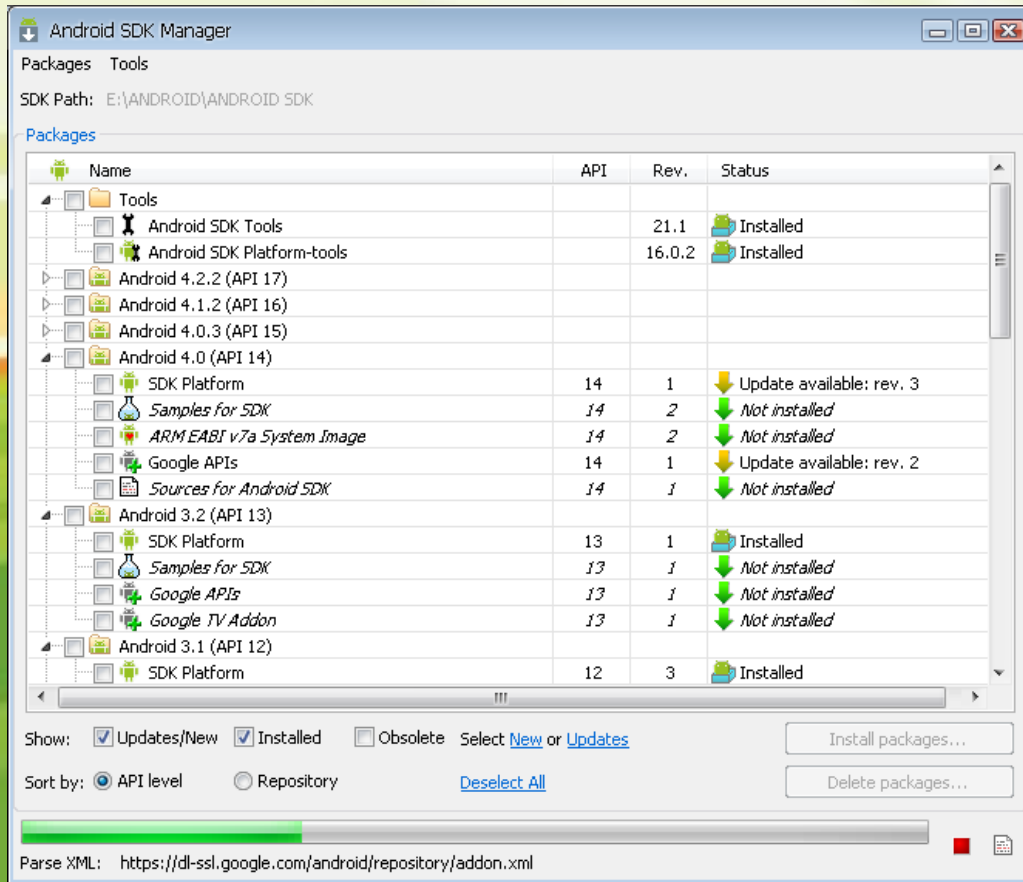
# Android SDK (2)

Pilih Next > dan Finish



# Android SDK (3)

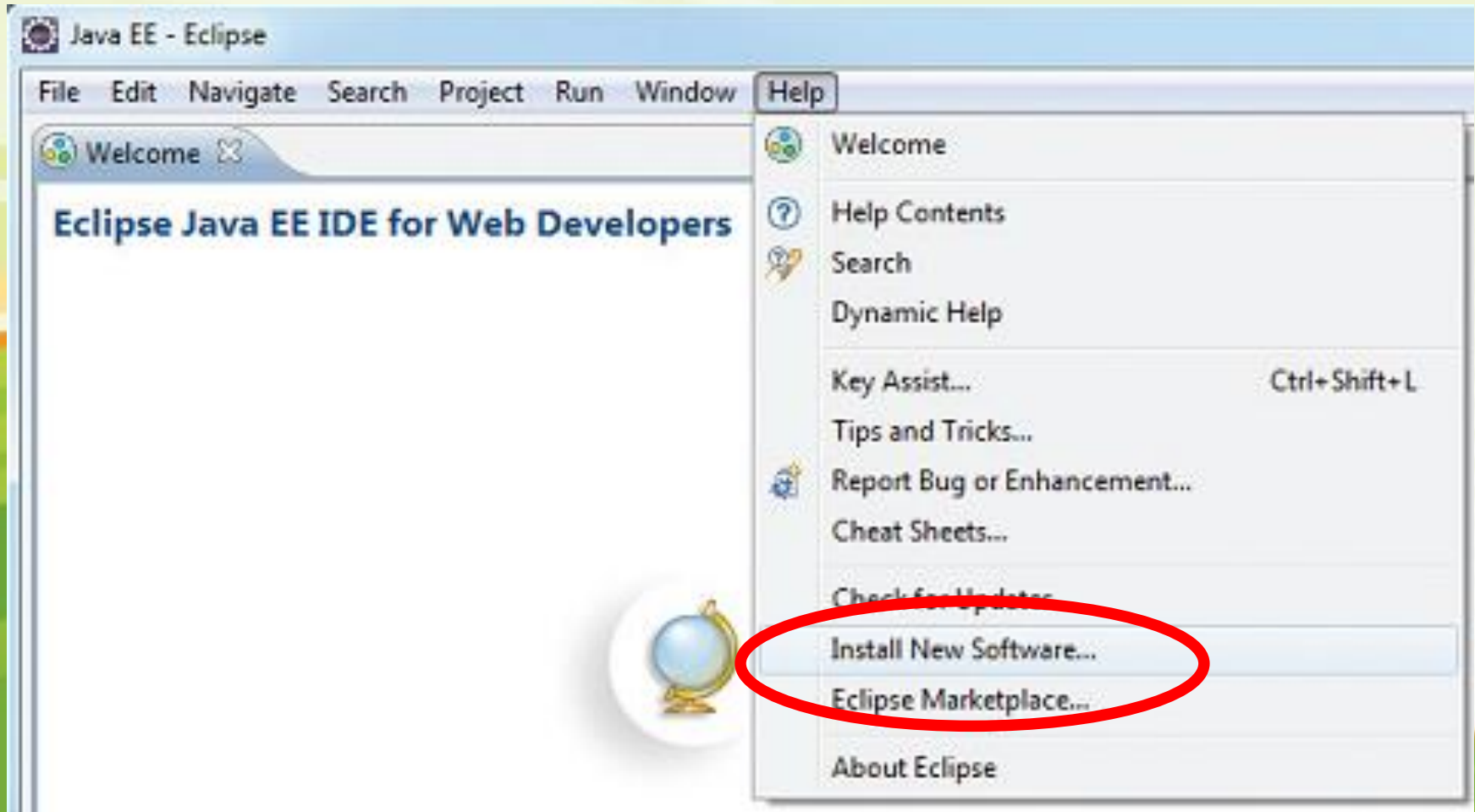
Setelah itu, buka SDK Manager dan download Android Platform yang anda butuhkan



[\*] Something depends on this package

# Download ADT Eclipse Plugin (1)

Buka Eclipse anda. Setelah itu masuk menu, Help ⇨ Install New Software.

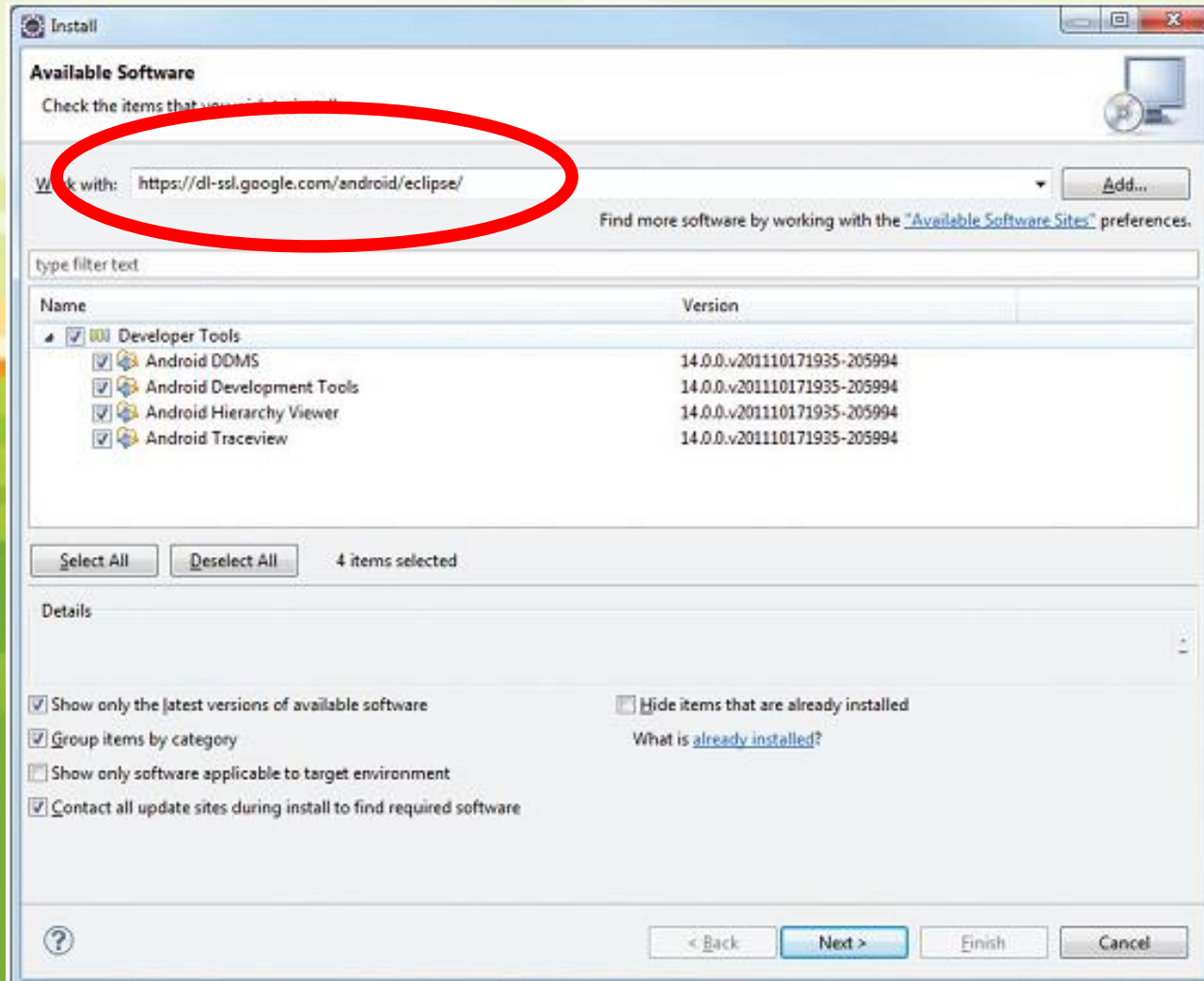




# Download ADT Eclipse Plugin (2)

Input pada kotak URL yang tersedia dengan :

**<https://dl-ssl.google.com/android/eclipse/>**



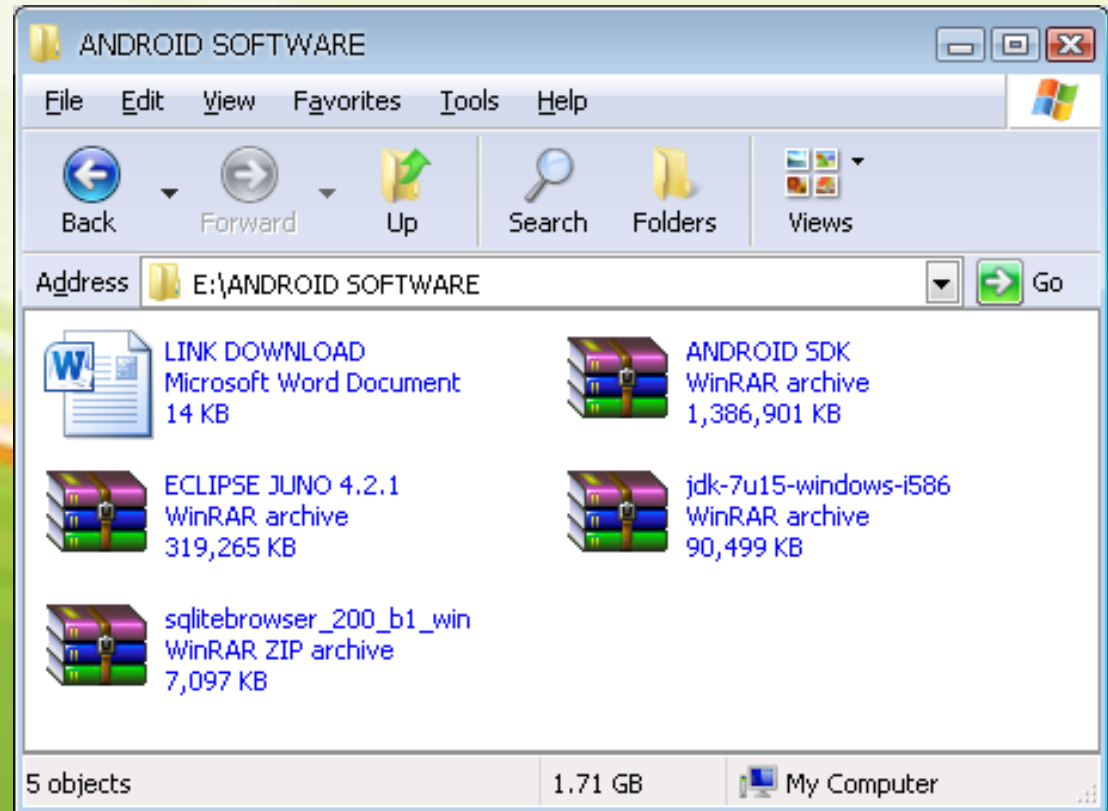
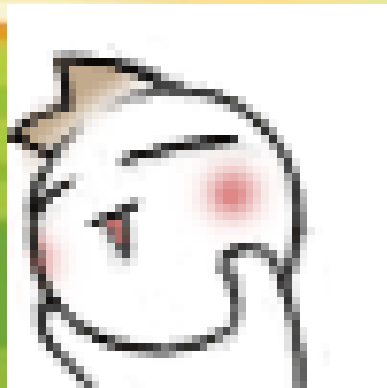
# Anda Pusing ?



Gak Ngerti !!!!

# Jangan Khawatir

Kami sudah menyediakan Software lengkap untuk mata kuliah ini.

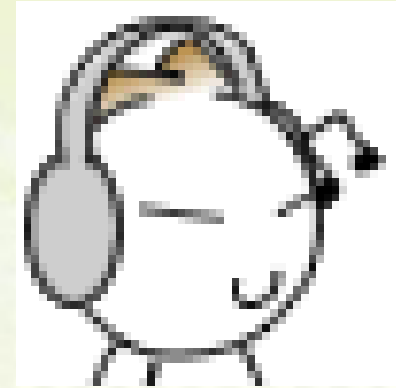


Silahkan anda ikuti Video Tutorial Berikut Ini

# Catatan Penting

Software-software yang wajib anda miliki dengan memiliki Versi paling minimum untuk develop proyek Android adalah sebagai berikut :

- JDK 1.6 update 15
- Eclipse 3.7
- ADT 21
- SQLite Browser 1



Sedangkan untuk Rekomendasi, tentu saja gunakan software paling terbaru.

# MVC Android

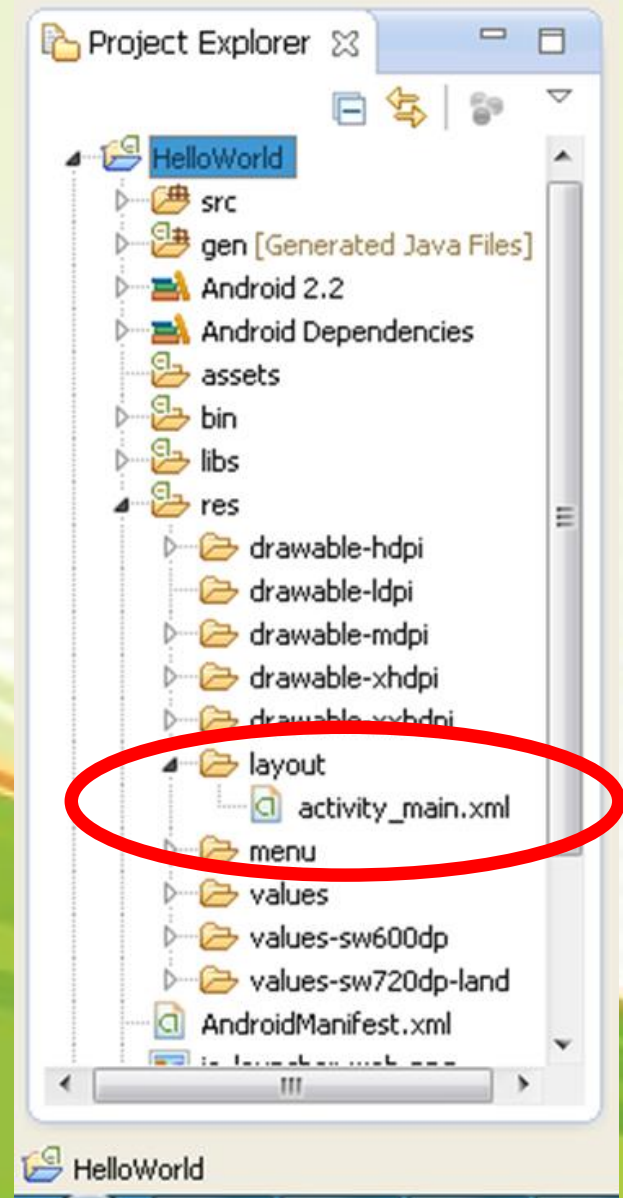
## MVC





# Layout xml

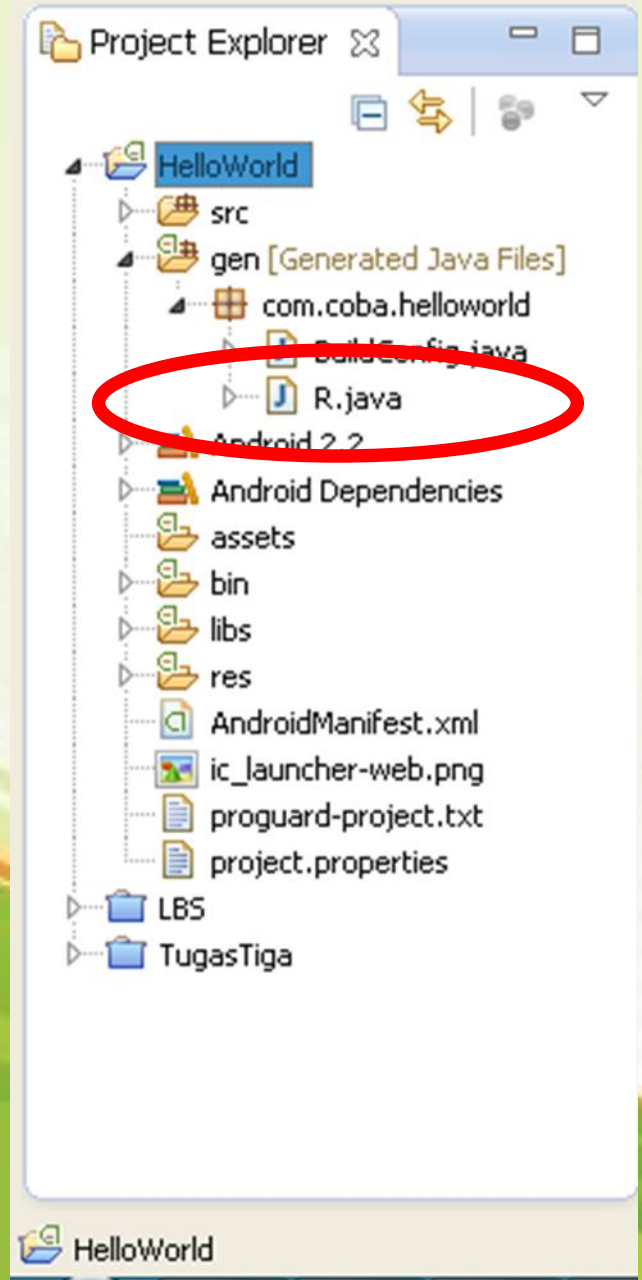
File-file xml digunakan untuk membuat tampilan (*user interface*) pada aplikasi android anda. file-file xml tersebut disimpan dalam folder **res/layout/** pada proyek Eclipse.



# R.java

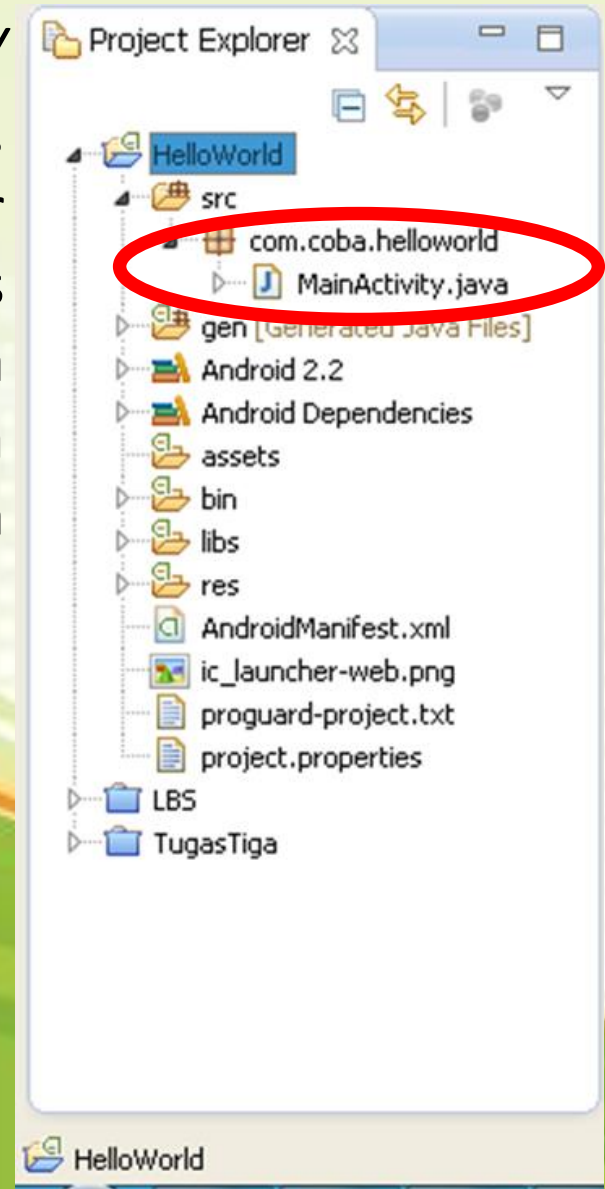
R.java berfungsi sebagai penghubung antara View (xml) dengan Controller (java). Terletak pada folder **gen/nama\_package/** pada proyek Eclipse.

**Catatan** : R.java tidak boleh di ubah, karena bersifat *auto generated*.



# Java

Java berfungsi sebagai *Controller/* pengendali aplikasi android yang kita buat. Tidak hanya berfungsi sebagai pengatur alur kerja database, tetapi semua aktivitas yang ada di aplikasi yang kita buat. Semua file java disimpan di dalam folder src, anda boleh menyimpannya didalam **nama\_package** seperti contoh disamping.

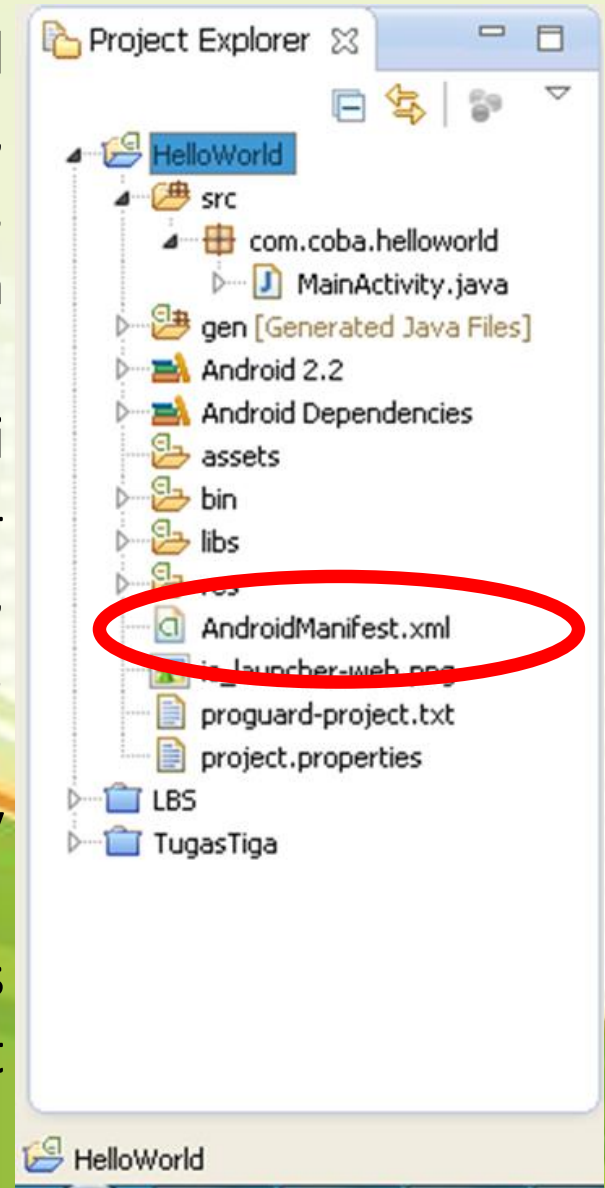


# AndroidManifest.xml

Android Manifest merupakan sebuah xml yang berisi informasi mengenai aplikasi, seperti versi dari aplikasi, nama package, level SDK yang digunakan, beserta icon dan nama yang diberikan untuk Aplikasi.

selain itu, AndroidManifest.xml ini digunakan sebagai pengatur activity-activity yang terdapat pada aplikasi, berupa daftar kelas-kelas java, penggunaan intent untuk pemilihan, dan pemberian Label / title pada suatu Activity saat mereka Aktif.

AndroidManifest.xml ini secara otomatis ada jika kita membuat sebuah project aplikasi Android



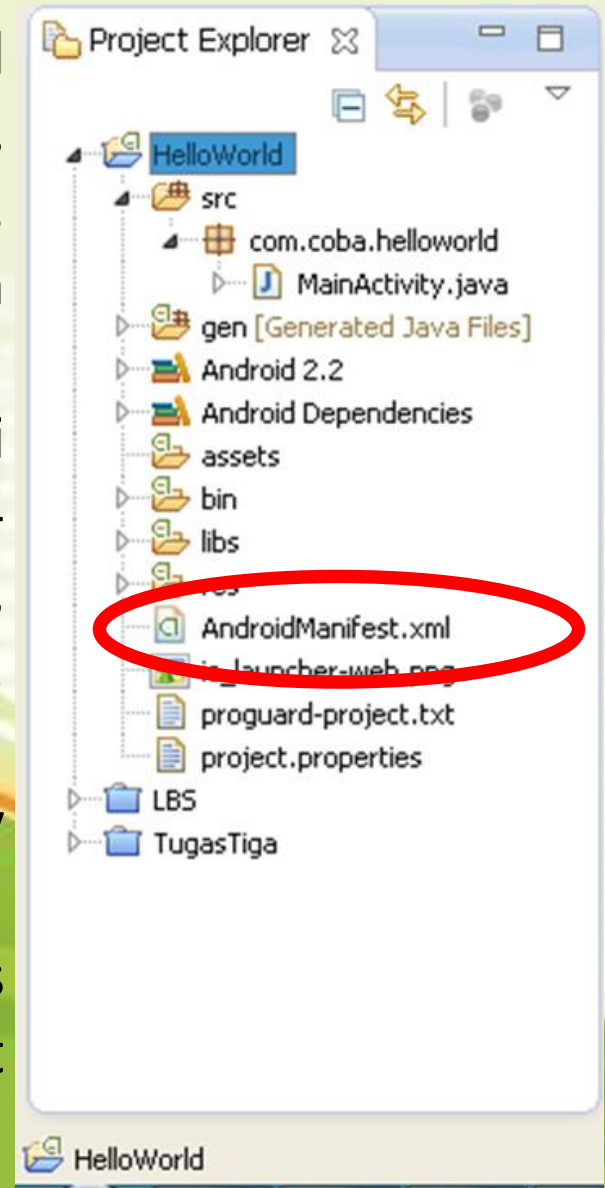


# AndroidManifest.xml

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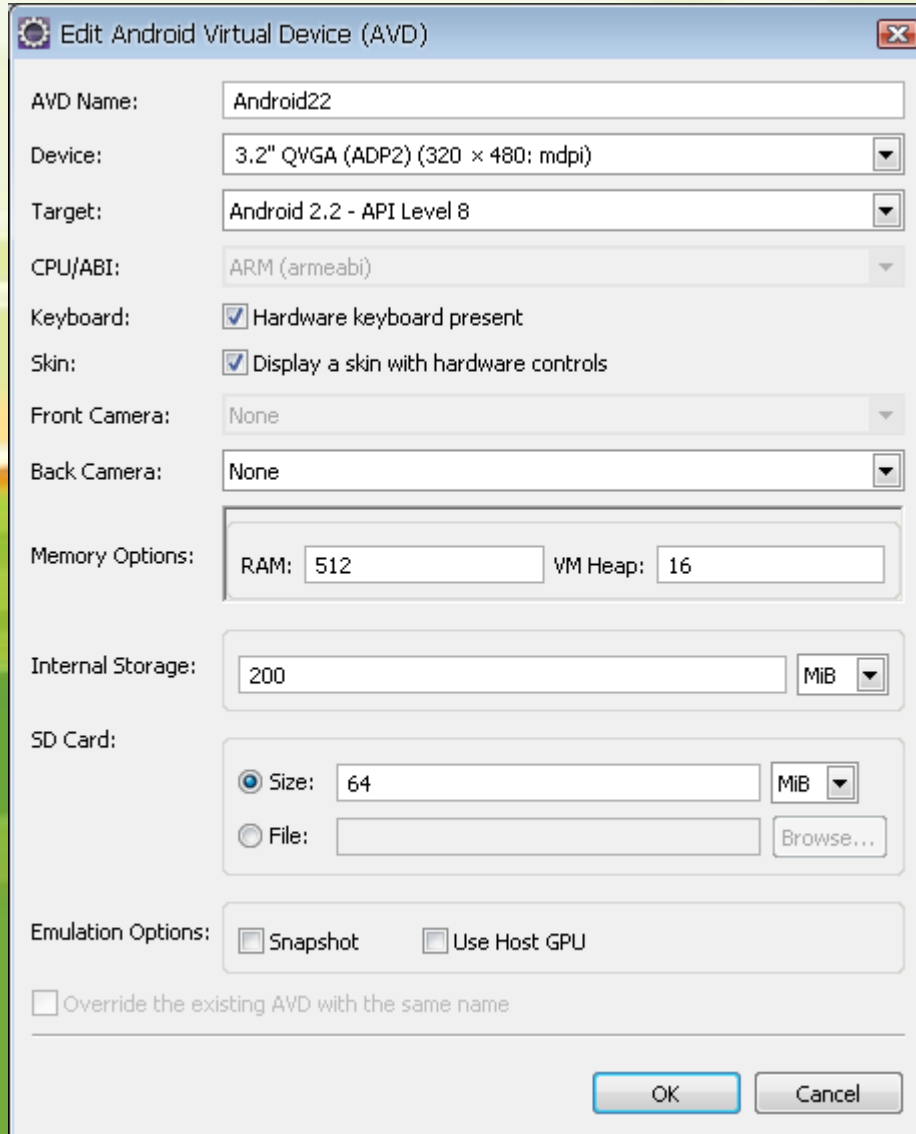
AndroidManifest.xml ini secara otomatis ada jika kita membuat sebuah project aplikasi Android





# Membuat AVD

Buatlah AVD dengan Spesifikasi sebagai berikut :



**Edit Android Virtual Device (AVD)**

AVD Name:

Device:

Target:

CPU/ABI:

Keyboard: ☒ Hardware keyboard present

Skin: ☒ Display a skin with hardware controls

Front Camera:

Back Camera:

Memory Options: RAM:  VM Heap:

Internal Storage:  MiB

SD Card: ☒ Size:  MiB ☐ File:  Browse...

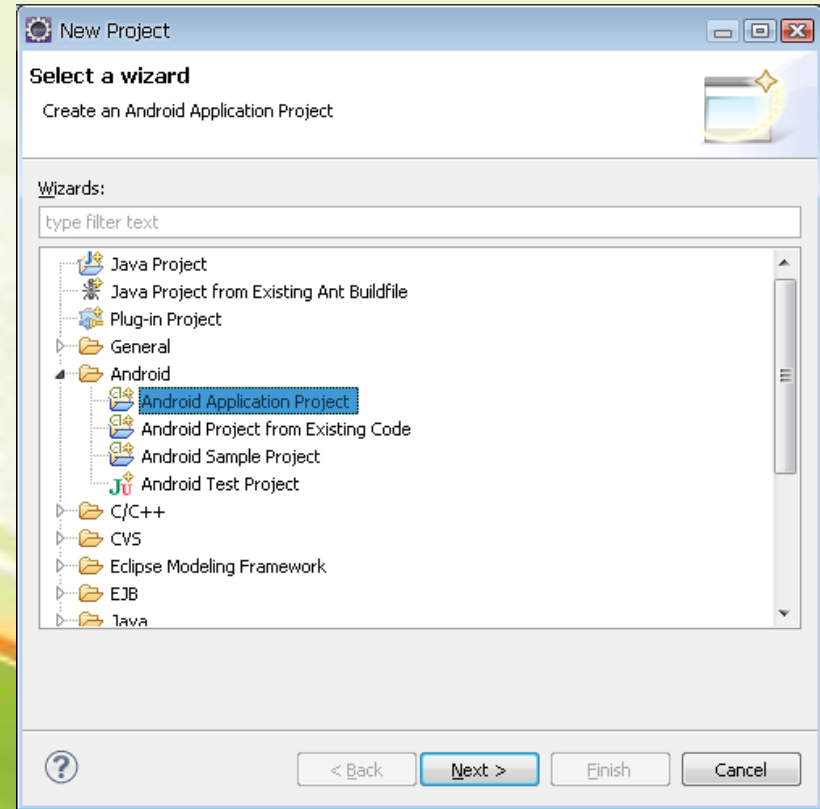
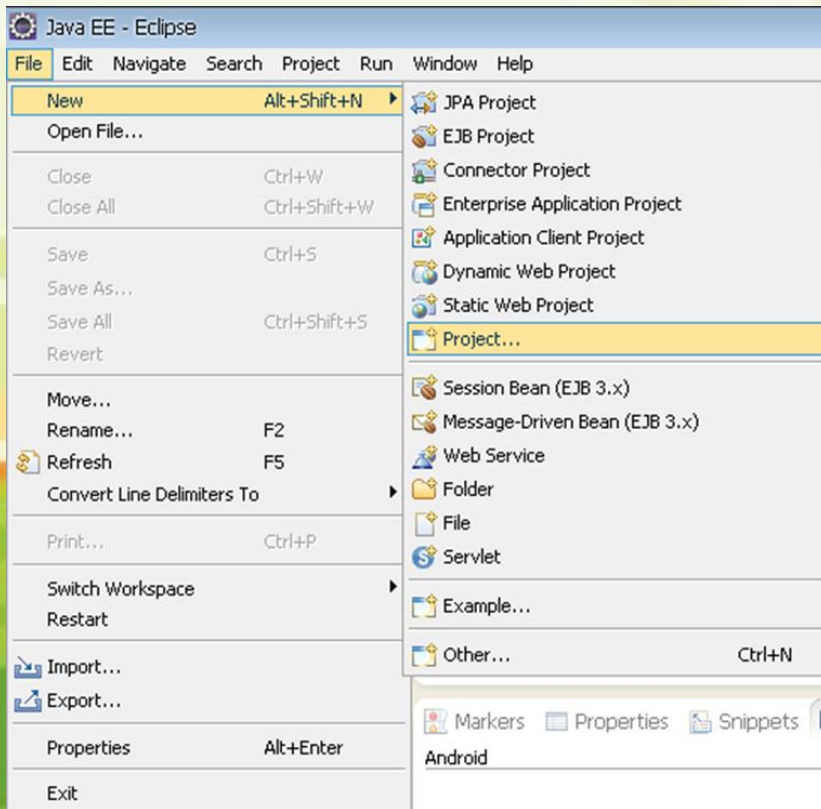
Emulation Options: ☐ Snapshot ☐ Use Host GPU

☐ Override the existing AVD with the same name

Setelah itu  
Run

# Membuat Proyek (1)

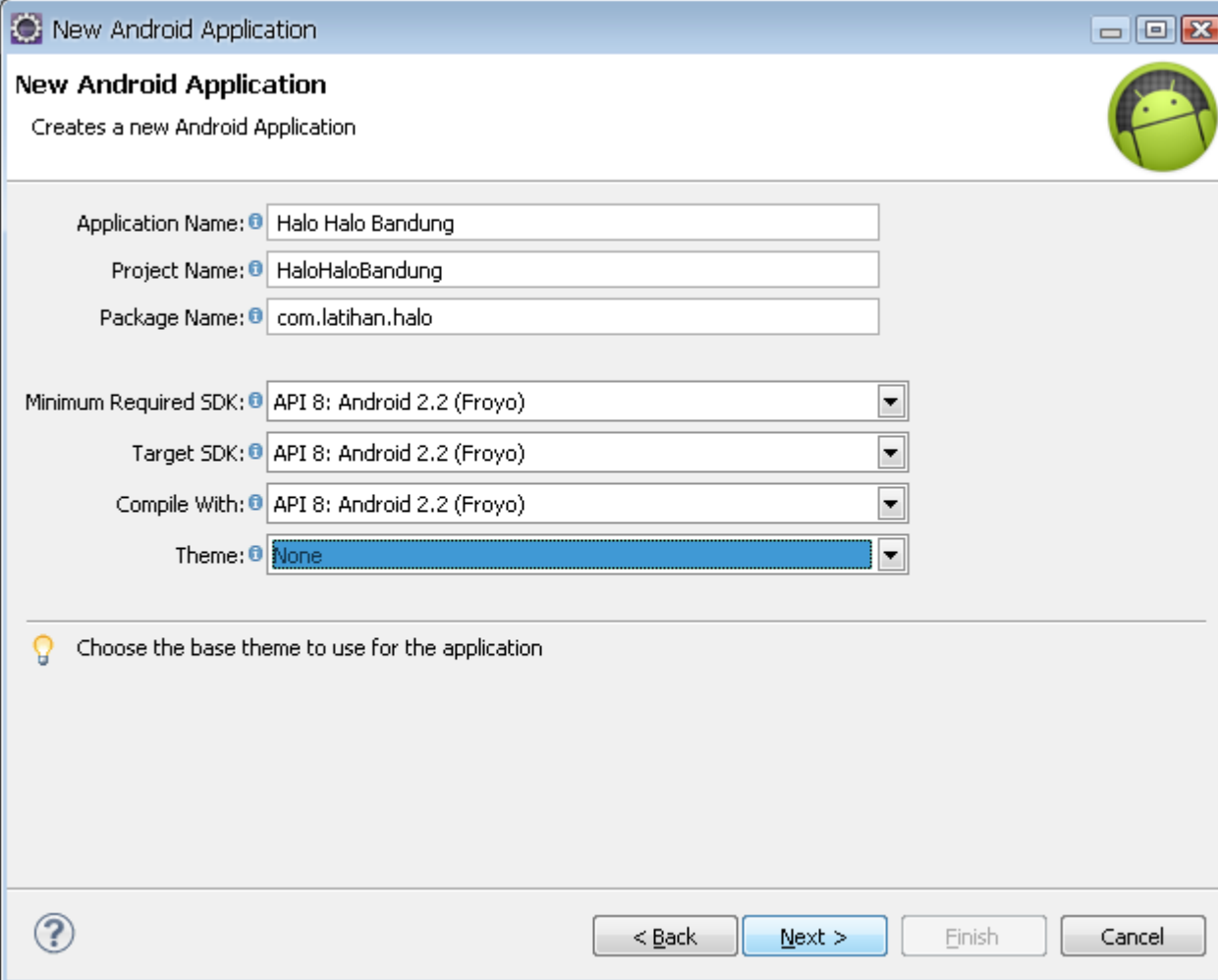
Buat proyek baru : File ⇔ New ⇔ Project



Android ⇔ Android Application Project

# Membuat Proyek (2)

New Android Application : Create a new Android Application



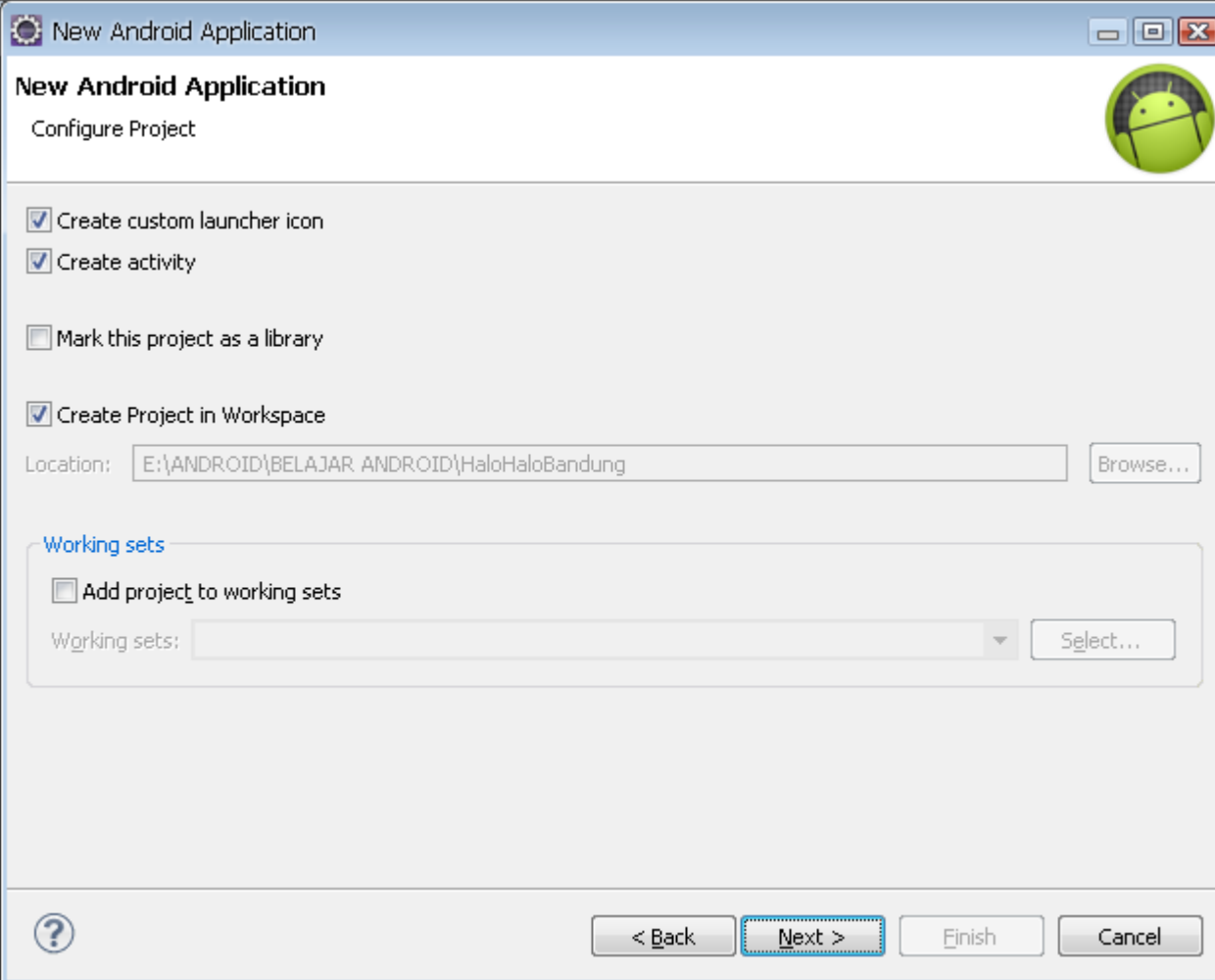
The screenshot shows the 'New Android Application' dialog box. The title bar reads 'New Android Application'. Below the title bar, the text 'New Android Application' is displayed, followed by the subtitle 'Creates a new Android Application'. An Android robot icon is in the top right corner. The dialog contains several input fields and dropdown menus:

- Application Name: Halo Halo Bandung
- Project Name: HaloHaloBandung
- Package Name: com.latihan.halo
- Minimum Required SDK: API 8: Android 2.2 (Froyo)
- Target SDK: API 8: Android 2.2 (Froyo)
- Compile With: API 8: Android 2.2 (Froyo)
- Theme: None

Below these fields, there is a lightbulb icon and the text 'Choose the base theme to use for the application'. At the bottom, there are four buttons: '< Back', 'Next >', 'Finish', and 'Cancel'.

# Membuat Proyek (3)

## New Android Application : Configure Project



The screenshot shows the 'New Android Application' dialog box in Android Studio, specifically the 'Configure Project' step. The dialog has a title bar with the text 'New Android Application' and standard window controls. Below the title bar, the text 'New Android Application' and 'Configure Project' are displayed, along with the Android logo. The main area contains several checkboxes: 'Create custom launcher icon' (checked), 'Create activity' (checked), 'Mark this project as a library' (unchecked), and 'Create Project in Workspace' (checked). Below these is a 'Location' field with the text 'E:\ANDROID\BELAJAR ANDROID\HaloHaloBandung' and a 'Browse...' button. A section titled 'Working sets' contains an unchecked checkbox 'Add project to working sets' and a 'Working sets:' dropdown menu with a 'Select...' button. At the bottom, there is a help icon (question mark) and four buttons: '< Back', 'Next >' (highlighted with a blue border), 'Finish', and 'Cancel'.

**New Android Application**  
Configure Project

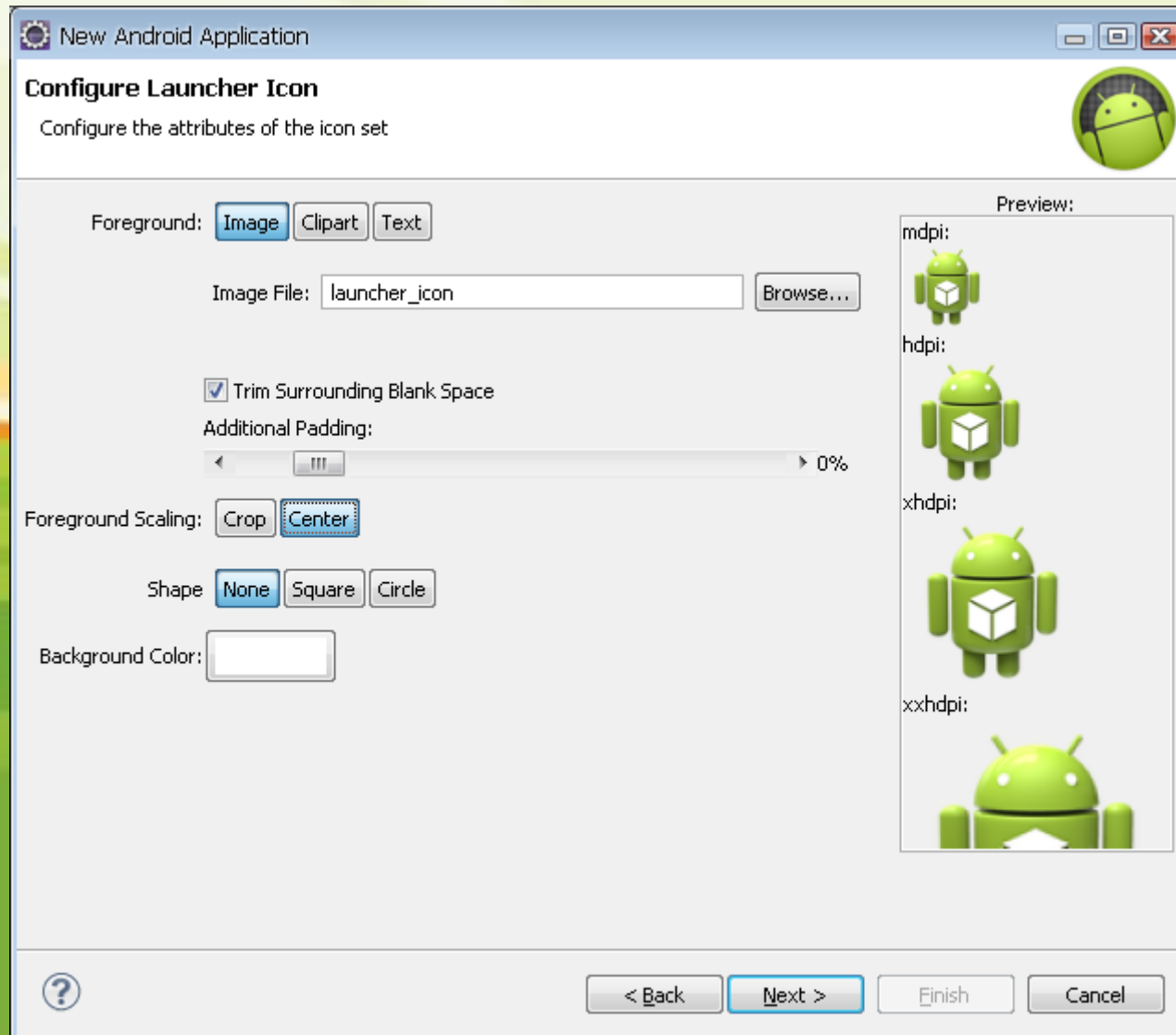
☒ Create custom launcher icon  
☒ Create activity  
☐ Mark this project as a library  
☒ Create Project in Workspace

Location:

**Working sets**  
☐ Add project to working sets  
Working sets:

# Membuat Proyek (4)

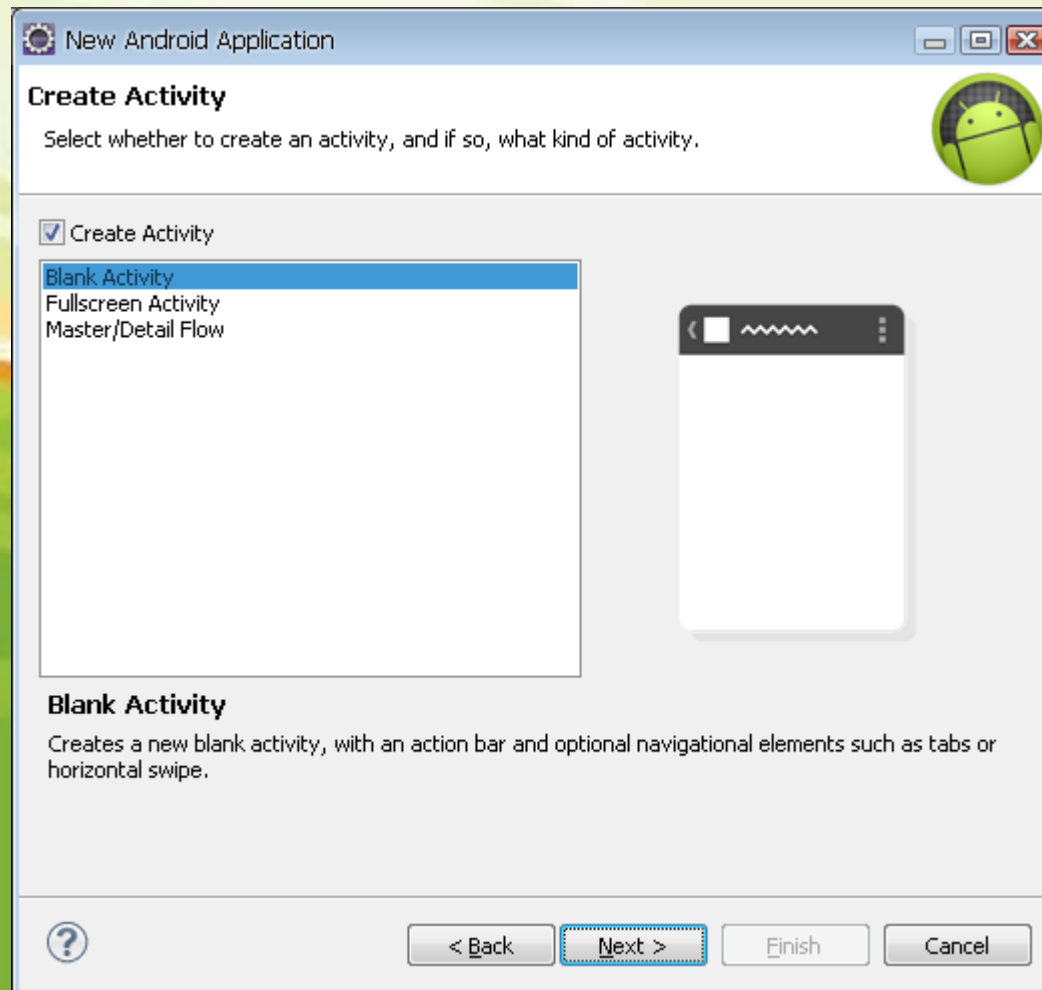
New Android Application : Configure the attributes of the icon set





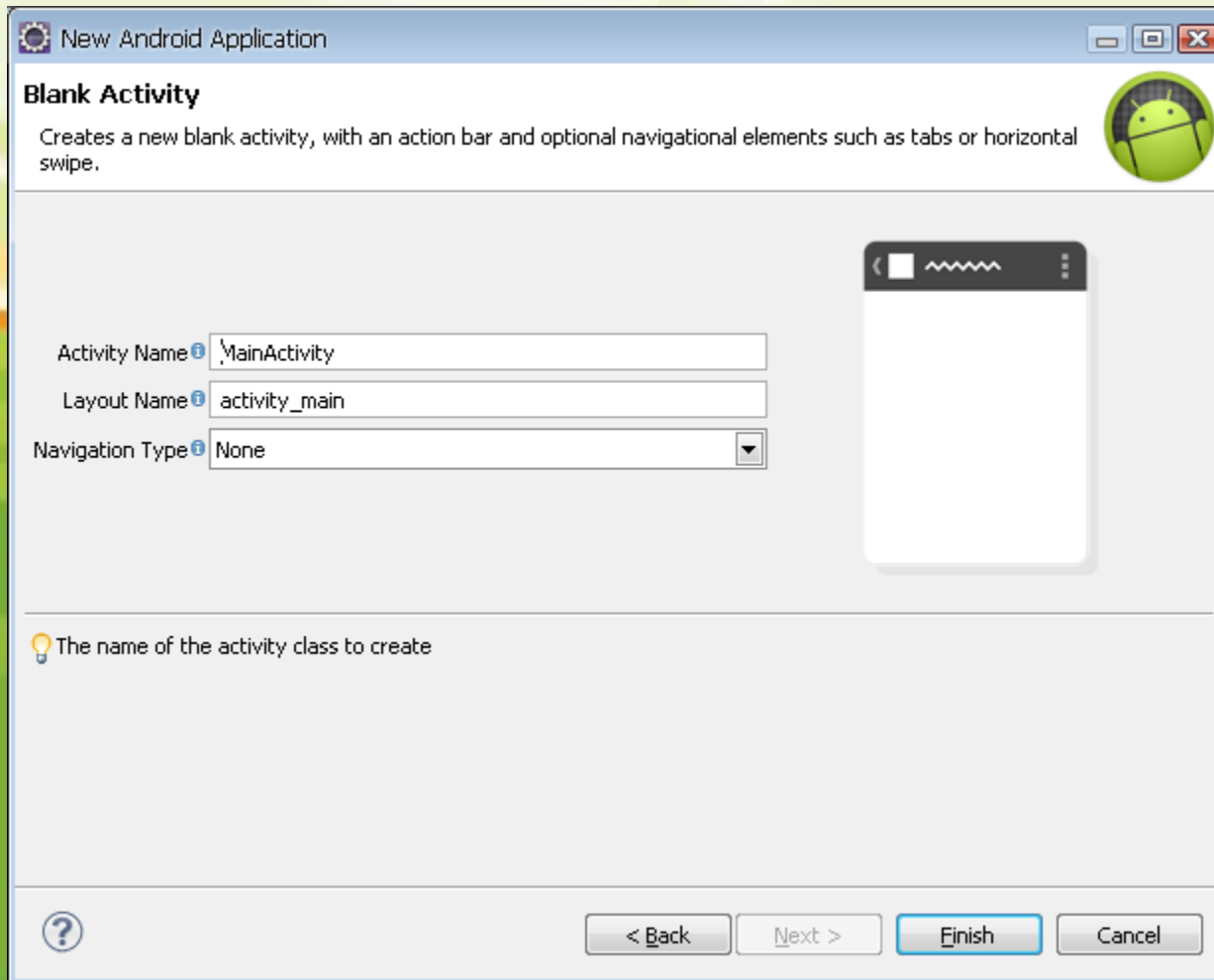
# Membuat Proyek (5)

New Android Application : Select whether to create an activity, and if so, what kind of activity.



# Membuat Proyek (6)

New Android Application : Create a new blank activity, with an action bar and optional navigational elements such as tabs horizontal swipe.



**New Android Application**


**Blank Activity**

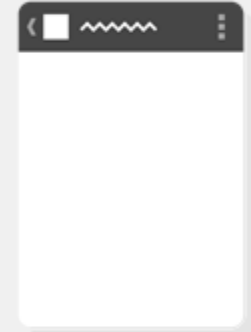
Creates a new blank activity, with an action bar and optional navigational elements such as tabs or horizontal swipe.


Activity Name


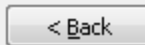


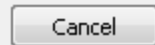
Layout Name

Navigation Type



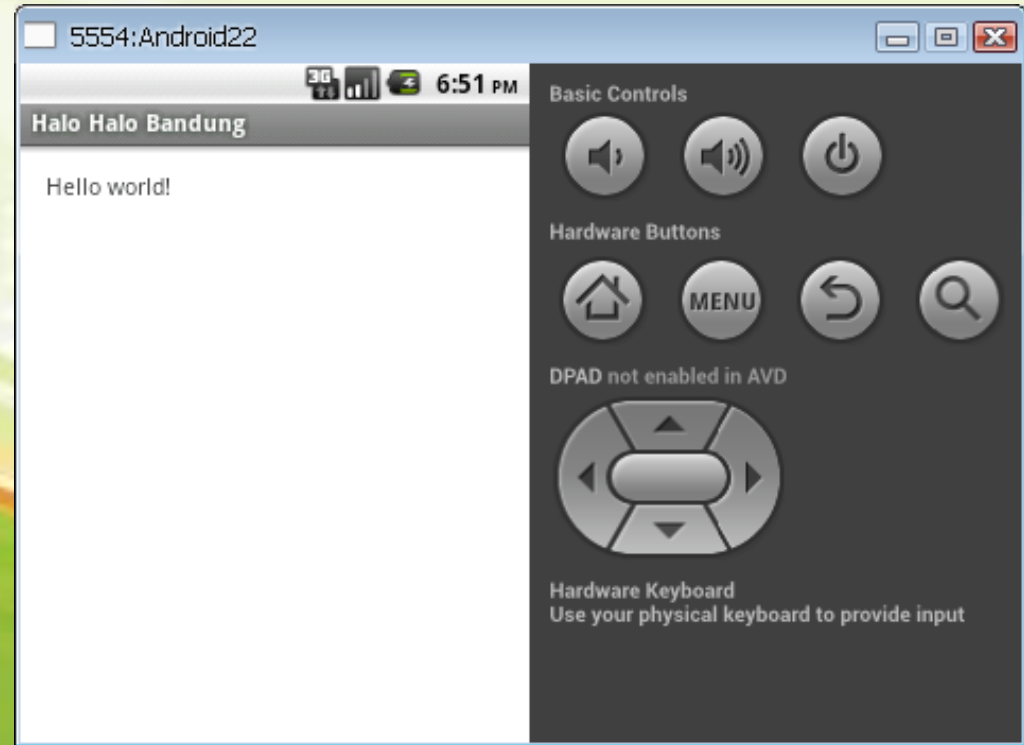
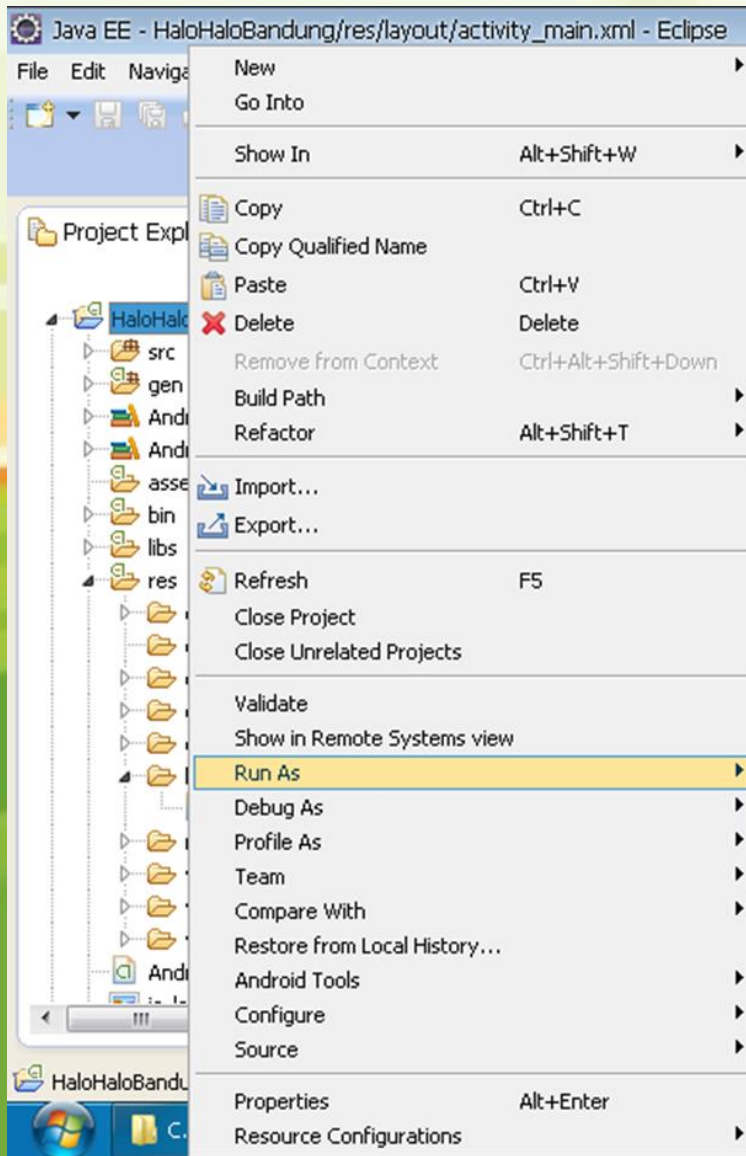


 The name of the activity class to create

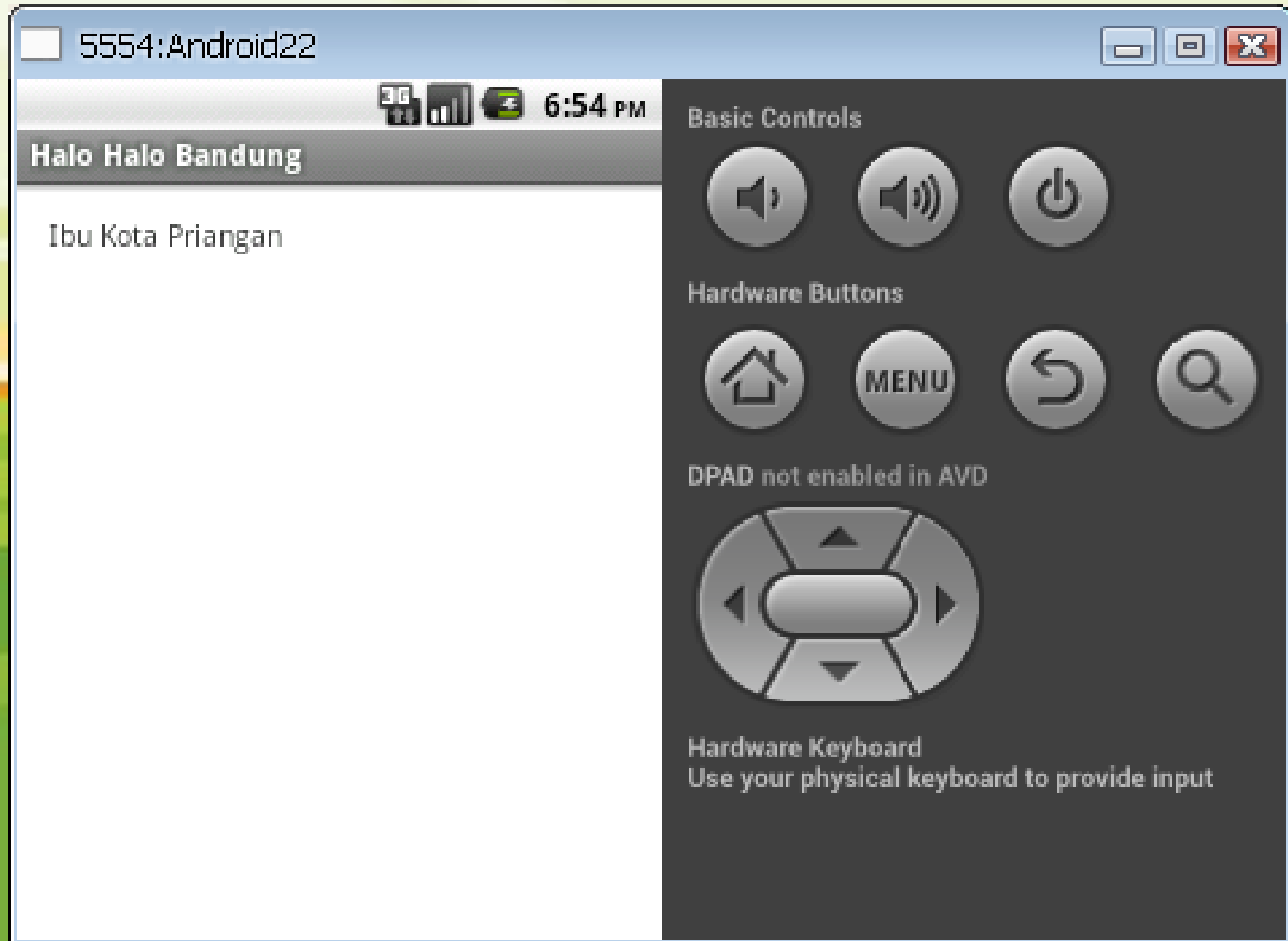
# Running Project

Running dengan menggunakan AVD yang sudah kita buat tadi.



# Modifikasi Project

Ubahlah kata “Hello world!” menjadi “Ibu Kota Priangan”.



Terima Kasih

