



# KONTRAK KULIAH PEMROGRAMAN VI

DANANDJAYA SAPUTRA

# DANANDJAYA SAPUTRA

- 
- Pendidikan :
    - S1 - STTI Tanjungpinang
    - S2 - Universitas Amikom Yogyakarta (Progress)
  - Pekerjaan :
    - Staff Puslahta STTI Tanjungpinang
    - Dosen Tetap STTI Tanjungpinang
    - Mobile Apps Developer PT. Maxindo Inovasi Digital Batam
    - Owner toko online [www.bintanrobotics.com](http://www.bintanrobotics.com)
  - Bidang Fokus dan Riset :
    - Mobile Application
    - Robotika
    - Internet of things

## CONTACT PERSON

 FB : Danand Jaya Saputra  
 WA : 085264874557

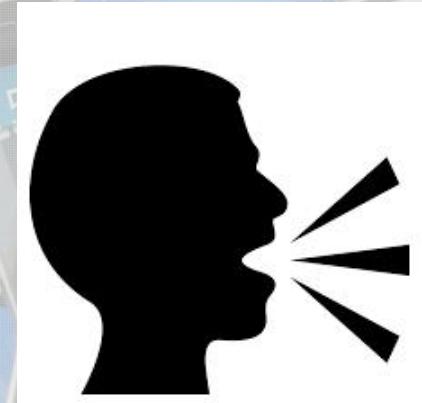
 NO. HP : 085264874557       EMAIL : danandj@gmail.com  
 BBM : 5489001F       WEB : profile.bintanrobotics.com  
 TELEGRAM : 085264874557       Linkdn : Danandjaya saputra

# PEMROGRAMAN VI

- Prodi : Teknik Informatika (IF) / Sistem Informasi (SI)
- Semester : 6
- Jumlah SKS : 3 (90 Menit)
- Bentuk perkuliahan :
  - Praktikum
  - E-Learning / Media Online



# TATA TERTIB PERKULIAHAN



## SISTEM PENILAIAN PERKULIAHAN

1. Tugas (20%)
2. Quiz (15%)
3. Ujian Tengah Semester (20%)
4. Ujian Akhir Semester (25%)
5. Absensi (20%)
  - Max. Toleransi kehadiran tanpa keterangan 3X

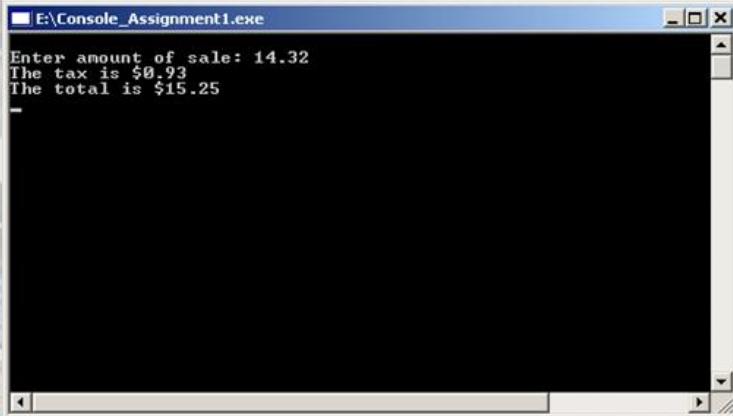




CODING APA YANG  
AKAN DI PELAJARI  
DI PEMROGRAMAN VI



# CONSOLE PROGRAMMING

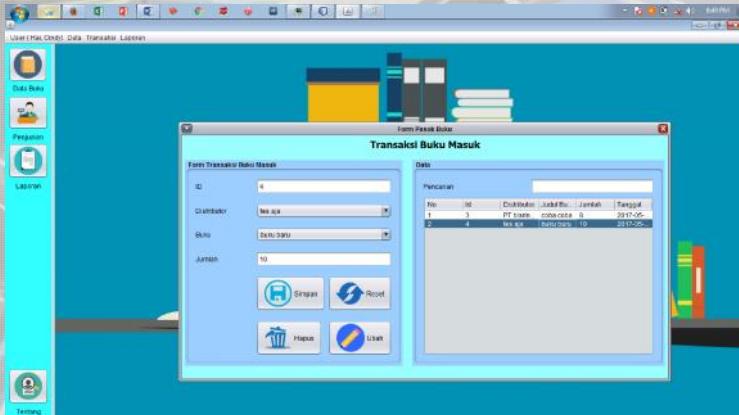


C++



# HTML, CSS, JS, ASP.NET

# DESKTOP PROGRAMMING



JAVA + MYSQL





# MOBILE PROGRAMMING

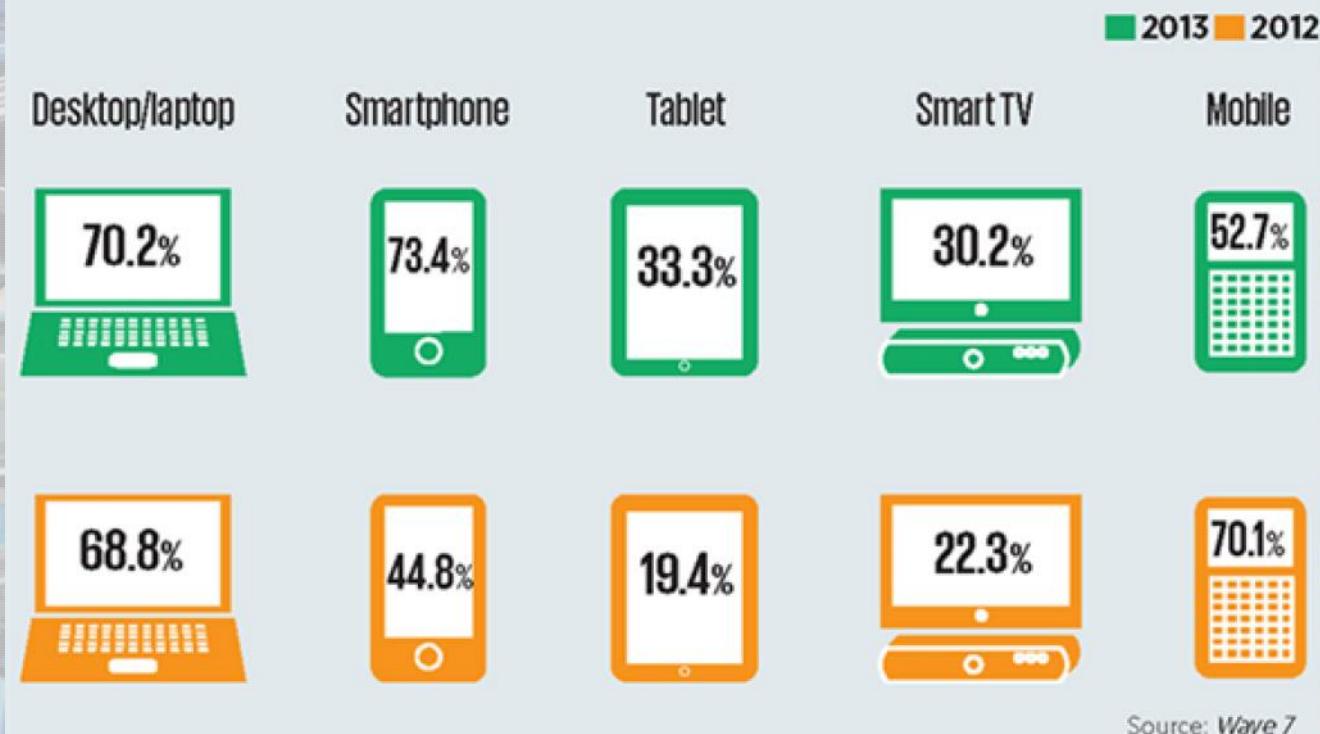
DANANDJAYA SAPUTRA

## EX: MOBILE DEVICES



# STATISTICS

## Ownership of tech devices



# ACTIVITY USER

## How we use our smartphones

ACTIVITY BY AVERAGE TIME PER DAY



<http://www.telegraph.co.uk/technology/mobile-phones/9365085/Smartphones-hardly-used-for-calls.html>

# MOBILE DEVICE OPERATING SYSTEM



iOS



android

palm webOS™



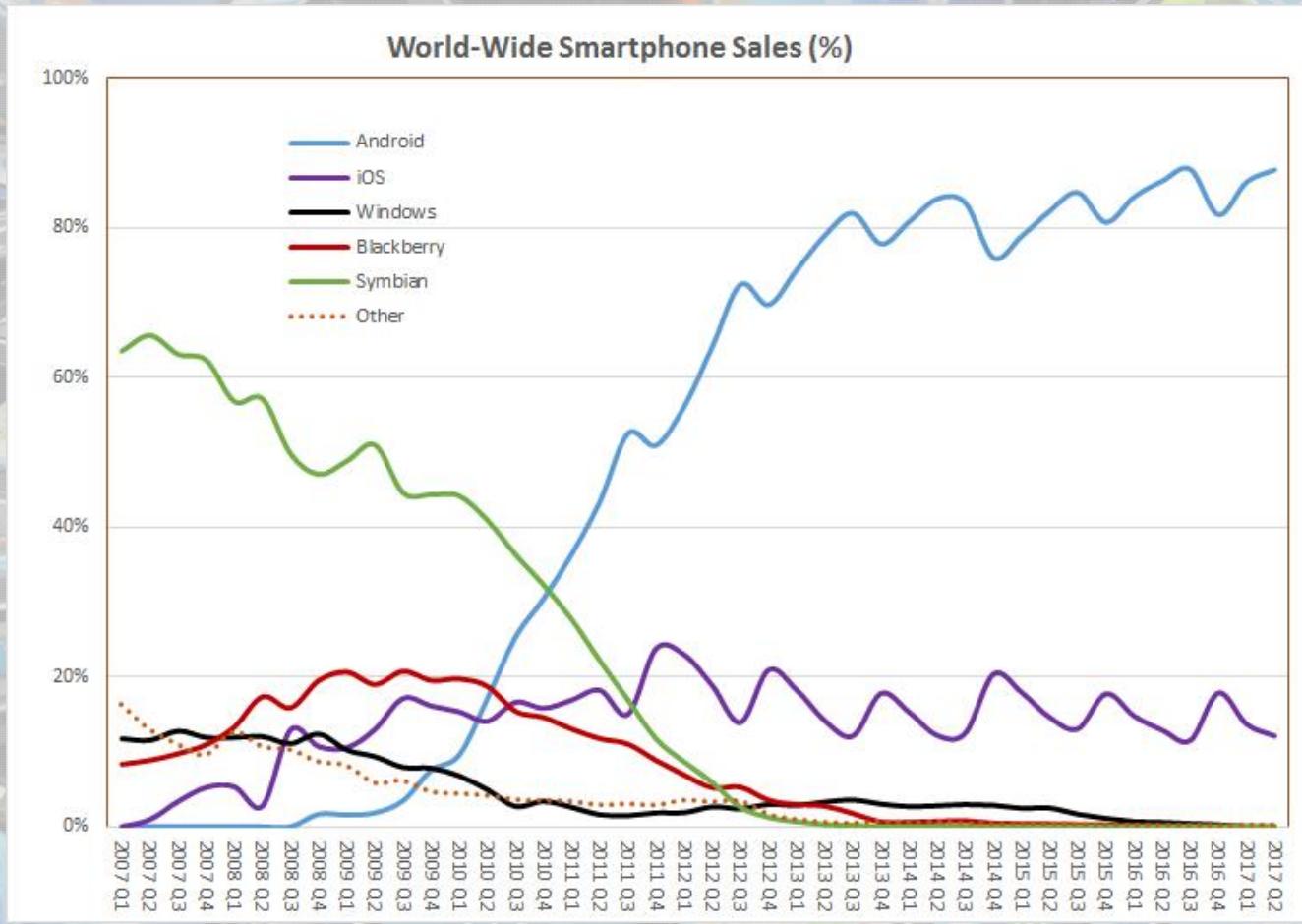
Windows  
phone

BlackBerry™

MeeGo™



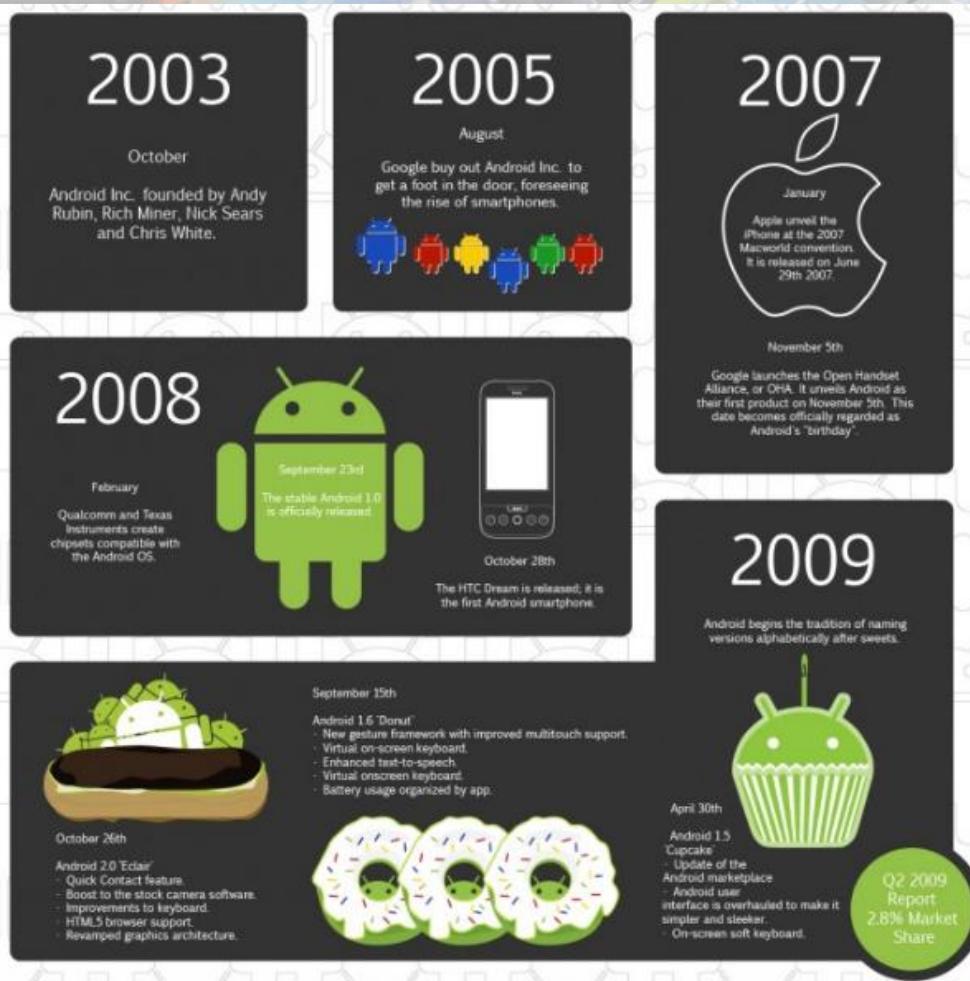
# TOP OS MOBILE DEVICE



# HISTORY ANDROID



**Andrew E. "Andy" Rubin**  
(born March 13, 1963) is an  
American computer  
programmer, engineer,  
entrepreneur, and venture  
capitalist



# HISTORY ANDROID DEVICE



HTC DREAM

<b>Manufacturer</b>	HTC
<b>Successor</b>	HTC Magic, HTC Desire Z(T-Mobile G2), Nexus One
<b>Form factor</b>	Slider smartphone
<b>Dimensions</b>	117.7 mm (4.63 in) (h) 55.7 mm (2.19 in) (w) 17.1 mm (0.67 in) (d)
<b>Weight</b>	158 g (5.6 oz)
<b>Operating system</b>	Android m3-rc22a to 1.6
<b>CPU</b>	528 MHz Qualcomm MSM7201A ARM11 processor
<b>Memory</b>	256 MB of internal storage, 192 MB RAM
<b>Removable storage</b>	Up to 16 GB microSD
<b>Battery</b>	1150 mAh Internal rechargeable removable lithium-ion battery
<b>Data inputs</b>	capacitive touchscreen display, QWERTY keyboard, trackball, volume controls, 3-axis accelerometer
<b>Display</b>	320 x 480 px, 3.2 in (81 mm), HVGA, 65,536 color TFT-LCD at 180 pixels per inch (ppi)
<b>Rear camera</b>	3.15 megapixel, autofocus
<b>Connectivity</b>	Wi-Fi (802.11b/g), Bluetooth 2.0+EDR, ExtUSB, A-GPS Quad-band GSM 850 900 1800 1900 MHz GPRS/EDGE Dual band UMTS 1700 2100 MHz HSDPA/HSUPA (US/Europe) (7.2/2 Mbit/s)

# ANDROID DEVICE



ANDROID PHONE



ANDROID TABLET



ANDROID WEAR



ANDROID TV



ANDROID AUTO



SAGEFOX

# ANDROID VERSION



Cupcake  
Android 1.5



Donut  
Android 1.6



Eclair  
Android 2.0/2.1



Froyo  
Android 2.2.x



Gingerbread  
Android 2.3.x



Honeycomb  
Android 3.x



Ice Cream Sandwich  
Android 4.0.x



Jelly Bean  
Android 4.1.x



KitKat  
Android 4.4.x



Lollipop  
Android 5.0



Marshmallow  
Android 6.0



Nougat  
Android 7.0



Oreo  
Android 8.0



## know your mobile Android version

Cynet systems



# CATEGORY ANDROID APPS DEVELOPMENT

## Native Apps



JAVA & XML (ANDROID STUDIO/ ECLIPSE), C#/C++ (XAMARIN), PASCAL (RAD Studio)

## Web Apps



HTML5 + JAVASCRIPT

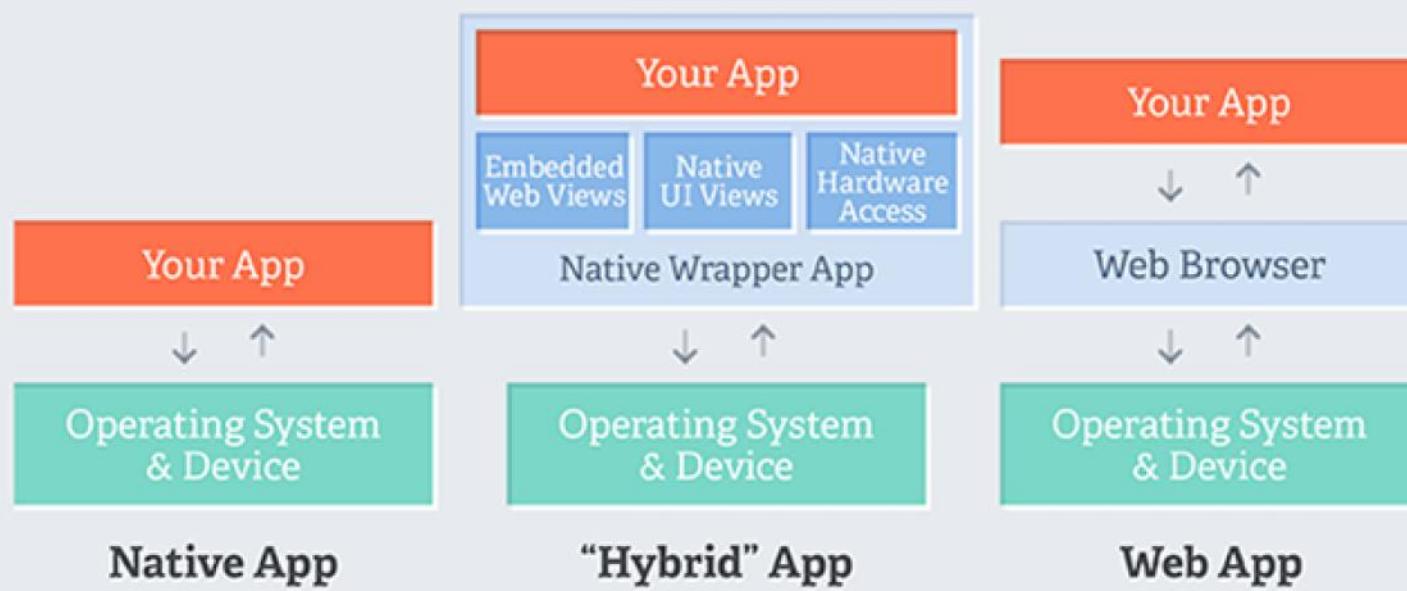
## Hybrid Apps



REACT NATIVE, IONIC, PHONEGAP, SENCHA TOUCH, FLUTTER

# CATEGORY ANDROID APPS DEVELOPMENT

## Mobile App Technology Stacks



# Native vs Web vs Hybrid

Features	Native Apps	Mobile Web Apps	Hybrid Apps
Performance	High	Low	Medium
Offline Mode	Supported	Not Supported	May be Supported
Distribution	App Store	Mobile Browser	App Store
Cross Platform Support	No	Yes	Yes
Device Level Access	High	Low	Medium
User Interface	Good	Average	Good
Development language	Native only	Web only	Native / Web
Development Time	High	Low	Medium
Development Cost	High	Low	Medium
Code Portability	Low	High	High
Maintenance	High	Low	Medium



## KESIMPULAN

- ❖ Tujuan : membuat aplikasi perangkat android (smartphone/tablet)
- ❖ Tools yang dibutuhkan :
  - 1) Eclipse ADT
  - 2) JDK 7/8
  - 3) SDK Android
  - 4) Emulator/Player Android untuk PC (MEMU/Windroye)

# EMULATOR ANDROID



MEMU



BLUESTACK



WINDROYE

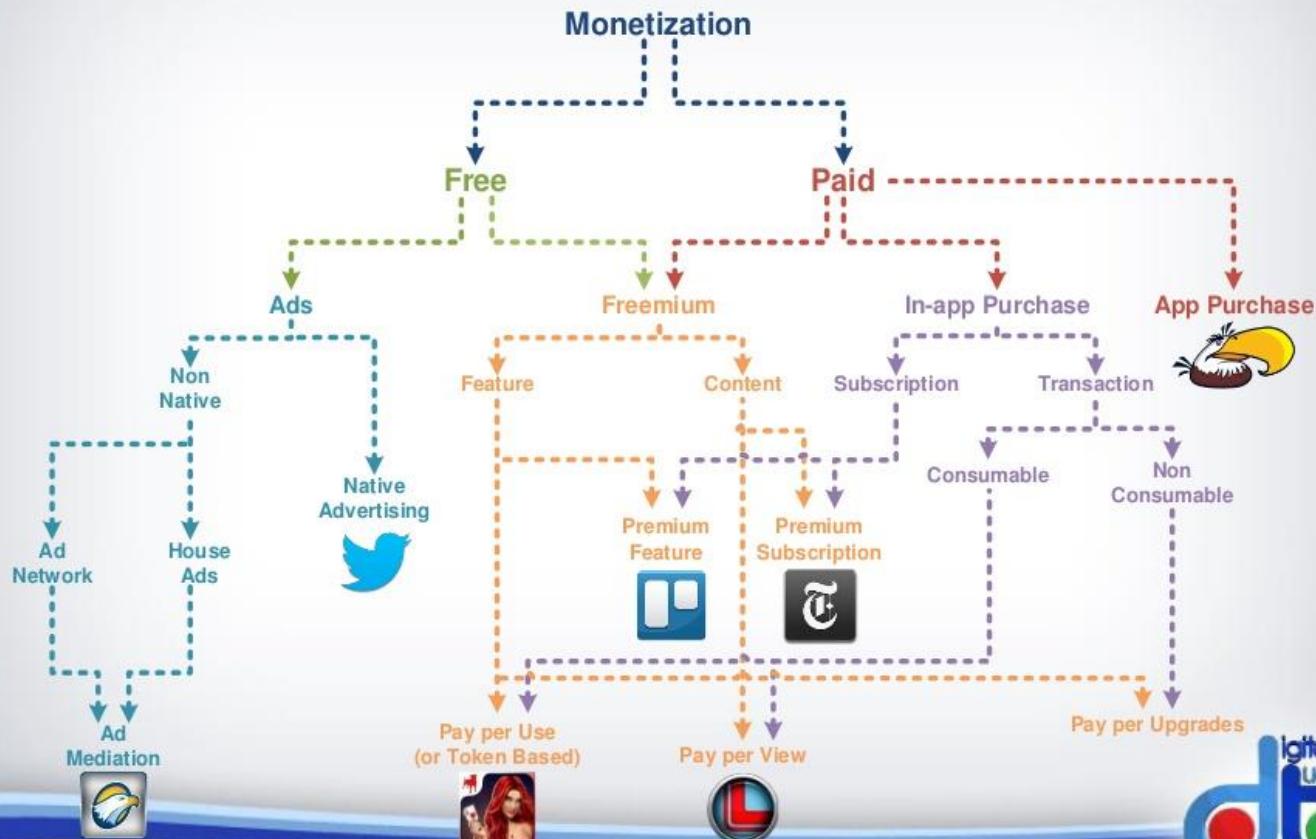


# MATERI PEMROGRAMAN VI (MOBILE PROGRAMMING)

- ❖ Pengenalan android + Install Tools
- ❖ Pengenalan Eclipse
- ❖ Activity, Komponen UI (Widgets)
- ❖ Event Handling
- ❖ Intent
- ❖ Data Storage (SQLite)
- ❖ Data Storage (Networking/ Client-Server)

# The Business Model

## Monetization – Tree Structure





A large number of smartphones are shown from various angles, creating a dense, overlapping texture. The screens of the phones display a variety of mobile applications, including maps, calculators, messaging interfaces, and financial charts. The overall color palette is dominated by blues, greys, and the vibrant colors of the app icons.

THANK YOU