

## Challenges faced by Mobile App Developers?

- Development Approach
- Device compatibility / screen size
- Attention to detail
- Funding
- Customer Reviews and Experience
- Performance

## 6 Myths of App Development →

- You need to know every API in Prior
- Developing an app is not time consuming
- Mobile development does not cost much
- Building an app brings an end to your efforts
- Apps are for smartphones only
- Mobile app markets on its own when it's built

## 3rd party framework →

Services created by company / developers that aren't Google.

## 3 categories →

→ Native Apps

App specifically designed for a particular platform.

## → Web Apps

App designed to deliver web pages on different web platforms for any device.

## → Hybrid Apps

Combination of both native and web application.

Developed from any platform from single code base.

## Mobility landscape →

Mobile — refers to as mobile devices

Mobility — refers to the way user engages with the device.

## What is platform in mobile app development →

A mobile application development platform, it is a type of software used by businesses for rapidly writing, testing and launching of the application.

- A company may make its own app or uses third party products.

## what are the types of mobile platforms ?

- Palm
- Android
- iOS
- Black Berry
- Windows

## Mobile OS →

### Palm OS

### Symbian OS → before Android

Symbian LTD

C++

Microkernel

User interface

}  
Till  
2007

## Advantages →

- long battery life
- open platform
- lower hardware requirement

## Features →

- flexible
- multimedia
- secure
- communication
- multitasking
- browser

## Disadvantage →

- non fluid screen.
- Dependent on Nokia.
- slower than android.

## Android → Linux Based

### Features →

#### Hardware →

- Bluetooth
- NFC
- microphone
- Audio

#### Disadvantage →

- Many apps required an internet connection.
- Battery wastage due to background processing.

#### Software →

- |               |                    |
|---------------|--------------------|
| - multimedia  | - multitask        |
| - widget      | - wallpaper        |
| - browser     | - video call       |
| - home screen | - internet storage |

Android vs Windows

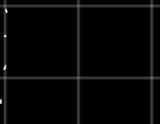
Android vs Pos

## API → Application Program Interface

software required prior to Android →

- JDK
- Android studio
- Eclipse
- JRE

### Android versions →



### Android Architecture →

Android operating system is a stack of software components which are divided roughly into 4-parts.



Types of layouts →

- Linear layout (vertical or horizontal)
- Relative layout (child view are relative)
- Grid layout
- Table Layout
- Frame layout
- Constraint layout

Services →

- Activity
- Resource management
- View
- Notification
- Content

Event →

Anything that happens.

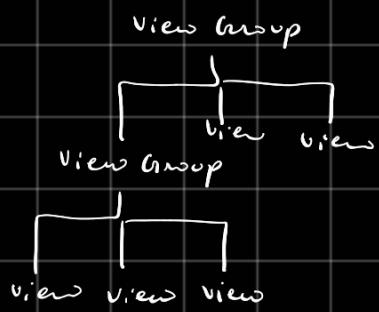
In UI →

Device → walking, driving

when any event is noticed  
and event handler is generated  
responsible for response to event.

View Group →

Is a type of view that contains other views.



```
LinearLayout LT = new LinearLayout(this);  
LT.setOrientation(LinearLayout.Vertical);  
  
TextView TS = new TextView(this);  
TS.setText = "Help";  
  
LT.addView(TS);  
  
setContentView(LT);
```

```
LinearLayout.LayoutParams LP = new LinearLayout.LayoutParams(  
    LayoutParams.Match_Parent,  
    LayoutParams.Wrap_Content)
```

```
LT.setLayoutParams(LP);
```

```
public void showText(View view) {
```

```
    String msg = "Tit";
```

```
    Toast toast = Toast.makeText(this, msg, duration);
```

```
    toast.show();
```

```
    android.OnClick = "setToast"
```

```
<LinearLayout
```

```
    android:orientation = "
```

```
    android:layout_height = "
```

```
    android:layout_width = "
```

```
<EditText
```

```
    - - - />
```

```
<Button
```

```
    - - - />
```

```
/>
```