BASIC ANDROID -

ANDROID INTRODUCTION

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Agenda

- **What is Android?**

- **What is OHA?**

- **Features of Android**

- **History of Android**

- **Application field**

- **Market share**

- **Android versions, codename and API level**

- **Categories of Android applications**

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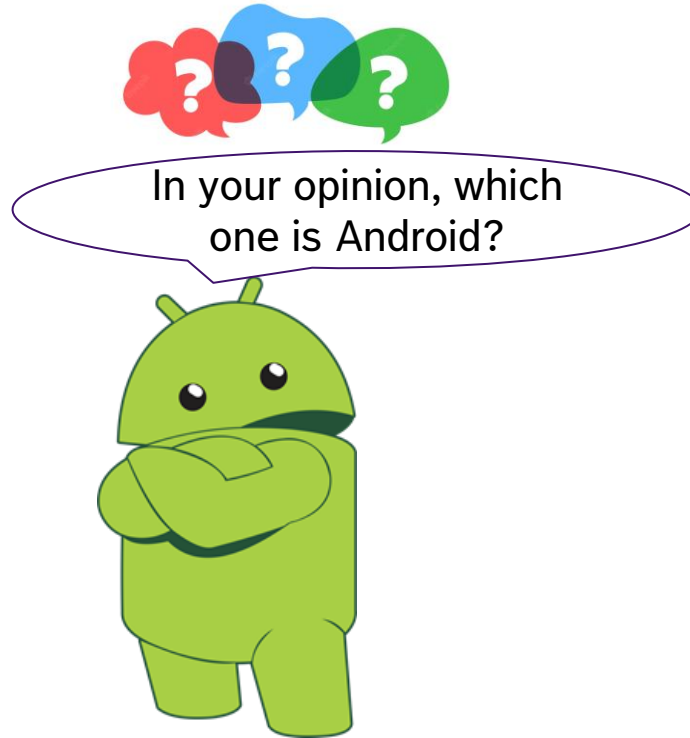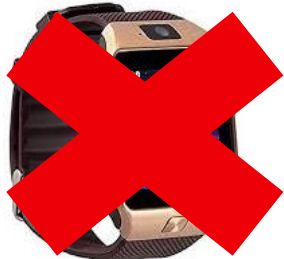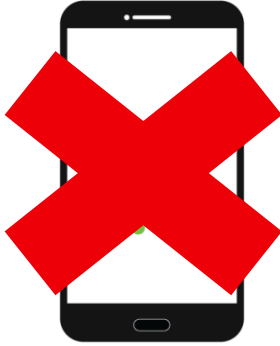- Categories of Android applications
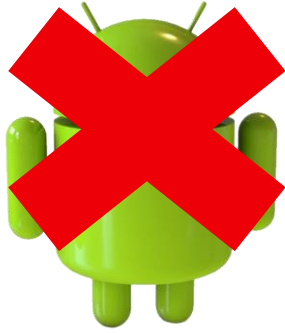
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What is Android?

Let's discuss: What is Android?

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What is Android?

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What is Android?

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What is Android?

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What is Android?

- Android is a **software package** and **linux based operating system** for devices such as tablets, smartphones, TV, watch, etc.

- It is developed by Google and later the **OHA** (**O**pen **H**andset **A**lliance). Java language is mainly used to write the android code even though other languages can be used such as Kotlin, ...

- The goal of android project is to create a successful real-world product that improves the experience for end users.
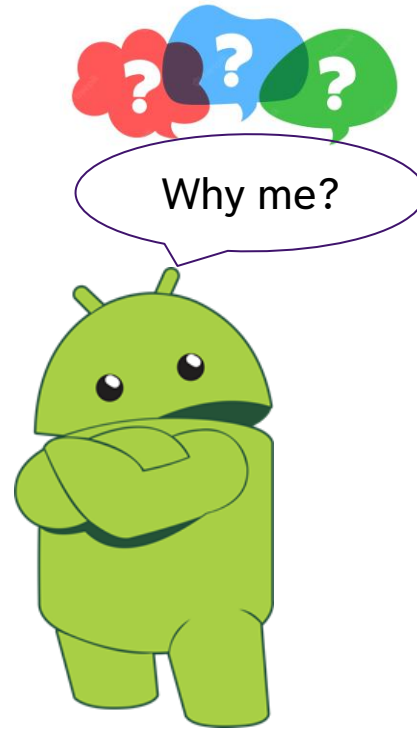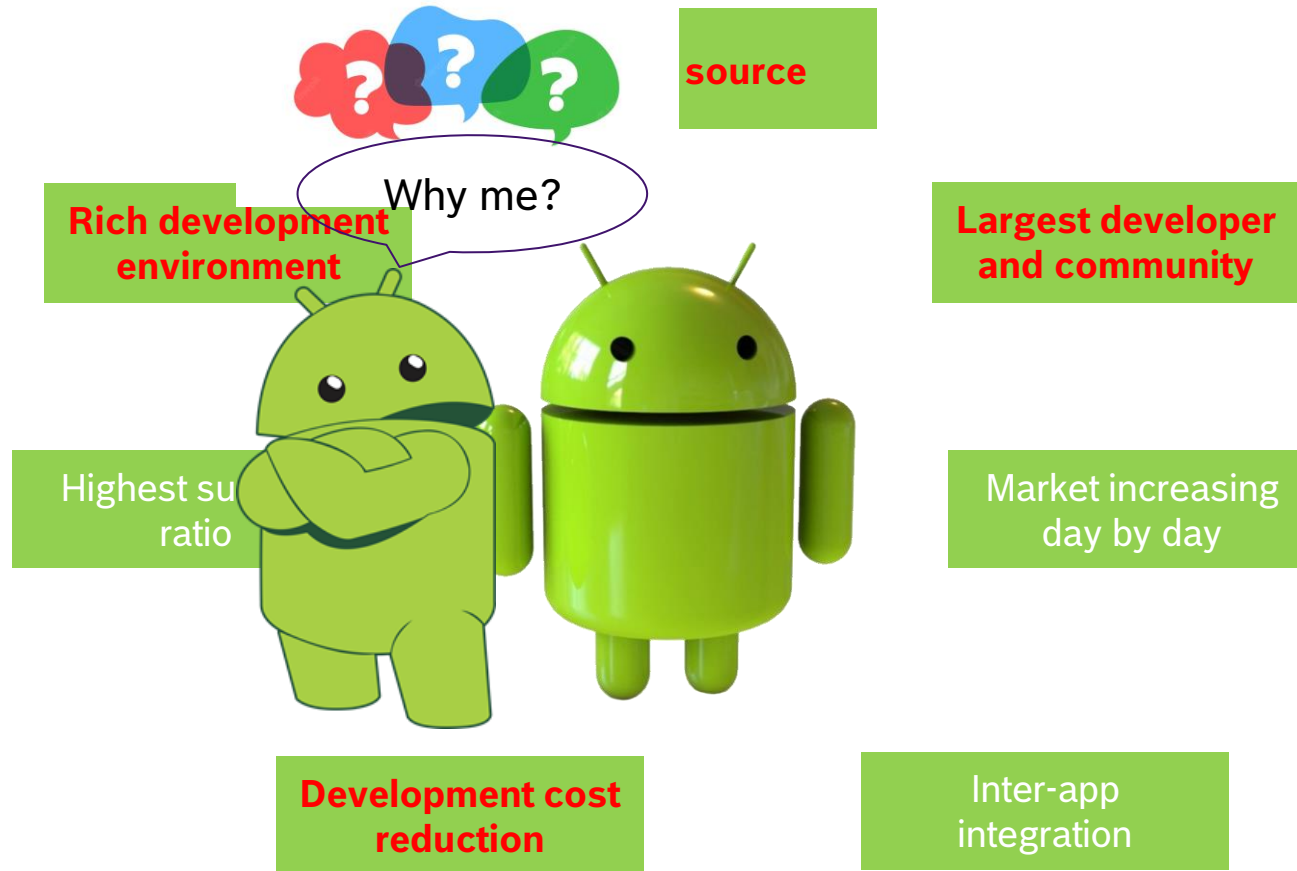
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What is Android?

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What is Android?

source

Rich development environment

Why me?

Largest developer and community

Highest su ratio

Market increasing day by day

Development cost reduction

Inter-app integration

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What is OHA?

- An organization including phone makers (such as HTC, SamSung, Motorola, etc.), chip manufacturers (such as Qualcomm, Texas Instruments, etc.), and carriers (such as T-Mobile, etc.).

- It was established on 5th November 2007, led by Google.

- It is committed to advance open standards, provide services and deploy handsets using the Android Platform.

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Features of Android

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Features of Android

- Android is a powerful operating system competing with Apple and supports great features:

  - Anyone can customize the Android Platform

  - Supports different types of connectivity for GSM, CDMA, Wi-Fi, Bluetooth, etc. for telephonic conversation or data transfer.

  - Can pair with other devices while playing games or using other applications.

  - Contains multiple APIs to support location-tracking services such as GPS.

  - Can manage all data storage-related activities by using the file manager.

  - Contains a wide range of media supports like AVI, MKV, FLV, MPEG4, etc. to play or record a variety of audio/video.

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Features of Android

- Android is a powerful operating system competing with Apple and supports great features:

  - Supports different image formats like JPEG, PNG, GIF, BMP, etc.

  - Supports multimedia hardware control to perform playback or recording using a camera and microphone.

  - Has an integrated open-source WebKit layout-based web browser to support User Interfaces like HTML5, and CSS3.

  - Provides support for virtual reality or 2D/3D Graphics.

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History of Android

- In Oct 2003, Android Inc was founded in Palo Alto, California by Rich Miner, Nick Sears, Chris White, and Andy Rubin.

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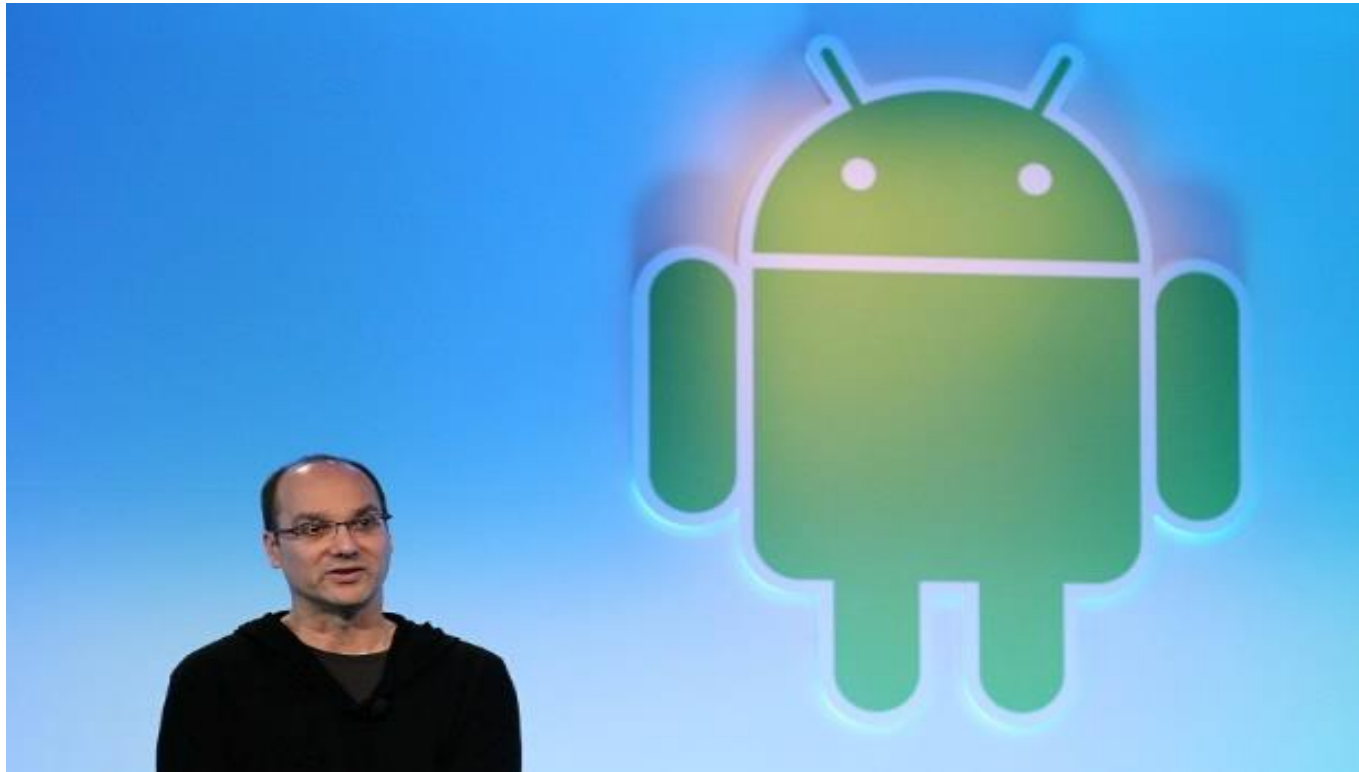
History of Android

- The purpose of Android Inc is to develop "smarter mobile devices that are more aware of its owner's location and preferences."

- In 2005, Google acquired Android Inc, marking the next big chapter in Android's history.

- Then, Linux was decided to use as the basis for the Android OS.

- This will make Android itself to be able to offer to third-party mobile phone manufacturers for free.

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History of Android

- In 2007, Apple launched the first iPhone and ushered in a new era in mobile computing while Google was still secretly working on Android.

- On Nov 05, 2007, Google revealed the plans to combat Apple and other mobile platforms by launching the public beta of version 1.0 for developers and establishing **Open Handset Alliance** (**OHA**).

- This ushered in a new era for Android, which will rule the world in later time.

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Application field

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Market share

Mobile OS Market Share Worldwide on May 2019
(http://gs.statcounter.com/os-market-share/mobile/worldwide)

Legend:
- Android
- iOS
- KaiOS
- Windows
- Samsung
- Others

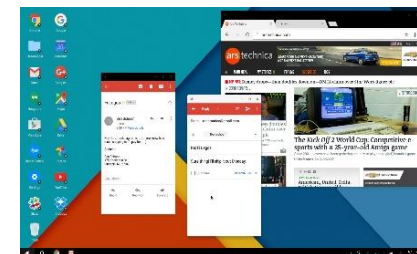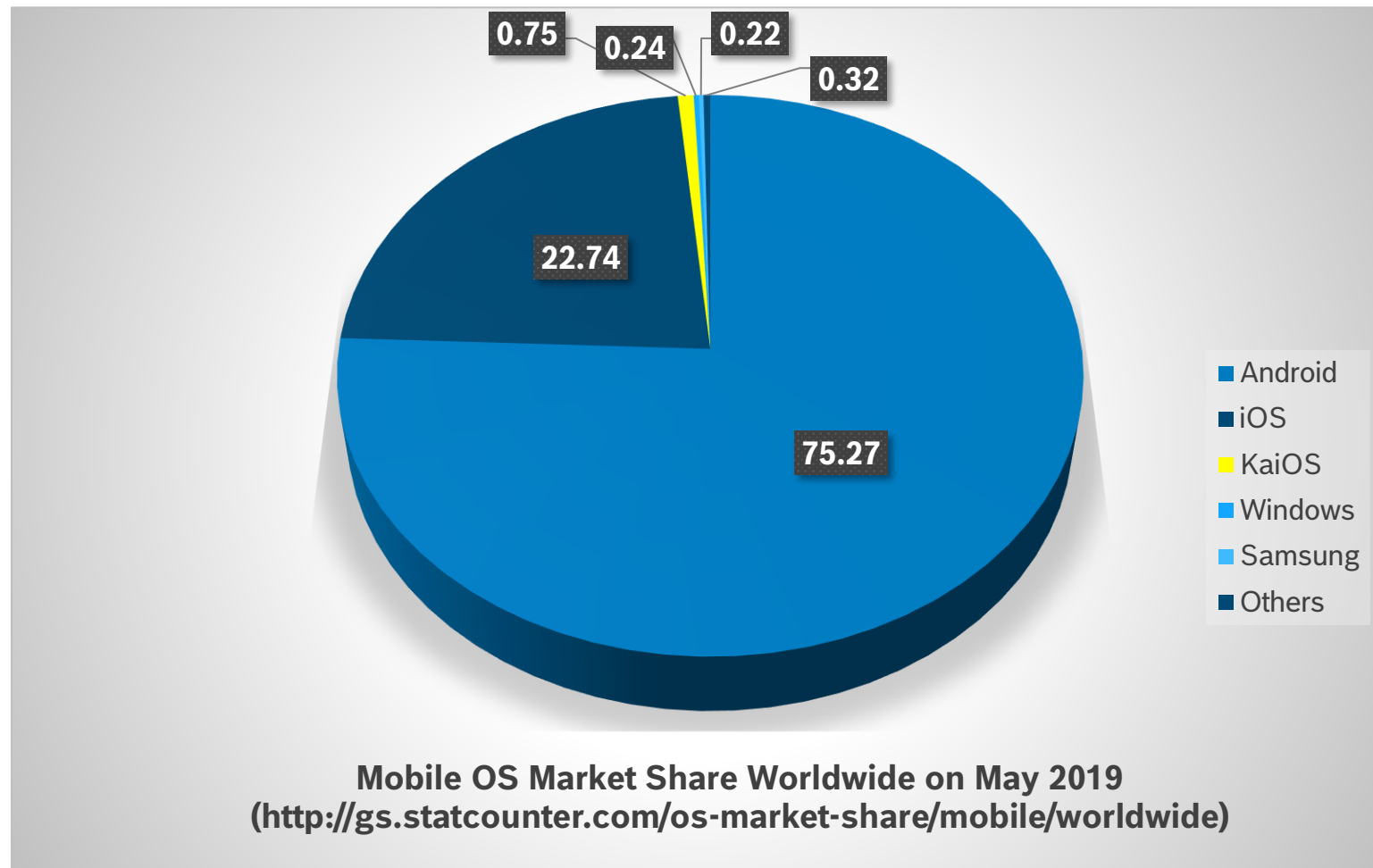Values shown: 0.75, 0.24, 0.22, 0.32, 22.74, 75.27
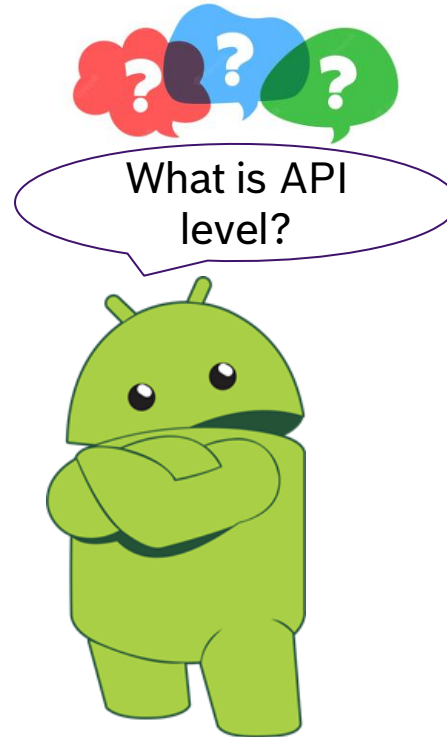
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Android version

Android 1.0 Sept 2008 **Android 1.1** Feb 2009	**Android 1.5** Cupcake April 2009

Android 1.0
Sept 2008
Android 1.1
Feb 2009

Android 1.5
Cupcake
April 2009

Android 1.6
Donut
Sept 2009

Android 2.0/2.1
Eclair
Oct 2009

Android 2.2
Froyo
May 2010

Android 4.4
Kitkat
Oct 2013

Android 4.1
Jelly Bean
Nov 2012

Android 4.0
Ice-cream
Sandwich
Oct 2011

Android 3.0
Honeycomb
Feb 2011

Android 2.3
Gingerbread
Dec 2010

Android 5.0/5.1
Lollipop
Nov 2014

Android 6.0
Marshmallow
Oct 2015

Android 7.0/7.1
Nougat
Aug 2016

Android 8.0
Oreo
Aug 2017

Android 9.0
Oreo
Aug 2018

Android 13.0
Tiramisu
UPCOMING

Android 12.0
Snow Cone
Oct 2021

Android 11.0
Android 11
Sep 2020

Android 10.0
Android Q
Sep 2019

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API level

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API level

- API Level is an integer value that uniquely identifies the framework API revision offered by a version of the Android platform

Code Name	Version	API level	Release date
–	Android 1.0	1	September 23, 2008
–	Android 1.1	2	February 9, 2009
Cupcake	Android 1.5	3	April 30, 2009
Donut	Android 1.6	4	September 15, 2009
Eclair	Android 2.0 – 2.1	5-7	October 26, 2009
Froyo	Android 2.2 – 2.2.3	8	May 20, 2010
Gingerbread	Android 2.3 – 2.3.4	9-10	December 6, 2010
Honeycomb	Android 3.0.x – 3.2.x	11 – 13	February 22, 2011

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Ice Cream Sandwich	Android 4.0 – 4.0.4	14 – 15	October 18, 2011
Jelly Bean	Android 4.1 – 4.1.2	16 – 18	July 9, 2012
Kitkat	Android 4.4 – 4.4.4	19	July 9, 2012
Lollipop	Android 5.0 – 5.1	21 – 22	October 17, 2014
Marshmallow	Android 6.0 – 6.0.1	23	October 5, 2015
Nougat	Android 7.0 – 7.1	24 – 25	August 22, 2016

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API level

- API Level is an integer value that uniquely identifies the framework API revision offered by a version of the Android platform

Oreo	Android 8.0	26	August 21, 2017
Pie	Android 9.0	27	August 6, 2018
Android Q	Android 10.0	29	September 3, 2019
Android 11	Android 11.0	30	September 8, 2020
Snow Cone	Android 12.0 – 12.1	31-32	October 4, 2021
Tiramisu	Android 13		UPCOMING

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Categories of Android applications

- There are many android applications in the market. The top categories are:

🎵 Music	📰 News	📺 Multimedia
⚽ Sports	🧘 Lifestyle	🍴 Food & Drink
🚌 Travel	🌤️ Weather	📒 Books
💼 Business	📓 Reference	🧭 Navigation
💬 Social Media	🔧 Utilities	📈 Finance

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Thank for your listening!

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