



Mobile Application Development I

Royal University of Phnom Penh

Faculty of Engineering

Instructor: Mr. Sao Kimsong



About Instructor

Name: Sao Kimsong

Experiences: 10 years in Full Stack Software Development.

Education: Master in IT Engineering, RUPP (2019)

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Work: Head of ICT Unit, Digital Social Protection Secretariat, GS-NSPC

About this course

What you'll learn

- Semester 1
 - Types of mobile app development
 - Basic native Android app development
 - Project structure
 - UI design
 - Application component
 - API usage.

What you'll learn

- Semester 2
 - How to manage and contribute source code as a team
 - Advanced Android application development
 - Design pattern, Kotlin, coroutine, ...
 - Build configuration (variant, flavor, signing, ...)
 - CI/CD
 - ...
 - Cross platform development (Flutter)
 - Hands-on project.

Prerequisites

- Android Studio (IDE)
- Access to a computer and internet connection
- Basic JAVA & Kotlin programming language.
- (Optional) Experience in an OOP
- (Optional) Android device and USB cable

Course Evaluation

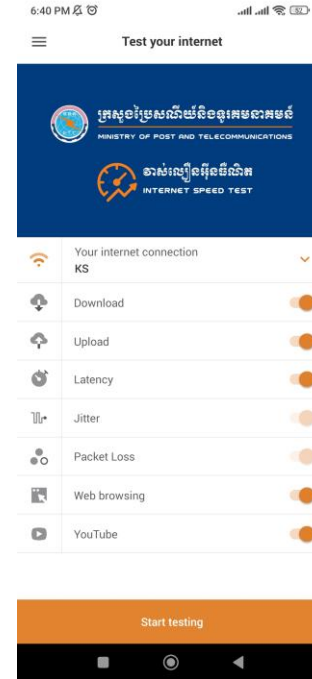
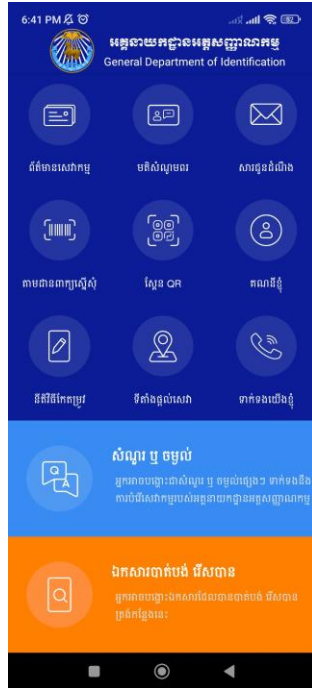
- Attendance : 10%
- Lab & Assignment : 20%
- QA & Coding : 30%
- Final Exam : 40%

Mobile Application Development

What is it?

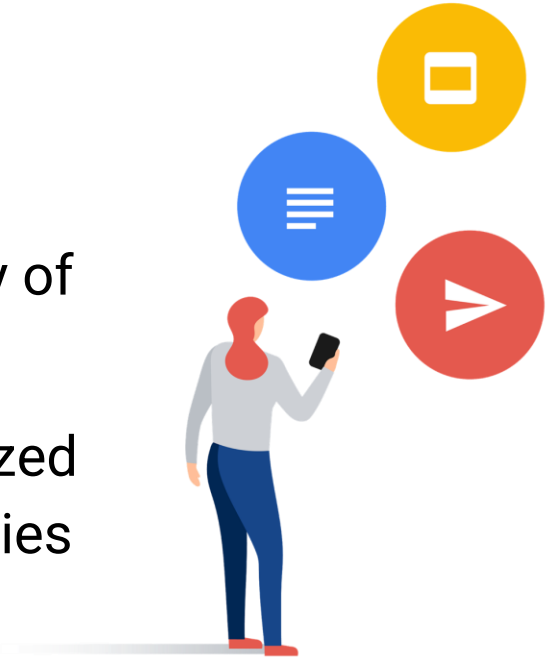
- Commonly referred to as a mobile app.
- A software application designed to run on mobile devices such as smartphones and tablets.
- Specifically developed to leverage the features and capabilities of mobile devices, including touchscreens, cameras, GPS, accelerometers, and more.

Mobile Apps



The opportunity

- Mobile devices are becoming increasingly commonplace
- Mobile apps connect users to information and services that can improve their quality of life
- Many industries have yet to be revolutionized through mobile, and offer great opportunities for new businesses and solutions

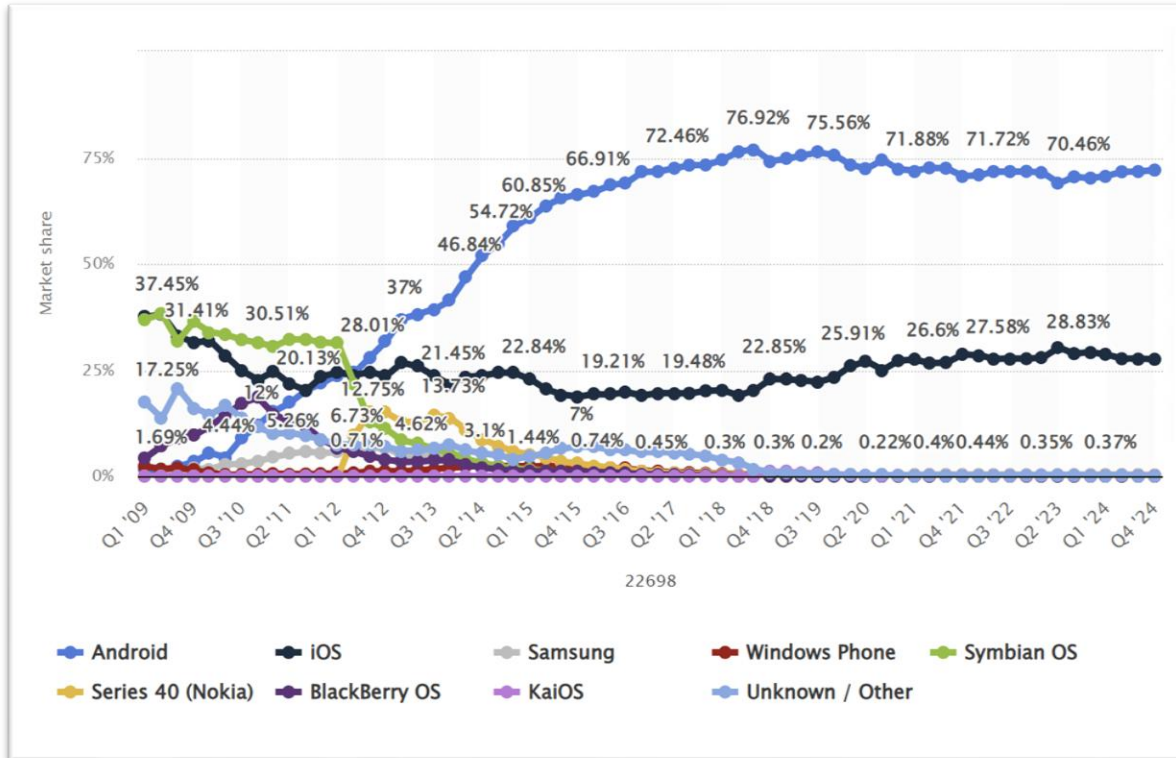


Job opportunity

- Mobile App Developer
- Android Developer
- Mobile UI/UX Designer
- Game Developer
- Mobile App Tester/QA Engineer
- ...



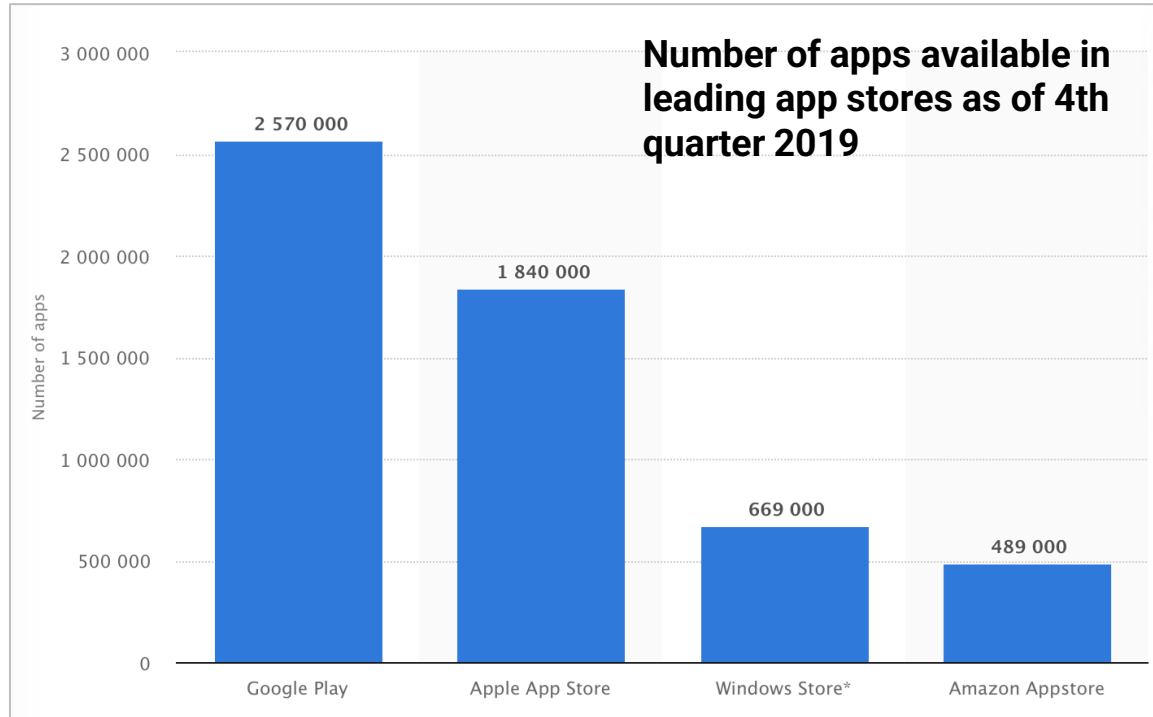
OS - Statistics



Market share of mobile operating systems worldwide

[Reference Link](#)

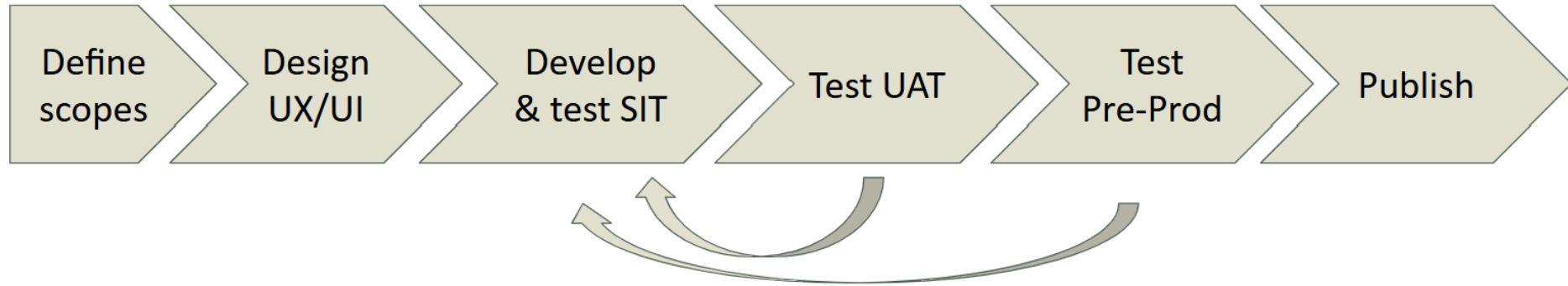
Stores - Statistics



Types of mobile app development



General Flow of Mobile App Dev.



Distribution

	Android	iOS
Official Store	Google Play Store (\$25/lifetime)	Apple App Store (\$99/year)
Installation File	Yes	No