

Mobile Apps Architecture

Gamboa López Jafet Jeshua

4A

Universidad Tecnológica de Tijuana

Tijuana, México

0322103712@ut-tijuana.edu.mx

Abstract—This document is an explication of what is mobile apps architecture and also this document is an explication of the three different design architecture.

Index Terms—architecture, apps, mobile, solid, kiss, dry

I. INTRODUCTION

In the world of mobile technology, application architecture plays a crucial role in the creation and operation of mobile applications. The way we design and structure these applications not only impacts their performance and efficiency but also influences the user experience and their ability to adapt to the changing demands of the market.

II. MOBILE APPS ARCHITECTURE

A. What is it?

The mobile application architecture is a structural building or structural systems that design elements that make up a mobile application. It covers the techniques, processes and components used during the application development process. The technology framework or platform on the back end of the application and the user-facing aspect of the mobile application are also part of the mobile architecture of the application.

III. THREE DESIGN ARCHITECTURE

Successful mobile app architecture uses the design principles of the following three terms: SOLID Mobile App Architecture KISS Mobile App Architecture DRY mobile application architecture

- SOLID Mobile App Architecture
- KISS Mobile App Architecture
- DRY Mobile App Architecture

A. SOLID Mobile App Architecture

It is called solid for this reason:

- Single-Responsibility
- Open-Closed
- Liskov Substitution
- Interface Segregation
- Dependency Inversion

This programming principle is essential for creating a scalable mobile application architecture. The scalable mobile application architecture is based on agile and flexible technology. This facilitates improvements, updates and extensions when necessary. This universal programming principle is an established framework on which mobile application architecture guidelines are based.

B. KISS Mobile App Architecture

This is a minimalist programming principle that is based on the premise of keeping the technology stack or mobile architecture simple. The idea behind this premise is that the simpler the technology stack, the less likely it is to create unnecessary or costly errors. Coding is required to be as minimal as possible to develop a mobile application architecture based on this principle.

C. DRY Mobile App Architecture

This programming principle, like KISS, is based on simplicity. It assumes that reducing repetition in logical coding sequences or software patterns will result in fewer errors.

IV. CLEAN ARCHITECTURE

Some developers apply the CLEAN programming principle to mobile application architecture. This principle, like its name, suggests a clear separation of application layers during development. As a result, these applications work independently of each other. This means that in case of errors or necessary updates, this programming principle facilitates more agile application development. It also reduces the need to recreate mobile app development from scratch, as all layers of the app work independently of each other.

REFERENCES

- [1] Schmidt, R. (2022) Arquitectura de aplicaciones móviles en 2024: cree su aplicación móvil, AppMaster. Available at: <https://appmaster.io/es/blog/arquitectura-de-aplicaciones-moviles-en-2022-construya-su-aplicacion-movil> (Accessed: 15 January 2024).