

Mobile devices architecture

1st Jesus Antonio Panama Arellano
Multiplatform Software Development
Universidad Tecnologica de Tijuana
Tijuana, Mexico
0322103781@ut-tijuana.edu.mx

Abstract—Mobile application architecture systems are fundamental to organize design resources and processes in app development. They include elements such as user experience, bandwidth adaptation and navigation strategies. User experience ensures intuitive interaction, while bandwidth adaptation ensures consistent performance across diverse mobile networks. Navigation strategies, such as stacked, modal or single view, aim to simplify the user experience. In addition, the architecture considers device versatility. A robust architecture provides competitive advantages by meeting customer needs and maximizing sales opportunities. Diverse development options facilitate mobile business activities, improving responsiveness and efficiency.

Index Terms—Application, Architecture, Experience, Users

I. INTRODUCTION

Mobile application architecture is an essential component in the development of software for mobile devices. This system allows organizing and structuring the design resources required for the composition of mobile applications, addressing key aspects such as user experience, adaptation to different networks and devices, and navigation strategies. In this context, a well-established architecture not only ensures intuitive and seamless interaction for users, but also provides competitive advantages to companies by meeting customer needs and maximizing sales opportunities. In this paper, we will explore the basic elements and key features of mobile application architecture.

II. BASIC ELEMENTS

- User experience: ensure that the architecture of your mobile applications is intuitive. This will create an engaging and seamless mobile application experience for users.
- Bandwidth: no two mobile networks are the same, so your mobile application architecture should be designed to work in a variety of network environments.
- Navigations strategy: you must create a simple and enjoyable user experience. It can be stacked, modal or single vita.
- Device in use: the architecture of the mobile application incorporates versatile design and functional elements during the development of the application.

III. CHARACTERISTICS

A well-established architecture is able to provide its users with a competitive advantage, as it helps companies to respond to the requirements of their customers, as well as to make the most of the options for generating potential sales for their business. There are different options depending on the development approach of the mobile application architecture that allow companies to simplify their activities in the field of mobile development, allowing them to increase responsiveness with their customers and keep their attention towards the product or service offered by the application.

REFERENCES

- [1] F. Luna, Desarrollo web para dispositivos moviles. RedUsers, 2016.
- [2] J. Peralta, A. Mendez, A. Fuentes, M. Estrada y A. Alvarez, “Arquitectura para el desarrollo de aplicaciones educativas para dispositivos móviles”, Tecnológico de Costa Rica, Costa Rica, mayo de 2015. Accedido el 1 de febrero de 2024. [En línea]. Disponible: <https://repositoriotec.tec.ac.cr/handle/2238/6416>