Universidad Tecnológica de Tijuana
Ingeniería En Desarrollo Y Gestión De Software
Aplicaciones Web Progresivas

Pwa Concepts and Features

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Chapter 1

Pwa Concepts and Features

1.1 Introduction

Progressive web apps (PWAs) are a new type of web application that combines the best of both web and native apps. They are built using web technologies, such as HTML, CSS, and JavaScript, but they can be installed on a user's device and accessed offline. PWAs offer a number of advantages over traditional web apps, including:

- Improved performance and reliability
- Increased engagement and retention
- Reduced development and maintenance costs

1.2 Service-Oriented Web Applications

Service-oriented web applications (SOAs) are web applications that are built using a service-oriented architecture. This means that they are composed of a collection of discrete services that can be independently developed, deployed, and managed. SOAs offer a number of advantages over traditional monolithic web applications, including .(Developers, 2023)

- Increased flexibility and scalability
- Reduced complexity and maintenance costs
- Improved performance and reliability

1.3 Native Apps

Native apps are applications that are specifically designed for a particular operating system, such as iOS or Android. They are typically written in a native

programming language, such as Objective-C or Java. Native apps offer a number of advantages over web apps, including: (Developers, 2023)

- Improved performance and reliability
- Increased user engagement and retention
- Access to native device features

1.4 Multiplatform Apps

Multiplatform apps are applications that can be run on multiple operating systems, such as iOS, Android, and Windows. They are typically written using a cross-platform development framework, such as React Native or Xamarin. Multiplatform apps offer a number of advantages over native apps, including: (Network, 2023)

- Reduced development and maintenance costs
- Increased reach to a wider audience

1.5 PWAs

PWAs are a type of web application that combines the best of both SOAs and native apps. They are built using web technologies, but they can be installed on a user's device and accessed offline. PWAs offer a number of advantages over traditional web apps, SOAs, and native apps, including:

- Improved performance and reliability
- Increased engagement and retention
- Reduced development and maintenance costs
- Access to native device features

1.6 PWAs Features

PWAs are characterized by a number of features that distinguish them from traditional web apps. These features include:

- Progressive - PWAs are progressively enhanced, meaning that they can be used even on devices with limited connectivity or resources.
- App-like - PWAs can be installed on a user's device and accessed from the home screen, just like a native app.
- Offline support - PWAs can be used offline, even if the user does not have an internet connection.

1.7 Conclusion

PWAs offer a number of advantages over traditional web apps, SOAs, and native apps. They are a promising new technology that has the potential to revolutionize the way we interact with web applications.

References

Developers, G. (2023, July 20). *Progressive web apps.* Documento web. Retrieved from `https://developers.google.com/web/progressive-web-apps`

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