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

Tools and Developments of PWAs

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Chapter 1

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1.1 Introduction

PWAs are a relatively new technology, but they are quickly gaining popularity. They offer a number of advantages over traditional web apps, including:

- Offline support: PWAs can be used even when the user is not connected to the internet.

- Push notifications: PWAs can send push notifications to the user, even when the app is not in use.

- Native app-like experiences: PWAs can be launched from the user's home screen and can be used with system-level features, such as notifications and permissions.

1.2 Requirements

To create a PWA, developers must first ensure that their web application meets the following requirements .(Network, 2023)

- The application must be built using web technologies, such as HTML, CSS, and JavaScript.

- The application must be responsive and should work well on a variety of devices and screen sizes.

- The application must be progressive, meaning that it should provide a good user experience even if it is not installed on the user's device.

1.3 Browsers

PWAs are supported by most modern browsers, including:

- Chrome

- Firefox

- Edge

- Safari

In addition to these browsers, there are also a number of third-party PWA browsers available, such as:

- PWABuilder

- PWAify

- PWA Launcher

1.4 Development tools

There are a number of development tools available to help developers create PWAs. These tools can help developers to: (W3C, 2023)

- Create a PWA-compatible web application

- Test and debug a PWA

- Deploy a PWA to the web

Some popular PWA development tools include:

- Create React App

- Angular CLI

- Ionic Framework

1.5 Benefits of using PWAs

PWAs offer a number of benefits over traditional web apps, including: (Developers, 2023)

- Better user experience: PWAs can provide a better user experience than traditional web apps, thanks to features such as offline support and push notifications

- Increased engagement: PWAs can help to increase user engagement, thanks to features such as push notifications and native app-like experiences

- Improved search engine optimization (SEO): PWAs can improve a web application's SEO, thanks to features such as service workers and app manifests

1.6 Conclusion

PWAs are a powerful new technology that can offer a number of advantages over traditional web apps. They are a good choice for web applications that need to provide a good user experience, increase engagement, or improve SEO.

References

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