Assignment:

Framework Selection

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GROUP:

9-B

SUBJECT:

Desarrollo Móvil Integral

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Framework Selection: React Native with Expo

1. Introduction to React Native with Expo: React Native is a powerful JavaScript framework for building natively-rendered mobile applications for iOS and Android using a single codebase. Expo is a comprehensive framework and platform for universal React applications, providing a set of tools and services that simplify the development process.

2. Why Choose React Native with Expo? React Native with Expo offers a robust and efficient way to develop mobile applications. Expo enhances React Native by providing a suite of tools that streamline development, testing, and deployment.

3. Key Features of Expo:

- **Over-the-Air Updates:** Expo allows you to push updates to your app without going through the app store review process.

- **Easy Integration with Native APIs:** Expo provides access to a wide range of native APIs, making it easier to add native functionality to your app.

- **Rich Set of Pre-built Components:** Expo includes a variety of pre-built components that can speed up development.

- **Expo Go:** A mobile app that lets you preview your project on your device in real-time.

4. Factors to Consider When Selecting React Native with Expo:

- **Project Requirements:** React Native with Expo is suitable for projects that require rapid development, easy updates, and access to native device features.

- **Community Support:** Both React Native and Expo have large, active communities, providing extensive resources, tutorials, and support.

- **Ease of Use:** Expo simplifies many aspects of React Native development, making it easier for beginners to get started.

- **Performance:** While Expo provides many conveniences, it may introduce some performance overhead compared to a pure React Native setup.

5. Advantages of Using React Native with Expo:

- **Simplified Development:** Expo's tools and services reduce the complexity of setting up and managing a React Native project.

- **Consistency:** Using Expo ensures a consistent development environment across different platforms.

- **Time Savings:** Expo's pre-built components and easy integration with native APIs can significantly speed up development.

- **Over-the-Air Updates:** The ability to push updates directly to users without app store approval is a major advantage.

6. Disadvantages of Using React Native with Expo:

- **Learning Curve:** While Expo simplifies many tasks, there is still a learning curve associated with understanding its tools and services.

- **Performance Overhead:** Expo may introduce some performance overhead, which could be a concern for performance-critical applications.

- **Dependency:** Relying on Expo means you are dependent on its maintainers for updates and bug fixes.

- **Limited Customization:** Some advanced native customizations may not be possible with Expo, requiring you to eject from the Expo environment.

References:

Anish. (2023, February 28). *Top 11 REACT Native Frameworks for cross platform app Development*. 21Twelve Interactive. https://www.21twelveinteractive.com/react-native-frameworks/

Expo. (n.d.). Expo. https://expo.dev/