

SNS COLLEGE OF TECHNOLOGY



Coimbatore-35 An Autonomous Institution

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DEPARTMENT OF COMPUTER APPLICATIONS

23CAT607- CROSS-PLATFORM APP DEVELOPMENT

I YEAR II SEM

UNIT 1 – INTRODUCTION WEB DESIGN

TOPIC 3 – Criteria for creating Cross-platform App





Agenda



What is Crossplatform App Criteria of Cross platform app

What are the criteria's

Diagrams

Summary

-2/18/2025





Platform Support

 Determine the target platforms you want your app to run on, such as iOS, Android, Web, Windows, macOS, or Linux.



✓ This will help you choose the appropriate cross-platform technology and framework





Development Approach

Decide whether you want to use a native approach (building separate codebases for each platform), a hybrid approach (using web technologies like HTML, CSS, and JavaScript wrapped in a native container), or a cross-platform framework (like React Native, Flutter, or Xamarin) that allows you to write code once and deploy it across multiple platforms.







User Experience

 Ensure that your crossplatform app provides a native-like user experience on each target platform.
Users expect apps to look and feel like they were built specifically for their device's operating system.







Performance

- Cross-platform apps should perform as well as native apps.
- Consider the performance implications of your chosen technology, especially for resourceintensive applications like games or video editing software.







Access to Native Features

- Evaluate your app's requirements for accessing native device features like cameras, sensors, Bluetooth, or push notifications.
- Cross-platform frameworks often provide plugins or modules to bridge the gap between the crossplatform code and native platform APL



Developer Experience

- Choose a cross-platform technology that aligns with your team's existing skills and development workflows.
- Frameworks with active communities, good documentation, and robust tooling can greatly improve the developer experience.

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Third-Party Library Support

 Assess the availability and quality of third-party libraries and plugins for the cross-platform technology you choose.









Testability and Debugging

- ✓ Consider the tools and processes available for testing and debugging your cross-platform app.
- ✓ Good tooling can help you catch issues early and ensure a stable, high-quality app across all platforms.

Cost and Time-to-Market

Cross-platform development can potentially reduce development costs and accelerate time-to-market compared to building separate native apps for each platform.



Thank you

REFERENCE:

- ✓ <u>A Complete Guide to Cross-Platform App</u> <u>Development 2023 (ongraph.com)</u>
- ✓ Introduction to cross-platform app development - itCraft blog (itcraftapps.com)
- ✓ Introduction to Cross-Platform App Development | AppMaster

