SNS COLLEGE OF TECHNOLOGY

(AN AUTONOMOUS INSTITUTION)

COIMBATORE – 35

DEPARTMENT OF COMPUTER SIENCE AND ENGINEERING

UNIT 1
GETTING STARTED WITH MOBILITY

Syllabus:

Mobility landscape, Mobile platforms, Mobile apps development, Overview of Android platform, setting up the mobile app development environment along with an emulator, a case study on Mobile app development.

Mobile Apps Development

APP Development Approaches:

Three broad approaches:

1. Native
2. Web
3. Hybrid

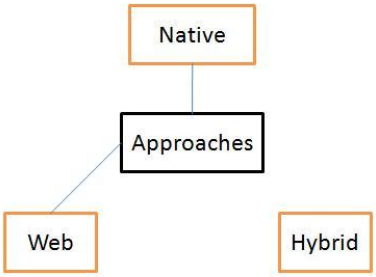


Figure: Mobile App Development Approaches

(1)Native Approach:

- native app,
- developed for native platform using platform specific APIs
- distributed through online app stores

- preferred when app requires a native look and feel

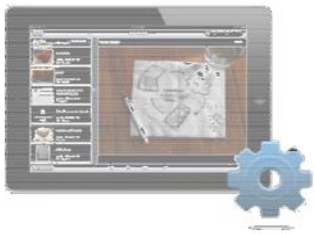
(2) Web Approach:

- mobile web app,
- developed using web technologies such as HTML5, CSS3, and JavaScript
- not installed on mobile device, gets rendered in an mobile browser, over the network
- preferred when app requires to cater to diverse devices using a single codebase
- no native L&F and no high-end device capabilities

☐ Hybrid Approach:

- mixed approach (features of native + web approaches)
- developed using mobile cross platforms
- hybrid platforms do not power device
- facilitate multiplatform development
- same codebase of a mobile app translated to fit into any of the supported native platforms

App development approaches



- Rich user experience
- Platform specific
- Proven path for mobile apps

NATIVE

- App-like experience
- Leverages device capabilities
- Multiple platforms

HYBRID

- Fast development cycles
- Cross-platform
- Instant updates

WEB/HTML5

App development approaches