

Cordova Hybrid Sprint Training

2 days (14 hours)

Overview

Cordova is an open-source framework for creating hybrid mobile applications using web technologies such as HTML, CSS and JavaScript. It enables the same code base to be deployed on multiple platforms (Android, iOS, etc.), making it an ideal solution for projects requiring rapid deployment on mobile.

Our Cordova Hybrid Sprint training course has been designed to immerse you in a short development cycle (Sprint type) by providing you with the tools you need to rapidly build, test and deploy hybrid mobile applications.

You'll learn how to structure a Cordova application, integrate native functionalities via plugins (camera, geolocation, etc.), optimize performance and automate multi-platform deployments. The pedagogical approach emphasizes hands-on practice, with one workshop per day, and an organization adapted to Agile/Scrum contexts.

This course is based on the latest stable release of [CLI Cordova v12.0.2](#) and [Cordova Android v14.0.0](#).

Objectives

- Understand hybrid application architecture with Cordova
- Create and structure a mobile application using web technologies
- Integrate native functionalities using Cordova plugins
- Optimize performance and cross-platform compatibility
- Deploy and publish an application on Android/iOS

Target audience

- Web developers wishing to create mobile applications

- Technical teams in an Agile/Scrum environment
- Freelancers or product teams wishing to prototype rapidly

Prerequisites

- Basic knowledge of HTML, CSS and JavaScript
- General command-line skills
- Node.js environment installed (npm, CLI)

Our Cordova Hybrid Sprint training program

Introduction to hybrid mobile development

- Introduction to Cordova and the hybrid approach
- Comparison of architectures: native, web, hybrid
- Cordova use cases in a Sprint context
- Installing and configuring the development environment
- Understanding the structure of a Cordova project
- Workshop: Creating a first simple Cordova project

HTML, CSS and JavaScript integration in Cordova

- Code organization in a Cordova application
- Best practices in mobile responsive design
- Managing touch events and mobile-specific interactions
- Use of mobile UI frameworks (e.g. Framework7, Onsen UI)
- Debugging with Chrome DevTools and Android/iOS emulators
- Workshop: Integrating an interactive interface with touch events

Using Cordova plugins

- What is a Cordova plugin?
- List of essential plugins: camera, GPS, local storage, etc.
- Installing, configuring and using plugins
- Managing mobile permissions
- Best practices in compatibility and fallback
- Workshop: Integrating camera and GPS into an application

Lifecycle and performance management

- Cordova lifecycle events
- Optimizing resources and loading time
- Cache and local storage management
- Profiling and performance analysis tools

- Preventing battery and memory problems
- Workshop: Performance analysis and optimization of a hybrid app

Cross-platform deployment and testing

- Preparation for Android and iOS
- Application signing, build generation (APK, IPA)
- Simulator and physical device testing
- Publication on Google Play Store and Apple App Store
- Build automation with Cordova CLI
- Workshop: Production APK generation and device testing

Best practices and Sprint organization

- Structuring a mobile project in an Agile/Scrum context
- Rapid prototyping techniques with Cordova
- Managing user feedback in the Sprint phase
- Communication between developers and Product Owner
- Cordova in a mobile DevOps stack
- Workshop: Creating a mini Sprint with a key feature

Companies involved

This course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is finalized, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the forthcoming course, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

Teaching methods

Practical training: 60% hands-on, 40% theory. Training material distributed in digital format to all participants.

Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

Validation

At the end of the session, a multiple-choice questionnaire is used to check that skills have been correctly acquired.

Certification

A certificate will be awarded to each trainee who completes the training course.