

# Course : Cordova, developing cross-platform mobile applications

**Practical course - 3d - 21h00 - Ref. OVA**

**Price : 1940 CHF E.T.**

Apache Cordova is an open-source project that provides the basis for cross-platform development using web technologies (HTML, Javascript and CSS). This training course will enable you to master the Cordova framework and considerably reduce the cost of developing your applications.

## Teaching objectives

**At the end of the training, the participant will be able to:**

- Discover the challenges of mobile application development
- Understand the process of developing a mobile application with the Cordova framework
- Mastering Visual Studio's Cordova tools
- Migrating a Web application to a mobile application

## Intended audience

Project managers, web and mobile developers.

## Prerequisites

Bonnes connaissances du développement Web (HTML / CSS et JavaScript). Des connaissances de base de Visual Studio et de NodeJS peuvent être un plus.

## Practical details

### Hands-on work

All developments will be tested on smartphones made available to participants. Android and IOS environments will be used.

## Course schedule

### PARTICIPANTS

Project managers, web and mobile developers.

### PREREQUISITES

Bonnes connaissances du développement Web (HTML / CSS et JavaScript). Des connaissances de base de Visual Studio et de NodeJS peuvent être un plus.

### TRAINER QUALIFICATIONS

The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

### ASSESSMENT TERMS

The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more.

Participants also complete a placement test before and after the course to measure the skills they've developed.

## 1 Cross-platform mobile development with Cordova

- The challenges of mobile development.
- Cross-platform versus native development.
- The Cordova framework.
- How Cordova works technically.
- Interact with the device.
- Advantages and limitations of Cordova.

## 2 Discovering Cordova

- Environment installation (NodeJS / Cordova).
- Using the CLI.
- Creation of a first application.
- Analyze the structure of an application.
- Windows application generation.
- Android application generation.
- iOS application generation.

### Hands-on work

Creating a Cordova application from the command line. Analyze the structure of the project tree.

## 3 Using Visual Studio

- Discover the Cordova tools in Visual Studio.
- Creating an application with Visual Studio.
- Windows and Android application generation.
- Deploy and debug application on Device or Emulator.
- Visual Studio and iOS.

### Hands-on work

Creating a Cordova application with Visual Studio. Deploy and debug on a device or emulator.

## 4 Migrating a Web application to a native application

- Web application versus native application.
- What's the effort involved?
- Make my application responsive.
- Touch management.
- Can a website be encapsulated?

### Hands-on work

Creating a Web application. Encapsulating a mobile application with Cordova. Deploy on device or emulator.

## 5 Interacting with the device

- What is a plug-in?
- Using a Core plug-in.
- Use of a public plug-in.
- Plug-in development.

### Hands-on work

Using plug-ins (accessing the camera, etc.). Creating a plug-in.

## TEACHING AIDS AND TECHNICAL RESOURCES

- The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
- At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
- A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

## TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training.

## ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you need special accessibility accommodations? Contact Mrs. Fosse, Disability Manager, at [psh-accueil@orsys.fr](mailto:psh-accueil@orsys.fr) to review your request and its feasibility.

## 6 Further information

- Specific code for each platform.
- Publish your application on stores.
- What about performance?
- Use AngularJS to structure your Web application.
- Use TypeScript.