Course Name: Hybrid Application (Ionic, Angular and TypeScript)
Duration: 60hrs

COURSE DESCRIPTION:

Ionic is a complete open-source SDK for hybrid mobile app development. Built on top of AngularJS and Apache Cordova, Ionic provides tools and services for developing hybrid mobile apps using Web technologies like CSS, HTML5, and Sass.

LEARNING OUTCOMES:

Typescript

1. What is TypeScript
2. Why TypeScript and how to use it
3. Installing TypeScript
4. Type Basics
5. Variable Declarations
6. TypeScript compiler understanding
7. TypeScript classes
8. TypeScript interfaces
9. TypeScript functions
10. Modules and Namespaces
11. Type inference
12. Type compatibility
13. Generics and Enums
14. ES6 features
15. Generators and Iterators
16. Module Resolutions

AngularJS 4.0

1. Angular 4.0 Introduction
2. SPA with Angular
3. Angular 4.0 Features

4. Difference between AngularJs & Angular
5. Angular 4.0 Setup (WebPack)
6. SPA & Angular 4.0 Architecture
7. Built In directives (Book)
8. Data display & User I/P's
9. Reactive Forms In angular (Book)
10. Dependency Injection
11. HTTP
12. Routing
13. Architectural Overview
14. Data Architecture in AngularJS 4
15. Services
16. Observables
17. Redux with Typescript & in Angular
18. Life Cycle Hooks
19. Event's in Angular
20. Advanced Templates
21. Change Detection
22. Hierarchical Injectors
23. Pipes

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A. Introduction of Ionic

1. Mobile Hybrid Architecture
2. What is Apache Cordova?
3. What is Ionic?
4. Software setup
5. Install Node.js
6. Install Git
7. Install Bower

8.   Install Gulp
9.   Install Sublime Text
10.   Install Cordova and Ionic CLI
11.   The platform guide
12.   Hello Ionic
13.   The browser developer tools setup
14.   Google Chrome
15.   Mozilla Firefox
16.   The Ionic project structure
17.   The config.xml file
18.   The www folder
19.   Scaffolding the tabs template
20.   Scaffolding the side menu template
21.   generator-ionic
22.   Installing generator-ionic

B. Ionic CSS Components and Navigation

1.   IIonic CSS components
2.   The Ionic grid system
3.   The page structure
4.   Buttons
5.   Lists
6.   Cards
7.   Ionicons
8.   Form elements
9.   Integrating Ionic CSS components with AngularJS
10.   The Ionic router
11.   A simple two-page app

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C. Ionic and SCSS

1. What is Sass?
2. Setting up SCSS in our Ionic project
3. The manual setup
4. The Ionic CLI task
5. Working with Ionic SCSS
6. Basic swatch
7. Understanding the Ionic SCSS setup
8. Using variables and mixins
9. The SCSS workflow
10. Building a swatch

D. Ionic Directives and Services

1. Ionic directives and services
2. The Ionic Platform service
3. registerBackButtonAction
4. The on method
5. Headers and footers
6. Content
7. ion-content
8. ion-scroll
9. ion-refresher
10. ion-infinite-scroll
11. $ionicScrollDelegate
12. Navigation
13. ion-view
14. Ionic view events
15. ion-nav-bar
16. ion-nav-buttons
17. $ionicNavBarDelegate

18. $ionicHistory
19. Tabs and side menu
20. Ionic loading
21. The Action Sheet service
22. Popover and Popup services
23. $ionicPopup
24. The ion-list and ion-item directives
25. Gesture directives and services
26. Utilities

E. Cordova and ngCordova

1. Setting up a platform-specific SDK
2. The Android setup
3. The iOS setup
4. Testing the setup
5. Testing for Android
6. Testing for iOS
7. Getting started with Cordova plugins
8. The Ionic plugin API
9. Add a plugin
10. Remove a plugin
11. List added plugins
12. Search plugins
13. The Cordova whitelist plugin
14. ngCordova
15. Setting up ngCordova
16. Legend
17. $cordovaToast
18. $cordovaDialogs
19. $cordovaFlashlight
20. $cordovaLocalNotification
21. $cordovaGeolocation

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