



# Ionic, Angular & Node Js Training

The friendly app platform for building cross-platform (Android, IOS and windows) apps with one codebase, for any device.

Ionic provides tools and services for developing hybrid mobile apps using Web technologies like CSS, HTML5, and Sass. Apps can be built with these Web technologies and then distributed through native app stores to be installed on devices by leveraging Cordova

**Tools : ANGULAR + JSON +PHP+MYSQL+IONIC+NODEJS**

## Angular Introduction

- Introduction to AngularJS MVC Architecture
- Conceptual Overview
- Setting up the Environment
- First Application
- Understanding ng Attributes

## Expression and Data binding

- Number and String Expressions
- Object Binding and Expressions
- Working with Arrays
- Forgiving Behaviour
- Understanding Data Binding

## Working with Directives

- Introduction
- Core Directives
- Conditional Directives
- Style Directives
- Mouse and Keyboard Events Directives

## Filters

- Purpose of Filters
- Built-In Filters
- Uppercase and Lowercase Filters

- Currency and NumberFormatting Filters
- OrderBy Filter
- Filter Filter
- Creating Custom Filter

## Forms

- Using Simple Form
- Working with Select and Options
- Input Validations
- Using CSS classes
- Form Events
- Custom Model update triggers
- Custom Validations

## Modules

- Why Module?
- Module Loading and Dependencies
- Recommended Setup of Application
- Creation vs Retrieval

## Controllers

- Understanding Controllers
- Programming Controllers and \$scope object
- Adding Behaviour to a Scope Object
- Passing Parameters to the Methods
- Having Array as members in Controller Scope
- Nested Controllers and Scope Inheritance
- Multiple Controllers and their scope

## Two-way data binding

---

## Services

- Understanding Services
- Developing Creating Services
- Using a Service
- Injecting Dependencies in a Service

## Routing

- Introduction to SPA
- Creating HTML Templates
- Configuring Route Provider

## NodeJs

- Introduction to Node JS
- Setup Dev Environment
- Node JS Modules
- Node Package Manager
- Creating Web server
- File System
- Debugging Node JS Application
- Serving Static Resources
- Database connectivity
- Template Engines

## Basic of Ionic[html/css]

- **Introduction**
- Computing eras & current mobile wave
- Platforms, Frameworks & Tools
- Hybrid frameworks, web tech, web APIs (backend)
- The stack – HTML5/CSS3/AngularJS/Cordova+platform
- Ionic – AngularJS and native-like.
- Phonegap / Cordova
- Demos and Code overview

## Ionic – ToDo App

- - Project Structure
  - Application Logic
  - Screen Templates
  - Ionic components
  - Navigation Stack
  - Summary

## Ionic – Getting Started

### Installing the tools

- Installing required npm packages
- Understanding the Ionic CLI
- Platform and SDK – Android / iOS
- Starting a fresh project
- Running the project
- Viewing App with Browser
- Viewing on Android Emulator
- Viewing on iPhone Emulator

## Ionic – Components

- Action Sheets
- Alerts
- Badges
- Buttons
- Cards
- Checkbox
- DateTime
- FABs
- Grid
- Icons
- Inputs
- Lists
- Loading
- Menus
- Modals
- Navigation
- Popover
- Radio
- Range
- Searchbar
- Segment
- Select
- Slides
- Tabs
- Toast
- Toggle
- Toolbar

## Ionic Theming

- Text Modification
- Element Placement
- Content Space
- Setting Attributes Dynamically
- Sass Variables
- Platform Specific Styles

## Integrating Device Features

- Cordova CLI
- ngCordova / Ionic native
- Device console
- Adding Camera plugin
- Image capture and upload
- Geolocation

## Ionic Data Storage

Shared Preferences

Internal Storage (Files)

External Storage(SD Card)

## Ionic Device Connectivity

- Working with Camera
- Working with WiFi
- List Paired Devices
- Bluetooth Tutorial

## Ionic Location API

- Working with Google Maps
- Example of Android Location API
- Location API Fundamental

## Ionic Multimedia

- Gallery
- Alarm Manager
- Playing Video
- Creating Audio Player
- Playing Audio
- Multimedia API

## JSON: JavaScript Object Notation

- JSON – Overview
- Uses of JSON
- JSON – Syntax
- JSON – DataTypes
- JSON – Objects
- JSON – Schema

- JSON - Comparison with XML
- JSON vs XML
- JSON Arrays
- JSON.parse
- JSON.stringify
- JSON with PHP

## Ionic CRUD Operation using php &Mysql

- Introduction to Mysql
- Mysql Basics
- Database Connectivity
- Data binding
- Crud Operation

## Releasing the Ionic App

- Preparing the app for distribution
  - Setting up icons and splash screens
  - Updating the config.xml file
- The PhoneGap service
- Generating installers using the Cordova CLI
  - Android installer
  - iOS installer
- The Ionic package
- Uploading the project to Ionic cloud
- Generating the required keys

## Live Project Work