
ELECTIVE – I ANGULAR JS

1. COURSE OBJECTIVES

- To help the reader understand how Angular JS differs from other frameworks
- To set up a test environment for Angular JS
- To show why Angular JS is a better framework for building modern web applications and websites
- To work on a functional application and implement testing
- To cover search engine optimization as it relates to Angular JS applications and websites.

2. COURSE OUTLINE

UNIT - I: INTRODUCTION TO ANGULAR JS

Introduction to Angular JS - JavaScript Client-Side Frameworks - Single-Page Applications - Bootstrapping the Application - Dependency Injection - Angular JS Routes - HTML5 Mode - Modern Search Engines - Angular JS Templates - Angular JS Views (MVC) - Angular JS Models (MVC) - Angular JS Controllers (MVC) - Controller Business Logic - Integrating Angular JS with Other Frameworks - Testing Angular JS Applications

UNIT - II: IDE AND ANGULAR JS PROJECTS

The IDE - Editing the HTML Code - Editing the JavaScript Code - Creating the Templates-Running the Applications - Testing Angular JS Applications in the IDE – JsTestRunner - Karma Test Runner - Protractor

UNIT - III: MVC AND ANGULAR JS

Angular JS Controllers – JS Test Drivers – Testing with Karma – End-to-End Testing with Protractor – Angular JS Models – Services and Business Logic – Angular JS Directives

UNIT - IV: ANGULAR JS VIEWS AND BOOTSTRAP

Angular JS Templates - Creating the Blog Project - Adding a New Blog Controller - Adding a New Blog Template- Twitter Bootstrap - Adding a Bootstrap Menu - Adding Mock Blog Data - Using CSS3 to Style the Page - Adding Styles and Presentation Logic - Viewing the Blog Post - Running the Blog Application – Angular JS and REST Services

UNIT - V: ANGULAR JS SECURITY AND SEO

Authentication - Adding a Login Service - Adding a Login Controller - Security Modifications to Other Controllers - Adding a Logout Controller - Adding a Login Template - Adding New Routes - Adding a Logout Link - Running the Blog Application – MEAN Cloud and Mobile – Angular JS and SEO

3. TEXT BOOK

- 1) Ken Williamson (O'Reilly). "Learning Angular JS", by Copyright 2015 Ken Williamson.
Unit – I: Ch. 1

Unit – II: Ch. 2

Unit – III: Ch. 3, 4, 7, 8, 9

Unit – IV: Ch. 5, 6

Unit – V: Ch. 10, 11, 12

4. REFERENCES

- Asim Hussain, “Angular: From to Practice”. CodeCraft, 1st Edition, 2017

5. WEB REFERENCES

- <https://angularjs.org>
- <https://docs.angularjs.org>
- <https://www.w3schools.com/angular>