

Full Stack Developer Course Syllabus

This Full Stack Developer Course Syllabus helps you master the most in-demand full stack development skills like HTML, CSS, JavaScript, React. js, MEAN Stack, Java and more. Besant's Full Stack Developer Content is 100% practice-based and hands-on. Get latest Full Stack Course Content for freshers and working Professionals.

This Full Stack Developer course syllabus is designed to give you an essence of front-end, middleware, testing and back-end Java web developer technologies with live projects. Get updated Full Stack Web Development Course Content PDF at free of cost.

Hyper Text Markup Language (HTML5)

Module Objectives:

- Building Strong expertise to develop front end application using HTML5
- Implement MVC and responsive design to scale well across PC, tablet and Mobile Phone

Overview:

This course provides you hands-on experience and exposure to developing HTML5 based single page

application for browsers. This course builds strong foundation on HTML5 which will help developer to use HTML5 concepts for building responsive web application.

Platform:

- Linux (Fedora / Mandriva / Ubuntu) or Windows Host system
- Firefox, Chrome

Detailed Course Contents:

- Introduction HTML
- HTML Basics
- HTML Elements
- HTML5 Semantic
- HTML Attributes
- HTML Headings
- HTML Paragraph
- HTML styles
- HTML Formatting
- HTML Quotations
- HTML Computer Code
- HTML Comments & Colors
- HTML CSS, Links and Images
- HTML Lists
- HTML Blocks
- HTML Classes

- HTML Layout
- HTML Responsive
- HTML iframes
- HTML JavaScript
- HTML Head

Cascading style Sheet (CSS)

Module Objectives:

- Building Strong expertise to develop front end application using CSS3
- Implement MVC and responsive design to scale well across PC, tablet and Mobile Phone

Overview:

This course provides you hands-on experience and exposure to developing CSS3 based web application. This course builds strong foundation on CS33 which will help developer to use CSS3 concepts for building responsive web application

Platform:

- Linux (Fedora / Mandriva / Ubuntu) or Windows Host system
- Firefox, Chrome

Detailed Course Contents:

- Introduction CSS3
- CSS3 syntax
- CSS3 How To
- CSS3 Colors
- CSS3 Backgrounds
- CSS3 Borders
- CSS Padding
- CSS Height/Width
- CSS3 Gradients
- CSS3 Shadows
- CSS3 Text
- CSS3 Fonts
- CSS3 2D Transforms
- CSS3 3D Transforms
- CSS Links
- CSS Lists
- CSS Tables
- CSS Box Model
- CSS Outline
- CSS Display
- CSS Max-width
- CSS Position
- CSS Float
- CSS Inline-block

A1 TRAINING INSTITUTE
(Only Coding)

- CSS Align
- CSS Combinators
- CSS Pseudo-class
- CSS Pseudo-element
- CSS Navigation Bar
- CSS Dropdowns
- CSS Tooltips
- CSS3 Images
- CSS Attr Selectors
- CSS Forms
- CSS Counters
- CSS3 Animations
- CSS3 Buttons
- CSS3 Pagination
- CSS3 Multiple Columns
- CSS3 User Interface
- CSS3 Box Sizing
- CSS3 Filters
- CSS3 Media Queries.
- CSS3 Responsive

Bootstrap

Module Objectives:

- To become proficient in Bootstrap concepts
- To develop a web pages based on Bootstrap

Overview:

This course is targeted for fresh engineers or professional who want to build competency in the Bootstrap Based web development.

Platform:

- Linux (Fedora / Mandriva / Ubuntu) or Windows Host system
- Firefox, Chrome Detailed

Course Contents:

- Introduction to Bootstrap
- Bootstrap Basics
- Bootstrap Grids
- Bootstrap Themes
- Bootstrap CSS
- Bootstrap JS

JavaScript

Module Objectives:

- Building Strong expertise to develop front end application using HTML5, CSS3 and JavaScript along with jQuery and AngularJS framework
- Implement MVC and responsive design to scale well

across PC, tablet and Mobile Phone

Overview: This course provides you hands-on experience and exposure to develop JavaScript based web application. This course builds strong foundation of JavaScript which will help developer to apply JavaScript concepts for responsive web frontend and backend development. Platform:

- Linux (Fedora / Mandriva / Ubuntu) or Windows Host system
 - Firefox, Chrome
- Detailed Course Contents:
- Introduction to JavaScript
 - JavaScript Language Basics
 - JavaScript Objects
 - JavaScript Scope
 - JavaScript Events
 - JavaScript Strings
 - JavaScript Numbers
 - JavaScript Math
 - JavaScript Arrays
 - JavaScript Boolean
 - JavaScript Comparisons
 - JavaScript Conditions
 - JavaScript Switch
 - JavaScript Loops
 - JavaScript Type Conversion

- JavaScript RegExp
- JavaScript Errors
- JavaScript Debugging
- JavaScript Hoisting
- JavaScript Strict Mode
- JavaScript Functions
- JavaScript Objects
- JavaScript Forms
- JavaScript HTML DOM
- JavaScript BOM

jQuery

Module Objectives:

- Building Strong expertise to develop front end application using HTML5, CSS3 and JavaScript along with jQuery and AngularJS framework
- Implement MVC and responsive design to scale well across PC, tablet and Mobile Phone

Overview:

This course provides you hands-on experience and exposure to develop jQuery Mobile based responsive web application. It builds strong foundation of jQuery which will help developer to apply concepts for responsive web frontend development.

Platform:

- Linux (Fedora / Mandriva / Ubuntu) or Windows Host system
- Firefox, Chrome Detailed Course Contents:
- Introduction to jQuery
- jQuery Syntax
- jQuery Selectors
- jQuery Events
- jQuery Effects
- jQuery HTML
- jQuery Traversing
- jQuery AJAX & Misc

Foundation Paradigm (Only Coding)

Module Objectives:

- jQuery
- To become proficient in OOPS, Design Patterns and Data Modelling concepts
- At the end of the course candidates will learn the concepts and their practical applications

Overview:

This course is targeted for fresh engineers or professional who want to build competency in the Object-Oriented

Programming. We focus on understanding OOPs concepts and its applications.

Platform:

- Linux (Fedora / Mandriva / Ubuntu) or Windows Host system
- Firefox, Chrome PHP & Mysql

Part 1: PHP Crash Course

- Using PHP
- Embedding PHP in HTML
- Adding Dynamic Content
- Accessing Form Variables

Part 2: Storing and retrieving data

- Opening a file
- Writing a File
- Closing a File
- Reading from a File

Part 3: Using Arrays

- Numerically Indexed Array
- Associative Arrays
- Sorting Arrays
- Recording Arrays
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Part 4: String Manipulation and Regular Expressions

- Formatting Strings
- Joining and Splitting Strings with String Functions
- Comparing Strings
- Matching and Replacing Substrings with String Functions

Part 5: Reusing Code and Writing Functions

- Using require() and include()
- Using Functions
- Parameters
- Recursion

Part 6: Object — Oriented PHP

- Object - Oriented Concepts & Creating Classes, Attributes, Operations in PHP
- Implementing Inheritance in PHP & signing Classes

Part 7: MVC with Laravel

- Laravel Installation
- Working with Forms
- Working with Controller
- Laravel Blade Template with Bootstrap
- Responses with Html
- Laravel Migration

- Laravel Requests, Models
- Laravel Eloquent ORM
- Build a Complete App in Laravel

Part 8: Designing your web database

- Relational Database Concepts
- How to Design Your Database & Web Database Architecture

Part 9: Creating your web database

- Creating Databases and Users
- Introduction to MySQL' Privilege System
- Setting Up a User for the Web
- Creating Database Tables

Part 10: Working with your MySQL database

- Inserting, Retrieving and Updating Data in to the Database
- Altering Tables after Creation

Part 11: Accessing your MySQL Database from the web with PHP

- How Web Database Architectures Work
- Checking and Filtering Input Data
- Setting Up a connection & Querying the Database

ReactJS (Building Web App using ReactJS)

Module Objectives:

- ReactJS basically is an open-source JavaScript library which is used for building user interfaces specifically for single page applications.
- It's used for handling view layer for web and mobile apps.

Overview:

ReactJS is JavaScript library used for building reusable UI components. According to React official documentation, following is the definition. It encourages the creation of reusable UI components, which present data that changes over time. React abstracts away the DOM from you, offering a simpler programming model and better performance. React can also render on the server using Node, and it can power native apps using React Native. React implements one-way reactive data flow, which reduces the boilerplate and is easier to reason about than traditional data binding.

Platform:

- Linux (Fedora / Mandriva / Ubuntu) or Windows Host system
- Firefox, Chrome

MEAN Stack Course Outline Angular (Type Script)

- Introduction to Angular
- Angular Application Architecture
- What is NgModule
- Angular Components
- Angular Templates
- Data Binding
- Types of Data Binding
- Modules Component Working
- Directives
- Structure Directives
- Template Routing
- Theme Implementation in Angular Framework

- Angular Forms
- Services
- Inject Services
- Angular Server Communication With Backend Server
- Working of Api's(GET,POST,PUT,DELETE)
- Complete Web application In Angular Framework

Nodejs

- Introduction to Nodejs
- Architecture of Nodejs Application
- Synchronous and Asynchronous Programming
- Call back Function in nodejs
- Promises in Nodejs
- Mongodb with Nodejs
- Design the Schema in Nodejs
- Design the Rest API's
- GET,POST,PUT,DELETE
- JSON web Token Authentication in nodejs

- Create the Auth APP in nodejs
- Create the E-commerce Backend
- Integrated Payment Gateway

ExpressJS (Building RESTFUL API's Using Express)

- Express
- Restful services
- Introducing Express
- Building your First Web Server
- Nodemon
- Environment Variables
- Route Parameters
- Handling HTTP GET Request
- Handling HTTP POST Request
- Calling Endpoints Using Postman
- Input Validations
- Handling HTTP PUT Request
- Handling HTTP DELETE Request

- Project- Build the Genres API

Express- Advanced Topics

- Middleware
- Creating a Custom Middleware
- Built-in Middleware
- Environments
- Configuration
- Debugging
- Templating Engine
- Database Engines (Only Coding)
- Database Integration
- Authentication
- Structuring Express Applications

MongoDB

- Introduction to MongoDB (No-sql)
- Collections in MongoDB

- Documents In mongoDb
- Difference between Mysql and NoSql
- Inserting data into database
- Filter queries in Mongodb Database
- Schema Validation in MongoDB database
- Indexing In collections
- Aggregation in MongoDB
- Embedded Document in MongoDB

MERN Stack Course Outline

ReactJS

- Introduction to ReactJS
- Understand ReactJS Library & directory
- React Components
- Types of Components
- Build a simple React component
- Component composition

- Component styling
- Add styles to your components
- Component inter communication
- How to pass data from one component to another
- Routing
- Using Routing to create single page app
- Hooks
- States
- Hooks vs States
- Types of Hooks
- Redux
- Using Redux as state container for react apps
- React Bootstrap
- How to deploy ReactJS App

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- Introduction to Nodejs
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