

Full Stack Developer Course Content

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.

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 Elements
- HTML Inline Elements
- HTML Forms
- HTML Tables
- HTML List
- HTML Classes
- HTML Layout
- HTML Responsive
- HTML iframes
- HTML JavaScript
- HTML Head

Cascading style Sheet (CSS)

Detailed Course Contents:

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

Detailed Course Contents:

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

JavaScript

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.

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
- OOPS Concepts
- JavaScript HTML DOM
- JavaScript BOM
- DOM Manipulation
- DOM Events
- Event Propagations

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.

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
- React Router
- Props
- States
- Using Routing to create single page app
- Hooks
- States

- Hooks vs States
- Types of Hooks
- API Handling
- JSON Servers
- Axios vs Fetch
- Redux
- Using Redux as state container for react apps
- React Bootstrap
- How to deploy ReactJS App

Python Course Syllabus

Our Python course syllabus is framed by our Industry experts. This Python and Django course content covers all the latest topics from basics to advanced level like Python for Machine Learning, AI, Web development and Data Science.

Module 1: An Introduction to Python

- What can Python do?
- Why Python?
- Good to know
- Python Syntax compared to other programming languages
- Python Install

Module 2: Beginning Python Basics

- The print statement
- Comments
- Python Data Structures & Data Types
- String Operations in Python
- Simple Input & Output
- Simple Output Formatting
- Operators in python

Module 3: Python Program Flow

- Indentation
- The If statement and its' related statement
- An example with if and it's related statement
- The while loop • The for loop • The range statement
- Break &Continue
- Assert
- Examples for looping

Module 4: Functions& Modules

- Create your own functions
- Functions Parameters
- Variable Arguments
- Scope of a Function
- Function Documentations
- Lambda Functions& map
- n Exercise with functions

- Create a Module
- Standard Modules

Module 5: Exceptions Handling

- Errors
- Exception handling with try
- handling Multiple Exceptions
- Writing your own Exception

Module 6: File Handling

- File handling Modes
- Reading Files
- Writing& Appending to Files
- Handling File Exceptions
- The with statement

Module 7: Classes In Python

- New Style Classes
- Creating Classes
- Instance Methods
- Inheritance
- Polymorphism
- Exception Classes & Custom Exceptions

Module 8: Generators and iterators

- Iterators
- Generators
- The Functions any and all
- With Statement
- Data Compression

Module 9: Data Structures

- List Comprehensions
- Nested List Comprehensions
- Dictionary Comprehensions
- Functions
- Default Parameters
- Variable Arguments
- Specialized Sorts

Module 10: Collections

- namedtuple()
- deque
- ChainMap
- Counter
- OrderedDict
- defaultdict

- UserDict
- UserList
- UserString

Module 11: Writing GUIs in Python (Tkinter Framework)

- Introduction
- Components and Events
- An Example GUI
- The root Component
- Adding a Button
- Entry Widgets
- Text Widgets
- Check buttons

Module 12: Python SQL Database Access

- Introduction
- Installation
- DB Connection
- Creating DB Table
- INSERT, READ, UPDATE, DELETE operations
- COMMIT & ROLLBACK operation
- handling Errors

Module 13: Date and Time

- sleep
- Program execution time
- More methods on date/time

Module 14: Few more topics in-detailed

- Filter
- Map
- Reduce
- Decorators
- Frozen set
- Collections

Module 15: Regular Expression

- Split
- Working with special characters, date, emails
- Quantifiers
- Match and find all
- character sequence and substitute
- Search method

Module 16: Threads ESSENTIAL

- Class and threads
- Multi-threading
- Synchronization
- Treads Life cycle
- use cases

Module 17: Accessing API ESSENTIAL

- Introduction API
- Facebook Messenger
- Openweathermap

DJANGO WEB FRAMEWORK

Module 18: DJANGO

- Django Overview
- Django Installation
- Creating a Project
- Usage of Project in depth Discussion
- Creating an Application
- Understanding Folder Structure
- Creating a Hello World Page
- Admin Interface
- Creating views
- URL Mapping
- Template system
- Form Details
- Page Redirection
- Database and Views
- Static Files and Forms
- Sending Emails
- API and Security

DATABASE – MYSQL

Theory , Terminology and Concepts

- Client / server concepts
- Database and Database Objects

Data Definition using SQL

- Databases
- Data Types
- Tables
- Constraints and Indexes
- Views

Basic Data Manipulation using SQL

- Recurring SQL Constructs
- Adding data
- Modifying data
- Removing data
- Searching data

Advanced Data Manipulation using SQL

- Expressions
- Grouping and Aggregate Functions
- Joins
- Types of Joins
- Joining Tables

Transactions

- Transactions Concepts
- SQL for working with Transaction

Import / Export

- Tool for Import/Export
- SQL for Import / Export

----Thank you----