

FULL STACK DEVELOPMENT Using Python & React

Course duration: 4 - 6 months

Google Rating

Offline/Online Program

500 Hours of Live Classes

LMS Access

Internship Certificate

MASTER FULL STACK DEVELOPMENT

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Founder's Message

IT Shaala is a Leading IT Training Provider for Web Development & Software Development Courses in Pune. It is one of the best Online/Classroom Training Institute, which provides High-Quality Industry Level Training with Real Time Projects. IT Shaala is Institute which broadcasts IT training from basic to advanced technologies.

IT Shaala has specially designed Job Oriented Programme for "Freshers" and "Job Seekers". We provide training by Expert Trainers who are having 15+ years of industry experience, who guide the candidate with the best knowledge and work culture of most IT companies. The training would be accompanied by live project and placement support, which makes the candidates ready to be absorbed in the industry. Our Institute conjointly gives a chance within their educational programs to meet the needs with projected desires of quick developing networking trade.



As you embark on your journey from student to professional, remember that every challenge is an opportunity to grow and excel.



About IT Shaala



At IT Shaala, our aim is to empower individuals with the knowledge and skills needed to thrive in the fast-paced world of information technology. We strive to provide accessible and practical education that opens doors to new opportunities.



Vision

Our vision at IT Shaala is to be a trusted leader in IT education, inspiring lifelong learning and driving positive change in individuals' lives. We envision a future where everyone has the chance to excel in the digital age, regardless of their background or circumstances.





Mission

Our mission at IT Shaala is simple: to deliver high-quality IT training that transforms lives. We're dedicated to fostering a supportive and inclusive learning environment where students can grow personally and professionally, reaching their full potential in the world of technology.

Scope in the industry









Course Syallabus

Core Python

1. Basics of Python

- a. Install Python and an IDE.
- Learn about Python syntax, variables, and basic data types

2. Control Flow and Functions

- Understand if statements, loops, and functions.
- b. Practice solving simple problems using control flow and functions

3. Lists and Tuples

- a. Explore lists and tuples.
- b. Learn basic operations on these data structures.

4. Dictionaries and Sets

- a. Understand dictionaries and sets.
- b. Practice using these data structures.

5. File Handling

- a. Learn how to read and write files in Python.
- b. Explore different file formats (text files, CSV, JSON).

6. Object-Oriented Programming (OOP)

- Understand the basics of OOP: classes and objects.
- b. Learn about inheritance, encapsulation, and polymorphism.

Advance Python

1. Exception Handling

- a. Learn about try, except, and finally blocks.
- b. Handle exceptions to make your code more robust.

2. Regular Expressions

- a. Understand the basics of regular expressions.
- b. Practice using regular expressions in Python.

3. Modules and Packages

- a. Explore how to use modules and create your own packages.
- b. Understand the concept of namespaces in Python.

Real Time Tools

- 1. GIT
- 2. Unit Testing

ORM Framework

- Research and understand the concept of Object-Relational Mapping (ORM).
- Explore popular Python ORM libraries like SQLAlchemy
- 3. Install and set up SQLAlchemy or Django ORM.
- 4. Create a simple model and perform basic CRUD operations.
- 5. Work on a small project to reinforce your understanding of ORM.

Django Framework

- 1. Django Setup
- 2. Django Project
- 3. Django Application
- 4. URL Mappings
- 5. Templates
- 6. Templates Challenge
- 7. Templates Solutions
- 8. Static Files
- 9. Django Models Overview
- 10. Creating Models
- 11. Population Scripts
- 12. Models-Templates-Views Paradigm

- 13. Django FormsDJANGO Framework
- 14. Form Basics Code Along
- 15. Form Validation
- 16. Model Forms
- 17. Relative URLs with Templates
- 18. URL Template Inheritance
- 19. Template Filters and Custom Filters
- 20. Django Passwords
- 21. User Models
- 22. Registration
- 23. Logins

HTML

1. Web Programming Introduction

- a. The architecture of a website
- b. Different technologies in making the website
- c. Web Development Introduction

2. Introduction

- a. History of HTML
- b. Syntax of HTML

3. Headers

a. Different types of tags used inside
 HTML headers

4. Different Types of Tags

- a. Basic Tags
- b. Formatting Tags
- c. Grouping Tags
- d. List Tags
- e. Table Tags
- f. Form Tags
- g. Other HTML Tags

5. Semantic HTML Elements

Different semantic HTML elements and it's use case

CSS

1. Introduction

- a. Introduction of CSS
- b. Benefits, History of CSS

2. Syntax

- a. Syntax
- b. Different ways to add CSS

3. Selectors and Specificity

- a. Types of selectors
- b. CSS specificity

4. Types of CSS properties

- a. Background
- b. Border
- c. Padding
- d. Text Fonts
- e. List
- f. Display and Positioning
- g. Other types of CSS Property

5. Box Model

a. Introduction to Box Model

Bootstrap

1. Introduction

- a. What is Bootstrap Framework
- b. Why Bootstrap
- c. Advantages of Bootstrap Framework
- d. What is Responsive web page
- e. How to remove Responsiveness
- f. Features of Bootstrap
- g. Mobile-First Strategy
- h. Environment Set up
- i. Implementing Bootstrap in Applications

2. Bootstrap Grid

- a. Bootstrap Grid and implementation of Bootstrap Grid
- b. What is Container & Offset Column

- c. Reordering Columns
- d. Advantages of Bootstrap Grid
- e. Display responsive Images & change class properties
- f. Customize Bootstrap's components & jQuery plug-in
- g. Bootstrap Typography & its use
- h. Bootstrap Tables, Form Layout & Bootstrap Button
- i. Muted and Warning Text Messages
- j. Carets Classes / Hide or show the text in Bootstrap
- k. Bootstrap Components / Plugins

Javascript

1. General overview of JavaScript

- a. Prerequisite of JavaScript
- b. Introduction and history of JavaScript
- c. How to include/add JavaScript in HTML

2. Syntax, Variables, Values, Data Types

- a. Syntax review
- b. Variable declaration
- c. Data types supported in JavaScript
- d. Key Difference between Var, Let, and Const

3. Expressions and Operators

- a. What are Operators in JavaScript
- b. Different types of Operators in JavaScript

4. Control structures

- a. Flow control and conditionals
- b. Loops and iteration
- c. Jumps

5. Error handling

- a. Throwing errors
- b. Error handling

6. Data types with methods supported

- a. String
- b. Numbers
- c. Arrays
- d. Functions

7. JSON

a. What is JSON and syntax of JSON

8. Regular Expressions

a. Creating regular expressions for matching patterns

9. Objects

- a. Creating object
- b. Properties
- c. Methods
- d. Build-in JavaScript objects

10. ES6 Features.

11. Iterators and generators

- a. Working with Iterators
- b. Working with Generators

12. Prototype-based Object Oriented Programming

- a. Defining Constructors
- b. Prototypes
- c. Inheritance

13. JavaScript in the Web browser

- a. Embedding JavaScript in HTML
- b. Execution of JavaScript code

14. Browser Object Model

- a. Introduction to the browser object model
- b. Different use cases of a browser object model

15. Document Object Model

- a. Document structure/DOM tree
- b. HTML elements and attributes
- c. Creating, changing, and deleting nodes

16. Handling Events

- a. Types of events
- b. How to control events

17. Ajax*

- a. JavaScript and HTTP communication
- b. Synchronous and asynchronous request

18. JavaScript Async

- a. JavaScript Callback
- b. Promises
- c. Async/Await

19. Data Storage

- a. Cookies
- b. Web Storage
- c. IndexedD

React

- 1. Introduction to React
- a. What is React?
- b. Why React?
- c. React version history
- d. React 16 vs React 15

- e. Just React Hello World
- f. Using create-react-app
- g. Anatomy of react project
- h. Running the app
- i. Debugging first react app

2. Templating using JSX

- a. Working with React. createElement
- b. Expressions
- c. Using logical operators
- d. Specifying attributes
- e. Specifying children
- f. Fragments

3. About Components

- a. Significance of component architecture
- b. Types of components
- c. Functional
- d. Class based
- e. Pure
- f. Component Composition

4. Working with state and props

- a. What is state and its significance
- b. Read state and set state
- c. Passing data to component using props
- d. Supplying default values to props using defaultProps

5. Hooks

- a. What are hooks
- b. Why do you need hooks
- c. Different types of hooks

6. Routing with react router

- a. Setting up react router
- b. Different components of react router

7. Rendering lists

- a. Using react key prop
- b. Using map function to iterate on arrays to generate elements

8. Event handling in React

- a. Understanding React event system
- b. Understanding Synthetic event
- c. Passing arguments to event handlers

9. Understanding component lifecycle and

handling errors

- a. Understand the lifecycle methods
- b. Handle errors using error boundaries

10. Context

a. Introduction to Context and its use case

11. Code-Splitting

a. Introduction to Code Splitting

12. Redux

- a. What is redux and to use it redux
- b. Install and setup redux

13. Immutable.js

- a. What is Immutable.js?
- b. Immutable collections
- c. Lists
- d. Maps
- e. Sets

14. React Redux

- a. What is React Redux and why to use it
- b. React Redux Implementation

15. Redux middleware

- a. Why redux middleware
- b. Different types of middleware and their implementation

16. Webpack

- a. What is webpack
- b. Working with webpack configuration file

17. Babel

- a. What is webpack
- b. ReactJS Using Babel

My SQL

1. Introduction to Databases and MySQL

- a. Overview of databases and their importance
- b. Introduction to MySQL and its features

2. Installation and Configuration

- a. Installing MySQL server and client
- b. Configuring MySQL for the first use

3. Basic SQL Syntax

- a. SELECT, INSERT, UPDATE, DELETE statements
- b. Creating and modifying tables
- c. Understanding data types

4. Querying Data

- a. Filtering and sorting data
- b. Using WHERE and ORDER BY clauses
- c. Aggregating data with GROUP BY

5. Joins and Relationships

- a. Understanding different types of joins
- b. Creating relationships between tables

6. Indexing and Optimization

- a. Importance of indexing
- b. Optimizing queries for better performance

7. Data Integrity and Constraints

- a. Enforcing data integrity with constraints
- b. Using PRIMARY KEY, FOREIGN KEY,

UNIQUE, and CHECK constraints

8. Introduction to Stored Procedures and Functions

- a. Creating and using stored procedures
- b. Defining and calling functions

Mongo DB

1. Introduction to NoSQL and MongoDB

- a. Overview of NoSQL databases
- b. Introduction to MongoDB and its features

2. Installation and Configuration

- a. Installing MongoDB
- b. Configuring MongoDB for the first use

3. Basic CRUD Operations

- a. Creating, reading, updating, and deleting documents
- b. Understanding collections and documents

4. Querying Data

- a. Query language and syntax
- b. Filtering and sorting data
- c. Using projection to retrieve specific fields

5. Indexes and Performance

- a. Importance of indexing in MongoDB
- b. Creating and managing indexes
- c. Analyzing and optimizing queries

6. Data Modeling in MongoDB

- a. Designing collections and documents
- b. Embedding vs. referencing documents
- c. Schema design best practice

Student Reviews

A testament to the power of determination, hard work, and dedication. Read what our alumni have to say about their experinece with us.

Komal Kale



The instructors at IT SHAALA are undoubtedly experts in their fields. They were not only knowledgeable but also adept at conveying complex concepts in a clear and understandable manner.



Sandesh Dongardive



Great learning experience at ITshaala, ITshaala provides quality training and the best infrastructure. I got best guidance from Sandeep sir. IT shaala helped me to shape my carrier as IT professional.



Kishor Pol



Had a fanstastic learning experience at IT Shaala, one of the top institute for Backend Developer training. The institute offers excellent training and top-notch infrastructure



Pruthviraj Gaikwad



I have been taking classes for a month now and I am getting good knowledge here .Sandeep sir's teaching method is very nice, nonteaching staff is also supportive .If you want to get knowledge then this is the right place.



Student Placements

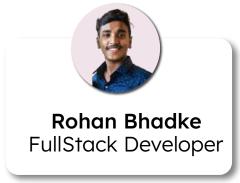


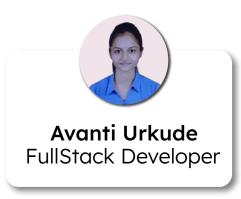




Kedar Thakur Software Engineer



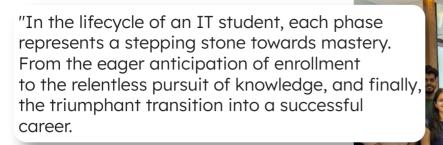








Life at IT Shaala







IT Shaala





IT Shaala

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For any query, Connect us at:













