FULL STACK DEVELOPMENT

About the program

Full Stack Course breaks down the fundamentals of each technology that you would require to become a Full Stack Developer. The entire course is broken down into five separate segments: Frontend, Backend, Database, Other Essential Technologies, and Debugging/Version Control. Each section includes multiple technologies to help you gain more experience as a developer.

Table of Contents :

- HTML & CSS - Content, layout, and styling of web page
- Bootstrap - is a framework to help you design websites faster and easier
- JavaScript Programming - The programming language of the Web
- JQuery - is a fast, small and feature-rich JavaScript library included in a single .js file
- Angular - is a platform for building mobile and desktop web applications
- ReactJS - is a JavaScript library used in web development to build interactive elements on websites
- Node.JS - is an open-source server-side runtime environment built on Chrome's V8 JavaScript engine
- MySQL Database - is a relational database management system based on SQL

What is HTML and CSS?

HTML (the Hypertext Markup Language) and CSS (Cascading Style Sheets) are two of the core technologies for building Web pages. HTML provides the structure of the page, CSS the layout, for a variety of devices. Along with graphics and scripting, HTML and CSS are the basis of building Web pages and Web Applications.

What is Bootstrap?

Bootstrap is the most popular HTML, CSS, and JS framework for developing responsive and mobile-first websites. Bootstrap 4 is the newest version of Bootstrap. It's open-source and free to use, yet features numerous HTML and CSS templates for UI interface elements such as buttons and forms. Bootstrap also supports JavaScript extensions.

What is JavaScript Programming?

JavaScript is a dynamic computer programming language. It is lightweight and most commonly used as a part of web pages, whose implementations allow client-side script to interact with the user and make dynamic pages. It is an interpreted programming language with object-oriented capabilities.

What is JQuery?

jQuery is a fast, small, and feature-rich JavaScript library. It makes things like HTML document traversal and manipulation, event handling, animation, and Ajax much simpler with an easy-to-use API that works across a multitude of browsers. It is a lightweight, "write less, do more", JavaScript library. The purpose of jQuery is to make it much easier to use JavaScript on your website. jQuery takes a lot of common tasks that require many lines of JavaScript code to accomplish, and wraps them into methods that you can call with a single line of code.

What is Angular?

Angular is a platform and framework for building single-page client applications using HTML and TypeScript. Angular is written in TypeScript. It implements core and optional functionality as a set of TypeScript libraries that you import into your apps.

What is React JS?

React. js is an open-source JavaScript library that is used for building user interfaces specifically for single-page applications. It's used for handling the view layer for web and mobile apps. React also allows us to create reusable UI components.

What is Node.Js?

Node.js is an open-source, cross-platform runtime environment for developing server-side and networking applications. Node.js applications are written in JavaScript, and can be run within the Node.js runtime on OS X, Microsoft Windows, and Linux.Node.js also provides a rich library of various JavaScript modules which simplifies the development of web applications using Node.js to a great extent.

What is MySQL Database?

MySQL is a freely available open-source Relational Database Management System (RDBMS) that uses Structured Query Language (SQL). SQL is the most popular language for adding, accessing, and managing content in a database. It is most noted for its quick processing, proven reliability, ease, and flexibility of use.

TOPICS COVERED

HTML (HyperText Markup Language) :

- Introduction to Web Sites & Web Applications
- Life Cycle of Web Applications
- Introduction to HTML
- HTML Document Structure
- HTML Tags
- HTML Headings
- HTML Attributes
- HTML Editors
- HTML Paragraphs
- HTML Styles
- HTML Comments
- HTML Blocks
- HTML Classes, Ids
- HTML Tables,Div
- HTML Lists
- HTML Images
- HTML Forms
- HTML File Paths

CSS (Cascading Style Sheets):

- Introduction to CSS
- CSS Selectors

- Inserting CSS in to HTML(Inline, Internal,External)
- Colors
- Borders
- Background
- Margins
- padding
- Working with core concepts of CSS
- Box/Model
- Outline
- Fonts
- Links
- Lists
- Tables
- Combinations

Bootstrap 4 :

- Intro to Bootstrap 4.
- Grid System Typography
- Colors Tables
- Jumbotron
- Alerts
- Buttons
- Dropdowns
- Navbar
- Forms
- An application using Bootstrap 4

Javascript :

- Scripting Languages :
- History of JavaScript Variables
- Data types
- Operators
- control statements.
- Types of Operators and their usage. If statement
- while loop
- do-while loop
- keywords
- Working with Functions
- Nested Functions.
- Working with Functions
- Accessing, Looping Over, removing elements. Array methods in detail.
- Date and its methods.
- Working with Strings
- Strings and its methods.
- Working with Objects

JQuery :

- Introduction
- Selectors and Event Methods
- Hide/Show,
- Toggle and Fading methods

- UI
- draggable() and droppable() methods
- chaining()
- Self( )
- selectable() and accordion()
- Animation,
- Slide methods

Angular :

- Importance of Angular
- Project Setup and First App
- What is TypeScript
- Creating a New Component
- Understanding the Role of AppModule
- Component Declaration
- Using Custom Components
- Creating Components with the CLI & Nesting Components
- Working with component Templates and styles
- What is Data Binding, String Interpolation, and Property Binding
- Event Binding
- Passing and Using Data with Event Binding
- Two-way Data Binding
- Built-in Directives
- Multiple Components
- Multiple Modules

- Children of Components
- Life Cycle of Hooks and Services
- Forms and Form Validations
- Routing and Guards
- Deployment
- Rxjs
- Ajax.

ReactJS :

- JSX
- Rendering Elements
- Components and Props
- State and Lifecycle
- Handling Events
- Lists and Keys
- Forms
- Lifting State Up
- Composition vs Inheritance

Node.Js :

- Install Node.js Windows
- Introduction to Node.js
- Punycode
- TTY
- Web ModulesAssertion Testing

- Async Hooks
- Buffer
- Child Processes
- Cluster
- Command Line Options
- Console
- Crypto
- Debugger
- Deprecated APIs
- DNS
- Domain
- Inspector
- Internationalization
- Modules

MySQL DataBase :

- Introduction to DataBase
- What is MySQL
- Download and Installation of MySql
- Querying the Data
- Filtering the Data
- Sort the Data
- Tables
- Joining the Tables
- CRUD Operation(Create,Read,Update,Delete)
- Grouping the Data and Subqueries

- Managing the database
- Data Types
- Constraints
- Import & Export
- Stored Procedures
- Views
- Functions
- Triggers