

Full Stack Web Developer Course Overview

What You'll Learn

Discover the art and science of web development with our immersive Full Stack Web Developer Course. Gain hands-on experience and expertise in the following key areas:

- **Build Websites with HTML & CSS:** Master the fundamentals of web design by creating visually appealing and responsive websites.
- **Build Backend Servers & APIs with Node and Express:** Dive into the backend of web development, creating robust servers and APIs using Node.js and Express.
- **Work with PostgreSQL:** Explore the world of relational databases and learn how to work with PostgreSQL for efficient data management.
- **Build Full-Stack Web Apps with React:** Harness the power of Facebook's React framework to build dynamic and interactive full-stack web applications.
- **Build Mobile-Friendly Websites with Bootstrap 4 & CSS:** Ensure your websites are accessible and visually appealing across various devices with Bootstrap 4 and CSS.



.NET Core (C#)

What You'll Learn

Embark on a journey into the world of programming with our enriching .NET Core Course (C#). Acquire comprehensive knowledge and hands-on experience in fundamental programming concepts:

- **Data Types:** Explore the various data types and their role in programming.
- **Common Operators:** Master the essential operators used in programming for efficient data manipulation.
- **String Operations:** Dive into string manipulation techniques to enhance your programming skills.
- **Reading and Writing to a Console:** Learn the basics of interacting with the console for effective input and output.
- **Arrays:** Understand the use of arrays for organized data storage and retrieval.
- **Enums:** Explore enumerations and their role in enhancing code readability.
- **If / Switch Statements:** Grasp the concepts of conditional statements for effective decision-making in your code.
- **Loops (for, while do while, for each):** Master the various loop structures for efficient repetitive tasks.
- **Methods:** Gain expertise in creating and utilizing methods for modular and organized code.
- **Classes and Objects:** Understand the fundamentals of object-oriented programming with classes and objects.
- **Boxing / Unboxing, Stack and Heap:** Explore memory management concepts and their impact on program performance.
- **Access Modifiers:** Learn to control the accessibility of classes, methods, and properties.
- **Static Classes and Class Members:** Dive into the concept of static classes and members for shared functionality.



.NET Core (C#)

- **Extension Methods:** Enhance your programming capabilities with the use of extension methods.
- **Inheritance:** Understand the principles of inheritance for code reusability and hierarchy.
- **Polymorphism:** Explore polymorphic behavior for flexible and dynamic code execution.
- **Properties:** Master the use of properties for encapsulation and controlled access to class members.
- **Interfaces:** Delve into interface implementation for defining contracts in your code.
- **Abstract Classes:** Understand the concept of abstract classes and their role in defining base structures.
- **Delegates:** Explore the powerful concept of delegates for method references and event handling.
- **Exception Handling:** Learn effective strategies for handling exceptions in your code.
- **Generics:** Master the use of generics for creating flexible and reusable code.
- **Lists / Dictionaries:** Explore dynamic data structures for efficient data organization.
- **Anonymous Methods / Lambda Operators:** Embrace concise and expressive coding with anonymous methods and lambda operators.
- **Multithreading:** Learn the basics of multithreading for parallel execution of tasks.

Experience between 24–28 insightful lectures, tailored to your learning group. Stand out as one of the best students and seize the opportunity for an internship at GeoAlpha Solutions.



Microsoft SQL Server Course

What You'll Learn

Embark on a comprehensive journey into the world of SQL with our specialized SQL Course for Developers. Acquire in-depth knowledge and hands-on experience in key areas crucial for database management:

- **Introduction to the SQL Server Platform:** Explore the basic architecture of SQL Server, understand different editions and versions, and learn to work efficiently in SQL Server Management Studio.
- **Introduction to T-SQL, Writing SELECT Queries:** Get acquainted with Transact-SQL (T-SQL) and develop skills in crafting SELECT queries. Gain insights into working with sets, logic of predicates, and Boolean operations in SELECT statements.
- **Using DML to Change Data:** Master the use of Data Manipulation Language (DML) to modify data in SQL Server. Learn techniques for adding, changing, and deleting data, as well as the automatic generation of column values.
- **Data Grouping and Aggregation:** Explore the fundamentals of data grouping and aggregation, including the use of aggregate functions, GROUP BY, and filtering with the HAVING function.
- **Connections, Data Sorting, and Filtering:** Dive into the intricacies of establishing connections, sorting data, and applying filters with predicates. Work with the TOP and OFFSET-FETCH commands, and handle unknown values effectively.
- **Working with SQL Server Data Types:** Understand SQL Server data types, learn to work with different data types, and explore date and time data manipulation.
- **Using Built-In Functions:** Write commands with built-in functions, including conversion functions, logical functions, and functions for handling NULL values.
- **Using Subqueries:** Develop skills in writing limited and correlated subqueries. Explore the use of the EXISTS predicate in subqueries.



Microsoft SQL Server Course

- **Using SET Operators:** Master the use of SET operators, including the UNION, EXCEPT, and INTERSECT operators. Explore the APPLY operator.
- **Using Window, Ranking, Offset, and Aggregate Functions:** Create and use window functions with the OVER command. Understand how to utilize these functions effectively.
- **Pivoting and Grouping Data:** Write commands for pivoting and unpivoting data. Explore the use of kits for effective data representation.
- **Stored Procedures:** Learn to write commands for stored procedures, pass parameters, and create simple stored procedures. Dive into working with Dynamic SQL.
- **Programming in T-SQL:** Explore the elements of T-SQL programming and learn to control program flow effectively.
- **Working on Mistakes:** Master T-SQL error handling and exception handling techniques.
- **Implementation of Transactions:** Understand transactions and their role in the database engine. Gain control over transactions for effective database management.



Flutter Development

Key Learning Outcomes:

- **Build Cross-Platform Applications:** Learn how to write efficient code that compiles into fully functional apps for mobile, web, and desktop.
- **Highly Branded Design Capabilities:** Master the tools to create highly branded, visually stunning apps while ensuring native performance and compatibility.
- **Seamless User Interface Creation:** Develop pixel-perfect UIs that match the design standards of both Android and iOS, leveraging Flutter's extensive widget library.
- **Access to Powerful Package Ecosystem:** Integrate a wide array of hardware features like camera, GPS, network, and storage, and implement services such as payments, cloud storage, authentication, and ads with Flutter's rich package ecosystem.

Why Choose Flutter?

- Single Codebase for multiple platforms.
- Fast Development and high performance with the "hot reload" feature.
- Free and Open-Source, with an active community and extensive documentation.
- Suitable for interactive apps and those requiring rich, customizable designs.
- **Who Should Take This Course?**
- This course is perfect for:
 - Developers looking to create cross-platform applications with minimal hassle.
 - Designers who want to ensure their apps are visually consistent across devices.
 - Anyone aiming to develop apps that support both mobile and desktop interfaces.

By the end of this course, you'll be able to create highly responsive, feature-rich apps using Flutter, enhancing your development speed and efficiency while delivering exceptional user experiences.

