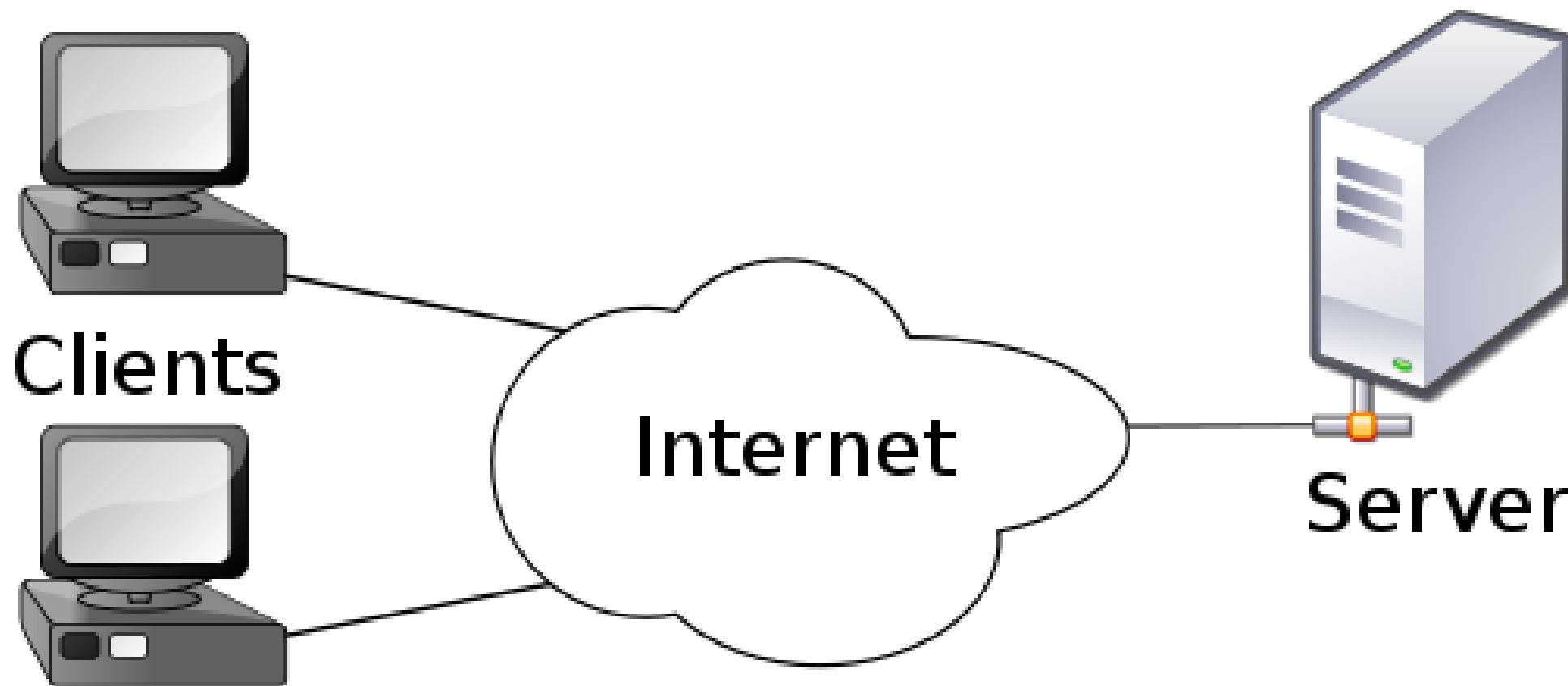


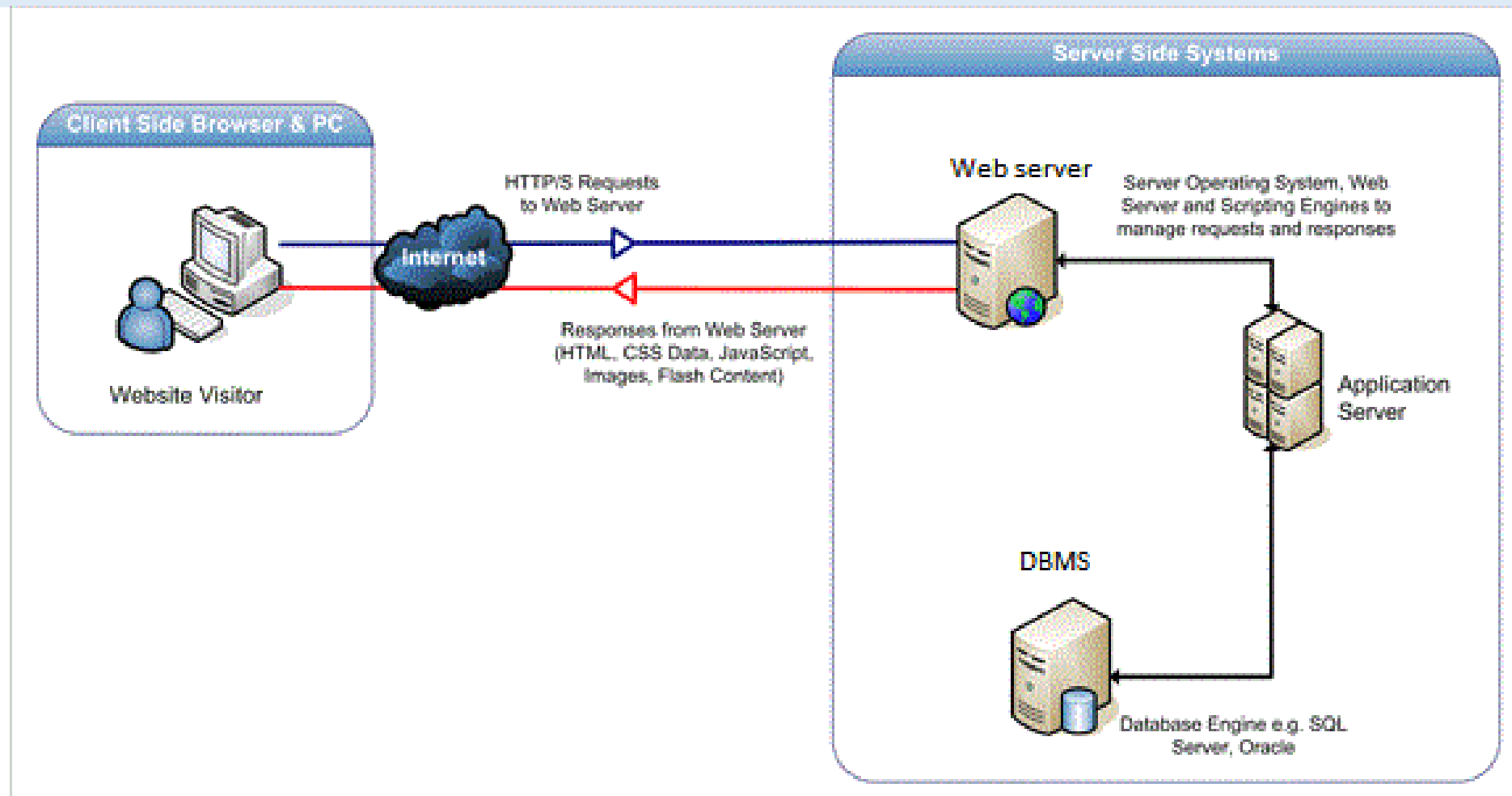


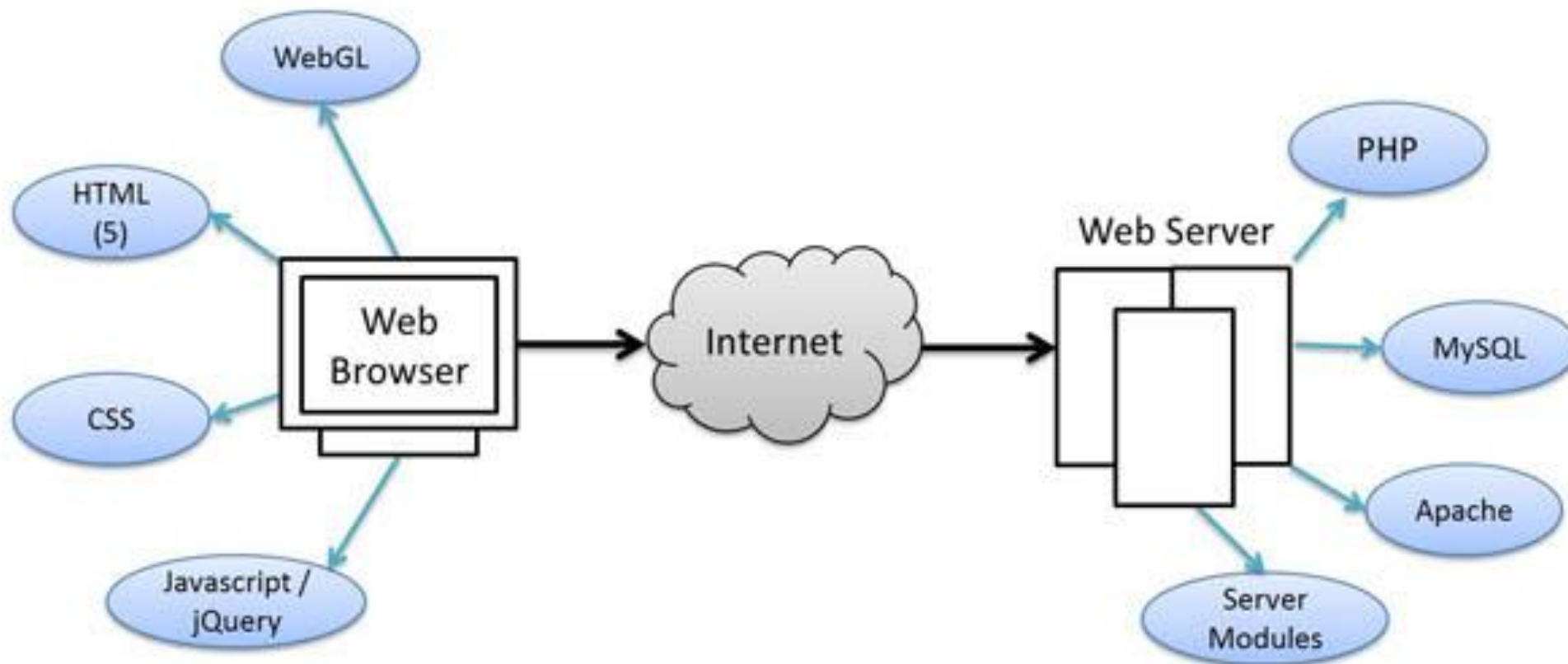
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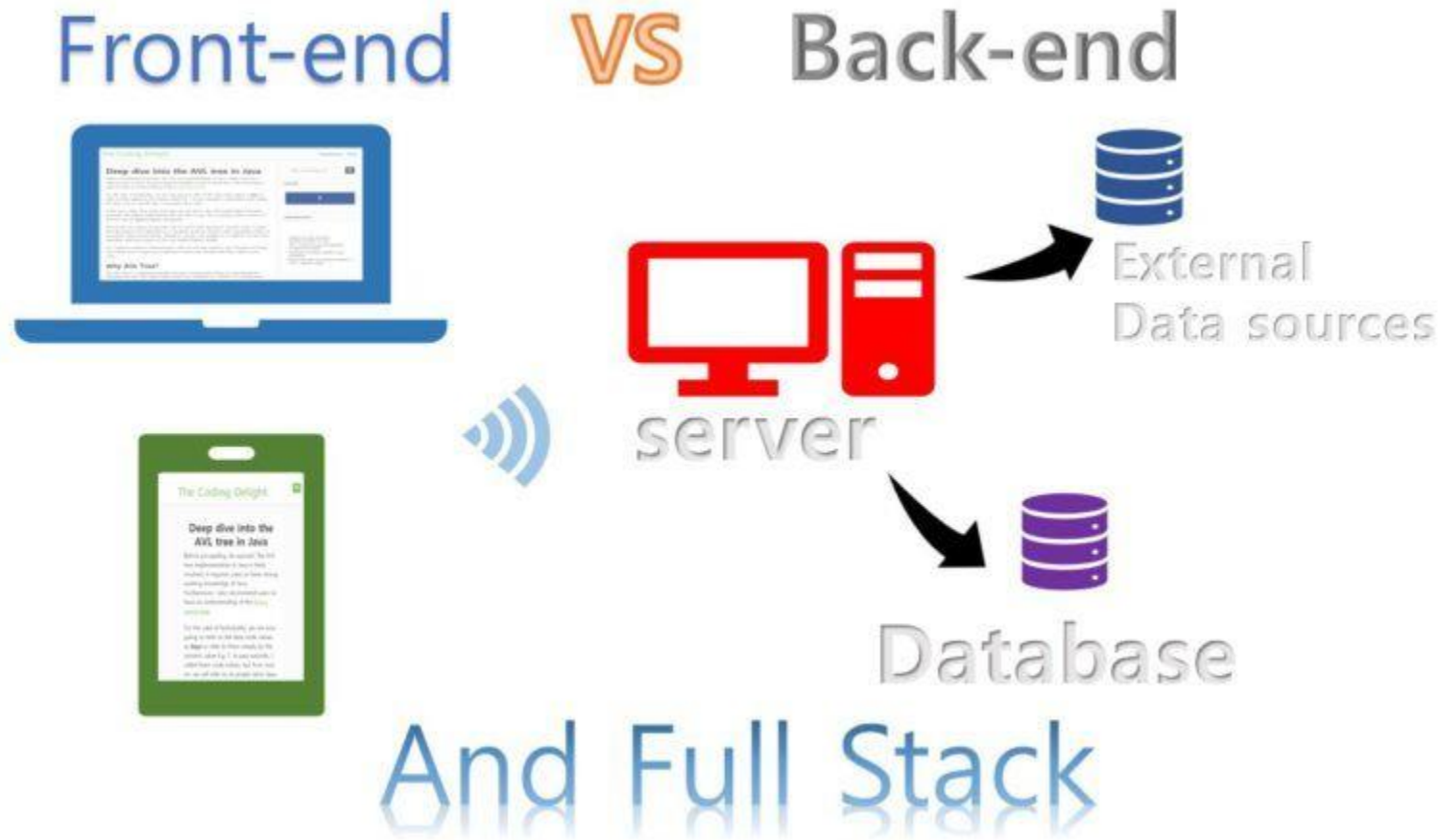
Nice to meet you



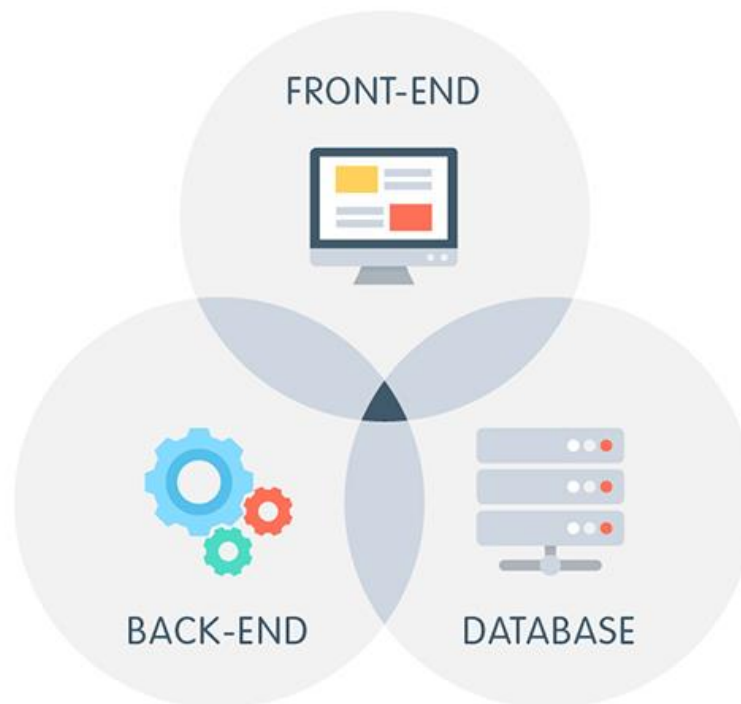


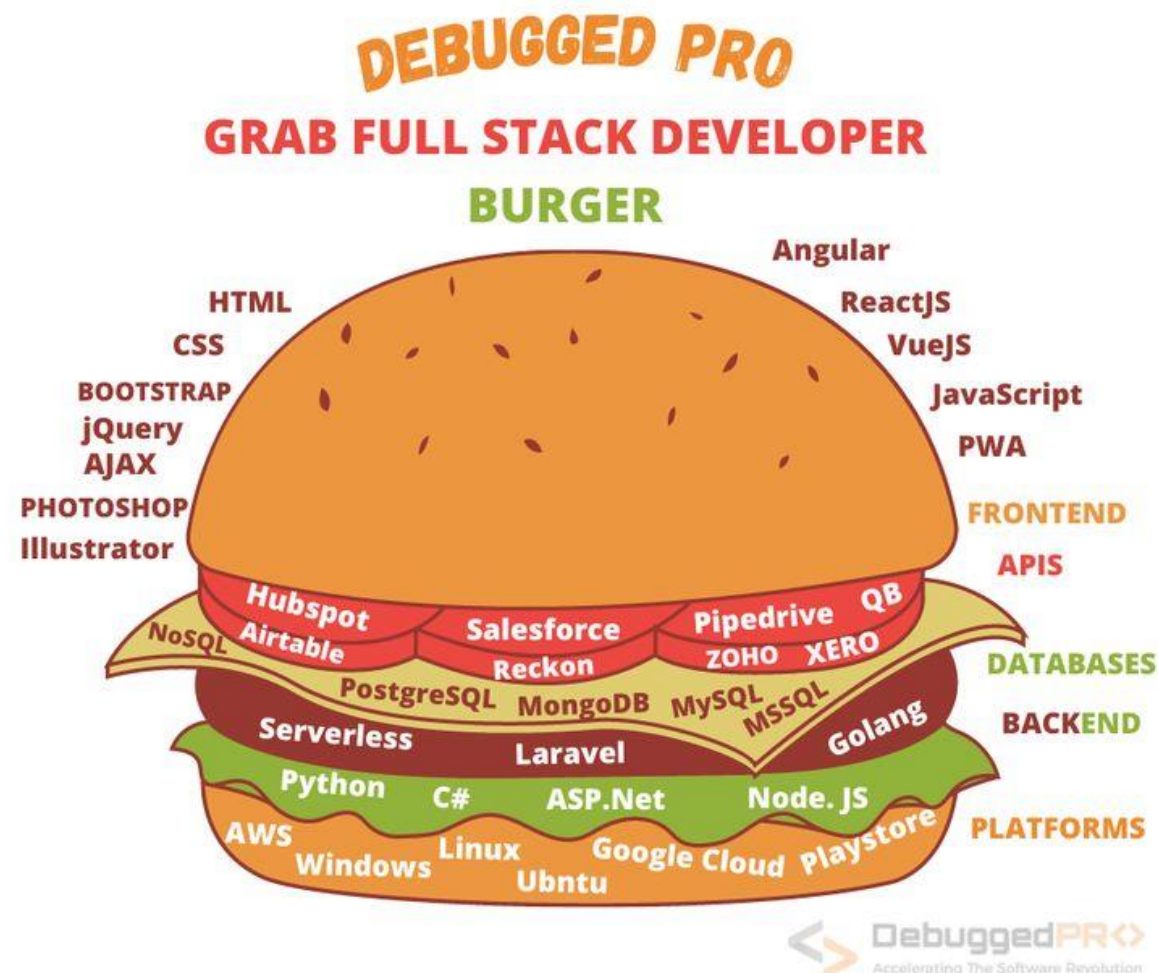


- Front-End
- Back-End
- Full-Stack



FULL-STACK DEVELOPMENT





שיטת הפול-סטאק נולדה כתוצאה מביקוש למפתחים שיהיו גמישים יותר – מנוגד לגישת ההתמחות

ככל שהיישומים נהיו מורכבים יותר נותר צורך במפתחים שיבינו את כל הרכיבים

העקרונות הם:

1. יעילות – מפתח פול-סטאק יותר יעיל כי הוא עובד בו-זמנית על הכל

2. רב-צדדיות

3. עלות-תועלת – פחות עובדים

4. פיתוח בגישת Agile

5. תרבות של סטארט-אפים

מה בתוכניתנו?

- HTML
- CSS
- JavaScript
- Node.js
- React
- Python
- SQL

HTML - Hyper-Text Markup Language

- Created in the 90's by Tim Berners-Lee
- Version 4 - HTML 4.0 - 1997, Version 5 - HTML 5.0 - 2014
- Maintained and updated by W3 Consortium
- It is the standard markup language used for creating and structuring the content of web pages. HTML uses a set of tags to define the elements within a web page, such as headings, paragraphs, images, links, tables, forms, and more.
- HTML documents are composed of a series of nested elements, forming a hierarchical structure. Each HTML element is represented by an opening tag (<tag>) and a closing tag (</tag>), with the content placed between the tags.
- HTML provides a wide range of elements and attributes that define the structure and appearance of web content. Elements can be used to create headings, paragraphs, lists, links, images, forms, tables, and more. Attributes provide additional information about an element and modify its behavior or appearance.

- CSS - Cascading Style Sheets
- Created in the 90's, Currently CSS3 - 1999-2018
- Maintained and updated by W3 Consortium
- A styling language used to describe the presentation and visual appearance of a document written in HTML or XML. CSS separates the content and structure of a document from its visual representation, allowing developers to control the layout, colors, fonts, and other visual aspects of a web page.
- CSS works by defining rules that target specific HTML elements and apply styling properties to them. These rules consist of a selector, which specifies the HTML element(s) to style, and a declaration block containing one or more property-value pairs.
- CSS provides a wide range of properties to control various aspects of the visual presentation, including colors, fonts, margins, padding, borders, backgrounds, positioning, and more. It allows developers to create consistent styles across multiple web pages, apply responsive design for different screen sizes, and add visual effects and animations to enhance user experience.

- JavaScript is a high-level, interpreted programming language primarily used for adding interactivity and dynamic functionality to web pages.
- It was created by Brendan Eich at Netscape Communications in 1995
- JavaScript allows developers to manipulate web page elements, handle user interactions, and dynamically update content without requiring a page reload. It is commonly used for tasks such as form validation, creating interactive user interfaces, performing calculations, making AJAX requests to retrieve data from servers, and much more.
- JavaScript is supported by all modern web browsers, making it a versatile language for client-side scripting. It is embedded directly within HTML documents using `<script>` tags or can be included as an external JavaScript file linked to the HTML document.

Key features of JavaScript include:

- Variables and data types
- Functions
- DOM manipulation
- Events and event handling
- Control flow and loops
- APIs and third-party libraries
- In addition to client-side scripting, JavaScript is also used for server-side development through platforms like Node.js, allowing developers to build full-stack web applications using a unified programming language.

Overall, JavaScript plays a vital role in modern web development by enabling interactivity, enhancing user experience, and making web pages more dynamic and engaging.

Node.js is an open-source, cross-platform JavaScript runtime environment that allows developers to run JavaScript code outside of a web browser. It is built on the V8 JavaScript engine, which is also used in the Google Chrome browser, and provides an event-driven, non-blocking I/O (input/output) model that makes it efficient and scalable for building network applications.

Node.js was created by Ryan Dahl in 2009 and has gained significant popularity and adoption since then. It enables server-side JavaScript development and allows developers to build a wide range of applications, including web servers, command-line tools, real-time chat applications, APIs, and more.

Key features and benefits of Node.js include:

1. JavaScript on the server-side
2. Asynchronous and event-driven
3. NPM ecosystem
4. Fast execution
5. Lightweight and efficient
6. Cross-platform compatibility

Node.js has played a significant role in the development of modern web applications, particularly in the area of real-time applications, APIs, and microservices architectures. Its ability to handle concurrent connections and its extensive ecosystem of libraries make it a popular choice for building scalable and high-performance server-side applications.

- React is an open-source JavaScript library for building user interfaces (UIs). It was developed by Facebook and released in 2013. React is widely used for creating dynamic and interactive web applications.
- React follows a component-based architecture, where the UI is divided into reusable components. Each component represents a part of the user interface and encapsulates its own logic and state. These components can be composed together to build complex UIs.

Key concepts and features of React include:

1. Virtual DOM
2. JSX
3. Reusable components
4. Unidirectional data flow
5. React Hooks
6. Virtual DOM reconciliation

React is often used in conjunction with other libraries and frameworks, such as Redux for state management, React Router for handling routing, and Axios for making HTTP requests. It has a vibrant ecosystem with a wide range of community-contributed libraries. Overall, React simplifies the process of building complex user interfaces by providing a declarative and component-based approach. It has gained popularity due to its performance optimizations, reusability, and developer-friendly features, making it a popular choice for front-end development.

- SQL (Structured Query Language) is a standard programming language for managing and manipulating relational databases. It provides a set of commands and statements for performing various database operations, such as querying data, inserting, updating, and deleting records, creating and modifying database structures (tables, indexes, views, etc.), and managing user access and permissions.
- SQL is widely used in the field of database management systems (DBMS) and is supported by most relational database systems, including MySQL, PostgreSQL, Oracle Database, Microsoft SQL Server, and SQLite, among others.
- SQL is a declarative language, meaning that users specify what they want the database to do rather than how to do it. SQL statements are written in a specific syntax and are executed by the database management system, which performs the necessary operations on the underlying data.
- SQL has become a fundamental skill for working with databases, whether for data analysis, web development, business intelligence, or other data-related tasks. Its standardized syntax and widespread adoption make it a powerful tool for interacting with relational databases and managing data effectively.

- Key concepts and features of SQL include:

1. Data Manipulation Language (DML)
2. Data Definition Language (DDL)
3. Data Control Language (DCL)
4. Querying and filtering
5. Database normalization
6. Transaction control

- Python is a high-level, interpreted, and general-purpose programming language. It was created by Guido van Rossum and first released in 1991. Python emphasizes code readability and simplicity, making it beginner-friendly while also being powerful and versatile.
- Python's popularity has been steadily increasing over the years due to its simplicity, versatility, and extensive libraries. It is widely used in various industries and domains, including web development, data science, scientific research, artificial intelligence, education, and more. The availability of resources, documentation, and community support makes Python an accessible language for both beginners and experienced developers.

Key features and characteristics of Python include:

1. Readability
2. Simplicity and ease of use
3. Versatility and scalability
4. Interpreted and interactive
5. Object-oriented programming
6. Strong community and ecosystem

1. Practice
2. Practice
3. Practice
4. Comment your code
5. Use your keyboard and not your mouse
6. Create and maintain a logical folder structure
7. Create and maintain a library of tools
8. Did I mention practice?
9. Ask questions – don't leave them unanswered
10. Copy...but give credit...



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