

NEOTECH INSTITUTE OF TECHNOLOGY

Neotech campus

**BACHELOR OF DIPLOMA
ENGINEERING IN**

**1 SEMESTER COMPUTER
ENGINEERING
SUBMITTED BY**

- 1. VEER PATEL**
- 2. MANAN PATEL**

**SUBJECT: FUNDAMENTAL OF
COMPUTER APPLICATION**

TOPIC : WEB DEVELOPMENT

**AFFILATED TO GUJARAT
TECHNOLOGICAL UNIVERSITY**



WEB DEVELOPMENT



- **Web development** is the work involved in developing a website for the Internet (World Wide Web) .
- Web development can range from developing a simple single static page of plain text to complex web applications, electronic businesses, and social network services.
- A more comprehensive list of tasks to which Web development commonly refers, may include Web engineering, Web design, Web content development, client liaison, client-side/server-side scripting, Web server and network security configuration
- There are three kinds of Web developer specialization: front-end developer, back-end developer, and full-stack developer.

Steps of web development



➤ There are basically seven steps of web development.

- 1) Information Gathering
- 2) Planning
- 3) Design
- 4) Content Writing and Assembly
- 5) Coding
- 6) Testing, Review and Launch
- 7) Maintenance

- Maintenance is done by Check that all of your pages are loading without errors.
- Check the load speed of your website and ensure that nothing is bogging it down.



IDEs for web development



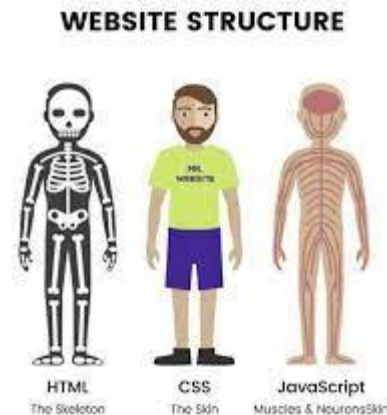
- An **integrated development environment (IDE)** is software for building applications that combines common developer tools into a single graphical user interface.
- This are the some IDEs
 - Visual Studio code by Microsoft
 - Atom by github.
 - Netbeans
 - Webstorm
 - PhpStorm
 - Pycharm
 - IntelliJ IDEA
- With the help of this we can make responsive websites and it becomes easy to code.



Front-end development



- An overview: HTML provides the basic structure of sites, which is enhanced and modified by other technologies like CSS and JavaScript. CSS is **used to control presentation, formatting, and layout**. JavaScript is used to control the behavior of different elements.
- In simple words HTML is like a skeleton , CSS is like skin and JAVASCRIPT is like the brain of human.



Source: FreeCodeCamp.org

HTML



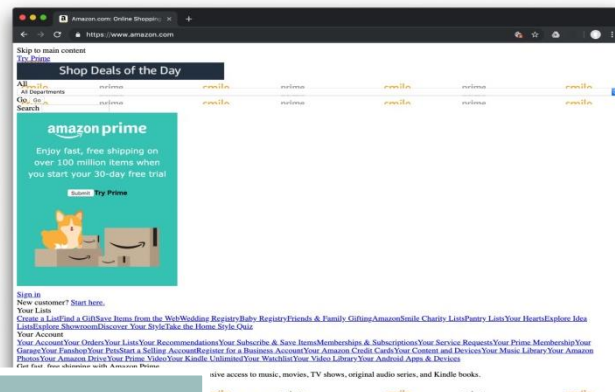
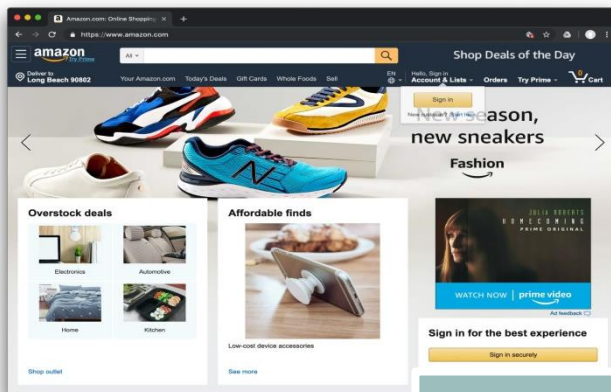
- The **HyperText Markup Language**, or **HTML** is the standard markup language for documents designed to be displayed in a web browser.
- Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages
- HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items.



```
<html>
<header><title>This is title</title></header>
<body>
Hello world
</body>
</html>
```



- **Cascading Style Sheets (CSS)** is a style sheet language used for describing the presentation of a document written in a markup language such as HTML. Basically use to design website
- CSS is designed to enable the separation of presentation and content, including layout, colors, and fonts.
- CSS also has rules for alternate formatting if the content is accessed on a mobile device.

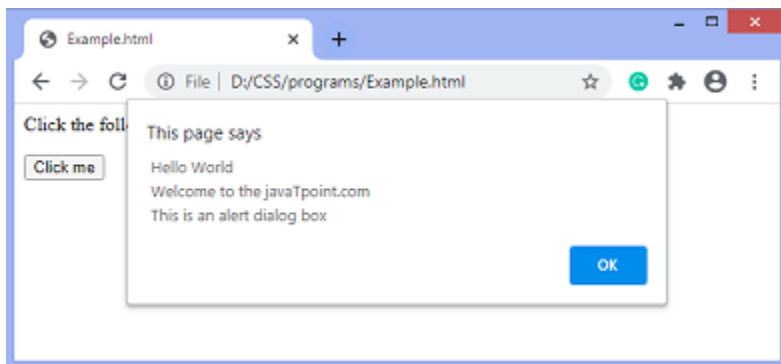


Webpage without CSS

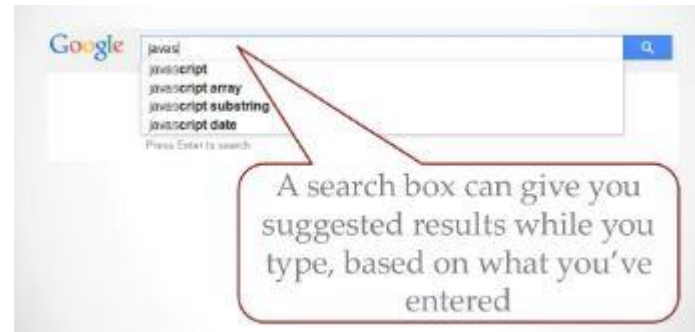
Javascript



- **JavaScript** is high-level, often just-in-time compiled and multi-paradigm. It has dynamic typing, prototype-based object-orientation and first-class functions.
- It allows us to add dynamic behavior to the webpage and add special effects to the webpage.
- Using JavaScript, it is also possible to load the content in a document without reloading the webpage.

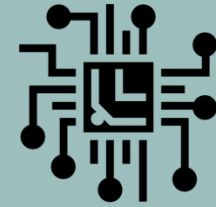


Javascript Alert function Example

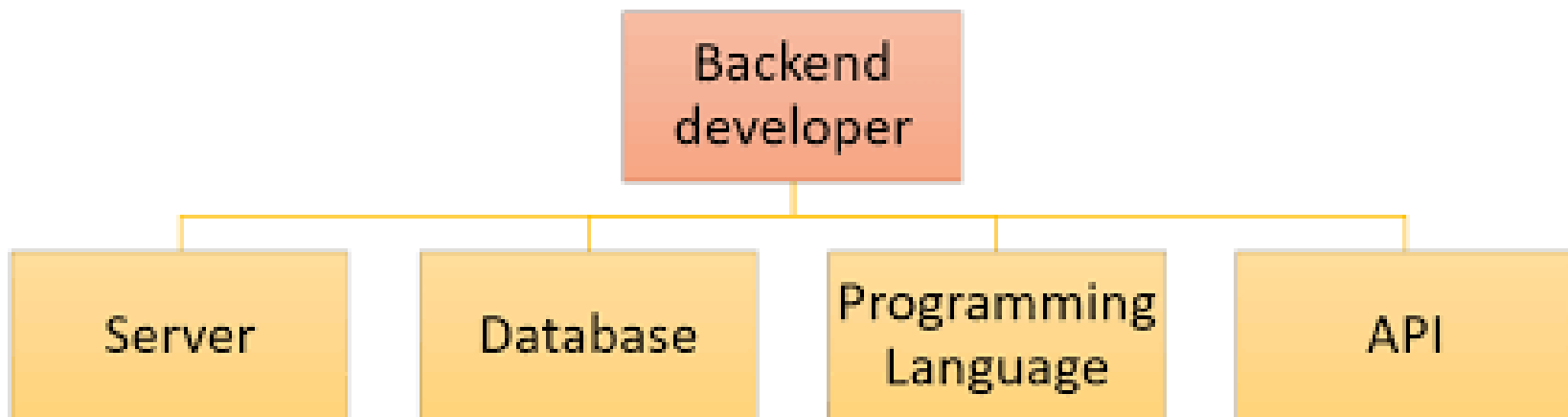


Example of JS

Back end development



- Backend Development is also known as **server-side development**. It is everything that the users don't see and contains behind-the-scenes activities that occur when performing any action on a website.
- Back-end programming language include python , php , java , c#
- It focuses primarily on databases, backend logic, APIs, and Servers.



How front-end and back-end work together



- A browser connects to a server.
- That server sends the front-end to the browser.
- From there, the front-end explains how the browser should communicate with the server.

