JAVA SCRIPT

Sai Vardhan T

WHAT IS JAVASCRIPT

- *JavaScript* was initially created to "make web pages alive".

- The programs in this language are called *scripts*. They can be written right in a web page's HTML and run automatically as the page loads.

- Scripts are provided and executed as plain text. They don't need special preparation or compilation to run.

JAVASCRIPT VS JAVA

- **Why is it called <u>Java</u>Script?**
  - When JavaScript was created, it initially had another name: "LiveScript". But Java was very popular at that time, so it was decided that positioning a new language as a "younger brother" of Java would help.
  - But as it evolved, JavaScript became a fully independent language with its own specification called <u>ECMAScript</u>, and now it has no relation to Java at all.
- Today, JavaScript can execute not only in the browser, but also on the server, or actually on any device that has a special program called <u>the JavaScript engine</u>.

WHAT CAN JAVASCRIPT DO?

- Add new HTML to the page, change the existing content, modify styles.

- React to user actions, run on mouse clicks, pointer movements, key presses.

- Send requests over the network to remote servers, download and upload files

- Get and set cookies, ask questions to the visitor, show messages.

- Remember the data on the client-side ("local storage").

WHAT CAN'T JAVASCRIPT DO?

- JavaScript on a webpage may not read/write arbitrary files on the hard

- Modern browsers allow it to work with files, but the access is limited

- JavaScript can easily communicate over the net to the server where the current page came from. But its ability to receive data from other sites/domains is crippled

- Different tabs/windows generally do not know about each other (Same Origin Policy)

WHAT MAKES JAVASCRIPT UNIQUE

- Full integration with HTML/CSS.
- Simple things are done simply.
- Supported by all major browsers and enabled by default.

HISTORY OF JS

- Invented by Brendan Eich at Netscape in just 10 days! Originally called Mocha, then LiveScript, then JavaScript(1995)

- Netscape submitted JavaScript to Ecma International (ECMA) for standardization.(1996)

- ECMA continued to release new versions of the standard, adding features like classes and modules.(1998)

- The rise of Node.js enabled JavaScript to run on servers, opening doors for server-side development.(2009)

- Complete access to all browsers(present)

TOOLS FOR JS

- WIDELY USED TOOLS

  - NOTEPAD / NOTEPAD++
  - VS CODE
  - SUBLIME TEXT