



JAVASCRIPT

# History

- **Developed by Brendan Eich at Netscape**  
Scripting language for Navigator 2.
- **Later standardized for browser compatibility.**  
ECMAScript Edition 3 (aka JavaScript 1.5).
- **Related to Java in name only.**  
The name was part of a marketing deal. Java and javascript have no similarity. Just like carpet to the car.

# What is JavaScript?

- JavaScript is the world's most popular programming language that we use for adding interactivity to web pages.
- Feature:
  1. Weakly typed (Do not need to specify types while declaring variables).
  2. Interpreted (More accurately, Just In Time compiled)
- JavaScript is a client-side language, which means that it works inside a web browser.

# Common Use of Javascript

- **Form Validation.**
- **Page embellishments and special effects.**
- **Navigation systems.**
- **Basic math calculations.**
- **Dynamic content manipulation.**
- **Sample applications.**

# Drawbacks of JavaScript in Comparison to Other Programming Languages

- **Single-threaded Execution**
- **Callback Hell.**
- **Lack of Strong Typing.**
- **Browser Compatibility issue.**
- **Security Concerns.**
- **No Built-in Module System (Before ES6)**

# Javascript Vs PHP

PHP	JavaScript
<ul style="list-style-type: none"><li>• Server-side scripting language</li><li>• Used for back-end development</li><li>• More secure (as is not visible in browser)</li><li>• Helps to build high-level interactive web pages</li><li>• Quite slow performance</li><li>• More features available</li><li>• Combined with HTML</li><li>• MariaDB, MySQL, and PostgreSQL;</li><li>• WordPress, Drupal, Joomla</li><li>• Best for e-commerce and other websites using CMS</li></ul>	<ul style="list-style-type: none"><li>• Client-side scripting language</li><li>• Mainly used for front-end development</li><li>• Has tools for enhancing security but needs more effort to do so</li><li>• Helps to build user-friendly creative web pages</li><li>• Fast performance</li><li>• Less load on a server and less server traffic</li><li>• Combined with HTML, XML, Ajax</li><li>• AngularJS and ReactJS;</li><li>• MongoDB, CouchDB, and NoSQL</li><li>• Best for dynamic SPAs</li></ul>

# How to add JS to a page ?

In order to add JS in HTML we use script tag.

```
<!doctype html>
<html>
<head>
<meta charset="UTF-8">
<title>My Web Page</title>
<script>
    /*      Write your JS Code here      */
</script>
</head>
```

# Adding External JS File in HTML:

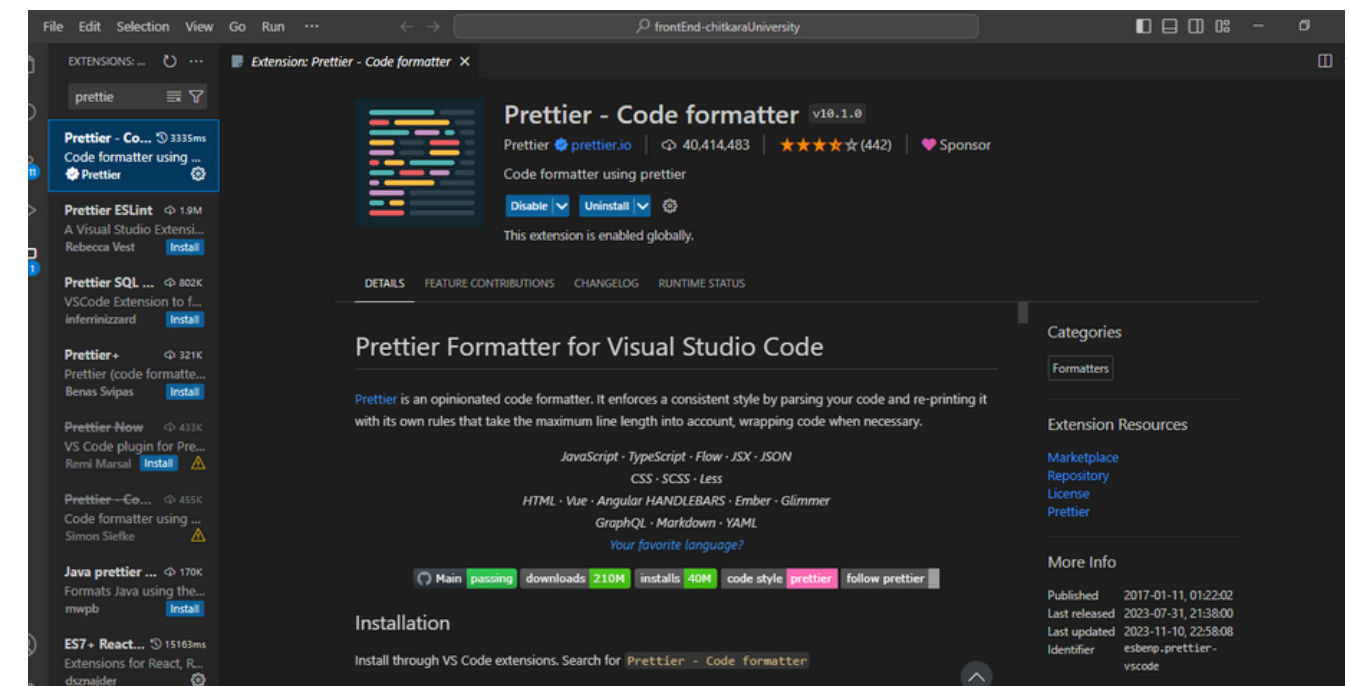
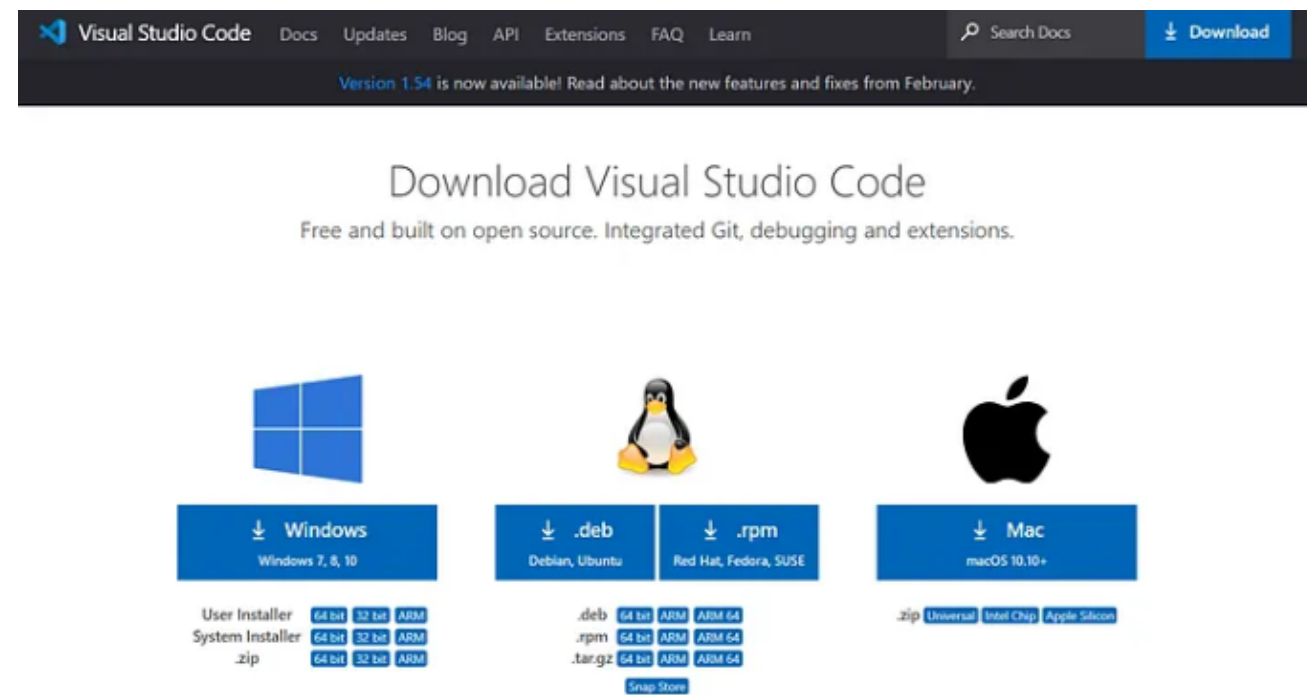
Here JS file name is *navigation.js*

```
<!doctype html>
<html>
<head>
<meta charset="UTF-8">
<title>My Web Page</title>
<script src="navigation.js"></script>  /*    Linking JS file    */
</head>
```



# Tools and extensions

## Install VS CODE:



We also downloaded Prettier to make our code visibility look good.