

JavaScript For Beginners

11th | 12th

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All the code will be available here:

<https://github.com/hemansnation/JavaScriptForBeginners>

1. What is JavaScript?



JavaScript is a Programming Language that is capable of changing the content of a HTML page.

- Where to download JavaScript?

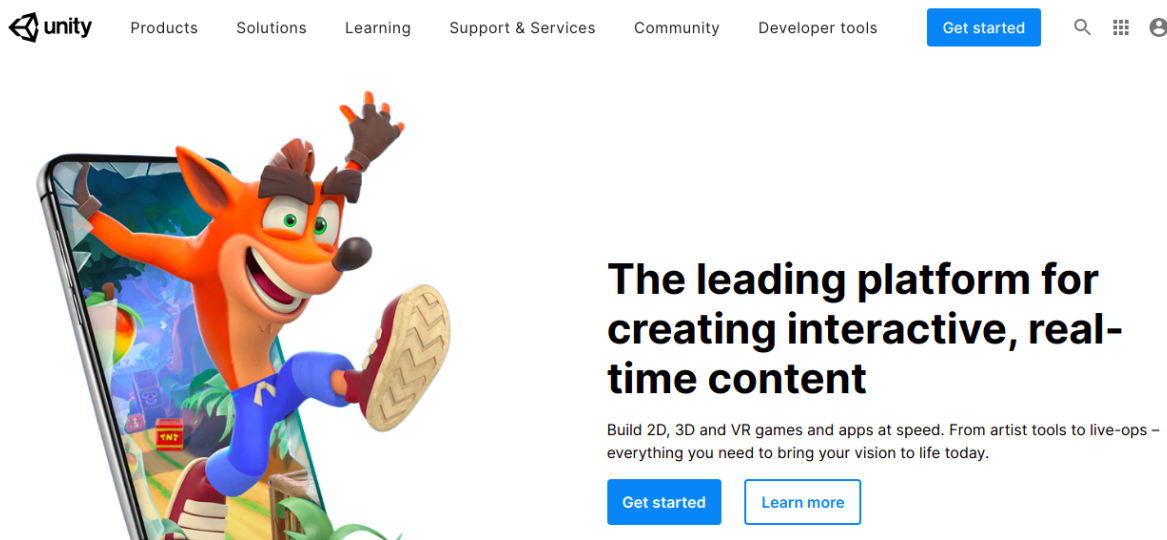
It is already in your browser, you don't need to download it.

Applications

- Web Pages
- Business Apps
- Utility Apps
- Games

You may heard of popular game engine UNITY
JavaScript is supported as a programming language for this engine.

<https://unity.com/>



How to start

- We need to know about the basics of HTML and CSS.
- And we need an editor.

In our case we are using **Sublime Text**

Let's Get Started.

2.Adding JavaScript Code to HTML Page.

We will do that using these 2 methods :

- Internal JavaScript
Here we use script tag to achieve this.

<script>

```
document.getElementById('addition').innerHTML =  
"Hello"
```

</script>

- External JavaScript

Create a file name indore.js
Start writing JavaScript code in it.
Add using this tag in HTML file

```
<script src="indore.js" ></script>
```

Src → it is for source path of the JavaScript file

Basic Concepts:

- document object
- console object
- Print in the HTML tags
- Print in console/ browser inspect
ctrl + shift + i

3.Variables

Variables are used to store values using **var** keyword.
Example:

```
var a = 10;  
console.log(a);
```

```
var b = "Hello Indore";  
console.log(b);
```

```
var x = 10.5;  
console.log(x);
```

4.Operators

- Arithmetic Operators
+, -, *, /, %, ++, --
- Relational Operators
<, >, <=, >=, ==, !=

5. Comments

- Single line comment
 //
- Multiple line comment
 /* */

6. Conditional Statements

Conditionals are code structures used to test if an expression returns true or not. A very common form of conditionals is the if....else statement.

```
var x = 10;
if (x > 5){
    console.log("Greater");
} else{
    console.log("Smaller");
}
```

7. For loop

We use a loop to iterate a particular statement.

```
for (var i=1 ; i <=10 ; i++){
    console.log(i);
}
```

8. Functions

Functions are the containers with lines of code. Imagine it as a box, we will write some lines of code and put it in a box and call it a function.

We can also give it a name.

```
function lion(){  
    console.log("Hello");  
}
```

```
lion();
```

```
alert("Hello");
```

We can use alert function, it is a predefined function.

return statement

9. Events

Real time activity on a web page needs JavaScript Events.

We use onclick event.

10. Form Validation

Validate HTML form using JavaScript for user input.

- onsubmit event

11. Project - Captcha Generator

This is used to check that the user is human, not a bot.

For this project we need three 2 files

- index.html
- captcha.js

We have to create 2 functions one is to generate captcha and the other one is to check that the user entered the correct captcha.

All the code will be available here:

<https://github.com/hemansnation/JavaScriptForBeginners>

You can connect with me here

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