

Complete Javascript In 10 Slides

JS

lacksquare Complete Tutorial Of Javascript ightarrow



Javascript

- It is a scripting language for web.
- Used to make web pages alive.
- Programs written in it are called scripts.
- · With .js file extension

First Program

```
console.log("Hello world!");
```

To run it we have several options-

- Install Node.js and run node file.js in terminal.
- On browser's console
- Online JS code editor



Fundamentals

Variables

Using let

```
let user = "John";
```

Using var (old way)

```
var message = "Read it!";
```

Constants

```
const LANGUAGE = "JS";
```

Loops

while

```
while(condition) {
  code
}
```

for

```
for(begin; condition; step){
  code
}
```

Value can't be changed!

It is optional to add semi-colon at the end of statement in JS.

Functions

- · Main building block of the program
- 2 ways to define function
 - a. With function keyword
 - b. Arrow functions

Simple Functions

```
function(name, age) {
  console.log(name + "is" + age + "years old.");
}
```

Arrow Functions

```
let func = (name, age) ⇒ {
  console.log(name + "is" + age + "years old.");
}
```

Classes

• It is code template used to create objects.

```
class User {
  constructor(name) {
    this.name = name;
  }
  sayName() {
    console.log(this.name);
  }
}
```

```
let user = new User("Tim");
user.sayName(); // Tim
```

Objects

- Stores key-value pair
- · Like a dictionary

```
let user = {
  name: "John",
  age: 30
}
```

JSON

- · Javascript Object Notation
- · Contains data just like objects

```
"user": "John",
   "age": "12",
}
```

Error Handling

Allows us to catch errors from scripts.

```
try {
   // code
} catch(error) {
   // error handling
}
```

Regular Expression

- Provides a way to search and replace in text.
- RegExp object is used for it. (OR in between slashes)

```
regexp = new RegExp("pattern", "flags");
```

```
regexp = /pattern/; // no flags
```

Include JS In HTML

```
External JS
                                           Inline JS
<body>
                               <body>
                                 <button
  <script src="index.js">
                                    onclick="alert("hi")"
</body>
                                 >Click</button>
                               </body>
                  Embedded JS
                                ...
        <body>
          <script>
            console.log("hi");
          </script>
        </body>
```

Module

Helps us to split JS code into multiple files

```
<script type="module">...</script>
```



DOM

- Document Object Model
- It represents all page content as objects of web page.
- document object is main entry point to the page.

```
let para = document.getElementById("para");
para.style.color = "grey";
```

BOM

- Browser Object Model
- Additional objects provided by browser

```
console.log(location.href); // current URL
```



Events

- Action that may happen from input and to react on it.
- For example user clicks a button to submit form.
- addEventListener() method is used to create events.

```
// Select a DOM element
let btn = document.querySelector("button");
```

```
// Add Event Listener
btn.addEventListener("click", () ⇒ {
  btn.style.background = "grey";
  btn.style.color = "white";
})
```

I hope you got something out from this. There are so many other topics to be covered but this is for beginners who are starting out in web dev.