

Front-End Development


Fundamentals of Javascript

Shatroopa Saxena
Ph.D. Student

Department of Computer Science and Engineering
Indian Institute of Technology Kanpur



- Defines the behaviour of a webpage¹
- Just like any other programming language!

¹<https://www.w3schools.com/js/default.asp> 

Uniqueness of JS

- Need not be compiled in order to be executed
- Dynamically typed
- Embedded in webpages and in server-side applications
- Event driven

What can JS do?

- Change HTML content and attribute values
- Animations
- Pop-up boxes
- Writing to the browser console: `console.log()`

Placement

External

```
<head>  
  <script src="myScript.js"></script>  
</head>
```

Internal

```
<script>  
  let x, y, z;  
  x = 5; y = 6;  
  z = x + y;  
</script>
```

Inline

```
<button type="button" onclick="myFunction()">  
  Try it  
</button>
```

- All statements must end with a semicolon (;)
- Comments: `//`, `/*...*/`
- Case sensitive
- Identifiers must begin with a letter or `_` or `$`
- Expressions and operators: `=`, `+`, `-`, `*`, `/`, etc
- Declaration of variables(not mandatory): `let`, `var`, `const`
- Data types: `String`, `Number`, `Boolean`, `Object` (`Object`, `array`, `date`), `Undefined`, `Null`, etc
- Branching: `if-else` `if-else`, `switch-case`
- Loops: `for`, `while`
- Control: `break`, `continue`

Pop-up boxes

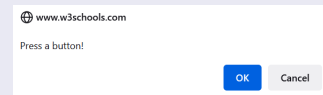
Alert box

```
alert("I am an alert box!");
```



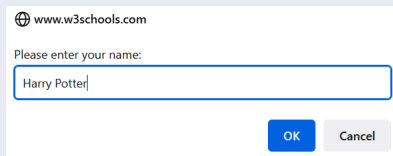
Confirm box

```
confirm("Press a button!");
```



Prompt box

```
prompt("Please  
enter your name",  
Harry Potter);
```



Javascript can be used to "react" to events occurring on a webpage. Eg: Button click, hover, timer, etc

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