

Web Programming with Python and JavaScript

Lecture 5: JavaScript

July 12, 2018

A teal-colored rectangular box with the word "Client" centered inside in white text.

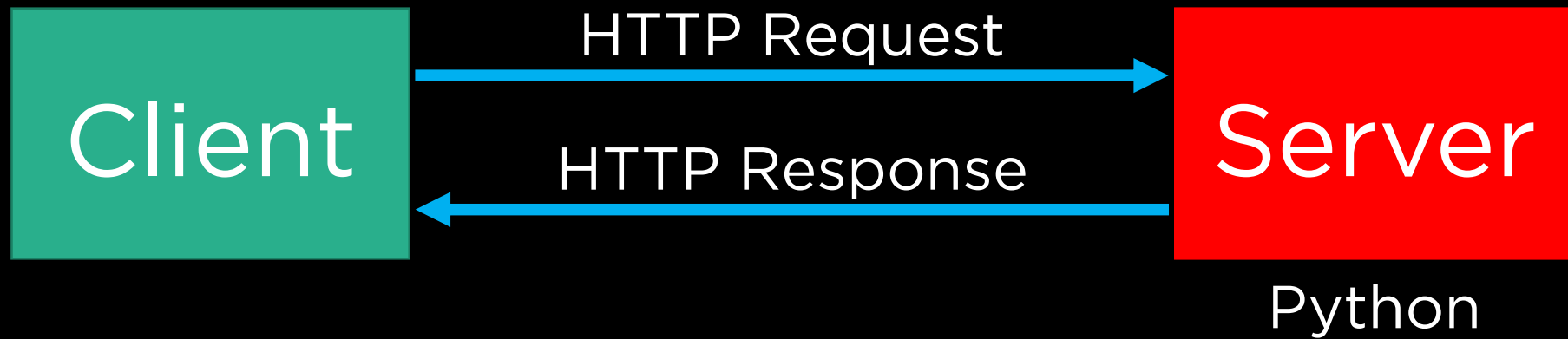
Client

A red-colored rectangular box with the word "Server" centered inside in white text.

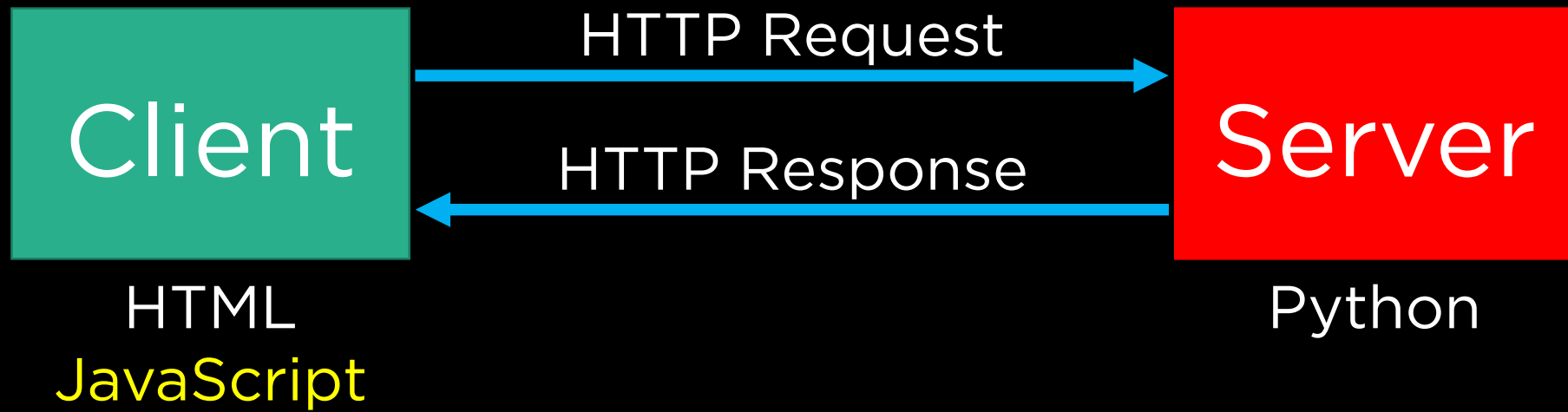
Server











JavaScript

JavaScript ES6

```
<script>  
    alert('Hello, world!');  
</script>
```

Functions

```
function hello() {  
    alert('Hello, world!');  
}
```

Functions

```
function hello() {  
    alert('Hello, world!');  
}
```

Events

- `onclick`
- `onmouseover`
- `onkeydown`
- `onkeyup`
- `onload`
- `onblur`
- ...

Query Selector

- `document.querySelector('tag')`
- `document.querySelector('#id')`
- `document.querySelector('.class')`

Ways to Define Variables

- `const`
- `let`
- `var`

Arrow Functions

```
() => {  
  alert('Hello, world!');  
}
```


Arrow Functions

```
x => {  
    alert(x);  
}
```

Arrow Functions

```
x => x * 2;
```

Higher-Order Functions

Higher-Order Functions

(aka passing functions as arguments to other functions)

Local Storage

Using Local Storage

- `localStorage.getItem(key);`
- `localStorage.setItem(key, value);`

Ajax

Ajax Example

```
const request = new XMLHttpRequest();  
request.open(method, url);
```

```
request.onload = function() {  
    // do something  
};
```

```
const data = new FormData();  
data.append(key, value);  
request.send(data);
```


Socket.IO

Socket.IO

- on
- emit