

Recitation III

Javascript

ADITI PRAKASH
DEPARTMENT OF COMPUTER SCIENCE
UNIVERSITY OF COLORADO BOULDER

WHY JAVASCRIPT?

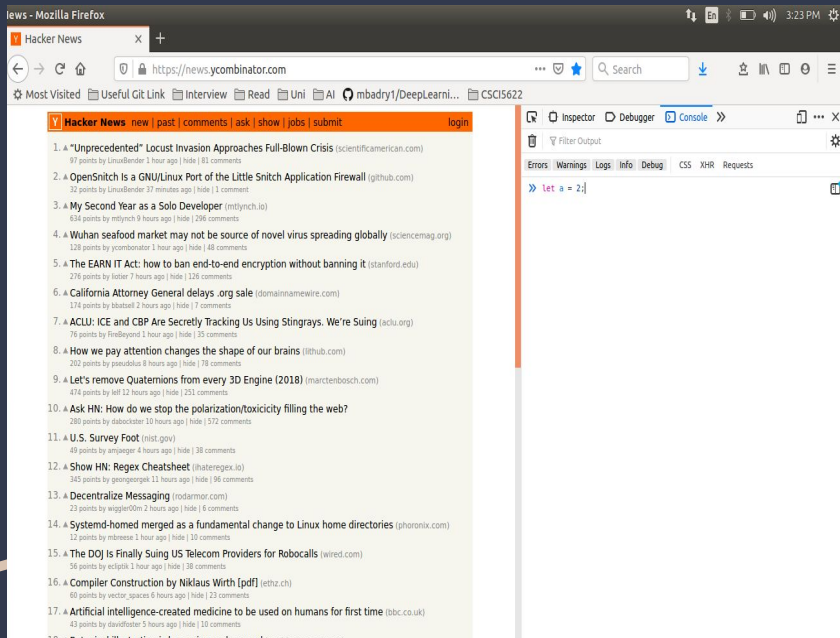
- Dynamic and interactive experience in a HTML document
- Beginner friendly

WHERE IS IT USED?

- Games
- Responses when buttons are pressed
- Responses when data is entered in forms Dynamic styling
- Animation

Console

Console is a command line interface used to execute snippets of code.



To use JS console:

1. Open your browser
2. Press F12 or
 - a. Right click on a web-page
 - b. Click Inspect element
 - c. Select the Console tab

BASICS of JS

Variables & Print statements

```
var a = 2;
```

```
let b = 3;
```

var vs let

let allows you to declare variables that are limited to a scope of a block.

var defines a variable globally, or locally to an entire function regardless of block scope.

Print

```
console.log(statement);  
Ex: console.log("hello");  
    console.log(4+5);
```

```
1 function varTest() {  
2   var x = 1;  
3   {  
4     var x = 2; // same variable!  
5     console.log(x); // 2  
6   }  
7   console.log(x); // 2  
8 }  
9  
10 function letTest() {  
11   let x = 1;  
12   {  
13     let x = 2; // different variable  
14     console.log(x); // 2  
15   }  
16   console.log(x); // 1  
17 }
```

Functions demo

```
>> function multiply(num1, num2){  
    let result = num1 * num2;  
    return result;  
}
```

```
← undefined
```

```
>> multiply(4,7)
```

```
← 28
```

```
>> function square(x){  
    let s = x*x;  
    return s;  
}
```

```
← undefined
```

```
>> square(multiply(2,2))
```

```
← 16
```

```
>>
```



Events

Interactivity on a website needs events.

These are code structures which listen for things happening in the browser and runs code in response.

The most obvious example is the click event, which is fired by the browser when you click on something with your mouse.

NOW YOU TRY

```
document.querySelector('html').onclick =  
function() {  
    alert('Ouch! Stop poking me!');  
}
```

same as

```
let myHTML =  
document.querySelector('html');  
myHTML.onclick = function() {};
```

NOTE:

html element

onclick handler property

Nameless function

HTTP COOKIE/ BROWSER COOKIE/ WEB COOKIE



- Small piece of data that a server sends to the user's web browser.
- The browser may store it and send it back with the next request to the same server.
- Used to tell if two requests came from the same browser — keeping a user logged-in.
- Applications of cookies
 - Session management
 - Logins, shopping carts, game scores, or anything else the server should remember
 - Personalization
 - User preferences, themes, and other settings
 - Tracking
 - Recording and analyzing user behavior

Reference Links to learn more:

- Javascript
 - [JavaScript basics - Learn web development](#)
- Cookies
 - [HTTP cookies - HTTP](#)
 - [Document.cookie - Web APIs](#)
- Read
 - <https://www.veracode.com/security/javascript-security>