

HTML - JavaScript - CSS

HTML



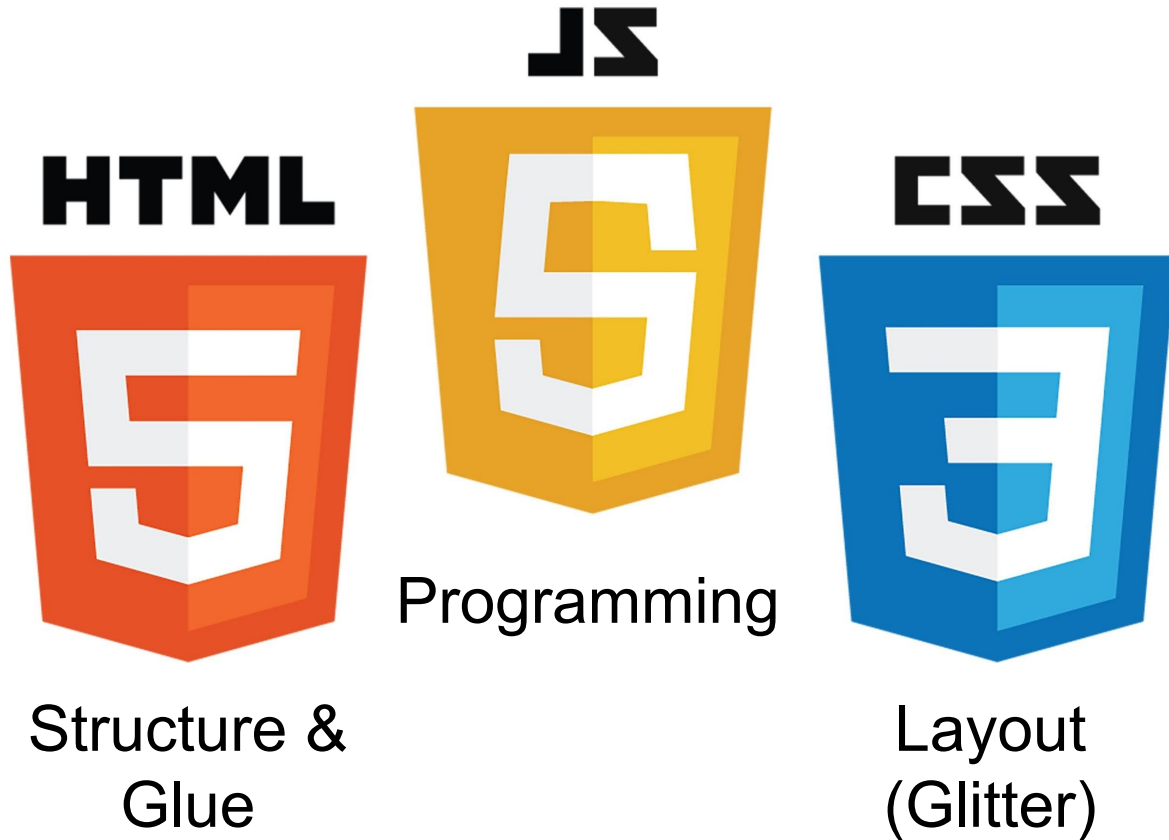
JS



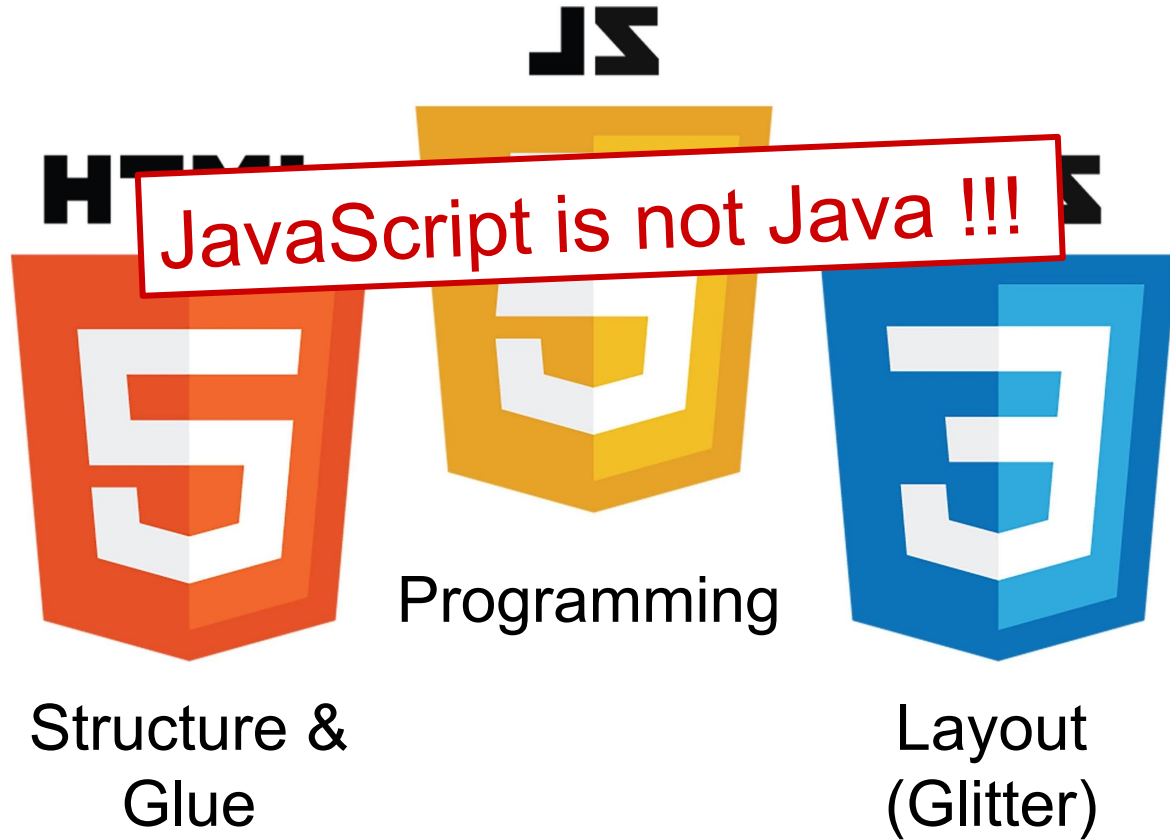
CSS



HTML - JavaScript - CSS



HTML - JavaScript - CSS



HTML



```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
</head>
```

```
<body>
```

```
</body>
```

```
</html>
```

HTML



```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
  <title>M&B Workshop</title>
```

```
</head>
```

```
<body>
```

```
  <h1 id="foo">Hello Mind & Brain!</h1>
```

```
</body>
```

```
</html>
```

HTML and CSS



```
<!DOCTYPE html>

<html>

<head>
  <title>M&B Workshop</title>
  <style>
    h1 { color:firebrick; font-family:Sans-Serif; font-size:100px; text-align:center; }
  </style>
</head>

<body>
  <h1 id="foo">Hello Mind & Brain!</h1>

</body>

</html>
```

HTML and CSS and JavaScript



```
<!DOCTYPE html>

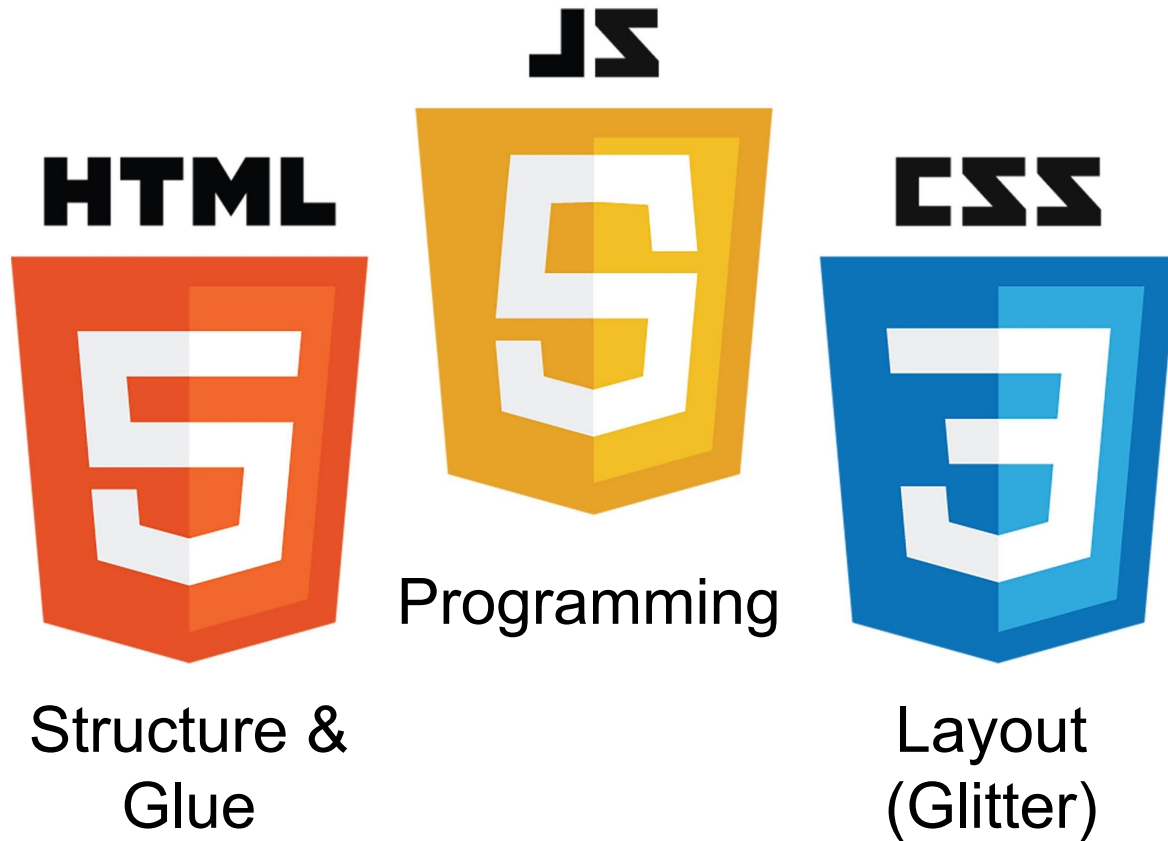
<html>

<head>
  <title>M&B Workshop</title>
  <style>
    h1 { color:firebrick; font-family:Sans-Serif; font-size:100px; text-align:center; }
  </style>
</head>

<body>
  <h1 id="foo">Hello Mind & Brain!</h1>
  <script>
    document.addEventListener("click", () => { alert("😄😄😄") });
  </script>
</body>


</html>
```

Events and Listeners



Events and Listeners



Matlab 

show stimulus -> wait for response
show stimulus -> wait for response
show stimulus -> wait for response
...

JavaScript

is **event-driven**

Events and Listeners



Listener
(not really)



name of
Event



Action



```
document.addEventListener("click", doSomething);
```

Events and Listeners



Listener
(not really)



name of
Event



Action
Callback-Function



```
document.addEventListener("click", doSomething);
```

```
function doSomething() {  
    alert("😄😄😄");  
}
```

Events and Listeners



Listener
(not really)



name of
Event



Action
Callback-Function

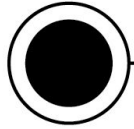


```
document.addEventListener("click", doSomething);
```

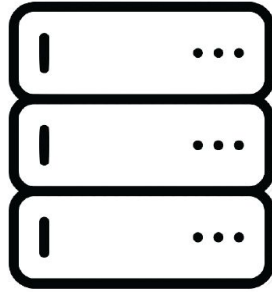
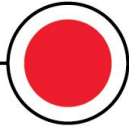
```
function doSomething() {  
    alert("😄😄😄");  
}
```

```
document.addEventListener("click", () => {  
    alert("😄😄😄");  
}));
```

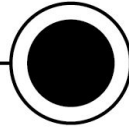
Create and edit HTML/JS/CSS
on your local computer



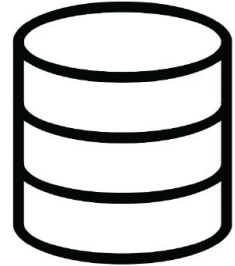
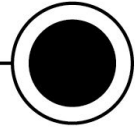
Deploy files to a server



Collect data



Download and analyze



Deploy to the Internet

Option A:

Qualtrics, SurveyMonkey etc. do it for you, but ... limited

Option B:

DIY, but ... complicated

Option C:

JATOS

Deploy to the Internet

Option A:

Qualtrics, SurveyMonkey etc. do it for you, but ... limited

Option B:

DIY, but ... complicated

Option C:

JATOS

Option C.1:

Convince your IT guys

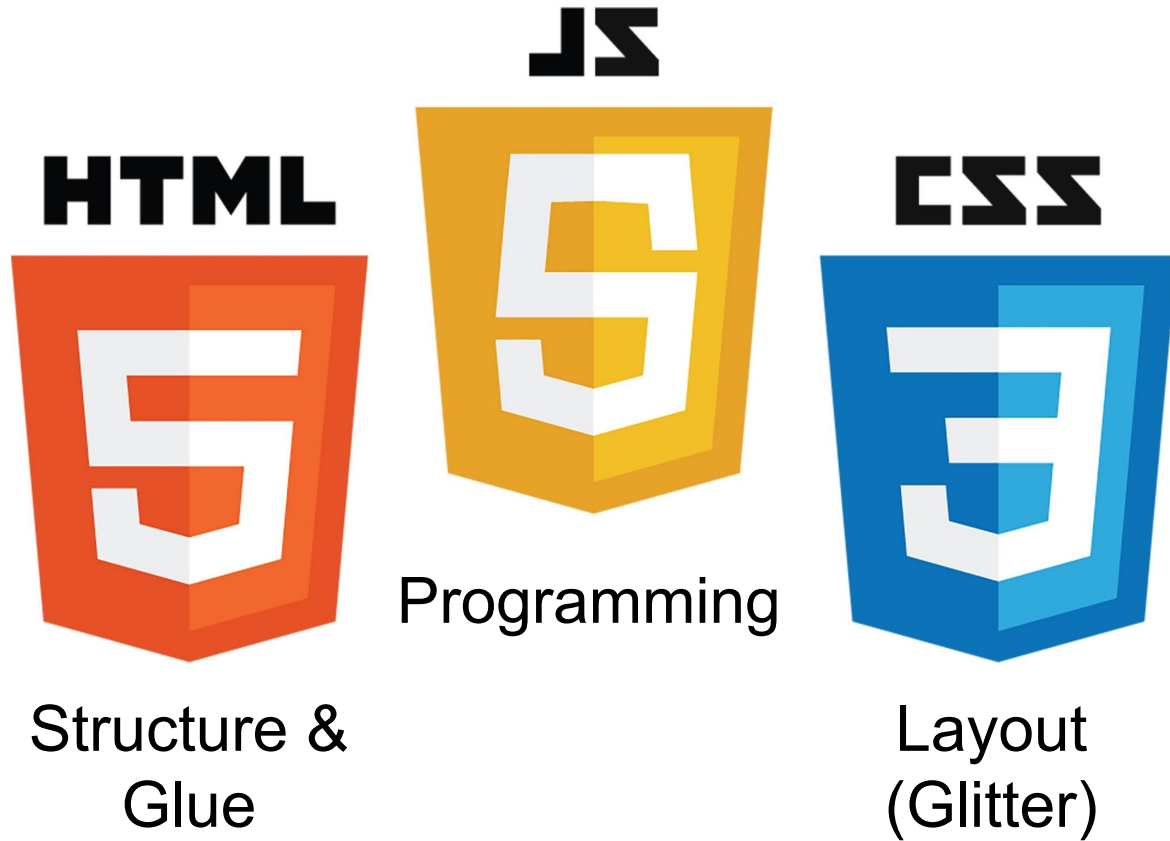


Option C.2:

Be your own admin



JSON & JavaScript Objects

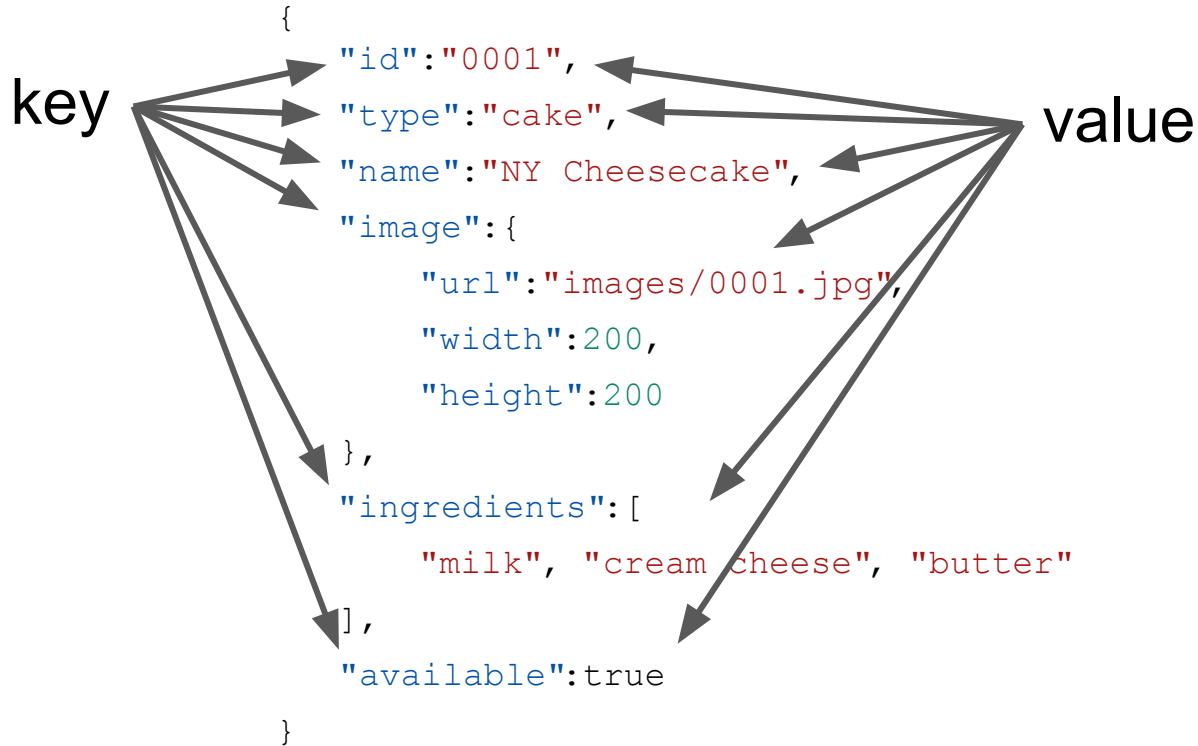


JSON & JavaScript Objects



```
{
  "id": "0001",
  "type": "cake",
  "name": "NY Cheesecake",
  "image": {
    "url": "images/0001.jpg",
    "width": 200,
    "height": 200
  },
  "ingredients": [
    "milk", "cream cheese", "butter"
  ]
}
```

JSON & JavaScript Objects



JSON & JavaScript Objects



```
{
  "id": "0001",
  "type": "cake",
  "name": "NY Cheesecake",
  "image": {
    "url": "images/0001.jpg",
    "width": 200,
    "height": 200
  },
  "ingredients": [
    "milk", "cream cheese", "butter"
  ],
  "available": true
}
```

string
number
boolean
array
object

JSON & JavaScript Objects



`JSON.stringify:`

Object -> JSON

`JSON.parse:`

JSON -> Object

```
[{"rt":934,"key_press":32,"trial_type":"text","trial_index":0,"time_elapsed":938,"internal_node_id":"0.0-0.0"}, {"rt":5398,"key_press":32,"trial_type":"text","trial_index":1,"time_elapsed":7340,"internal_node_id":"0.0-1.0"}, {"rt":-1,"stimulus":"/study_assets/workshop_go_nogo/img/orange.png","key_press":-1,"response":"no-go","trial_type":"single-stim","trial_index":2,"time_elapsed":10850,"internal_node_id":"0.0-2.0-0.0","correct":true}, {"rt":327,"stimulus":"/study_assets/workshop_go_nogo/img/blue.png","key_press":70,"response":"go","trial_type":"single-stim","trial_index":3,"time_elapsed":13130,"internal_node_id":"0.0-2.0-1.0","correct":true}, {"rt":676,"stimulus":"/study_assets/workshop_go_nogo/img/blue.png","key_press":70,"response":"go","trial_type":"single-stim","trial_index":4,"time_elapsed":15436,"internal_node_id":"0.0-2.0-2.0","correct":true}, {"rt":-1,"stimulus":"/study_assets/workshop_go_nogo/img/orange.png","key_press":-1,"response":"no-go","trial_type":"single-stim","trial_index":5,"time_elapsed":17838,"internal_node_id":"0.0-2.0-3.0","correct":true}, {"rt":322,"stimulus":"/study_assets/workshop_go_nogo/img/blue.png","key_press":70,"response":"go","trial_type":"single-stim","trial_index":6,"time_elapsed":18952,"internal_node_id":"0.0-2.0-4.0","correct":true}, {"rt":-1,"stimulus":"/study_assets/workshop_go_nogo/img/orange.png","key_press":-1,"response":"no-go","trial_type":"single-stim","trial_index":7,"time_elapsed":21995,"internal_node_id":"0.0-2.0-5.0","correct":true}, {"rt":-1,"stimulus":"/study_assets/workshop_go_nogo/img/orange.png","key_press":}
```

JSON & JavaScript Objects



```
[
  {
    "rt":934,
    "key_press":32,
    "trial_type":"text",
    "trial_index":0,
    "time_elapsed":938,
    "internal_node_id":"0.0-0.0"
  },
  {
    "rt":5398,
    "key_press":32,
    "trial_type":"text",
    "trial_index":1,
    "time_elapsed":7340,
    "internal_node_id":"0.0-1.0"
  },
  {
```

Recap

- HTML / JS / CSS
- HTML tags <head> <body> <script> <style>
- JavaScript is event driven
- JSON
- Libraries survey.js and jsPsych
- Deploy JATOS to a server on Digital Ocean
- Create study links in JATOS