

JavaScript Juggernauts

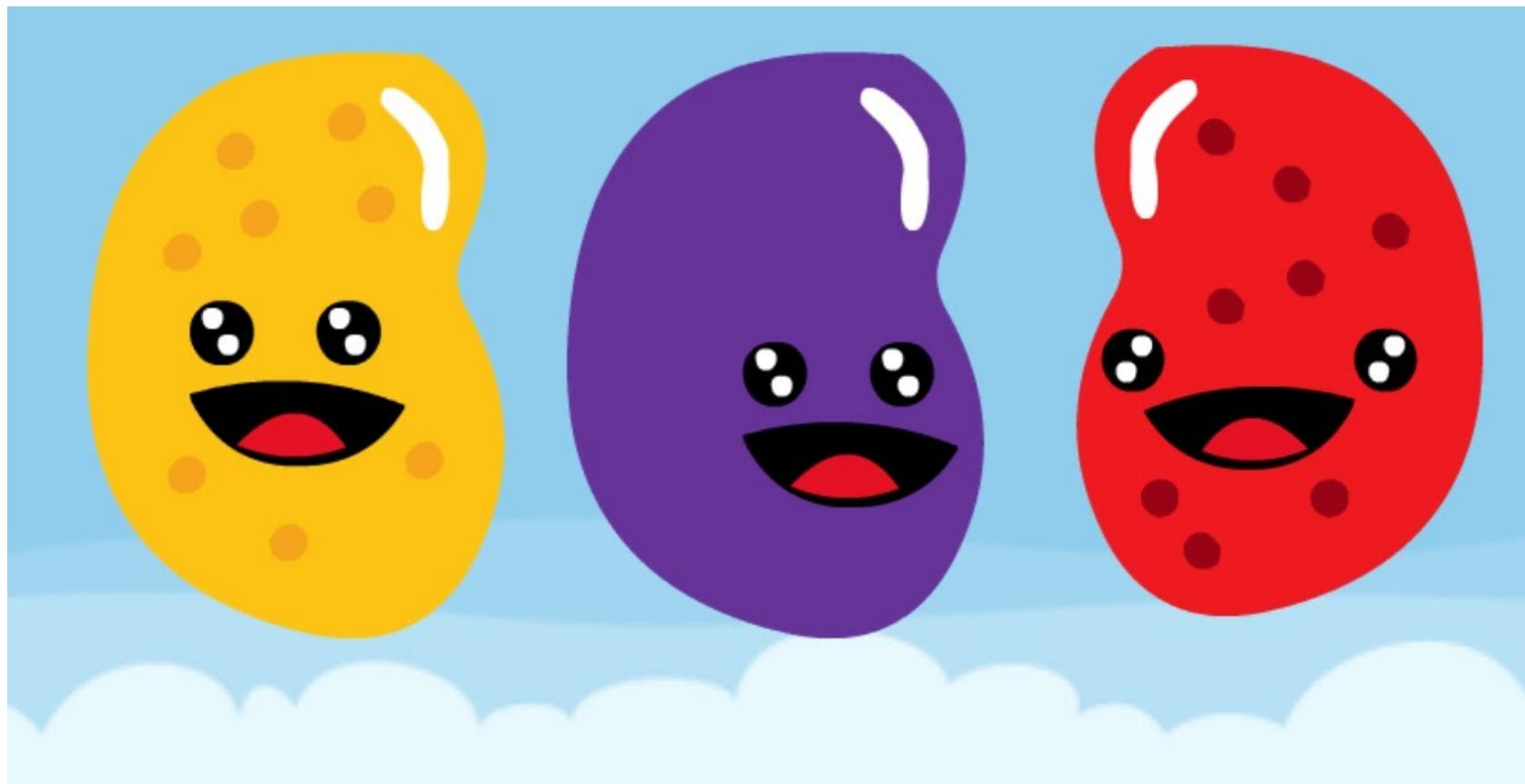
The Coding Bootcamp

This will soon be you...



JavaScript Juggernauts.

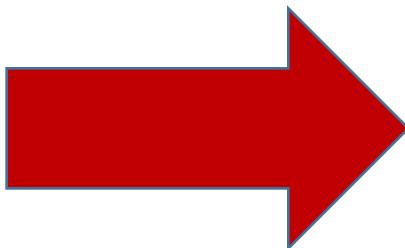
But right now...



Maybe feeling like

JavaScript Jellybeans.

Transformation to Come



HANG IN THERE!

Objects

Demo Time

Instructor: Demo

(good-array.html | 28-GoodArray)

Demo Time

Instructor: Demo

(joan-of-arc-arrays-unsolved.html | 29-JoanOfArcArrays)

Associated Data ==/== Arrays

```
var joanOfArcInfoParts = ["Real Name", "Grew Up Where", "Known For", "Scars", "Symbolism"];  
  
var joanOfArcInfoValues = ["Jehanne la Pucelle.", "Domremy, a village in northeastern France.",  
"Peasant girl, daughter of a farmer, who rose to become Commander of the French army.",  
"Took an arrow to the shoulder and a crossbow bolt to the thigh while trying to liberate Paris.",  
"Stands for French unity and nationalism."];
```

Relating two separate arrays is not fun.

Demo Time

Instructor: Demo

(gandalf-the-grey-objects.html | 30-GandalfTheGreyObjects)

Gandalf – The Object

```
11  var gandalf = {  
12    "real name": "Gandalf",  
13    "age (est)": 11000,  
14    race: "Maia",  
15    haveRetirementPlan: true,  
16    aliases: [  
17      "Greyhame",  
18      "Stormcrow",  
19      "Mithrandir",  
20      "Gandalf the Grey",  
21      "Gandalf the White"  
22    ]  
23  }  
24 // Object properties can be accessed with "bracket notation"  
25 alert("My name is " + gandalf["real name"]);  
26 // Or with "dot notation"  
27 if (gandalf.haveRetirementPlan) {  
28   // Or with a variable that matches the name of the property  
29   var ageProperty = "age (est)";  
30   var years = gandalf[ageProperty];  
31   alert("My 401k has been gathering interest for " + years + " years!");  
32 }  
33 // You can access arrays and their properties from an object  
34 alert("I have more than " + gandalf.aliases.length + " aliases");  
35 // Non-existent properties return undefined  
36 alert("My designation is " + gandalf["designation"]);
```

Gandalf's “**properties**” and “**values**” are associated in object form, making it easy to recall specific data.

Objects Visualized

```
var gandalf
```

```
=
```

```
{
```



```
“real name”
```

```
:
```

```
“Gandalf”
```

```
,
```

```
“age (est)”
```

```
:
```

```
11000
```

```
,
```

```
“race”
```

```
:
```

```
“Maia”
```

```
}
```

This is Gandalf. According to code... Gandalf is an **Object**.

Objects Visualized

```
var gandalf
```

```
=
```

```
{
```



```
“real name”
```

```
:
```

```
“Gandalf”
```

```
,
```

```
“age (est)”
```

```
:
```

```
11000
```

```
,
```

```
“race”
```

```
:
```

```
“Maia”
```

```
}
```

These are Gandalf's **properties** (like descriptors).

Objects Visualized

```
var gandalf
```

```
=
```

```
{
```



```
“real name”
```

```
:
```

```
“Gandalf”
```

```
,
```

```
“age (est)”
```

```
:
```

```
11000
```

```
,
```

```
“race”
```

```
:
```

```
“Maia”
```

```
}
```

These are the **“values”** of Gandalf’s **properties**.

Objects Visualized

var gandalf

=

{



“real name”

:

“Gandalf”

,

“age (est)”

:

11000

,

“race”

:

“Maia”

}

Thus: gandalf[“race”] = “Maia”

Demo Time

Instructor: Repeat Demo

(gandalf-the-grey-objects.html | 30-GandalfTheGreyObjects)

Code Dissection / Creation: Basic Objects

- With a partner, spend the next few moments studying the code just slacked to you.
- Then, write code below each comment to log the relevant information about the provided car object.
- **Bonus:** If you finish early, create a brand new object of your own. Slack out a snippet of the code to the class when you are done. Be Creative!

Demo Time

Instructor: Demo in Browser

(*car-game-solved.html | 32-CarGame*)

Code Creation: Run that Car!

- Using the code from the previous activity as a starting point, create a complete application such that:
 - Users can enter keyboard input (letters).
 - Each of the car's methods are assigned to a key.
 - When the user presses a key it calls the appropriate function.
 - These letters also trigger a global function called reWriteStats() that logs the car's make, model, color, mileage, and isWorking status to the console.
 - **HINT:** You will need to use the document.onkeyup() function to collect input from the user's keyboard.

Questions
