<CS105>
What Will We Do Today?

<cs105>

</cs105>
What Will We Do Today?

The Orange Furball
What Will We Do Today?

<cs105>

<intro>
What Will We Do Today?
</intro>

<chapter>
The Orange Furball
</chapter>

<chapter>
What Does The Fox Say?
</chapter>

<chapter>
Put away some toys
</chapter>

<chapter>
Fix our first bug
</chapter>

</cs105>
The Orange Furball
The Orange Furball
The Orange Furball

Joey
What *Does* the Fox Say?
What *Does* the Fox Say?

A) Bark?
B) Meow?
C) Hoot?
D) Or are foxes mute?
What **Does** the Fox Say?

Fox.mp4
What Does the Fox Say?

Fox.mp4

What's That?
Why File Extensions Matter

ZIP   DOCX   JPG   SB2
EXE   XLSX   MP3   HTML
JS    PDF    AVI   CSS
CPP   TXT    MP4   PNG
## Why File Extensions Matter

<table>
<thead>
<tr>
<th>ZIP</th>
<th>DOCX</th>
<th>JPG</th>
<th>SB2</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXE</td>
<td>XLSX</td>
<td>MP3</td>
<td>HTML</td>
</tr>
<tr>
<td>JS</td>
<td>PDF</td>
<td>AVI</td>
<td>CSS</td>
</tr>
<tr>
<td>CPP</td>
<td>TXT</td>
<td>MP4</td>
<td>PNG</td>
</tr>
</tbody>
</table>
### Why File Extensions Matter

<table>
<thead>
<tr>
<th>Format</th>
<th>ZIP</th>
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<th>MP4</th>
<th>PNG</th>
</tr>
</thead>
</table>

**Compressed? What do you mean?**
ZIP Files are like Legos...sort of
ZIP Files are like Legos...sort of

Did you ever build a Lego house?
ZIP Files are like Legos...sort of

Did you ever build a Lego house?
ZIP Files are like Legos...sort of

Did you ever build a Lego house?
ZIP Files are like Legos...sort of
ZIP Files are like Legos...sort of

Sure takes up a lot of space....
How can we make it smaller?
How can we make it smaller?

There's a lot of air in it!
How can we make it smaller?

There's a lot of air in it!

What if we could remove that?
How can we make it smaller?

There's a lot of air in it!

What if we could remove that?

Like in a Space Saver bag
So let's just take it apart, then
So let's just take it apart, then
So let's just take it apart, then much smaller already !
So let's just take it apart, then it might even fit under your bed.
OK, that's one house....
OK, that's one house....

What if we need to pack a whole skyline?
OK, that's one house....

What if we need to pack a whole skyline?
OK, that's **one** house....

What if we need to pack a whole skyline?

We'll just get more drawers!
OK, that's one house....

What if we need to pack a whole skyline?

We'll just get more drawers!
OK, that's one house....

What if we need to pack a whole skyline?

We'll just get more drawers!

And the whole thing becomes one neat ZIP file!
Enough Talk...
Enough Talk...

Let's do some programming
Enough Talk...
Let's do some programming

Today we will learn how to:

- display a message
- use a simple variable
Enough Talk...
Let's do some programming

Today we will learn how to:

- display a message
- use a simple variable

Meet JS Fiddle
So what did we just do?

`alert("Hello World");`
So what did we just do?

```javascript
alert("Hello World");
```

Technically we just called a function

But for now you can think of `alert` as a command or instruction
So what did we just do?

`alert("Hello World");`

`alert` just takes whatever "string" you give it and creates a message box with that string.
What's with the quotes?

`alert("Hello World");`
What's with the quotes?

```
alert("Hello World");
```

Those quotes tell the "compiler" that *Hello World* is a string.
What's a compiler?
What's a compiler?

Basically a compiler reads your code, tries to make sense of it and translates it into commands that the machine will can understand.
What's with the quotes?

alert("Hello World");

Those quotes tell the "compiler" that Hello World is a string.
What's else could it be?
What's else could it be?

alert("Hello World");  A string
What's else could it be?

>alert("Hello World");  A string

>alert(17);  A number
What's else could it be?

alert("Hello World"); // A string

alert(17); // A number

alert(randomtext); // A variable
Variables

Do you remember what a variable is?
Variables

Do you remember what a variable is?

Surprise.....
Variables

Do you remember what a variable is?

Surprise.....

It's like a box
Variables

Do you remember what a variable is?

Surprise.....

It's like a box

A different kind of box, of course
What will the message be?
What will the message be?

alert("Hello World");  Hello World
What will the message be?

`alert("Hello World");`  Hello World

`alert(17);`  17
What will the message be?

`alert("Hello World");`  Hello World

`alert(17);`  17

`alert(randomtext);`  nothing at all
We have our first bug
We have our first bug

Let's fix it
We have our first bug

Let's fix it

First: What does the console say?
We have our first bug

Let's fix it

First: What does the console say?

ReferenceError: randomtext is not defined
We have our first bug

Well that makes sense.
We have our first bug

Well that makes sense, ..., does it?
We have our first bug

Well that makes sense, .... , does it?

We must first define randomtext as a variable.
We have our first bug

Well that makes sense, .... , does it?

We must first define `randomtext` as a variable.

```javascript
var randomtext;
```
What will the message be now?
What will the message be now?

```javascript
alert("Hello World");  Hello World

alert(17);  17
```
What will the message be now?

`alert("Hello World");`  Hello World

`alert(17);`  17

`alert(randomtext);`  undefined
What will the message be now?

```javascript
alert("Hello World");  Hello World

alert(17);  17

alert(randomtext);  undefined
```

But Why?
We still have our first bug
We still have our first bug

Now that we have randomtext as a variable, we need to "assign" it a value.
We **still** have our first bug

Now that we have `randomtext` as a variable, we need to "assign" it a value.

```
randomtext = "Hello There";
```
We **still** have our first bug

Now that we have `randomtext` as a variable, we need to "assign" it a value.

```
randomtext = "Hello There";
```

This is *not* an equation!
What will the message be now?
What will the message be now?

```javascript
alert("Hello World");  // Hello World

alert(17);  // 17
```
What will the message be now?

alert("Hello World"); Hello World

alert(17); 17

alert(randomtext); Hello There
What will the message be now?

```
alert("Hello World");  Hello World
```

```
alert(17);  17
```

```
alert(randomtext);  Hello There
```

```
Much Better!
```
</CS105>
One More Question

Today's Lecture Was

a) Amazing
b) Nice
c) Like Any Other
d) Not So Great
e) Horrible!