



FEWD - Variables & Conditionals

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Agenda

- Review
- Variables
- Conditionals
- Lab Time

Review

Variables

What are variables?

Variables

- We can tell our program to remember values for us to use later on.
- The entity we use to store the value is called a variable.

Variables Declaration

Declaration: `var age;`

Assignment: `age = 21;`

Both at the same time: `var age = 21;`

Variable Re-Assignment

```
var name = 'Jo';
```

Name is 'Jo'

```
name = 'Amir';
```

name is now 'Amir'

Variable Conventions

- Variables start with a lower case letter
- If they contain multiple words, subsequent words start with an upper case letter.

```
var numberOfStudents = 10;
```


Variables & Data Types

What can you store in a variables?

Note:

Data Types

The types of different values we support include:

- **String** text
- **int, float** numbers
- **Boolean** true or false
- **Functions** function()

Code along!

Score Keeper

Strings

- Stores textual information
- String literal is surrounded by quotes

```
"How is the weather today?"
```

```
'Warm'
```

Strings

Double vs single quoted strings:

```
'They "purchased" it'
```

```
"It's a beautiful day"
```

Strings

Escaping

```
"They \"purchased\" it"
```

```
'It\'s a beautiful day'
```

Conversion: String To Number

```
var intString = "4";  
var intNumber = parseInt(intString, 10);  
var floatString = "3.14159";  
var floatNumber = parseFloat(floatString);
```

Note:

Why would you need to convert datatypes?

Conversion: Number To String

```
var number = 4;  
number.toString(); // => "4"
```

Note:

Why would you need to convert datatypes?

Numbers

Represent numerical data

int: 42

float: 3.14159265

Conditionals

- `if`
- `else if`
- `else`
- `while`

Making Decisions

It's either TRUE or FALSE (like booleans)

If you are greater than 18
you are an adult:

```
if(age > 18){  
    return "You are an adult";  
}
```

- Note: What's wrong with this code?



Compare That

Comparisons - Equality

Are two things equal?

```
10 == 10 //true  
10 == 5 //false  
"hi" == "hi" //true
```

Logical Operators



Conditional Syntax

```
if(condition is true) {  
    //Do cool stuff  
}
```

Conditional Syntax

```
if(condition is true) {  
    //Do cool stuff  
}else{  
    //Do other cool stuff  
}
```

Conditional Syntax

```
var topic = "JS";

if(topic == "JS") {
  return "You're learning JavaScript";
} else if(topic == "JavaScript") {
  return "You're still learning JavaScript";
} else {
  return "You're learning something else";
}
```


Multiple Conditions

```
if(name == "GA" && password == "YellowPencil"){  
    return 'Welcome to the internet!'  
} else {  
    return 'No internet for you.';  
}
```

The Truth Table

```
if (name == "GA" && password == "YellowPencil"){  
    // Allow access to internet  
}
```

The Truth Table

AND - &&	TRUE	FALSE
TRUE	true	false
FALSE	false	false

The Truth Table

```
if (day == "Monday" || day == "Wednesday"){  
    // We have class today  
}
```

OR -	TRUE	FALSE
TRUE	true	true
FALSE	true	false

The Console



Blackout



C/F - Temp Converter

