

# Values and Datatypes

What sort of data is it?

WEB PROGRAMMING FUNDAMENTALS

web design and development  
full sail university



*wpf*



# Variables





# Variables

- Variables are the storage containers of the programming world. Store & retrieve data.
- Variables are “nick names” for objects
- Variables have
  - Name
  - Datatype
- If they are defined they also have a
  - Value



# Variables

- Variables MUST be declared before you use them.
  - Reads right to left
- You are basically saying “I am using this name to represent an object” and the machine needs to know this BEFORE you do anything with that object.



# Instantiation

*AKA How We Use It*

```
var courseName = "Web Programming Fundamentals";
```

- The var keyword :
  - Declares a variable
  - Named container that refers to a specific piece of data
  - Can be recalled for later use
  - You SHOULD only declare the variable once



# Instantiation

*AKA How We Use It*

```
var courseName = "Web Programming Fundamentals";
```

- Variable Name :
  - Unique Identifier - Can be anything, but make it descriptive!
  - Cannot start with a number
  - No spaces
  - Uses camelCase or underscores
  - By rule, should start with a lowercase



# Instantiation

*AKA How We Use It*

```
var courseName = "Web Programming Fundamentals";
```

- Value
  - If a value is not specified its default value is null which is an empty container



# Datatypes

- Type (class) of data to be stored in a variable
- Many types available
- Each Type Has Different Properties





# Datatypes

- Numbers
- Strings
- Boolean



# Datatypes

- Numbers
  - Stores numeric values, Positive, Neg, Decimal, Integer



# Datatypes

- String
  - Holds any text value
  - Must have matching quotes
    - "text" or 'text'



# Datatypes

- Boolean
  - Holds either True or False
  - Not the text, the value