



App Dev League

Day 4: Intro to JS



Content Review

- → Advanced HTML Tags
 - Footers
 - ♦ Headers
 - Navs
- → Styling Specific elements
- → Multiple Pages
- → Lists



Lesson Plan

- 1. Intro to JS
 - a. Introduction and Setup
- 2. Variables and Data Types
- 3. Printing and Concatenation
- 4. Operators
- 5. If-else statements
- 6. JS Project





What is JS?

- One of the most popular language to do web development in
- Instructs the computer to complete certain tasks
- Emphasizes simple code readability
- Non-typed
- Easy to learn!





What is JS used for?

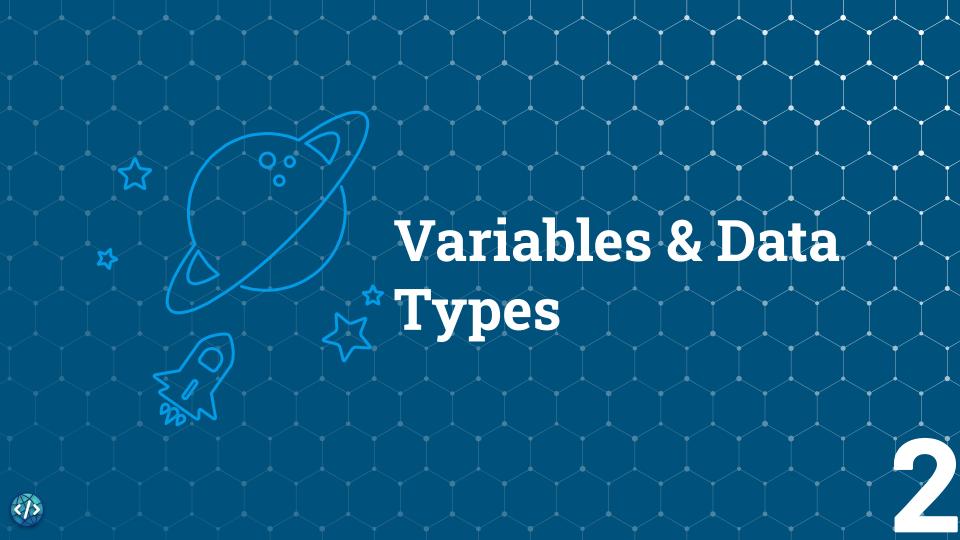
- Web Development
- Game Development
- Servers
- Mobile App development

- Instagram
- Google
- Netflix
- Youtube
- Quora
- Dropbox
- Spotify
- And more!



Let's set up JS!

We'll use repl.it in this tutorial



Data Types in JS

- In programming, your code can store different types of data
- Different data types can do different things!
- We will go over five data types:
 - Integers
 - Floating Point Values
 - Complex Numbers
 - Booleans
 - Strings



Integers

- Like their name suggests, they hold integer values (whole numbers)
- No decimal places in the number

Examples:

10, -9876, 5



Floating Point (Or Floats)

Floating Point values are used to store decimals and fractional numbers

Examples:

8.65, -50.87, -0.476, 9.825



Booleans

- Hold True and False values
- Booleans can only hold one of those two values

We'll go into examples soon!



Strings

Strings hold words and sequences of characters

Examples:

"Hello world!", "My name is bob", "apple"



What are variables?

Variables are used to store these data types!

- Declared in JS using the keyword var
- Variables in JS are different than variables in math, but they share some similarities
 - The value stored in a variable can be changed
- A variable is created when you first assign a value to it



3 Concatenation



What is concatenation?

- Joining strings together end-to-end to create a new string
- We use the '+' operator
 - Remember that it is NOT addition when we use it for strings!

Let's combine two strings together in repl!



Operators

Arithmetic Operators

Addition: + x + y

Subtraction: - x - y

Multiplication: * x * y

Division: / x / y

Modulus: % x % y

Exponentiation: ** x ** y



Assignment Operators

•	x += 3	is the same as	x = x+3
•	x -=3	is the same as	x = x - 3
•	x *= 3	is the same as	x = x * 3
•	x /=3	is the same as	x = x / 3
•	x %= 3	is the same as	x = x % 3
	x **=3	is the same as	x = x **

Comparison Operators

•	==	Equal	x == y
•	!=	Not equal	x != y
•	>	Greater than	x > y
•	<	Less than	x < y
•	>=	Greater than or equal to	x >= y
•	<=	Less than or equal to	x <= y



Logical Operators

And

Returns True if both statements are true

Or

Returns True if at least 1 statement is true

Not

Returns opposite of the result (returns false if result is true)



5 If-else statements



If-else statements

If statements execute code if a specific condition is matched Syntax:

if(condition){

Do something



6 Functions



Functions

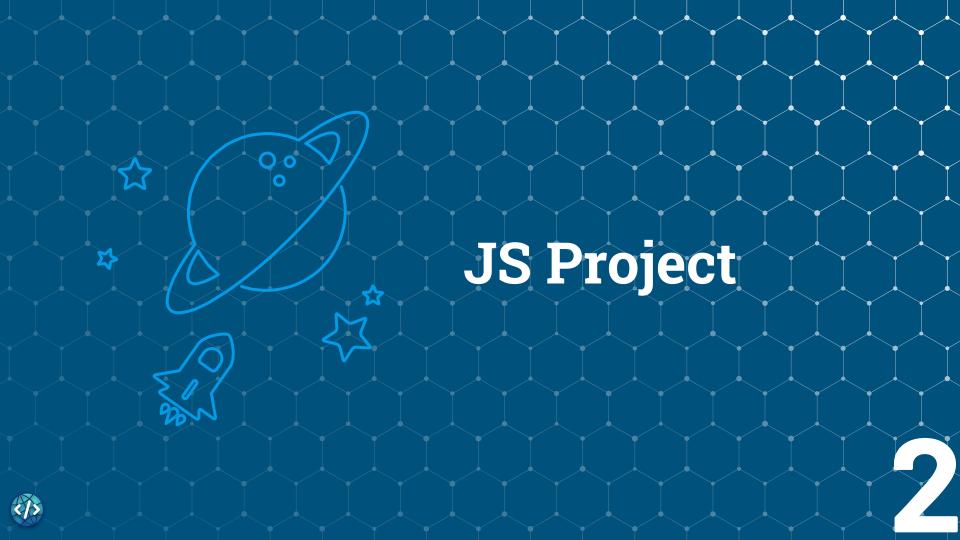
Functions are used to define a repeatable piece of code

```
Syntax:

function name(){

// code
```





Content Review

- → Variables and Data Types
 - Integers, Floating Point, Complex Numbers, Booleans, Strings
- Printing elements and Concatenation
- → Arithmetic, Assignment, Comparison, and Logical Operators
- → If-else statements

