

Software Development

JavaScript
Lesson 4

Learning objectives

1. Determine scope in JavaScript
2. Recognize the principles of Object Oriented Programming

Agenda

- 01.** Recap
- 02.** Scope
- 03.** Objects
- 04.** Object Oriented Programming

Recap

- What are variables used for?
- What are functions used for?
- What are loops used for?

Scope

- Global / module
- Function (local)
- Block

Objects

- Create an object in JavaScript
- Dot notation
- Bracket notation
- **this** keyword
- Constructors
- Everything is an object!

Break

Agenda

- 01.** Recap
- 02.** Scope
- 03.** Objects
- 04.** Object Oriented Programming

Object Oriented Programming

- Classes
- Instances
- Constructors
- 4 pillars
 - Encapsulation
 - Abstraction
 - Inheritance
 - Polymorphism

Exercise (35 mins)

Class, Constructor and Instance exercise

- Create a book class that has constructor and method/function along with some properties like book title, pages, author name, published year, etc.
- Instantiate the book object
- Call properties of book class with the object

Object Oriented Programming

- Do the exercise from LMS for all 4 principles

For next class

- 1. Read about encapsulation, abstraction, inheritance and polymorphism in the LMS**
- 2. Review the next lesson**