// FLATIRON SCHOOL

Object Oriented Programming
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Object Oriented Programming

For Data Science

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Agenda

Introduction

- A Brief History
- Why OOP?
- What is OOP?

Breakout Session (10 mins)

Practical

- Terminator

Introduction

Introduction

A brief history

Programming

Low-level to High-level Languages
Formal Programming Paradigms
SmallTalk at Xerox PARC

Introduction

Why OOP?

Spaghetti code is an **anti-pattern** in software design and development which features messy, convoluted **control flow**.

OOP is a paradigm that helps us to better understand, design, maintain and build software.

Introduction

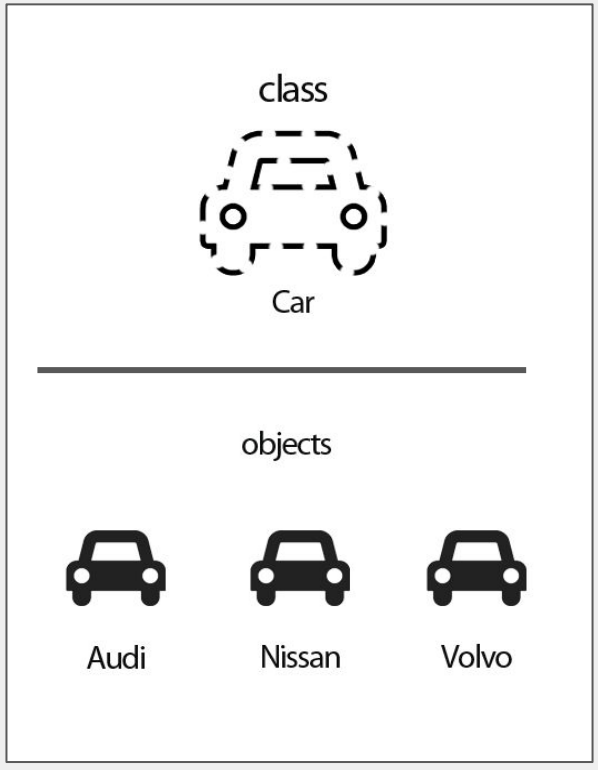
What is OOP?

Organizes code into object definitions where data and behaviour are matched.

OOP Pillars

Encapsulation - *state management*
Abstraction - *public interface*

Inheritance - *shared composition*
Polymorphism - *unique composition*



Breakout

1. What is the spaghetti code antipattern and consider one personal example where it affected you.

2. What the the four tenets of Object Oriented Programming and how do they help simplify software development?

3. What other types of programming paradigms exist and why might they exist?

4. What is meant by *composition* > *inheritance* and how does it affect how I/we develop software?

Q&A

Practical

bit.ly/2RAb0qu

Good Code

Good code gets easier.
Good code is iterative.
Good code is a mindset.

Practice makes perfect!