

PLAYER 1 0

0 PLAYER 2

PING PONG

clone

INFPALS BIG PROJECT SEMESTER 1

SESSION BREAKDOWN

WEEK 1

- Introduction to HTML, CSS, JavaScript
- Intro/Recap OOP (basics for project use)

WEEK 2

- Build of the UI / canvas

WEEK 3

- Implementation of controls
- Implementation of game logic

WEEK 4

- Implementation of AI

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INTRO TO
HTML CSS
JAVASCRIPT

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HTML, CSS & JAVASCRIPT

ALL

- Languages
- Building Blocks of the Web

HTML

- Markup language
- Basic Structure

CSS

- Design Language
- Styling

JAVASCRIPT

- Programming Language
- Functionality

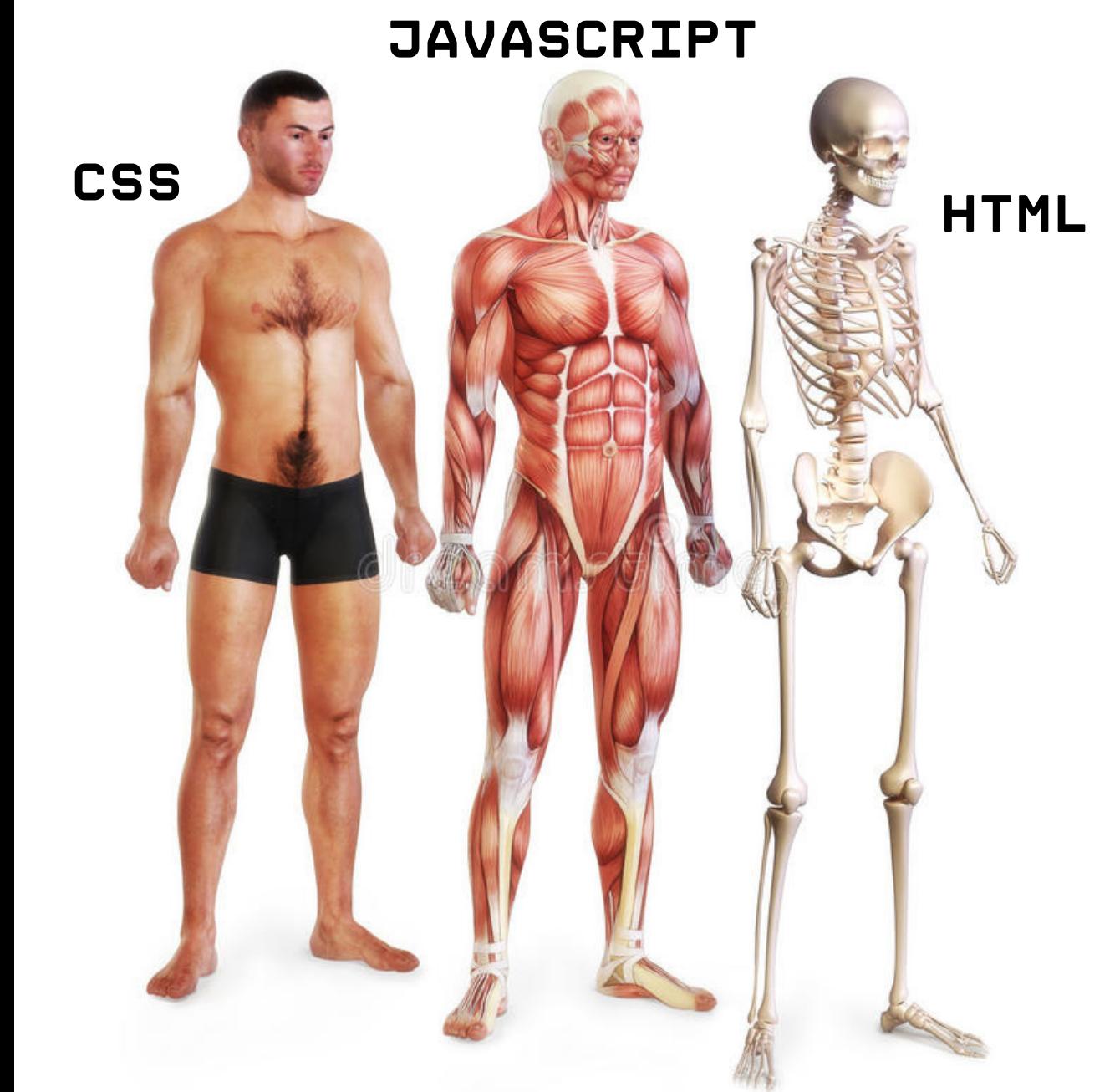
HTML,

CSS

S

JAVASCRIPT

HUMAN



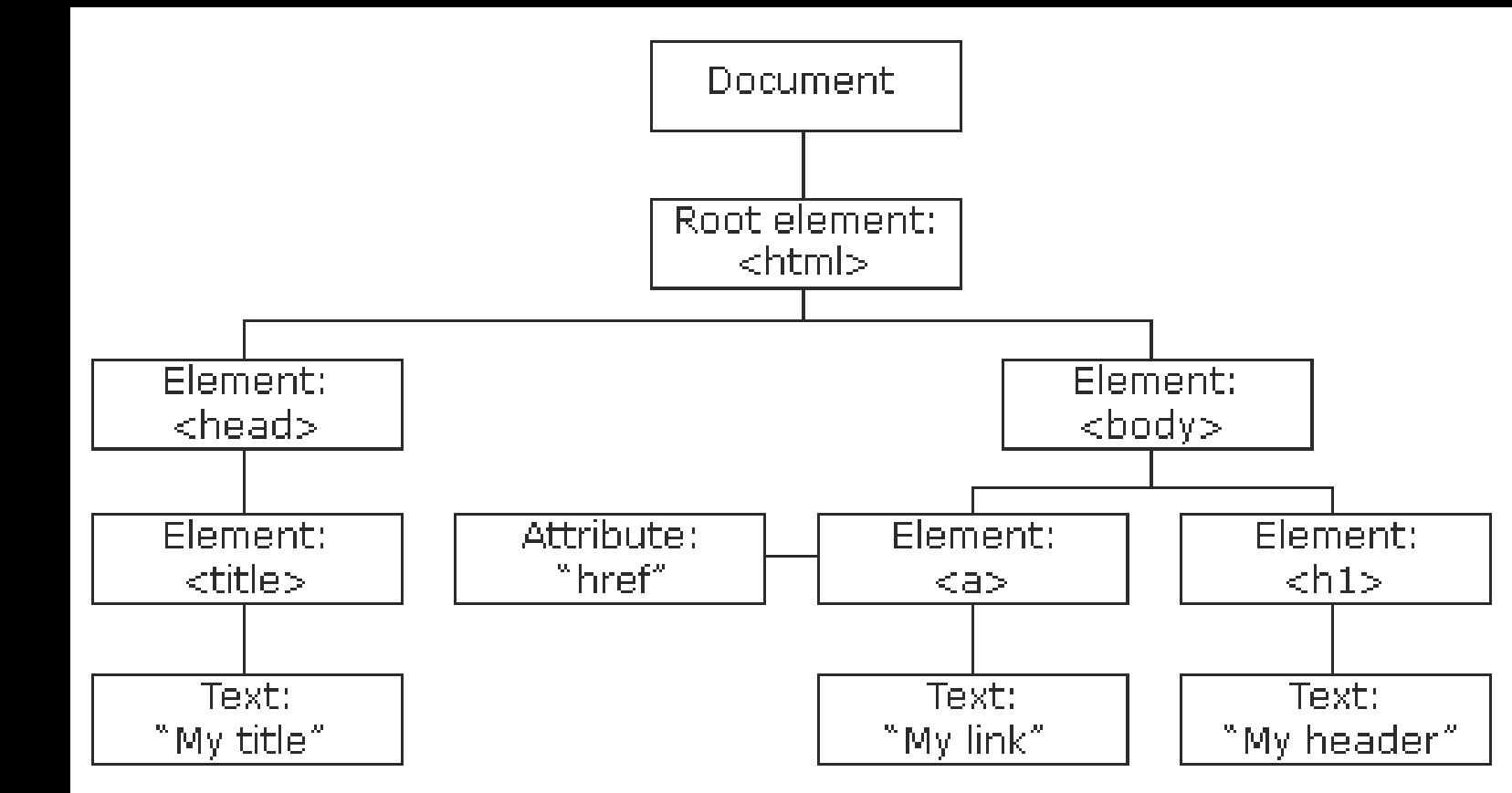
JAVASCRIPT FUNCTION

TRY TO FIGURE OUT WHAT THIS FUNCTION DOES

```
function changeText() {  
    let headerTitle = document.getElementById('hello');  
    headerTitle.textContent = 'Hello you ';  
}
```

DOCUMENT OBJECT MODEL

- DOM
- Representation of the objects within a web document (e.g. a html file)
- Root of Tree / Hierarchy



TRY TO LOOK AT YOUR INITIAL CODE AND IMAGINE WHAT DOM MIGHT LOOK LIKE IN OUR CASE

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INTRO TO OBJECT ORIENTED PROGRAMMING

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OBJECT ORIENTED PROGRAMMING

OOP

INTRO OR REFRESHER

Computer programming model that organises software design around data, or objects, rather than functions and logic

CLASS VS INSTANCE OF A CLASS

CLASS

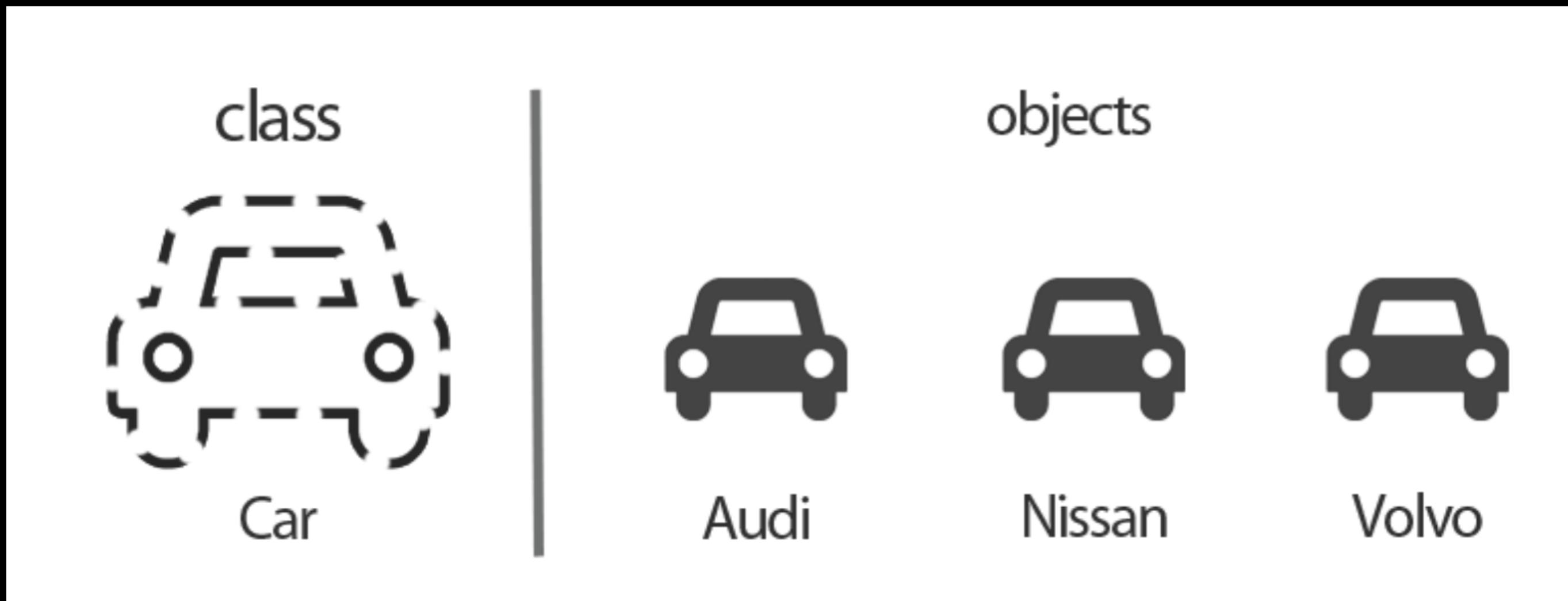
Template
or
Blueprint

INSTANCE OF A CLASS

Concrete 'Thing'
Made using class

TRY TO THINK OF AN EXAMPLE (TOPIC: CAR)

CLASS VS INSTANCE OF A CLASS



ATTRIBUTE VS METHOD

ATTRIBUTE

Function

Defined in Class

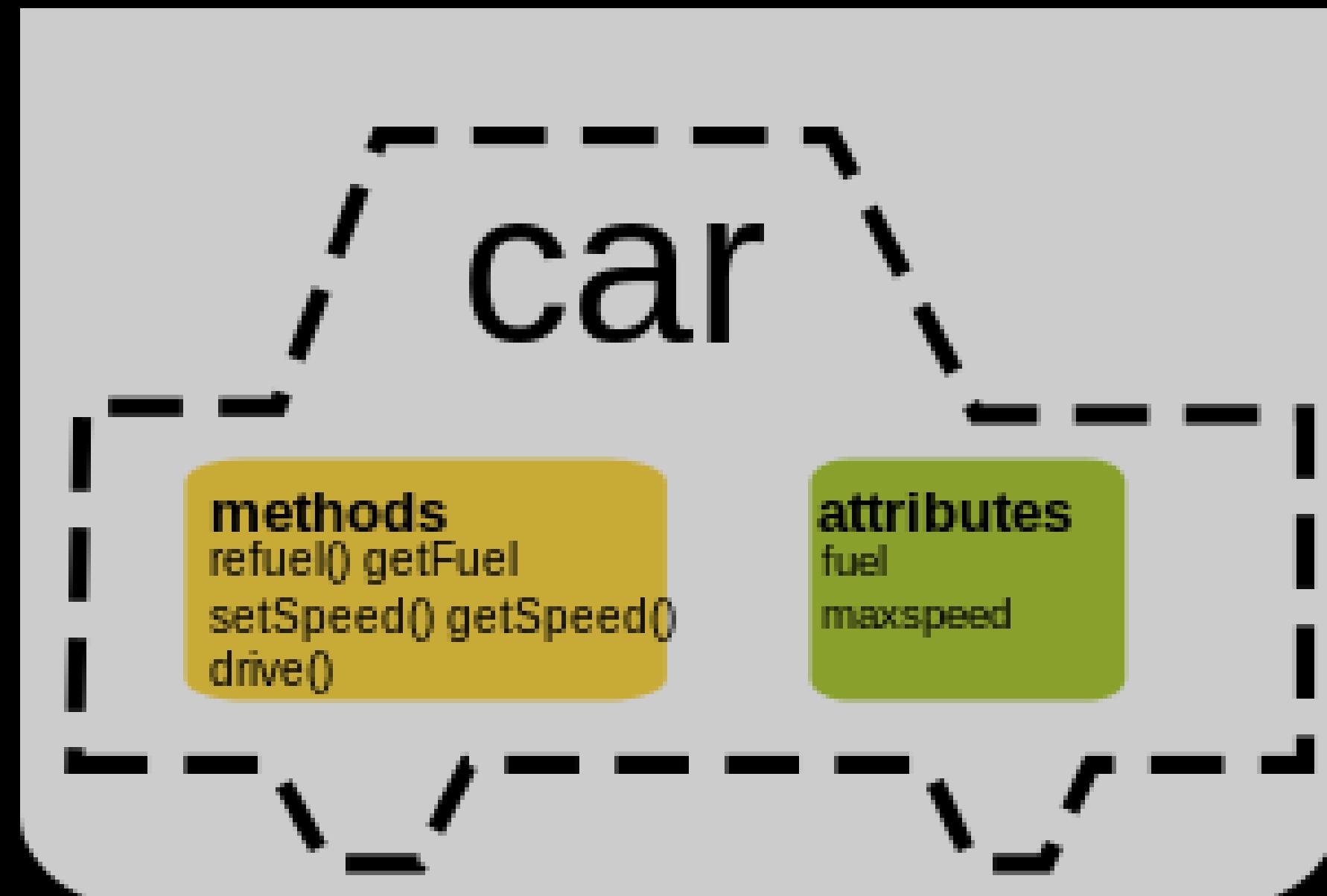
METHOD

Feature

Defined in Class

TRY TO THINK OF AN EXAMPLE (TOPIC: CAR)

ATTRIBUTE VS METHOD



PUTTING IT ALL TOGETHER EXAMPLE

```
class Pokemon {  
  
    name;  
    type;  
  
    constructor(name, type){  
        this.name = name;  
        this.type = type;  
    }  
  
    attack(){  
        attack_opponent;  
    }  
}
```

```
let Pikachu = new Pokemon(Pikachu,  
Electric);  
  
Pikachu.attack();
```

WHAT IS CLASS, INSTANCE OF CLASS, ATTRIBUTE & METHOD?

TIME FOR EXERCISES

1. GET FILES TO YOUR LOCAL MACHINE

A. LINK: [HTTPS://GITHUB.COM/INFPALS/IP2023-BIG-PROJECT-1-INITIAL-TEMPLATE](https://github.com/INFPALS/IP2023-BIG-PROJECT-1-INITIAL-TEMPLATE)

B. OPTIONS

I. FORK GITHUB REPO, CLONE IT TO YOUR LOCAL MACHINE

II. DOWNLOAD THE ZIP FILES

2. OPEN YOUR FILES IN CODE EDITOR OF YOUR CHOICE

A. VISUAL STUDIO CODE

B. SUBLIME TEXT

3. TRY TO CHANGE THE NAME WHICH IS DISPLAYED ON THE TAB
(CLICK ON YOUR HTML)

4. TRY TO ADD FAVICON OF YOUR CHOICE