# Programming Javascript for Web and Mobile

## Session 1

Pepe García jgarciah@faculty.ie.edu

# Grading system

| Criteria | Score % |
|---|---|
| Individual Work | 50 % |
| Workgroups | 35 % |
| Class Participation | 15 % |

# Syllabus

# SESSION 1 (FACE TO FACE)

## Course presentation.

In this session we will introduce the course, the syllabus, materials we're going to use, and grading system.

## Frontend development.

During this course we will learn how to create dynamic web applications using HTML, CSS, and Javascript. We will also learn some of the tools of the modern web developer, such as Yarn and Jest.

# SESSION 2 (NON-CLASS LEARNING)

## CSS

In this session we will learn about CSS. Students will go over a Codecademy session. They will also be able to test their CSS abilities with https://flukeout.github.io/

# SESSIONS 3 & 4 (FACE TO FACE)

Javascript for the web

# SESSION 5 (NON-CLASS LEARNING)

## Communication between frontend and backend

In order to make our frontend applications communicate with the backend we will make requests from Javascript. In this session we will learn about using the fetch() function in JS, promises, and sending and receiving JSON from the server.
The professor will record a video for this session for students to follow along.

# SESSION 6 (FACE TO FACE)

## Communication between frontend and backend

In this second session about the communication between frontend and backend we will go over what we learnt last session and also do a small exercise in class.

# SESSION 7 (NON-CLASS LEARNING)

## Individual assignment 1

In this session students will do an individual exercise on their own. There will be an open forum in campus for them to ask questions if they have any.

# SESSION 8 (FACE TO FACE)

## Box model

In this session we will learn about the box model in CSS. We will learn how to position things in a web page and how this box model makes elements interact with others.

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# SESSION 10 (FACE TO FACE)

## Frontend UI frameworks

In this session we will learn about Bootstrap one of the many frontend frameworks for creating interfaces. Using these kinds of frameworks can make prototyping our websties much faster, and will also help us grow the UI architecture of our site in an easier way.

# SESSION 11 (NON-CLASS LEARNING)

## Group assignment 1

In this session students will do an individual exercise on their own. There will be an open forum in campus for them to ask questions if they have any.

# SESSION 12 (FACE TO FACE)

## QA session

In this session we will do a whirlwind tour over what we have learned in the course and we will have time to answer questions students may have

# Github Classroom

Please join the GH classroom,

https://classroom.github.com/a/8iCf1YR4

# Code editors

So far we've used Spyder for code editing, but for this course we'll change to a better editor.

# Install VScode

Install Visual Studio code from https://code.visualstudio.com/

(You may already have it from when you installed anaconda)

# CSS

What is CSS
how to add CSS to a webpage
cascading, precendence

# CSS

CSS is a language to give style to webpages.

# CSS

```
p {
  color: 000;
  blackground: orange;
  padding: 15px;
}
```

`p` is the selector, and refers to which tags do these rules apply. In this case, we're applying it to **<p>** tags.

`color: 000;`, `blackground: orange;`, and `padding: 15px;` are CSS properties.

# Adding CSS to a webpage

There are several ways to add css to a webpage:

* using the **style=""** attribute
* using the **<style>** html tag
* loading the CSS from an external resource

# Adding CSS to a webpage

one can use the **style** attribute to add style to an HTML element directly

```
<p style="border:2px;">
this paragraph will have a two pixels border
</p>
```

# Adding CSS to a webpage

It's also possible to embed a piece of CSS inside an HTML `<style>` tag:

```
<style>
p {
  color: red;
}
</style>
```

# Adding CSS to a webpage

Finally, the most common way of adding CSS to a webpage, is using the `<link>` tag. We'll be able to create standalone CSS files and link them to our HTML with it.

```
<link rel="stylesheet" href="./styles/file.css">
```

We can pass any URL or path to the `href` attribute.

# Practice

Let's do exercise1 from

https://github.com/mcsbtp-web-programming-2021/session-1

# Homework

Do exercise2 of

https://github.com/mcsbtp-web-programming-2021/session-1

# Resources

Mozilla development network docs:
https://developer.mozilla.org/en-US/docs/Web/CSS

CSS Basic Properties:
http://web.simmons.edu/~grabiner/comm244/weekthree/css-basic-properties.html