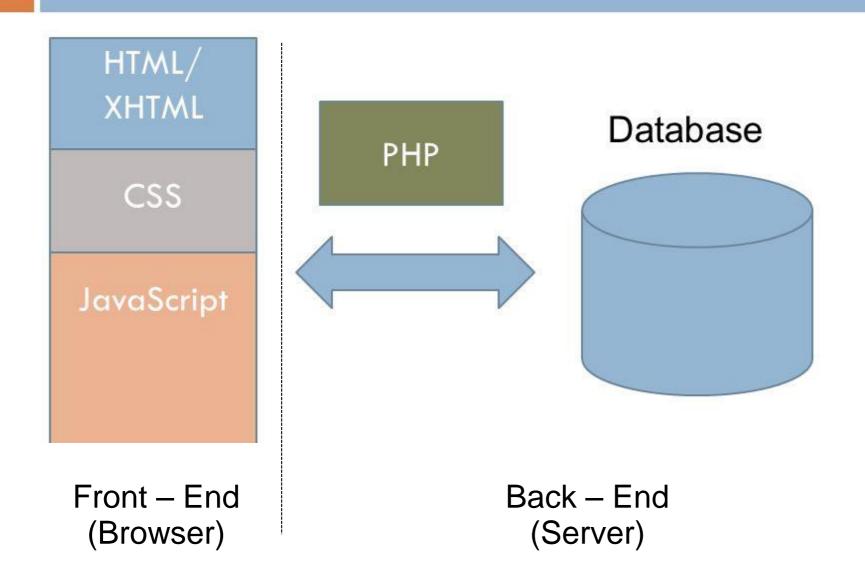
#### Front End Development

**DBW 2018** 

### Website basic structure



### Website front

- The front of a website is all the browser shows to us: colors, images, text, etc.
- To say the browser how to show that information, we have to write some code in HTML and CSS languages.
- Additionally, JS allows us to improve interaction with the HTML + CSS elements.

# Website front (HTML + CSS)

- HTML is the language for describing the structure of Web pages.
- CSS describes how HTML elements are to be displayed on screen.
- Page with css: <a href="http://mmb.irbbarcelona.org/webdev/bootstrap/">http://mmb.irbbarcelona.org/webdev/bootstrap/</a>
- Page without css: <a href="http://mmb.irbbarcelona.org/webdev/bootstrap/no-css.html">http://mmb.irbbarcelona.org/webdev/bootstrap/no-css.html</a>

# Website front (HTML + CSS)

• How it works?

The browser downloads the HTML and CSS files (and the rest of the media as images and fonts) from the server, interprets that info and show it to us as a web page.

## Most Common HTML Tags

```
<!DOCTYPE> Defines the document type
<html> Defines an HTML document
<head> Defines information about the document
<title>Defines a title for the document
<body>
<h1> to <h6> Defines HTML headings
 Defines a paragraph
<br/>
<br/>
Inserts a single line break
<i>or <em> Italic font
<br/>
<b> or <strong> Bold font
<l
<img> Image
<div> Layer
<!- text to comment --> Defines a comment
```

#### CSS Reference

.name\_of\_class Defines a class (used over more than one element)

#name\_of\_id Defines an id (used over a single element)

**body**, **html**, **table**, **tr**, **td**, etc Used over all the html items in the document

CSS units: %, px, em, cm, in, vh, vw, etc.

Syntax example:

```
.something {
    color: red;
    text-align: center;
}
```

# Simple Page Example

```
<!doctype html>
<html lang="en">
<head>
<meta charset="utf-8">
<title>Title of your webpage</title>
<meta name="description" content="Description of your webpage">
<meta name="author" content="Your Name">
<link rel="stylesheet" href="css/styles.css">
</head>
<body>
<div id="layer1">Hello world!</div>
<script src="js/scripts.js"></script>
</body>
</html>
```

https://www.sitepoint.com/a-basic-html5-template/

# What is Bootstrap?

- It is an HTML, CSS and JavaScript framework that you can use as basis for creating web sites or web applications.
- A framework provides a standard way to build and deploy applications. It's an universal, reusable software environment.

# Why Bootstrap?

- It's easy
- It's free
- It saves us a lot of work
- It's responsive
- http://getbootstrap.com/

### Bootstrap example

https://github.com/gbayarri/bootstrap

### Websites built with bootstrap

- https://mmb.irbbarcelona.org/MCDNA/
- https://vre.multiscalegenomics.eu

### Useful links

- http://www.cssbasics.com/
- http://www.w3schools.com/
- http://stackoverflow.com/
- http://getbootstrap.com/getting-started/#examples
- https://www.youtube.com/watch?v=RhcQXFeor9g
- https://jquery.com/
- https://www.google.com