Introduction to **B**ootstrap !

Framework Bootstrap

Framework: a set of structured and reusable components (libraries, classes, helpers, …) used to create the foundations and organize the code to gain productivity and maintenance.

Bootstrap is a Framework ! Its real name is Twitter Bootstrap. It combines external JS and CSS files for a more intuitive and responsive design.

Advantages

+ Framework « cross-browser »: presentation is similar regardless of the browser used and very compatible
+ Saves development time
+ Normalize the presentation
+ Grid for positioning elements
+ Integrated elements (buttons, navigation, …)
+ Taking into account the different types of screen

DISADVANTAGES

+ To use it effectively, you have to know it. A learning time is therefore necessary
+ The standardization of the presentation can be boring (always the same visual effects)

BUT Bootstrap can be used quickly, even for a beginner and is fully configurable with {sass}

Installation with CDN
(Content Delivery Network)

```
https://stackpath.bootstrapcdn.com/bootstrap/4.5.0/css/bootstrap.min.css
https://stackpath.bootstrapcdn.com/bootstrap/4.5.0/js/bootstrap.min.js
```

Advantages : fast loading, getting the latest version.

Disadvantages : depends on an external server (=> the day the server naps, the files are inaccessible).

GRID

Bootstrap integrates a system of columns which allows a more responsive approach.

Specific classes have been created, to allow in advance to adapt the rendering to the screen type of the user.

Smartphone	Tablet	Computer	HD screen
col-*	col-sm-*	col-md-*	col-xl-*

COLUMNS

.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1

.col-md-4	.col-md-4	.col-md-4

.col-md-8	.col-md-4

.col-md-2	.col-md-4	.col-md-4	.col-md-2

COLUMNS

Bootstrap integrates a system of 12 columns.
If the 12 are exceeded, automatically, the 13th will go to the line.

We must therefore pay attention to the classes allocated for the different screens.

Example :

```
<div class="row">
        <div class="col-12 col-sm-6 col-md-8"></div>
        <div class="col-12 col-sm-6 col-md-4"></div>
</div>
```

Some external resources ...

Official website

http://getbootstrap.com

Icons

http://bootstrapicons.com

Alert

https://www.w3schools.com/bootstrap/bootstrap_alerts.asp

Table

https://www.w3schools.com/bootstrap/bootstrap_tables.asp

Buttons

https://www.w3schools.com/bootstrap/bootstrap_buttons.asp

Glyficons

http://getbootstrap.com/components/

be
</code>