# BOOTSTRAP 4

#### **Fundamentals**

Curated by Vasilis Tzelepopoulos

### WHAT IS BOOTSTRAP 4

Bootstrap is a famous, open-source, front-end frameworks of the Web.

From its first version in 2011, a ton of changes and new features have been inserted.

Today is one of the most popular responsive frameworks for the front-end developer.

## CORE PRINCIPLES

12-Column Grid & Breakpoints

Helper Classes (Styling)

Components

Functionality (JavaScript)

### **PROS**

**Quick & Easy Development** 

We can build upon well-crafted, responsive and well-tested code

No need to switch to CSS

**Cross Browser** 

Common Language

**Excellent Documentation** 

**Huge Community** 

(StackOverflow to the rescue!)

#### Core Principles\*

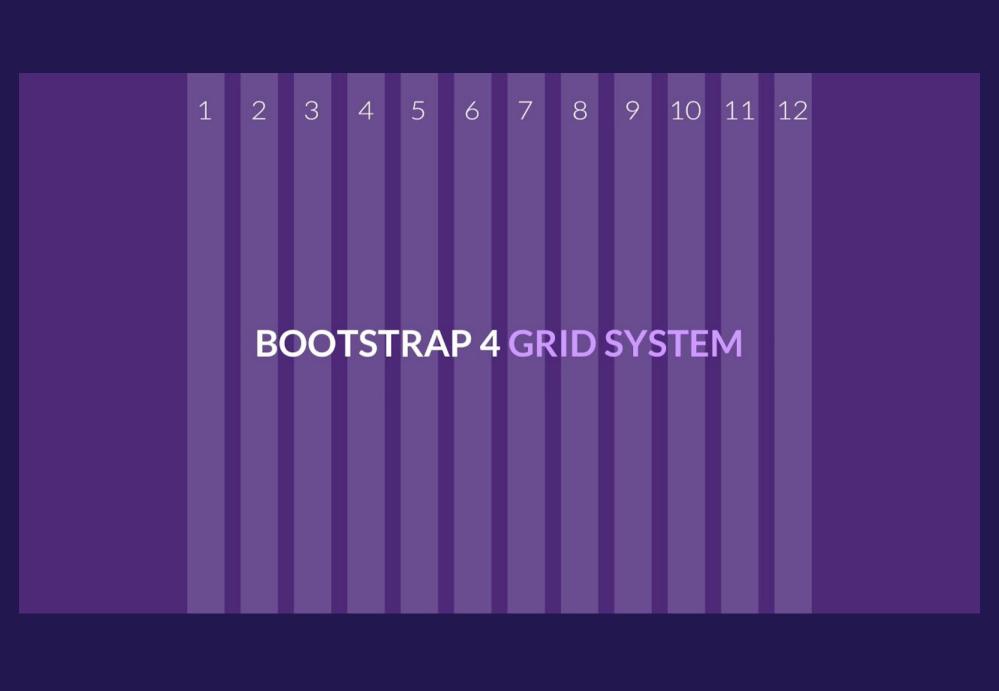
## MOBILE FIRST

"Mobile first, as the name suggests, means that we start the product design from the mobile end which has more restrictions, then expand its features to create a tablet or desktop version."

Reference

Core Principles\*

GRID LAYOUT



This is a single column.

This is the first column.

This is the first column.

This is the second column.

This is the second column.

This is the third column.

This is the fourth column.



#### Core Principles\*

## RESPONSIVE BREAKPOINTS

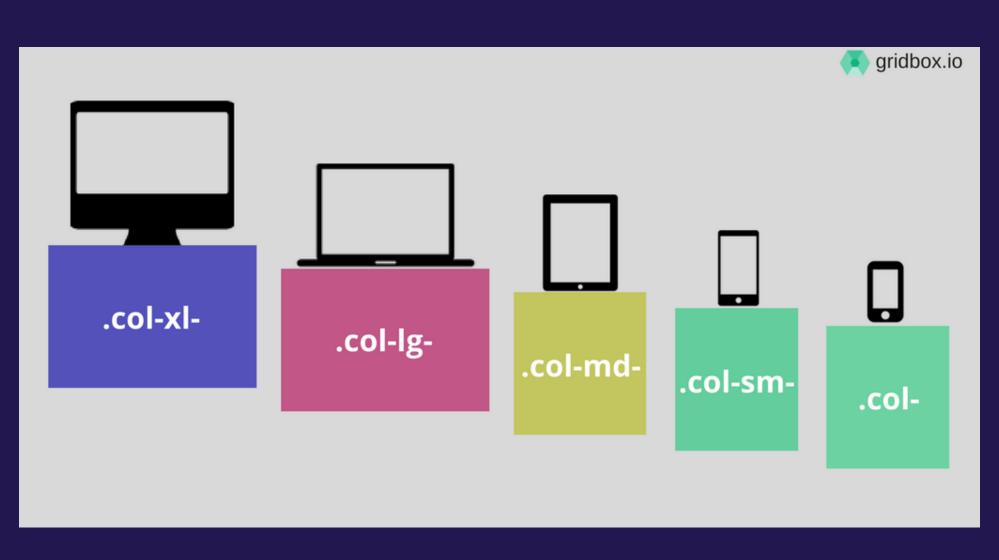
Small devices (landscape phones, 576px+ and up): .col-sm-\*

Medium devices (tablets, 768px and up): .col-md-\*

Large devices (desktops, 992px and up): .col-lg-\*

Extra large devices (large desktops, 1200px and up): .col-xl-\*

Reference



## ONE RULE:



## LET'S PRACTICE!

Visit

https://bit.ly/2noQufs

and follow the instructions

### **ENOUGH TALK. LET'S CODE!**

1) VSCode > File > New Window > New file > Type! and press Tab

2) Include Bootstrap 4 (CDN)

https://getbootstrap.com > Get Started

3) Open File with Live Server > Ctrl + L, Ctrl + O

Cmd + L, Cmd + O for Mac

4) Open Browser Console F12

### CLASS DEMO FOR EXERCISE

Starter theme: The Math World

https://bit.ly/2mE9nuC

### RESOURCES

- Official Bootstrap Site
- Get Started
- Bootstrap 4 at W3Schools.com
- Learn Bootstrap 4 at scrimba.com Highly Recommended
- Learn the Bootstrap 4 Grid System in 10 Minutes
- How to Bootstrap 4
- Bootstrap 4: Everything You Need to Know
- Built with Bootstrap

#### ONE TWEET FOR THE ROAD



"If you give someone a program, you will frustrate them for a day; if you teach them how to program, you will frustrate them for a lifetime."

**David Leinweber** 

#### THANK YOU FOR YOUR ATTENTION



Twitter: @vatzelos

Email: vatzelos@yahoo.gr