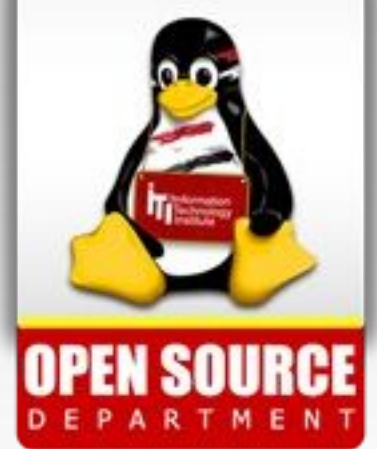# CSS Frameworks
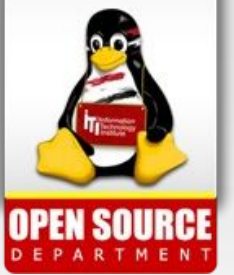
CSS for ALL
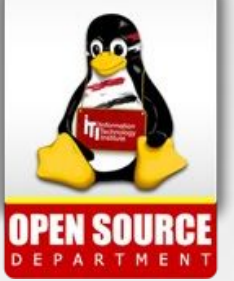
Agenda
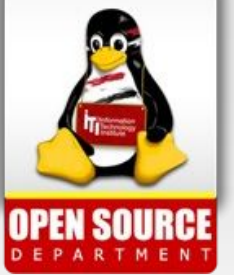
What is bootstrap?

Why bootstrap ?

Getting Started

Bootstrap grid-system

Bootstrap typography

Bootstrap images

Bootstrap buttons

What is Bootstrap

What is Bootstrap?

➢ Bootstrap is a powerful framework for faster and easier web front-end development.

➢ It is a free collection of tools for creating websites and web applications.

➢ It contains HTML and CSS-based design templates for typography, forms, buttons, navigation and other interface components, as well as optional JavaScript extensions.

➢ In August 2011, Twitter released Bootstrap as open source. In June 2014 it was the No.1 project on **GitHub** with over 73,000 stars.

➢ Bootstrap was developed by **Mark Otto** and **Jacob Thornton** at Twitter as a framework to encourage consistency across internal tools.
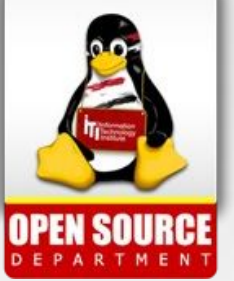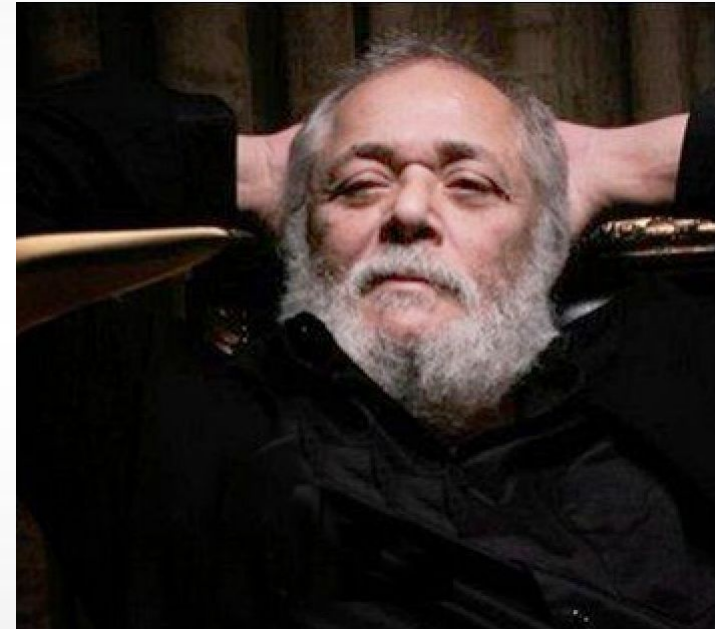
Why Bootstrap?

Why Bootstrap?

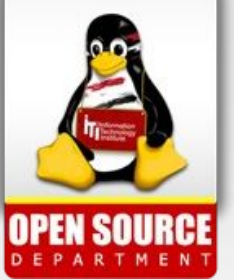
➢ **Save lots of time**

➢ **Responsive features**

➢ **Consistent design**

➢ **Easy to to use**
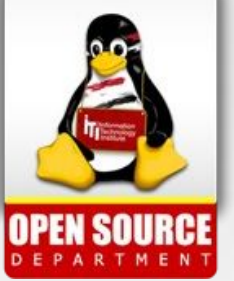
➢ **Compatible with browsers**

And the best part is

it is Open Source :)
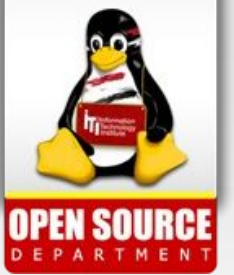
Why Bootstrap?

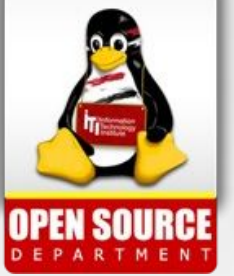**websites using Bootstrap**

Getting Started

Getting Started

➢ Include the css minified version of bootstrap in head

➢ Include the js minified version of jquery and bootstrap.js at the end of body

```html
<!DOCTYPE html>
<html>
<head lang="en">
    <meta charset="UTF-8">
    <title>Bootstrap Start</title>
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <link rel="stylesheet" type="text/css" href="../../css/bootstrap.min.css">
</head>
<body>
    Hello BootStrap!
    <script src="http://code.jquery.com/jquery.min.js"></script>
    <script src="../../js/bootstrap.min.js"></script>
</body>
</html>
```
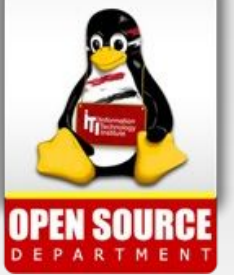
Bootstrap Grid-System

Bootstrap Grid-System
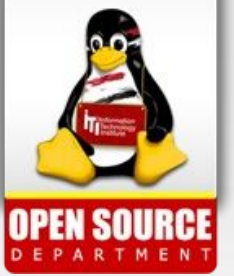
➢ **Grid systems** are used for creating page layouts through a series of rows and columns that house your content.

➢ Rows must be placed within a .container (fixed-width) or .container- fluid (full-width) for proper alignment and padding. **more**

➢ Use rows to create horizontal groups of columns.

➢ Content should be placed within columns, and only columns may be immediate children of rows.

➢ Predefined grid classes like .row and .col-xs-4 are available for quickly making grid layouts.

➢ Columns create gutters (gaps between column content) via padding.
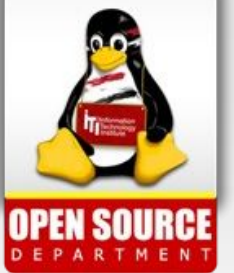
Bootstrap Grid-System

➢ Grid columns are created by specifying the number of **twelve** available columns you wish to span. For example, three equal columns would use three .col-xs-4.

➢ If more than **12 columns** are placed within a single row, each group of extra columns will, as one unit, wrap onto a new line.
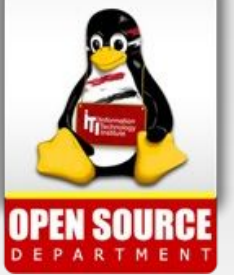
Bootstrap Grid-System
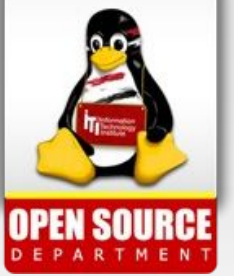
Bootstrap Grid-System

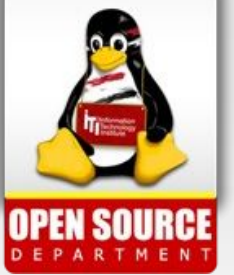|	**xs** <576px	**sm** ≥576px	**md** ≥768px	**lg** ≥992px	**xl** ≥120(
Container max-width	None (auto)	540px	720px	960px	1140(
Class prefix	.col-	.col-sm-	.col-md-	.col-lg-	.col-xl-
# of columns	12				
Gutter width	1.5rem (.75rem on left and right)				
Custom gutters	Yes				
Nestable	Yes				

Bootstrap Grid-System

Stacked-to-horizontal

.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-8	.col-md-4

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

.col-md-6	.col-md-6

Bootstrap Grid-System

Mobile and Desktop

.col-xs-12 .col-md-8		.col-xs-6 .col-md-4

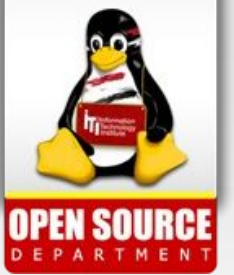| .col-xs-6 .col-md-4	.col-xs-6 .col-md-4	.col-xs-6 .col-md-4

.col-xs-6	.col-xs-6

Bootstrap Grid-System

Mobile, Tablets and Desktop

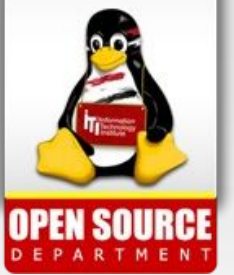| .col-xs-12 .col-sm-6 .col-md-8	.col-xs-6 .col-md-4

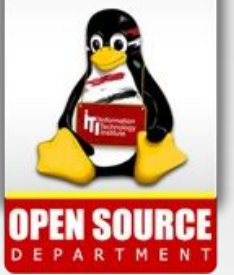| .col-xs-6 .col-sm-4	.col-xs-6 .col-sm-4	.col-xs-6 .col-sm-4

Bootstrap Grid-System

Column wrapping

.col-xs-9

.col-xs-4
Since 9 + 4 = 13 > 12, this
4-column-wide div gets wrapped onto a
new line as one contiguous unit.

.col-xs-6
Subsequent columns continue along the new line.

Bootstrap Grid-System
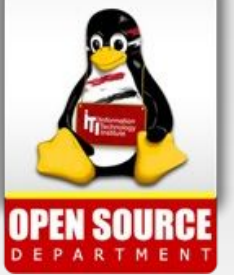
Responsive Column Reset

.col-xs-6 .col-sm-3 Resize your viewport or check it out on your phone for an example.	.col-xs-6 .col-sm-3	.col-xs-6 .col-sm-3	.col-xs-6 .col-sm-3

Bootstrap Grid-System

Nesting Columns

Level 1: .col-sm-9

Level 2: .col-xs-8 .col-sm-6

Level 2: .col-xs-4 .col-sm-6

Bootstrap Grid-System

Offsetting columns

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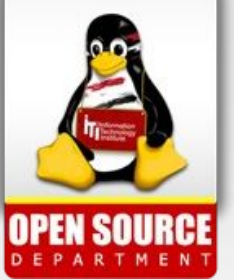
.col-md-4 .col-md-offset-4

.col-md-3 .col-md-offset-3

.col-md-3 .col-md-offset-3

.col-md-6 .col-md-offset-3

Bootstrap Typography

Bootstrap Typography

Headings

All HTML headings, <h1> through <h6>, are available. .h1 through .h6 classes are also available, for when you want to match the font styling of a heading but still want your text to be displayed inline.

EXAMPLE

h1. Bootstrap heading   Semibold 36px

h2. Bootstrap heading   Semibold 30px

h3. Bootstrap heading   Semibold 24px

h4. Bootstrap heading   Semibold 18px
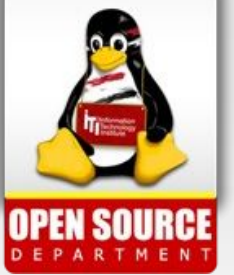
h5. Bootstrap heading   Semibold 14px

h6. Bootstrap heading   Semibold 12px
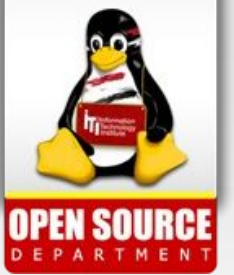
Bootstrap Typography

Classes

➢ .lead class

➢ Alignment (text-[left,right,center,justify,nowrap])

➢ Transformation (text-[lowercase,uppercase,capitalize]]
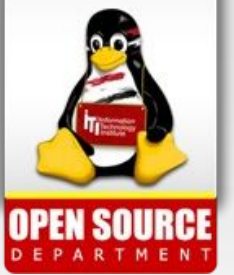
Bootstrap Typography

Lists

- ➤ Ordered and unordered lists
- ➤ list-[unstyled,list-inline]
- ➤ dl, dd and dt tags with dl-horizontal class (Note: auto-truncating)
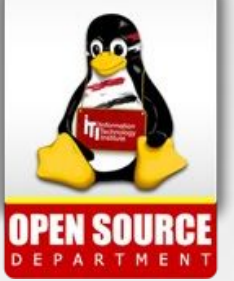
Bootstrap Typography

Code

- ➢ \<code> tag

- ➢ \<kbd> tag

- ➢ \<pre> tag

- ➢ \<var> tag

- ➢ \<samp> tag

Bootstrap Images

Bootstrap Images

➢ **Responsive images:**

Images in Bootstrap 5 can be made responsive-friendly via the addition of the **.img-responsive** class.
This applies max-width: 100%; and height: auto; to the image so that it scales nicely to the parent element.

➢ **Image shapes:**

img-[rounded,circle,thumbnail] class

EXAMPLE

140x140   140x140   140x140