

Journey → DOM Manipulation
→ "

- ① Event Handle
- ② How to attach an event
to a tag (Node / Element)
.on(' ', '')

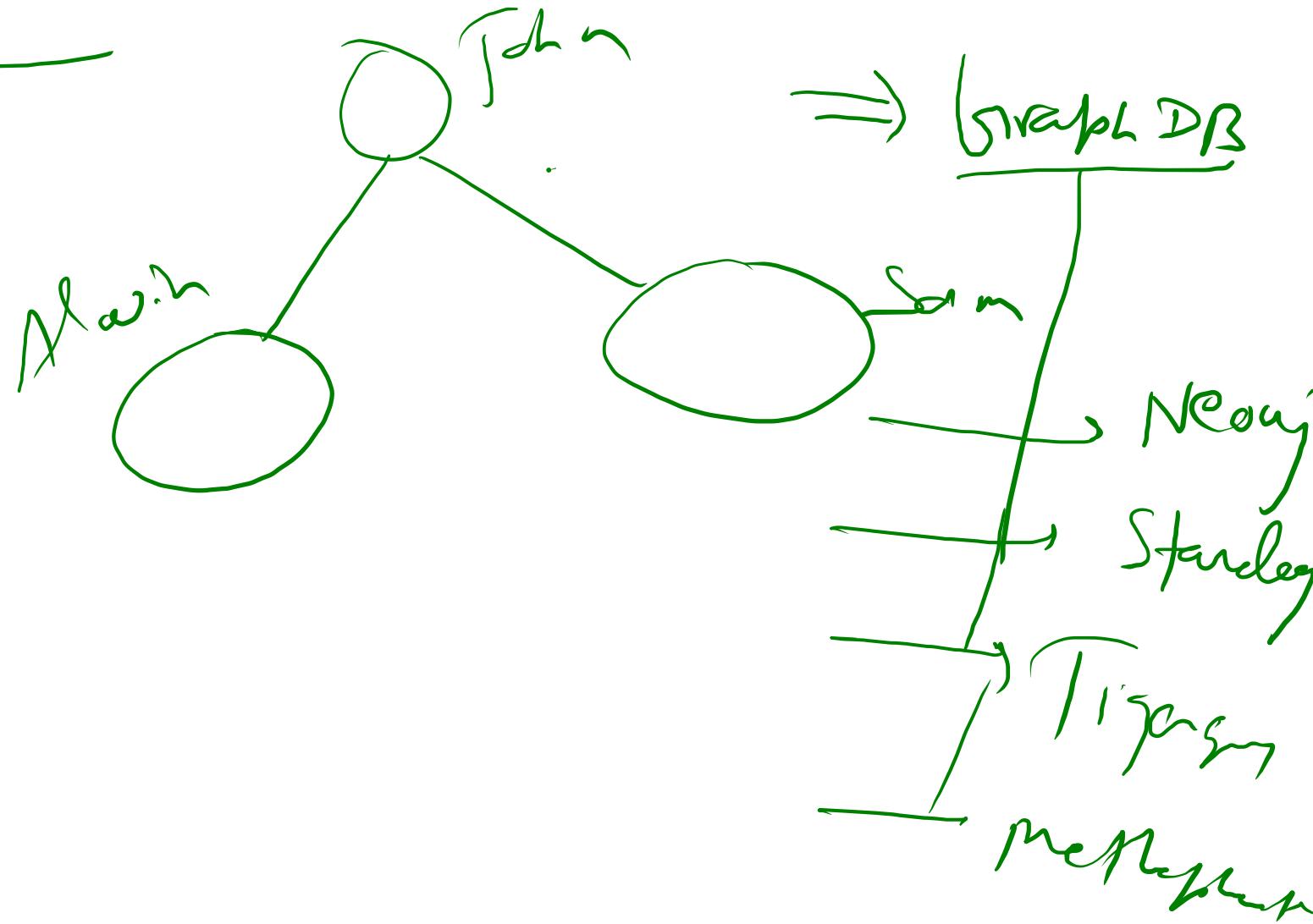
Ajax

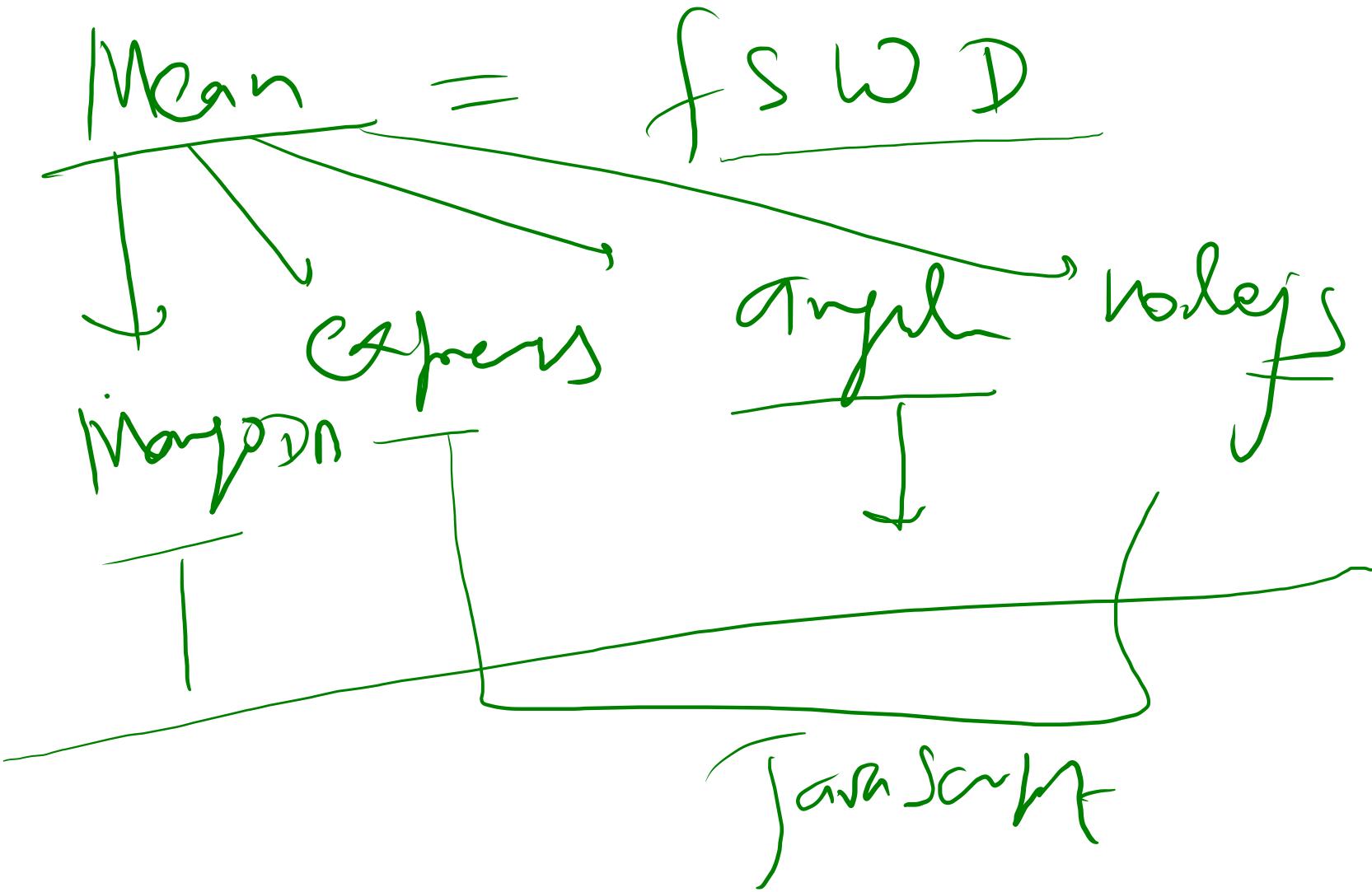
```
$ . ajax ( {  
    URL: _____  
    type: _____  
    success: function( --- ) { - }  
    error: function( --- ) { - }  
});
```

Success: function(---) { - } ← Service
Error: function(---) { - } ← Service

a. txt
b. json
c. html

Bootstrap





B

Bootstrap : Overview

- What is Bootstrap?

- Quickly design and customize responsive mobile-first sites with Bootstrap, the world's most popular front-end open source toolkit, featuring Sass variables and mixins, responsive grid system, extensive prebuilt components, and powerful JavaScript plugins

- In simple terms:

- Bootstrap is a giant collection of handy, reusable bits of code written in HTML, CSS, and JavaScript.
- It's also a front-end development framework that enables developers & designers to quickly build fully responsive websites
- Bootstrap is completely free to use in personal and commercial projects
- Bootstrap saves you from writing lots of CSS code



Bootstrap : Why Learn?

- **Is it worth using Bootstrap:**

- Has a set of components, utilities and features which allows us to build applications quickly ✓
- Simple and Easy to learn ✓
- Powers a lot of world's top websites ✓
- Plays well with any framework of your choice, custom code, Angular or React etc
- Bootstrap saves you from writing lots of CSS code



Bootstrap : Version History

- First version released: 2011 @ Twitter
- Total number of releases: 20+ releases
 - Includes 2 major re-writes (v2 and v3)
- Current stable version : V4
- Next major release : V5
 - Currently in Alpha
 - As of date : Aug 2020

Angularjs (1)

Angular (2)

}

Angular (11)



Bootstrap : What's new in V5? (v4)

- Major re-write of the entire framework
- Brand new look and feel
- Brand new logo
- New Typography ✓
- No jQuery Required anymore
- New CSS custom properties ↗
- Dropping support for Internet Explore ↗





Bootstrap : What's new in V5? - Contd

- New Themes Colors ✓
- Enhanced Grid
 - Multiple changes including addition of xxl
- Offcanvas ✓
- Bootstrap 5 has its own Icon system ←
- RTLCSS is being rolled out soon
- More changes are expected soon



Bootstrap : Basic Terminology

- What is a Responsive Design?

- Responsive Web design is the approach that suggests that design and development should respond to the user's behavior and environment based on screen size, platform and orientation.
- The practice consists of a mix of flexible grids and layouts, images and an intelligent use of CSS media queries.

- What is a Box Model?

- In CSS, the term "box model" is used when talking about design and layout. The CSS box model is essentially a box that wraps around every HTML element. It consists of: margins, borders, padding, and the actual content



Bootstrap : Container Layout

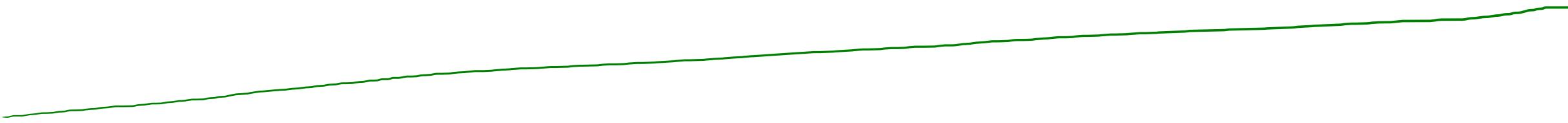
- **Bootstrap Container Layout**
 - Containers are the most basic layout element in Bootstrap
 - Containers are used to pad the content inside of them
 - There are two container classes available:
 - The **.container** class provides a responsive fixed width container
 - The **.container-fluid** class provides a full width container, spanning the entire width of the viewport

```
<div class="Container">
```

```
</div>
```

$\langle \hat{d}_v \rangle$ (Lam = "Gauß-Summe")

$\langle \hat{r} \hat{d}_v \rangle$



```
notes.txt •
```

```
notes.txt
3
4      - There 2 types of containers
5          - <div class="container"></div> // fixed width
6          - <div class="container-fluid"></div> // 100% of the width of the screen :
7
8      - Why use fixed layouts at all?    I
9          - |
10         - Desktop/ Screen
11             - Fixed width
12             - there are use cases where you might want to have a fixed width - fluid?
13             - login screen
14                 - username/password
15                     - 100%
16                     - fixed width and adapt to screen resolutions
17             - static website
18                 - Real estate company
19                 - Restaurant
20                 - Small Medium scale website
21
22         - Fluid design
23             - always about percentage design
24                 - 40% sidebar
25                 - 60% main content
26             - always occupy 100% width of the device screen
```

Ln 9, Col 11 Spaces: 4 UTF-8 CRLF Plain Text ⌂ ⌂



Bootstrap : Grid Classes

- **Bootstrap Grid features**
 - Bootstrap's grid system allows up to 12 columns across the page
 - Rows
 - Columns
 - Supports various screen resolutions like xs, sm, md, lg, xl

- Bootstrap Grid
 - Design layout, templates of the websites
 - Bootstrap grid allows upto 12 columns in a row
 - Grid - it consists of Row and columns
 - in one row we can have upto max 12 columns using bootstrap
 - Divide the row into columns to achieve your layout design
 - Bootstrap Grid supports various screen resolutions/sizes

- xs - extra small
- sm - mobile/ipad
- md - ipad/desktop
- lg
- xl - extra large

col|

abc **columns**
abc **columnsn**



Bootstrap : Grid Classes

- **Bootstrap Grid Classes**

- The Bootstrap 5 grid system has five classes:
 - **.col** – auto column value
 - **.col-xs-** (extra small devices - screen width less than 576px)
 - **.col-sm-** (small devices - screen width equal to or greater than 576px)
 - **.col-md-** (medium devices - screen width equal to or greater than 768px)
 - **.col-lg-** (large devices - screen width equal to or greater than 992px)
 - **.col-xl-** (xlarge devices - screen width equal to or greater than 1200px)
 - **.col-xxl-** (xxlarge devices - screen width equal to or greater than 1400px)



Bootstrap : Designing Layouts

- Let's start designing the layouts using Bootstrap Containers and Grids

- Implementing Simple Container
- Implementing Container with Header and Footer with Column
- Implementing Container with Header, Footer and 2 Columns Layout
- Implementing Container with Header, Footer and 3 columns Layout

File Edit Selection View Go Debug Terminal Help index.html - bootstrap5 - Visual Studio Code [Administrator]

EXPLORER

OPEN EDITO... 1 UNSAVED

- notes.txt
- index.html

BOOTSTRAPS

- index.html
- notes.txt

index.html

```
12  </head>
13  <body>
14
15      <div class="container-fluid">
16          <div class="header">
17              Header section of website
18          </div>
19          <div class="content">
20              <div class="row">
21                  <div class="col-3 sidebar">
22                      Left sidebar
23                  </div>
24                  <div class="col-9 main-content">
25                      Main Content
26                  </div>
27              </div>
28          </div>
29          <div class="footer">
30              Header section of website
31          </div>
32      </div>
33  </body>
```

The screenshot shows a dark-themed instance of Visual Studio Code. The top menu bar includes File, Edit, Selection, View, Go, Debug, Terminal, and Help. The title bar indicates the file is 'styles.css - bootstrap5 - Visual Studio Code [Administrator]'. The Explorer sidebar on the left lists files: 'notes.txt', 'index.html', and 'styles.css' under 'OPEN EDITOR... 2 UNSAVED' and 'BOOTSTRAPS'. The 'BOOTSTRAPS' folder also contains 'index.html', 'notes.txt', and 'styles.css'. The main editor area displays the following CSS code:

```
# styles.css > ↗ .main-content
1 body{
2     background-color: #ddd;
3 }
4 .header {
5     height:40px;
6 }
7 .content {
8     min-height:500px;
9 }
10 .main-content {
11     background-color: #fff;
12     min-height:500px;
13     border:1px solid
14 }
15 .footer {
16     height:40px;
17 }
```

The screenshot shows the Visual Studio Code interface with a dark theme. The Explorer sidebar on the left lists files: 'notes.txt' (marked as modified), 'index.html' (selected), and '# styles.css'. A 'BOOTSTRAPS' folder contains 'index.html', 'notes.txt', and '# styles.css'. The 'index.html' file is open in the main editor, showing the following code:

```
16 <div class="container-fluid">
17   <div class="header bg-success">
18     Header section of website
19   </div>
20   <div class="content">
21     <div class="row">
22       <div class="col-3 sidebar">
23         Left sidebar
24       </div>
25       <div class="col-6 main-content">
26         Main Content
27       </div>
28       <div class="col-3 sidebar">
29         Right Content
30       </div>
31     </div>
32   </div>
33   <div class="footer bg-warning">
34     Footer section of website
35   </div>
36 </div>
37
38 <!-- Optional JavaScript -->
```

The screenshot shows the Visual Studio Code interface with the following details:

- File Menu:** File, Edit, Selection, View, Go, Debug, Terminal, Help.
- Editor Bar:** layout.html - bootstrap5 - Visual Studio Code [Administrator].
- Explorer:** Shows the file tree with the following structure:
 - OPEN EDITORS: notes.txt (●), index.html, layout.html (selected).
 - BOOTSTRAPS: index.html, layout.html (selected).
 - notes.txt
 - # styles.css
- Editor:** The layout.html file is open in the main editor area. The code uses Bootstrap 5's grid system to create two columns of cards. The first column has three cards, and the second column has two cards. Each card includes a title, some text, and a primary button.

```
<div class="container-fluid">
  <div class="row">
    <div class="col-md-3 pb-4">
      <p class="card-text">Some quick example text to build on the card title and make this card wider than the others.</p>
      <a href="#" class="btn btn-primary">Go somewhere</a>
    </div>
  </div>
<div class="col-md-3">
  <div class="card" style="width: 18rem;">
    <div class="card-body">
      <h5 class="card-title">Card title</h5>
      <p class="card-text">Some quick example text to build on the card title and make this card wider than the others.</p>
      <a href="#" class="btn btn-primary">Go somewhere</a>
    </div>
  </div>
  <div class="card" style="width: 18rem;">
    <div class="card-body">
      <h5 class="card-title">Card title</h5>
      <p class="card-text">Some quick example text to build on the card title and make this card wider than the others.</p>
      <a href="#" class="btn btn-primary">Go somewhere</a>
    </div>
  </div>
</div>
```
- Terminal:** Not visible in the screenshot.

The screenshot shows a web browser window with three tabs at the top: "Grid system · Bootstrap v5.0", "Cards · Bootstrap v5.0", and "Hello, world!". The active tab is "Cards · Bootstrap v5.0". Below the tabs, the file path "C:/you/bootstrap5/layout.html" is displayed. The main content area contains a 2x3 grid of cards. Each card has a title, some descriptive text, and a blue button labeled "Go somewhere".

Card title	Card title	Card title
Some quick example text to build on the card title and make up the bulk of the card's content.	Some quick example text to build on the card title and make up the bulk of the card's content.	Some quick example text to build on the card title and make up the bulk of the card's content.
Go somewhere	Go somewhere	Go somewhere

Card title	Card title	Card title
Some quick example text to build on the card title and make up the bulk of the card's content.	Some quick example text to build on the card title and make up the bulk of the card's content.	Some quick example text to build on the card title and make up the bulk of the card's content.
Go somewhere	Go somewhere	Go somewhere



Example #1 – IBM's 2 column layout

The screenshot shows the IBM Cloud VPC Infrastructure interface. On the left is a dark sidebar with various navigation options. The main area is titled "Inspect connections". It displays a table of network rules. The table has columns for Name, Type, Source/Destination, Protocol, Value, Inbound, and Outbound. Three rules are listed:

Name	Type	Source/Destination	Protocol	Value	Inbound	Outbound
samplerule1	ACL	96.120.64.0/24	TCP	Ports 8-19	Blocked	Allowed
samplerule2	Security group	96.120.64.0/24	ICMP	Type: 8, Code: 10	Allowed	Allowed
samplerule3	Security group	All	All	All	Blocked	Blocked

The screenshot shows the Visual Studio Code interface with the following details:

- File Bar:** File, Edit, Selection, View, Go, Debug, Terminal, Help.
- Title Bar:** ibm-example.html - bootstrap5 - Visual Studio Code [Administrator].
- Explorer Panel:** Shows the project structure with two unsaved files: notes.txt, index.html, layout.html, Untitled-1, ibm-example.html, and ibm-styles.css. It also lists a folder named BOOTSTRAPS containing ibm-example.html, ibm-styles.css, index.html, layout.html, notes.txt, and styles.css.
- Code Editor:** The main area displays the content of the ibm-example.html file. The code includes HTML structure like <div> elements with classes "container-fluid", "row", and "col-3", and an element with class "list-group". It also includes a <link> tag for a stylesheet. The code is numbered from 10 to 33.

```
10<title>Hello, world!</title>
11</head>
12<body>
13<div class="container-fluid">
14<div class="row"> <!-- ./row -->
15<div class="col-3">
16<ul class="list-group">
17<li class="list-group-item">Dapibus ac facilisis in
18<li class="list-group-item list-group-item-dark">A simple pri
19<li class="list-group-item list-group-item-dark">A simple sec
20<li class="list-group-item list-group-item-dark">A simple suc
21<li class="list-group-item list-group-item-dark">A simple dan
22<li class="list-group-item list-group-item-dark">A simple war
23<li class="list-group-item list-group-item-dark">A simple info
24<li class="list-group-item list-group-item-light">A simple lig
25<li class="list-group-item list-group-item-dark">A simple dar
26</ul>
27</div> <!-- ./col-3 -->
28<div class="col-9">
29</div> <!-- ./col-9 -->
```

File Edit Selection View Go Debug Terminal Help • ibm-example.html - bootstrap5 - Visual Studio Code [Administrator]

EXPLORER OPEN EDITORS 2 UNSAVED

- notes.txt
- index.html
- layout.html
- Untitled-1
- ibm-example.html
- # ibm-styles.css

BOOTSTRAPS

- ibm-example.html
- # ibm-styles.css
- index.html
- layout.html
- notes.txt
- # styles.css

OUTLINE

index.html layout.html Untitled-1 ibm-example.html # ibm-styles.css

ibm-example.html

```
<ul>
  <li class="list-group-item list-group-item-dark">A simple secondary item</li>
  <li class="list-group-item list-group-item-dark">A simple success item</li>
  <li class="list-group-item list-group-item-dark">A simple danger item</li>
  <li class="list-group-item list-group-item-dark">A simple warning item</li>
  <li class="list-group-item list-group-item-dark">A simple info item</li>
  <li class="list-group-item list-group-item-dark">A simple light item</li>
  <li class="list-group-item list-group-item-dark">A simple dark item</li>
</ul>

</div> <!-- ./col-3 -->
<div class="col-1 main-content p-4">
  <h2>Inspections</h2>

  <table class="table">
    <thead>
      <tr>
        <th scope="col">#</th>
        <th scope="col">First</th>
        <th scope="col">Last</th>
        <th scope="col">Handle</th>
      </tr>
    </thead>
    <tbody>
      <tr>
```

Ln 72, Col 30 Spaces: 4 UTF-8 CRLF HTML ⚙

A screenshot of the Visual Studio Code (VS Code) interface. The window title is "ibm-styles.css - bootstrap5 - Visual Studio Code [Administrator]". The menu bar includes File, Edit, Selection, View, Go, Debug, Terminal, and Help. The top right corner shows standard window controls (minimize, maximize, close). The left sidebar is the Explorer view, titled "OPEN EDITORS 2 UNSAVED". It lists several files: notes.txt, index.html, layout.html, Untitled-1, ibm-example.html, # ibm-styles.css (marked with a red '1'), and two entries under "BOOTSTRAPS": ibm-example.html and # ibm-styles.css (also marked with a red '1'). The main editor area displays the contents of the "ibm-styles.css" file. The code is as follows:

```
# ibm-styles.css > .list-group-item
1 .sidebar {
2     background-color: #343a40;
3     max-height:600px;
4     overflow-y: scroll;
5 }
6 .list-group-item {
7     background-color: transparent;
8     color: #fff;
9     border-bottom: 1px solid #343a40;
10 }
```



Example #2 – Cosmos Grid layout

The screenshot displays the 'cosmos' Marketplace interface. On the left, a vertical sidebar features icons for Home, Marketplace (selected), My Apps, Leads Center, and Business Profile. The main area is titled 'MARKETPLACE' and is divided into two sections: 'ONLINE PRESENCE' and 'CUSTOMERS ENGAGEMENT'. The 'ONLINE PRESENCE' section contains six cards: 'Website Builder' (Powered by WebiPlanet), 'Online Store' (Powered by Ecwid), 'Domains' (Powered by Tucows), 'SSL Certificates' (Powered by Openprovider), 'Business Email' (Powered by Hostpapa), and 'SEO Tool' (Powered by MarketGoo). The 'CUSTOMERS ENGAGEMENT' section contains three cards: 'Appointment Scheduling' (Powered by Agendize), 'Email Marketing' (Powered by CalEmail), and 'Live Chat App' (Powered by Agendize). A large teal circular button with a white plus sign is located in the bottom right corner of the 'CUSTOMERS ENGAGEMENT' section.

ONLINE PRESENCE	
Website Builder Powered by WebiPlanet Build your own stunning website with our Do-It-Yourself site builder. Starting at \$5.00 / monthly	Online Store Powered by Ecwid Online Store is an e-commerce platform that allows you to easily create your own store and start... Starting at \$15.00 / monthly
Domains Powered by Tucows Our vast selection of domain names includes generic, specialty and country-code extensions, as we... Starting at \$13.00 / yearly	
SSL Certificates Powered by Openprovider Domain Validated (DV) Certificates. Robust 256-bit Encryption. Starting at \$15.00 / yearly	Business Email Powered by Hostpapa Choose from our business-class email packages built with your needs in mind, and look professional... Starting at \$6.00 / monthly
	SEO Tool Powered by MarketGoo Improve your website traffic and SEO with this smart marketing app. Starting from Free

CUSTOMERS ENGAGEMENT	
Appointment Scheduling Powered by Agendize Online Booking is a feature that allows the user to book a time slot for a service, directly from... Starting at \$19.90 / monthly	Email Marketing Powered by CalEmail Send professional-looking email campaigns in minutes and track their results. Starting at \$8.95 / monthly
	Live Chat App Powered by Agendize Engage with your site visitors using a live chat application on your website. Starting at \$16.00 / monthly

File Edit Selection View Go Debug Terminal Help cosmos-example.html - bootstrap5 - Visual Studio Code [Administrator]

EXPLORER

OPEN EDITORS 1 UNSAVED

- notes.txt
- index.html
- layout.html
- Untitled-1
- ibm-example.html
- Untitled-2
- cosmos-example.html
- # ibm-styles.css

BOOTSTRAPS

- cosmos-example.html
- ibm-example.html
- # ibm-styles.css
- index.html
- layout.html
- notes.txt
- # styles.css

OUTLINE

```
15 <div class="container-fluid">
16     <!-- navbar -->
17 
18 </div>
19 
20 <div class="container-fluid">
21     <div class="row">
22         <div class="sidebar col-md-2">
23             |
24         </div>
25         <div class="main-content col-md-2">
26             |
27         </div>
28     </div>
29 
30 </div>
31 
32 
33 
34     <!-- Optional JavaScript -->
35     <!-- Popper.js first, then Bootstrap JS -->
36     <script src="https://cdn.jsdelivr.net/npm/popper.js@1.16.0/dist/umd/popper.min.js" integrity="sha384-9eIprotoHl4z分明" crossorigin="anonymous"></script>
37     <script src="https://stackpath.bootstrapcdn.com/bootstrap/5.0.0-alpha1/js/bootstrap.min.js" integrity="sha384-5BSR7CQVZKJj45Qg0cKXn0+u0ZuPfBZP/7d3HrS26QmTt1Z2qWZLMIyj9w==" crossorigin="anonymous"></script>
38 </body>
```

Ln 23, Col 17 Spaces: 4 UTF-8 CRLF HTML ⚡ ⚡

color-hex.com/color/cbe0ff

color-hex color hex, name, rgb, hsl or i Get Info Blog Latest Palettes Palettes Colors Login

#cbe0ff Color Hex

#CBE0FF
(203, 224, 255)

★ 1 Favorites ■ 0 Comments

RGB 203 224 255
HSL 0.60 1.00 0.90
HSV 216° 20° 100°
CMYK 0.20 0.12 0.00 0.00
XYZ 69.3343 73.2278 105.0878
Yxy 73.2278 0.2800 0.2957
Hunter Lab 85.5732 -5.1265 -12.9095
CIE-Lab 88.5562 -0.5760 -17.3794

#cbe0ff Color Shades Tints Rgb Cmyk % Color Schemes Color Preview CSS Codes Color Palettes Related Colors

Facebook Twitter

#cbe0ff color RGB value is (203,224,255).

Base Numbers

Base	Red	Green	Blue
------	-----	-------	------

A screenshot of the Visual Studio Code interface. The top menu bar includes File, Edit, Selection, View, Go, Debug, Terminal, and Help. The title bar shows "cosmos-example.html - bootstrap5 - Visual Studio Code [Administrator]". The Explorer sidebar on the left lists files: notes.txt, index.html, layout.html, Untitled-1, ibm-example.html, Untitled-2, cosmos-example.html (selected), ibm-styles.css, and a folder named BOOTSTRAPS containing cosmos-example.html, ibm-example.html, ibm-styles.css, index.html, layout.html, notes.txt, and styles.css. The main editor pane displays the code for "cosmos-example.html". The code includes CSS for a sidebar and HTML for a navbar.

```
13     <style>
14         body {
15             background-color: #ecf3ff;
16         }
17         .sidebar {
18             background-color: #fff;
19             min-height: 600px;
20             border-right: 1px solid #ddd;
21         }
22     </style>
23
24 </head>
25 <body>
26
27     <div class="container-fluid">
28         <!-- navbar -->
29         <nav class="navbar navbar-expand-lg navbar-dark bg-dark">
30             <div class="container-fluid">
31                 <button class="navbar-toggler" type="button" data-toggle="collapse"
32                     <span class="navbar-toggler-icon"></span>
33                 </button>
34                 <div class="collapse navbar-collapse" id="navbarTogglerDemo01">
35                     <a class="navbar-brand" href="#">Hidden brand</a>
36                     <ul class="navbar-nav mr-auto mb-2 mb-lg-0">
```

File Edit Selection View Go Debug Terminal Help cosmos-example.html - bootstrap5 - Visual Studio Code [Administrator]

EXPLORER

OPEN EDITORS 1 UNSAVED

- notes.txt
- index.html
- layout.html
- Untitled-1
- ibm-example.html
- Untitled-2
- cosmos-example.html**
- # ibm-styles.css

BOOTSTRAPS

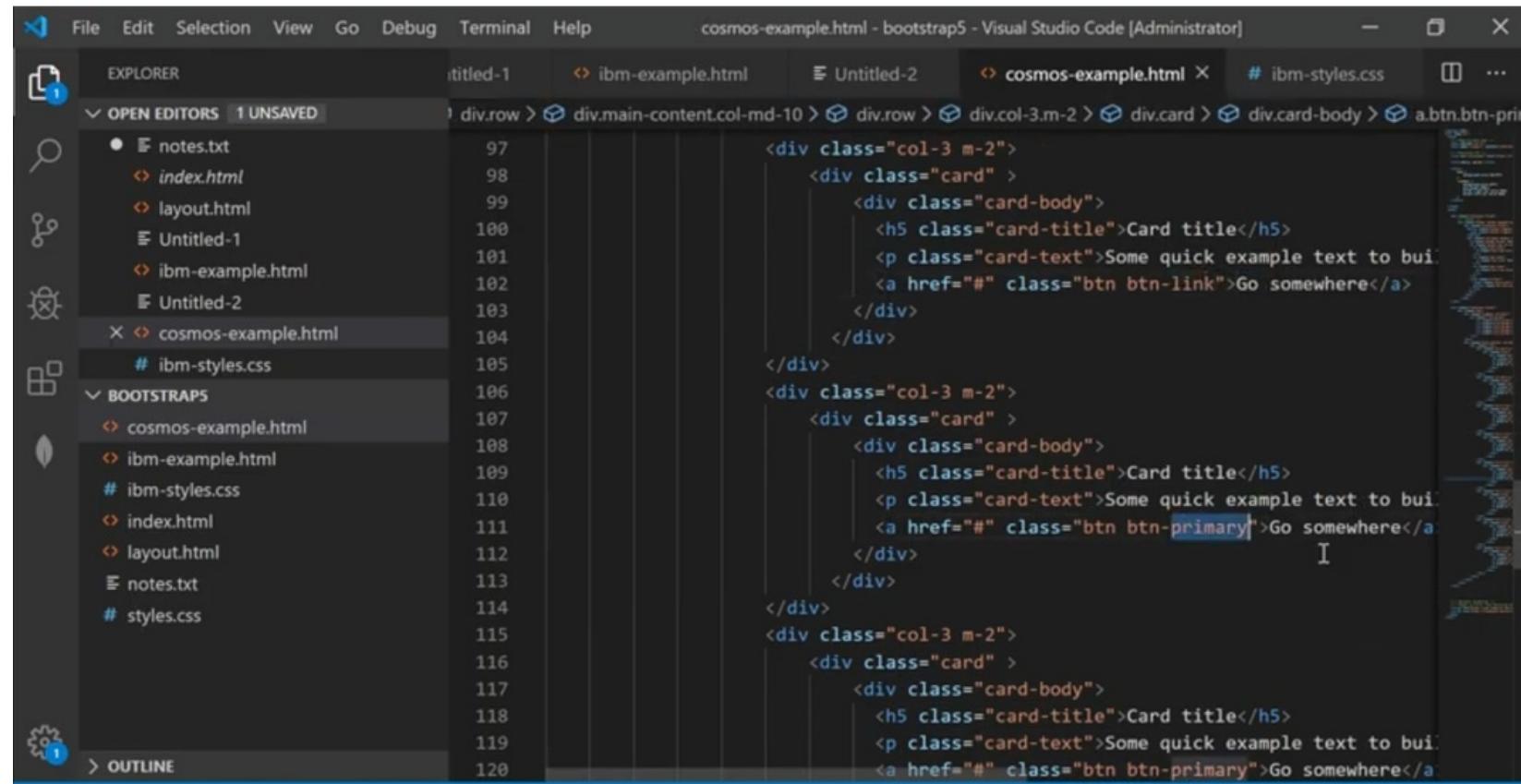
- cosmos-example.html
- ibm-example.html
- # ibm-styles.css
- index.html
- layout.html
- notes.txt
- # styles.css

OUTLINE

```
div.container-fluid > div.row > div.main-content.col-md-10 > div.row > div.col-xs-12.col-sm-6.col-md-4.col-lg-3.p-2
56   <div class="container-fluid">
57     <div class="row">
58       <div class="sidebar col-md-2">
59         <ul class="list-group">
60           <li class="list-group-item">Home</li>
61           <li class="list-group-item">Dashboard</li>
62           <li class="list-group-item">Events</li>
63           <li class="list-group-item">Users</li>
64           <li class="list-group-item">Settings</li>
65         </ul>
66       </div>
67       <div class="main-content col-md-10">
68         <div class="row">
69           <div class="col-xs-12 col-sm-6 col-md-4 col-lg-3 p-2">
70             <div class="card" style="width: 18rem;">
71               
72               <div class="card-body">
73                 <h5 class="card-title">Card title</h5>
74                 <p class="card-text">Some quick example text to build upon this card, and modify it to fit your needs.</p>
75                 <a href="#" class="btn btn-primary">Go somewhere</a>
76               </div>
77             </div>
78           </div>
79         </div>
    
```

A screenshot of a web browser displaying a page titled "C:/you/bootstrap5/cosmos-example.html". The page features a dark header bar with the text "Hidden brand" and navigation links for "Home", "Link", and "Disabled". A search bar is also present in the header. The main content area contains a grid of cards. On the left side, there is a vertical sidebar with links: "Home", "Dashboard", "Events", "Users", and "Settings". The grid consists of 9 cards arranged in three rows and three columns. Each card has a title, some descriptive text, and a blue "Go somewhere" button.

Card title	Card title	Card title
Some quick example text to build on the card title and make up the bulk of the card's content. Go somewhere	Some quick example text to build on the card title and make up the bulk of the card's content. Go somewhere	Some quick example text to build on the card title and make up the bulk of the card's content. Go somewhere
Card title Some quick example text to build on the card title and make up the bulk of the card's content. Go somewhere	Card title Some quick example text to build on the card title and make up the bulk of the card's content. Go somewhere	Card title Some quick example text to build on the card title and make up the bulk of the card's content. Go somewhere
Card title Some quick example text to	Card title Some quick example text to	





Example #3 – Apple.com Footer

Apple > Mac > MacBook Pro > Buy MacBook Pro

Shop and Learn	Apple Store	For Education	For Healthcare	Account
Mac	Find a Store	Apple and Education	Apple in Healthcare	Manage Your Apple ID
iPad	Shop Online	Shop for College	Health on Apple Watch	Apple Store Account
iPhone	Genius Bar		Health Records on iPhone	iCloud.com
Apple Watch	Today at Apple	For Business	Apple Values	About Apple
TV	Youth Programs	Apple and Business	Accessibility	Newsroom
Music	Apple Store App	Shop for Business	Education	Apple Leadership
iTunes	Refurbished and Clearance	Government	Environment	Job Opportunities
HomePod	Financing	Shop for Government	Inclusion and Diversity	Investors
iPod touch	Apple Trade In	Shop for Veterans & Military	Privacy	Events
Apple Card	Order Status		Supplier Responsibility	Contact Apple
Accessories	Shopping Help			
Gift Cards				

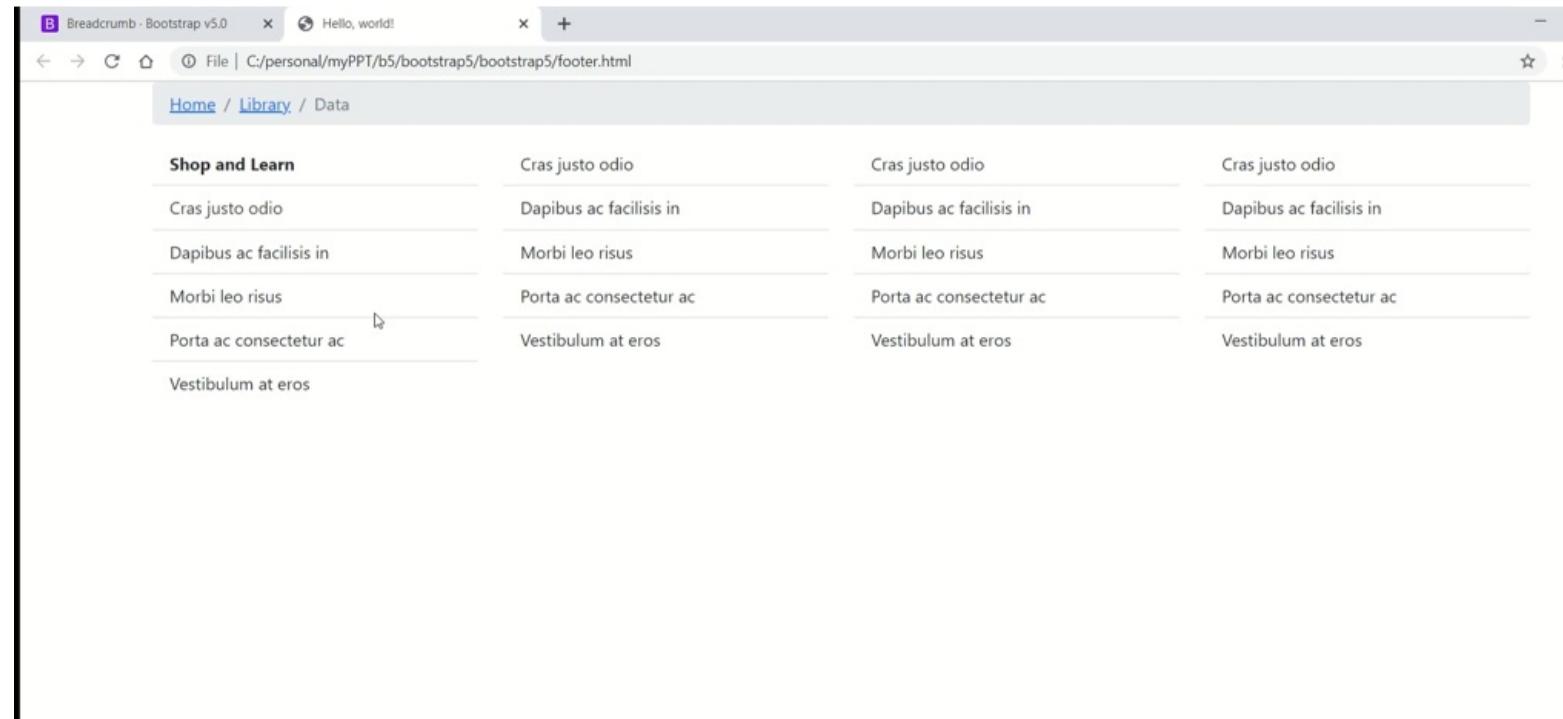
The screenshot shows the Visual Studio Code interface with the following details:

- File Bar:** File, Edit, Selection, View, Go, Run, Terminal, Help
- Title Bar:** footer.html - bootstrap5 - Visual Studio Code
- Explorer:** Shows files in the current workspace, including `ibm-styles.css`, `ibm-example.html`, and `footer.html`.
- Editor:** The main area displays the HTML code for `footer.html`. The code is structured as follows:

```
<title>Hello, world!</title>
</head>
<body>

    <div class="container">
        <div class="row">
            <div class="col-3">
                <ul class="list-group list-group-flush">
                    <li class="list-group-item"><a href="#">Cras justo odio</a></li>
                    <li class="list-group-item">Dapibus ac facilisis in</li>
                    <li class="list-group-item">Morbi leo risus</li>
                    <li class="list-group-item">Porta ac consectetur ac</li>
                    <li class="list-group-item">Vestibulum at eros</li>
                </ul>
            </div>
            <div class="col-3">
                <ul class="list-group list-group-flush">
                    <li class="list-group-item">Cras justo odio</li>
                    <li class="list-group-item">Dapibus ac facilisis in</li>
                    <li class="list-group-item">Morbi leo risus</li>
                    <li class="list-group-item">Porta ac consectetur ac</li>
                    <li class="list-group-item">Vestibulum at eros</li>
                </ul>
            </div>
            <div class="col-3">
                <ul class="list-group list-group-flush">
                    <li class="list-group-item">Cras justo odio</li>
                    <li class="list-group-item">Dapibus ac facilisis in</li>
                    <li class="list-group-item">Morbi leo risus</li>
                    <li class="list-group-item">Porta ac consectetur ac</li>
                    <li class="list-group-item">Vestibulum at eros</li>
                </ul>
            </div>
        </div>
    </div>
```

The code uses Bootstrap's grid system with three columns (`col-3`) containing nested lists (`list-group`) with the `list-group-flush` class. Each column contains five list items (`li`) with various Bootstrap classes like `list-group-item` and `list-group-flush`.



```
21 <div class="container">
22   <nav aria-label="breadcrumb">
23     <ol class="breadcrumb">
24       <li class="breadcrumb-item"><a href="#">Home</a></li>
25       <li class="breadcrumb-item"><a href="#">Library</a></li>
26       <li class="breadcrumb-item active" aria-current="page">Data</li>
27     </ol>
28   </nav>
29   <div class="row">
30     <div class="col-3">
31       <ul class="list-group list-group-flush">
32         <li class="list-group-item"><b>Dapibus ac facilisis in</b></li>
33         <li class="list-group-item"><a href="#">Cras justo odio</a></li>
34         <li class="list-group-item">Dapibus ac facilisis in</li>
35         <li class="list-group-item">Morbi leo risus</li>
36         <li class="list-group-item">Porta ac consectetur ac</li>
37         <li class="list-group-item">Vestibulum at eros</li>
38       </ul>
39     </div>
40     <div class="col-3">
41       <ul class="list-group list-group-flush">
42         <li class="list-group-item">Cras justo odio</li>
43         <li class="list-group-item">Dapibus ac facilisis in</li>
44         <li class="list-group-item">Morbi leo risus</li>
45         <li class="list-group-item">Porta ac consectetur ac</li>
46         <li class="list-group-item">Vestibulum at eros</li>
47       </ul>
48     </div>
49     <div class="col-3">
50       <ul class="list-group list-group-flush">
```



Bootstrap : Navbar

- **Bootstrap Navbar classes**

- An outer wrapper - **navbar**
- For branding – **navbar-brand**
- For Menu Items – **navbar-item**
- For Links – **navbar-link**
- For theming – **navbar-light**
- For responsiveness – **navbar-expand-lg**
- For toggle navbar Menu - **navbar-toggler**
- For static position – **fixed-top**, **fixed-bottom**, **sticky-top**

The screenshot shows the Visual Studio Code interface with the following details:

- File Bar:** File, Edit, Selection, View, Go, Run, Terminal, Help.
- Title Bar:** navbar.html - bootstrap5 - Visual Studio Code.
- Explorer View (Left):** Shows the project structure with files like ibm-styles.css, ibm-example.html, index.html, footer.html, js-example.html, navbar.html, layout.html, notes.txt, and styles.css.
- Editor View (Center):** Displays the HTML code for a Bootstrap 5 navigation bar. The code includes a container-fluid div, a navbar with classes navbar-expand-lg, navbar-dark, and bg-warning, a brand link, a-toggler button, a collapse menu with items, and a dropdown menu with various options.
- Bottom Status Bar:** Shows the line numbers from 13 to 43.

```
<body>
  <div class="container-fluid">
    <nav class="navbar navbar-expand-lg navbar-dark bg-warning">
      <a class="navbar-brand" href="#">Navbar</a>
      <button class="navbar-toggler" type="button" data-toggle="collapse" data-target="#navbarSupportedContent">
        <span class="navbar-toggler-icon"></span>
      </button>
      <div class="collapse navbar-collapse" id="navbarSupportedContent">
        <ul class="navbar-nav mr-auto mb-2 mb-lg-0">
          <li class="nav-item">
            <a class="nav-link active" aria-current="page" href="#">Home</a>
          </li>
          <li class="nav-item">
            <a class="nav-link" href="#">Link</a>
          </li>
          <li class="nav-item dropdown">
            <a class="nav-link dropdown-toggle" href="#" id="navbarDropdown" role="button" data-toggle="dropdown" data-target="#navbarDropdown">
              Action
            </a>
            <ul class="dropdown-menu" aria-labelledby="navbarDropdown">
              <li><a class="dropdown-item" href="#">Action</a></li>
              <li><a class="dropdown-item" href="#">Another action</a></li>
              <li><hr class="dropdown-divider"></li>
              <li><a class="dropdown-item" href="#">Something else here</a></li>
            </ul>
          </li>
          <li class="nav-item">
            <a class="nav-link disabled" href="#" tabindex="-1" aria-disabled="true">Disabled</a>
          </li>
        </ul>
      </div>
    </nav>
  </div>
```



Bootstrap : Card

- **Bootstrap Card Classes**

- card
- card-body
- card-title
- card-subtitle
- card-text
- card-link

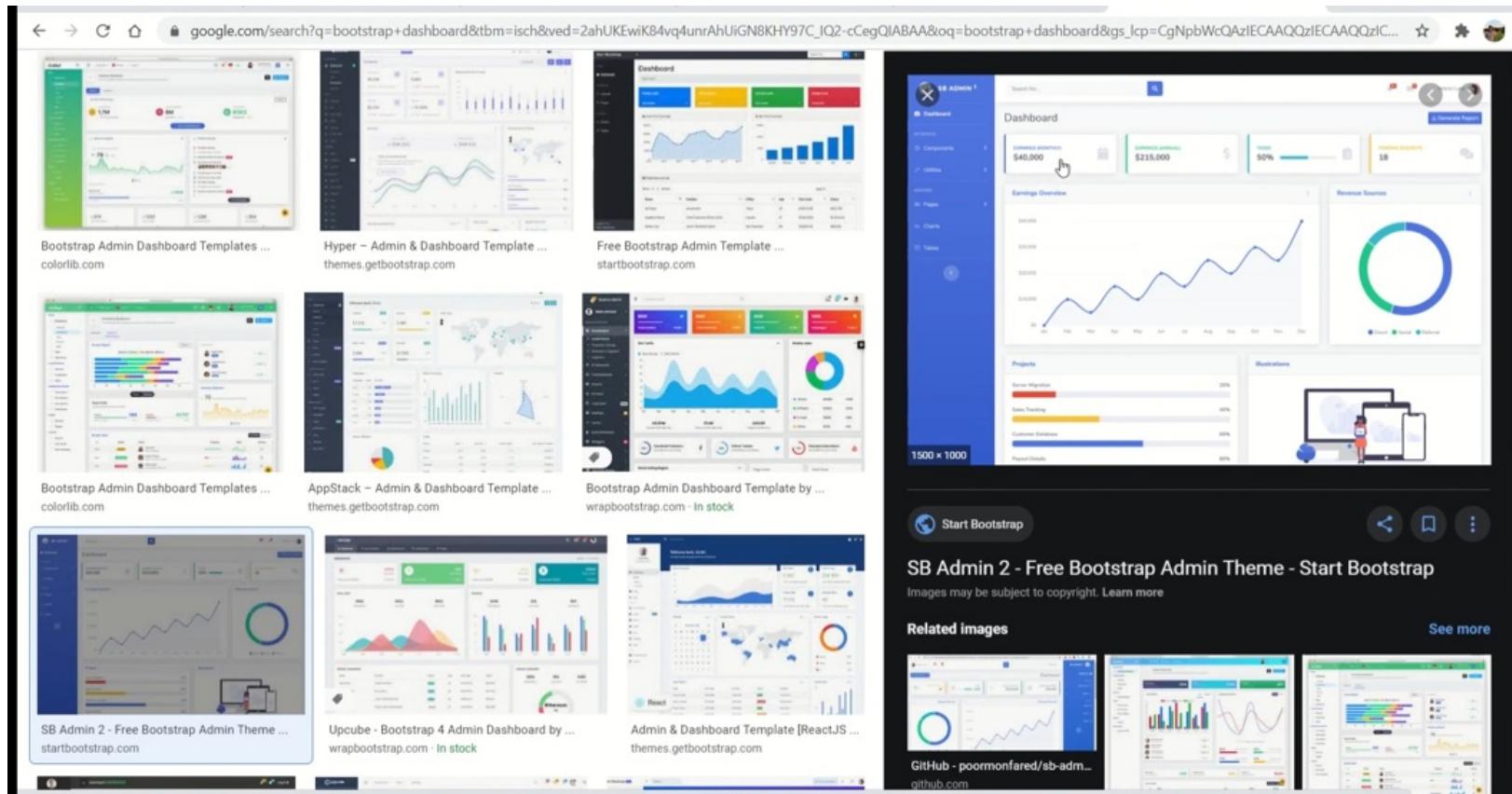
```
<head>
    <!-- Required meta tags -->
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">

    <!-- Bootstrap CSS -->
    <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/5.0.0-alpha1/css/bootstrap.min.css" integrity="sha384-5SF+wzD7KgGZ9Kw/R1Qfsz8uLq6xwZl+qLW3nXN1QFmE8e8XZCw0vZcVJiO" crossorigin="anonymous">

    <title>Hello, world!</title>
</head>
<body>

    <div class="container-fluid">
        <div class="card" style="width: 18rem;">
            
            <div class="card-body">
                <h5 class="card-title">Card title</h5>
                <p class="card-text">Some quick example text to build on the card title and make up the bulk of the card's content.</p>
                <a href="#" class="btn btn-primary">Go somewhere</a>
            </div>
        </div>
    </div>

    <!-- Optional JavaScript -->
    <!-- Popper.js first, then Bootstrap JS -->
    <script src="https://cdn.jsdelivr.net/npm/popper.js@1.16.0/dist/umd/popper.min.js" integrity="sha384-9eNzUCrdPRGewZC7E5K3UJyU4IuH+4JkQ1hJt4o64cT7WxOoJd0Q/ZoX+qDC+oD" crossorigin="anonymous">
    <script src="https://stackpath.bootstrapcdn.com/bootstrap/5.0.0-alpha1/js/bootstrap.min.js" integrity="sha384-jZJLEWjlycuDQ3C5L/KdkE07uOLXqEM1r3HptYKrkr27+D937Uq0mM/40J3" crossorigin="anonymous">
</body>
</html>
```





Bootstrap 5 : Lists

- **Bootstrap List classes**

- <ul class="list-group">
- <li class="list-group-item">Cras justo odio
- <li class="list-group-item">Dapibus ac facilisis in
- <li class="list-group-item">Morbi leo risus
- <li class="list-group-item">Porta ac consectetur ac
- <li class="list-group-item">Vestibulum at eros
-

- **Active**

- **Disabled**

```
<div class="col-4">
<ul class="list-group">
    <li class="list-group-item">Cras justo odio</li>
    <li class="list-group-item">Dapibus ac facilisis in</li>
    <li class="list-group-item active">Morbi leo risus</li>
    <li class="list-group-item">Porta ac consectetur ac</li>
    <li class="list-group-item">Vestibulum at eros</li>
</ul>
</div>
<div class="col-4">
<ul class="list-group">
    <li class="list-group-item">Cras justo odio</li>
    <li class="list-group-item">Dapibus ac facilisis in</li>
    <li class="list-group-item active">Morbi leo risus</li>
    <li class="list-group-item">Porta ac consectetur ac</li>
    <li class="list-group-item">Vestibulum at eros</li>
</ul>
</div>
<div class="col-4">
<ul class="list-group">
    <li class="list-group-item active disabled">Cras justo odio</li>
    <li class="list-group-item">Dapibus ac facilisis in</li>
    <li class="list-group-item">Morbi leo risus</li>
    <li class="list-group-item">Porta ac consectetur ac</li>
    <li class="list-group-item">Vestibulum at eros</li>
</ul>
</div>
</div>
```



Bootstrap : Tables

- **Bootstrap Table classes**
 - Outer wrapper - **table**
 - For colors - **table-primary**, **table-secondary**
 - For alternate rows colored – **table-striped**
 - For hover rows – **table-hover**
 - For theming – **navbar-light**
 - For aligning data – **align-middle**, **align-bottom**
 - For responsiveness- **table-responsive**
 - For breakpoint position – **table-responsive-md**, **table-responsive-sm**

File Edit Selection View Go Run Terminal Help

tables.html - bootstrap5 - Visual Studio Code

EXPLORER OPEN EDITORS 1 UNSAVED

BOOTSTRAPS cards.html cosmos-example.html footer.html ibm-example.html # ibm-styles.css index.html js-example.html layout.html navbar.html notes.txt # styles.css tables.html

tables.html > html > body > div.container > table.table.table-hover.table-primary

```
15 <div class="container">
16   <table class="table table-hover table-primary">
17     <thead>
18       <tr>
19         <th scope="col">#</th>
20         <th scope="col">First</th>
21         <th scope="col">Last</th>
22         <th scope="col">Handle</th>
23     </thead>
24     <tbody>
25       <tr>
26         <th scope="row">1</th>
27         <td>Mark</td>
28         <td>Otto</td>
29         <td>@mdo</td>
30     </tr>
31     <tr>
32       <th scope="row">2</th>
33       <td>Jacob</td>
34       <td>Thornton</td>
35       <td>@fat</td>
36     </tr>
37     <tr>
38       <th scope="row">3</th>
39       <td colspan="2">Larry the Bird</td>
40       <td>@twitter</td>
41     </tr>
42   </tbody>
43 </table>
44
45
```

Ln 16, Col 54 Spaces: 4 UTF-8 CRLF HTML ⚙️ 🔍

Subscribe

The screenshot shows a Visual Studio Code interface with the following details:

- File Bar:** File, Edit, Selection, View, Go, Run, Terminal, Help
- Title Bar:** tables.html - bootstrap5 - Visual Studio Code
- Explorer Panel (Left):** Shows a tree view of files and folders under "BOOTSTRAPS". The "tables.html" file is selected and highlighted.
- Editor Area (Right):** Displays the HTML code for a table. The table has a class of "table table-hover table-primary table-responsive table-dark table-bordered". It consists of three rows. The first row (thead) has four columns with headers "#", "First", "Last", and "Handle". The second row (tbody) has four columns with values "1", "Mark", "Otto", and "@mdo". The third row (tbody) has four columns with values "2", "Jacob", "Thornton", and "@fat". The fourth row (tbody) has four columns with values "3", "Larry the Bird", "@twitter", and "" (empty).

```
<div class="container">
  <table class="table table-hover table-primary table-responsive table-dark table-bordered">
    <thead>
      <tr>
        <th scope="col">#</th>
        <th scope="col">First</th>
        <th scope="col">Last</th>
        <th scope="col">Handle</th>
      </tr>
    </thead>
    <tbody>
      <tr>
        <th scope="row">1</th>
        <td>Mark</td>
        <td>Otto</td>
        <td>@mdo</td>
      </tr>
      <tr>
        <th scope="row">2</th>
        <td>Jacob</td>
        <td>Thornton</td>
        <td>@fat</td>
      </tr>
      <tr>
        <th scope="row">3</th>
        <td colspan="2">Larry the Bird</td>
        <td>@twitter</td>
      </tr>
    </tbody>
  </table>
```



Bootstrap : Buttons

- **Bootstrap Button classes**
 - Main class - **btn**
 - For colors - **btn-primary**, **btn-secondary**
 - For outline – **btn-outline-primary**, **btn-outline-secondary**
 - For sizes – **btn-sm**, **btn-md**
 - Disabled state – **disabled**

File Edit Selection View Go Run Terminal Help ibm-example.html - bootstrap5 - Visual Studio Code

EXPLORER OPEN EDITORS

BOOTSTRAPS

bootstrap5

- cards.html
- cosmos-example.html
- footer.html
- ibm-example.html
- # ibm-styles.css
- index.html
- js-example.html
- layout.html
- navbar.html
- notes.txt
- status-report.html
- # styles.css
- tables.html

ibm-example.html X cosmos-example.html

```
sample.html > html > body > div.container-fluid > div.row > div.col-10.main-content.p-4 > button.btn.btn-primary.mb-4
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
```

<ul class="list-group list-group-dark">
 <li class="list-group-item list-group-item-dark">Dashboard
 <li class="list-group-item list-group-item-dark">Events

</div> <!-- ./col-3 -->
<div class="col-10 main-content p-4">

<h2>Inspections</h2>

<button class="btn btn-primary mb-4">Add New Contact</button>

<table class="table">
 <thead>
 <tr>
 <th scope="col">#</th>
 <th scope="col">First</th>
 <th scope="col">Last</th>
 <th scope="col">Handle</th>
 </tr>
 </thead>
 <tbody>
 <tr>
 <th scope="row">1</th>



Bootstrap : Button Group

- **Bootstrap Button Group classes**

- <div class="btn-group" role="group" aria-label="Basic example">
- <button type="button" class="btn btn-secondary">Left</button>
- <button type="button" class="btn btn-secondary">Middle</button>
- <button type="button" class="btn btn-secondary">Right</button>
- </div>

ibm-example.html - bootstrap5 - Visual Studio Code

File Edit Selection View Go Run Terminal Help

EXPLORER ... ibm-example.html X js-example.html

OPEN EDITORS

BOOTSTRAPS

bootstrap5

- cards.html
- cosmos-example.html
- footer.html
- ibm-example.html
- # ibm-styles.css
- index.html
- js-example.html
- layout.html
- navbar.html
- notes.txt
- status-report.html
- # styles.css
- tables.html

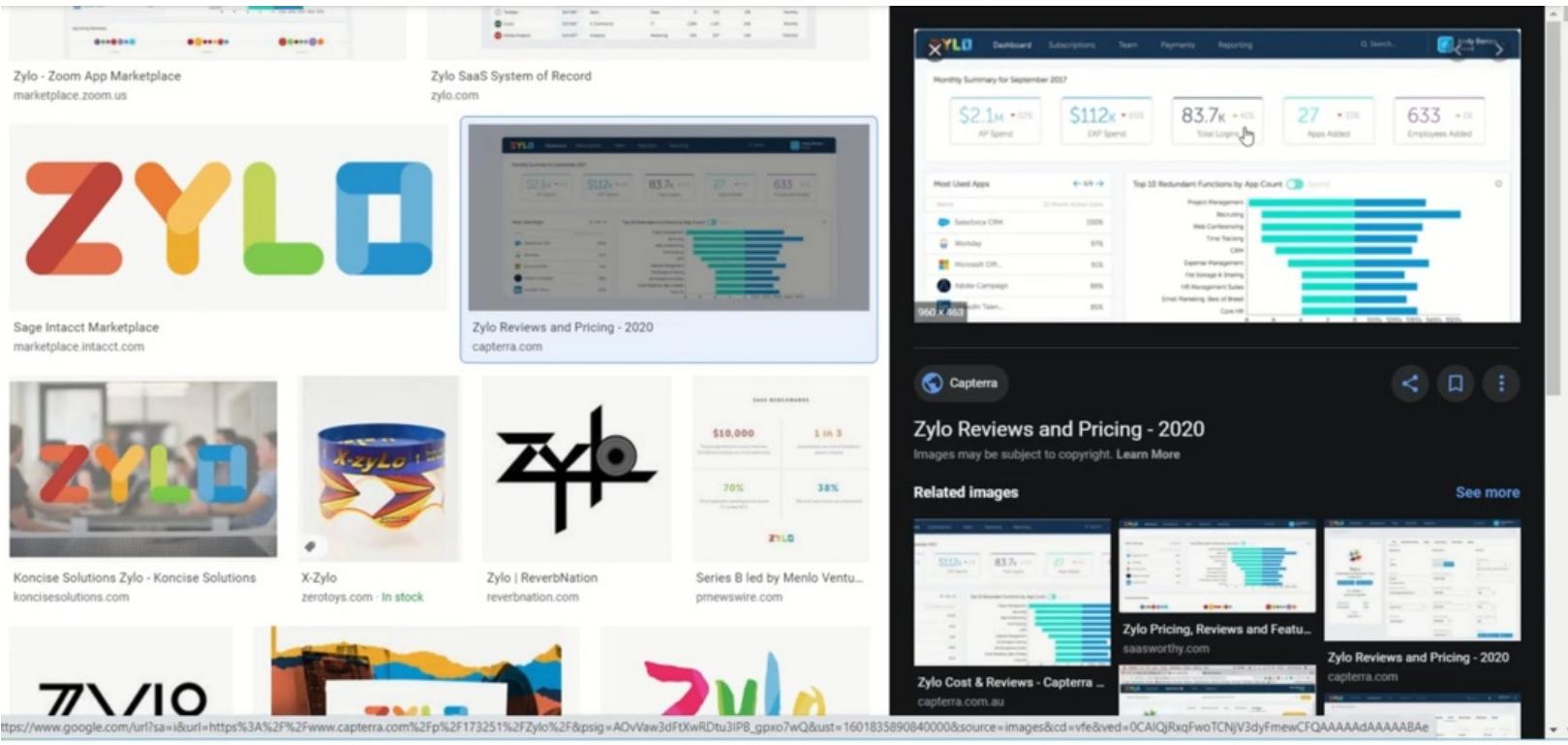
-fluid > div.row > div.col-10.main-content.p-4 > div.row > div.col-10.text-right > div.btn-group > button.btn.btn-warning

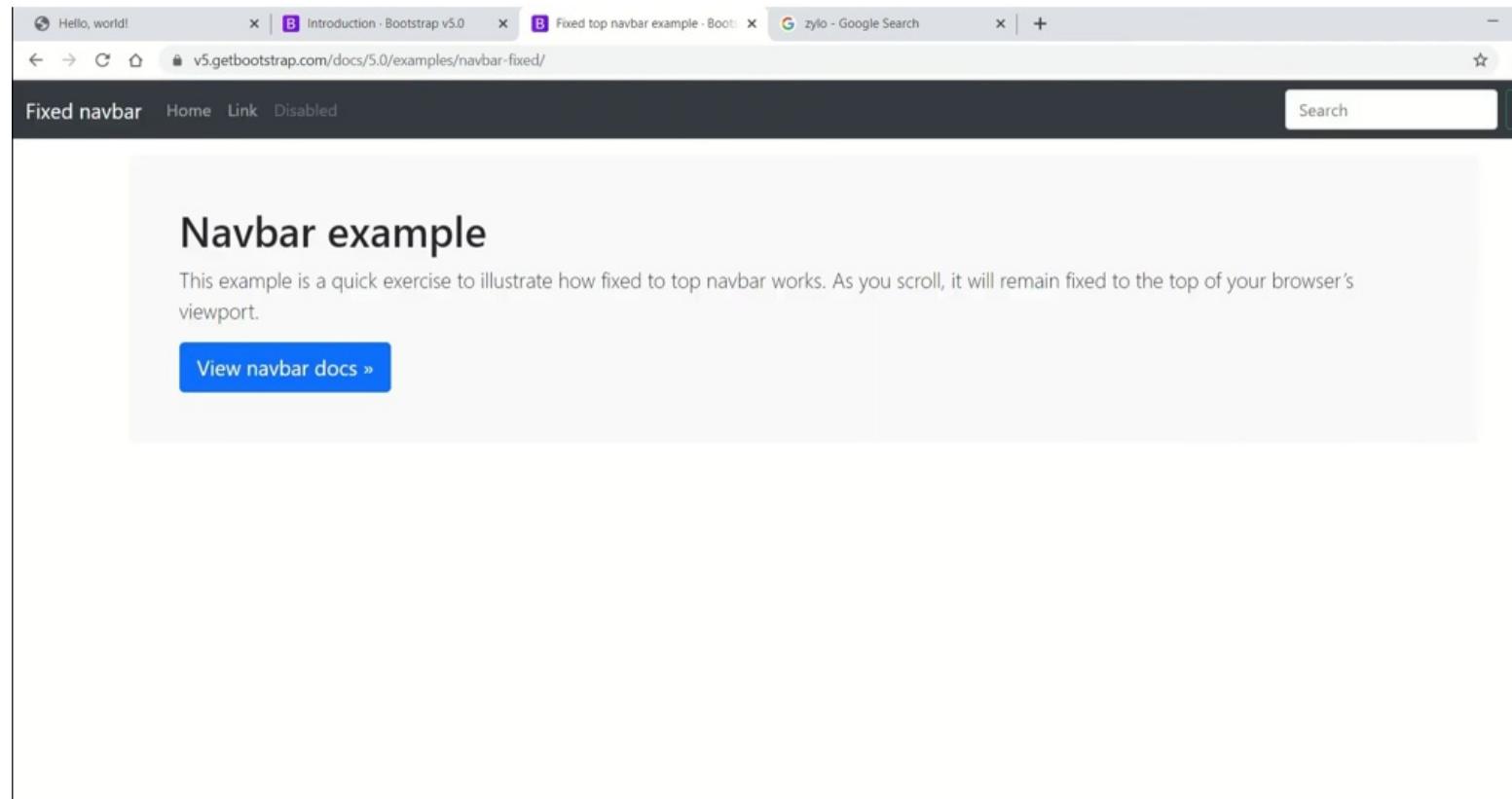
```
<div class="col-10 main-content p-4">
  <h2>Inspections</h2>

  <div class="row">
    <button class="col-2 btn btn-primary mb-4">Add New Contact</button>

    <div class="col-10 text-right">
      <div class="btn-group" role="group" aria-label="Basic example">
        <button type="button" class="btn btn-secondary">PDF</button>
        <button type="button" class="btn btn-primary">Download</button>
        <button type="button" class="btn btn-warning">Print</button>
      </div>
    </div>
  </div>

  <table class="table">
    <thead>
      <tr>
        <th scope="col">#</th>
        <th scope="col">First</th>
        <th scope="col">Last</th>
        <th scope="col">Handle</th>
      </tr>
    </thead>
```





```
27 <style>
28   .bd-placeholder-img {
29     font-size: 1.125rem;
30     text-anchor: middle;
31     -webkit-user-select: none;
32     -moz-user-select: none;
33     -ms-user-select: none;
34     user-select: none;
35   }
36
37   @media (min-width: 768px) {
38     .bd-placeholder-img-lg {
39       font-size: 3.5rem;
40     }
41   }
42 </style>
43
44
45  <!-- Custom styles for this template -->
46  <link href="navbar-top-fixed.css" rel="stylesheet">
47 </head>
48 <body>
49
50
51 <nav class="navbar navbar-expand-md navbar-dark fixed-top bg-dark">
52   <div class="container-fluid">
53     <a class="navbar-brand" href="#">fixed navbar</a>
54     <button class="navbar-toggler" type="button" data-toggle="collapse" data-target="#navbarCollapse" aria-controls="navbarCollapse" aria-expanded="false" aria-label="Toggle navigation">
55       <span class="navbar-toggler-icon"></span>
56     </button>
57     <div class="collapse navbar-collapse" id="navbarCollapse">
58       <ul class="navbar-nav mr-auto mb-2 mb-md-0">
59         <li class="nav-item active">
60           <a class="nav-link" aria-current="page" href="#">Home</a>
61         </li>
62         <li class="nav-item">
63           <a class="nav-link" href="#">Link</a>
64         </li>
65         <li class="nav-item">
66           <a class="nav-link disabled" href="#" tabindex="-1" aria-disabled="true">Disabled</a>
67         </li>
68       </ul>
69       <form class="d-flex">
70         <input class="form-control mr-2" type="search" placeholder="Search" aria-label="Search">
71         <button class="btn btn-outline-success" type="submit">Search</button>
72       </form>
73     </div>
74   </div>
75 </nav>
```

The screenshot shows a dark-themed code editor interface, likely from Visual Studio Code. The left sidebar contains icons for file operations, search, navigation, and other development tools. The main area has tabs for 'ibm-example.html', 'js-example.html', and 'zylo.html'. The 'zylo.html' tab is active, displaying the following code:

```
<!doctype html>
<html lang="en">
  <head>
    <!-- Required meta tags -->
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <!-- Bootstrap CSS -->
    <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/5.0.0-alpha.3/css/bootstrap.min.css">
  </head>
  <style>
    /* Show it is fixed to the top */
    body {
      min-height: 75rem;
      padding-top: 4.5rem;
    }
    .navbar-dark {
      background-color: #4D577C !important;
    }
  </style>
  <title>Hello, world!</title>
</head>
<body>
```

zylo.html - bootstrap5 - Visual Studio Code

File Edit Selection View Go Run Terminal Help

EXPLORER OPEN EDITORS

< BOOTSTRAPS >

bootstrap5

- cards.html
- cosmos-example.html
- footer.html
- ibm-example.html
- # ibm-styles.css
- index.html
- js-example.html
- layout.html
- navbar.html
- notes.txt
- status-report.html
- # styles.css
- tables.html
- zylo.html

zylo.html

```
48     </div>
49     </nav>
50
51     <main class="container">
52         <div class="bg-light p-2 rounded">
53             <div class="row">
54                 <div class="col-4"><h1>Add New Contact</h1></div>
55
56                 <div class="col-8 text-right">
57                     <div class="btn-group" role="group" aria-label="Basic example">
58                         <button type="button" class="btn btn-outline-primary">PDF</button>
59                         <button type="button" class="btn btn-outline-primary">Download</button>
60                         <button type="button" class="btn btn-outline-primary">Print</button>
61                     </div>
62                 </div>
63             </div>
64         </div>
65
66         <table class="table">
67             <thead>
68                 <tr>
69                     <th scope="col">#</th>
70                     <th scope="col">First</th>
71                     <th scope="col">Last</th>
72                     <th scope="col">Handle</th>
```

The screenshot shows a web browser window with multiple tabs open. The active tab is titled "Fixed top navbar example - Boot..." and displays a user interface for managing applications. The page has a dark blue header bar with the title "Fixed navbar" and links for "Home", "Link", and "Disabled". A search bar is also present in the header. Below the header, there are four cards, each labeled "Spending" and "10M". A section titled "Applications" lists three items: "Mark Otto @mdo", "Jacob Thornton @fat", and "Larry the Bird @twitter". A blue button labeled "Add New Application" is located at the bottom right of the card area.

#	First	Last	Handle	Handle	Handle
1	Mark	Otto	@mdo	@mdo	@mdo
2	Jacob	Thornton	@fat	@fat	@fat
3	Larry the Bird		@twitter	@fat	@fat



Bootstrap : Alerts

- **Bootstrap Alert classes**

- <div class="alert alert-primary" role="alert">
- <h4 class="alert-heading">Well done!</h4>
- A simple primary alert with an example link. Give it a click if you like.
- </div>
- <div class="alert alert-secondary" role="alert">
- A simple secondary alert—check it out!
- </div>
- <div class="alert alert-success" role="alert">
- A simple success alert—check it out!
- </div>
- <div class="alert alert-danger" role="alert">
- A simple danger alert—check it out!
- </div>

- <div class="alert alert-warning alert-dismissible fade show" role="alert">
- Holy guacamole! You should check in on some of those fields below.
- <button type="button" class="btn-close" data-dismiss="alert" aria-label="Close"></button>
- </div>

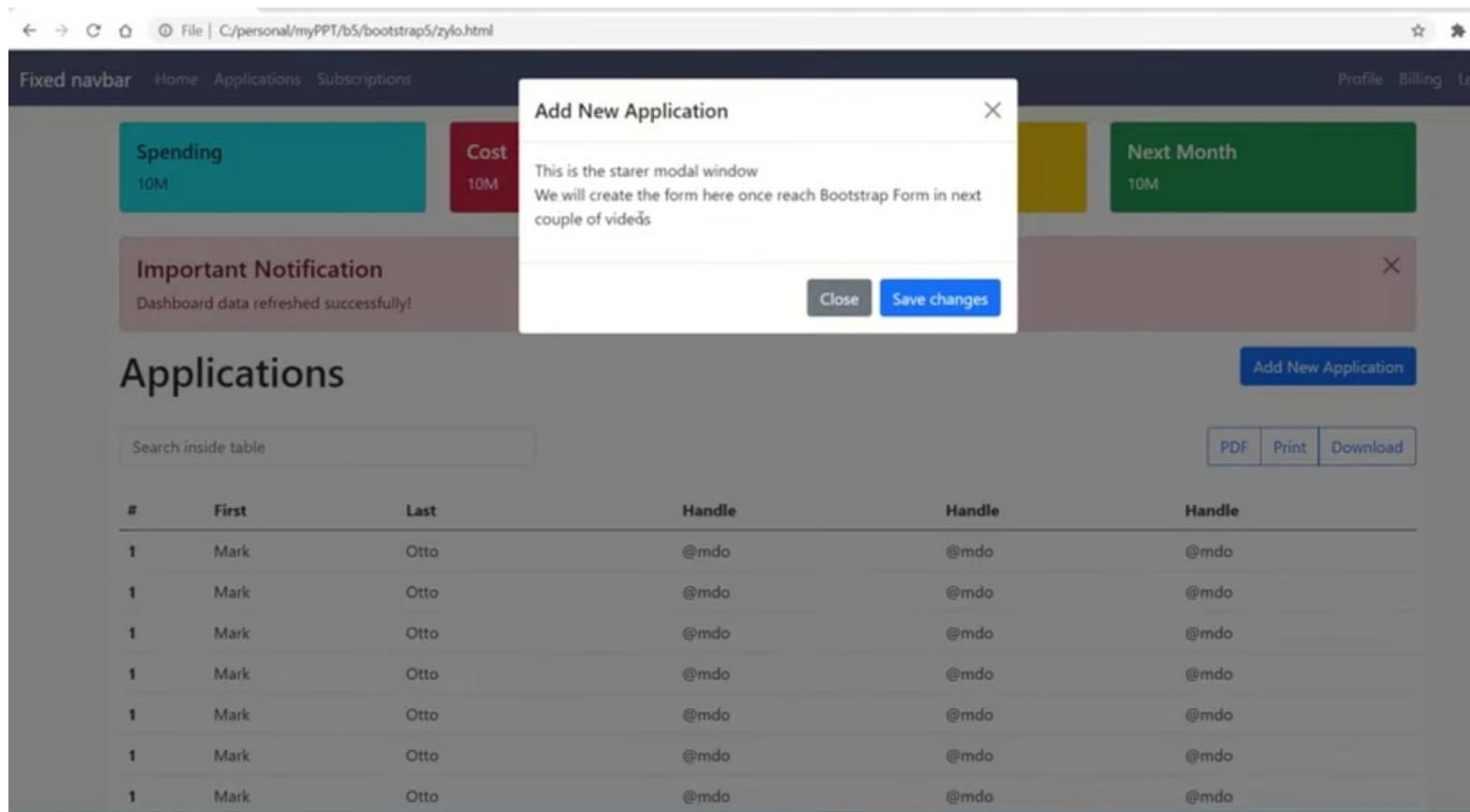


Bootstrap : Modal

- **Bootstrap Modal classes**

- <div class="modal" tabindex="-1">
- <div class="modal-dialog">
- <div class="modal-content">
- <div class="modal-header">
- <h5 class="modal-title">Modal title</h5>
- <button type="button" class="btn-close" data-dismiss="modal" aria-label="Close"></button>
- </div>
- <div class="modal-body">
- <p>Modal body text goes here.</p>
- </div>
- <div class="modal-footer">
- <button type="button" class="btn btn-secondary" data-dismiss="modal">Close</button>
- <button type="button" class="btn btn-primary">Save changes</button>
- </div>
- </div>
- </div>

A horizontal redaction mark covering several lines of text at the bottom of the slide.





Bootstrap : Collapse

- **Bootstrap Collapse classes**

- <button class="btn btn-primary" type="button" data-toggle="collapse" data-target="#collapseExample" aria-expanded="false" aria-controls="collapseExample">
 - Button with data-target
 - </button>
- <div class="collapse" id="collapseExample">
 - <div class="card card-body">
 - Anim pariatur cliche reprehenderit, enim eiusmod high life accusamus terry richardson ad squid. Nihil anim keffiyeh helvetica, craft beer labore wes anderson cred nesciunt sapiente ea proident.
 - </div>
 - </div>

v5.getbootstrap.com/docs/5.0/components/collapse/#accordion-example

Search docs...

Bootstrap v5.0

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Anim pariatur cliche reprehenderit, enim eiusmod high life accusamus terry richardson ad squid.
</div>
</div>
</div>
</div>

Accordion example

Using the `card` component, you can extend the default collapse behavior to create an accordion. To properly achieve the accordion style, be sure to use `.accordion` as a wrapper.

Collapsible Group Item #1

Collapsible Group Item #2

Collapsible Group Item #3

Anim pariatur cliche reprehenderit, enim eiusmod high life accusamus terry richardson ad squid. 3 wolf moon officia aute, non cupidatat skateboard dolor brunch. Food truck quinoa nesciunt laborum eiusmod. Brunch 3 wolf moon tempor, sunt aliqua put a bird on it squid single-origin coffee nulla assumenda shoreditch et. Nihil anim keffiyeh helvetica, craft beer labore wes anderson cred nesciunt sapiente ea proident. Ad vegan excepteur butcher vice lomo. Leggings occaecat craft beer farm-to-table, raw denim aesthetic synth nesciunt you probably haven't heard of them accusamus labore sustainable VHS.

On this page

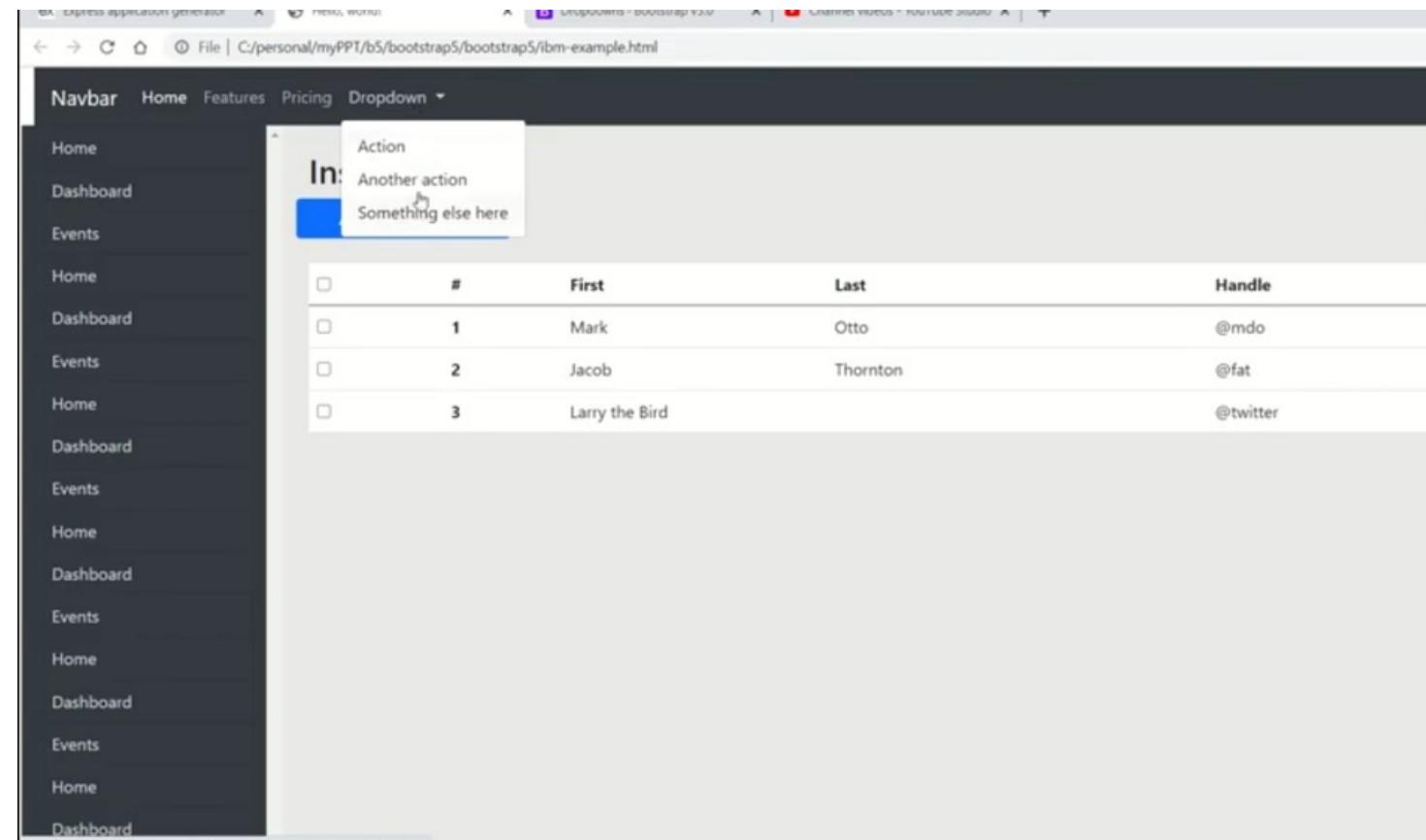
How it works
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Methods
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Bootstrap : Dropdowns

- **Bootstrap Dropdown classes**

- <div class="dropdown">
- <button class="btn btn-secondary dropdown-toggle" type="button" id="dropdownMenuButton" data-toggle="dropdown" aria-expanded="false">
- Dropdown button
- </button>
- <ul class="dropdown-menu" aria-labelledby="dropdownMenuButton">
- Action
- Another action
- Something else here
-
- </div>

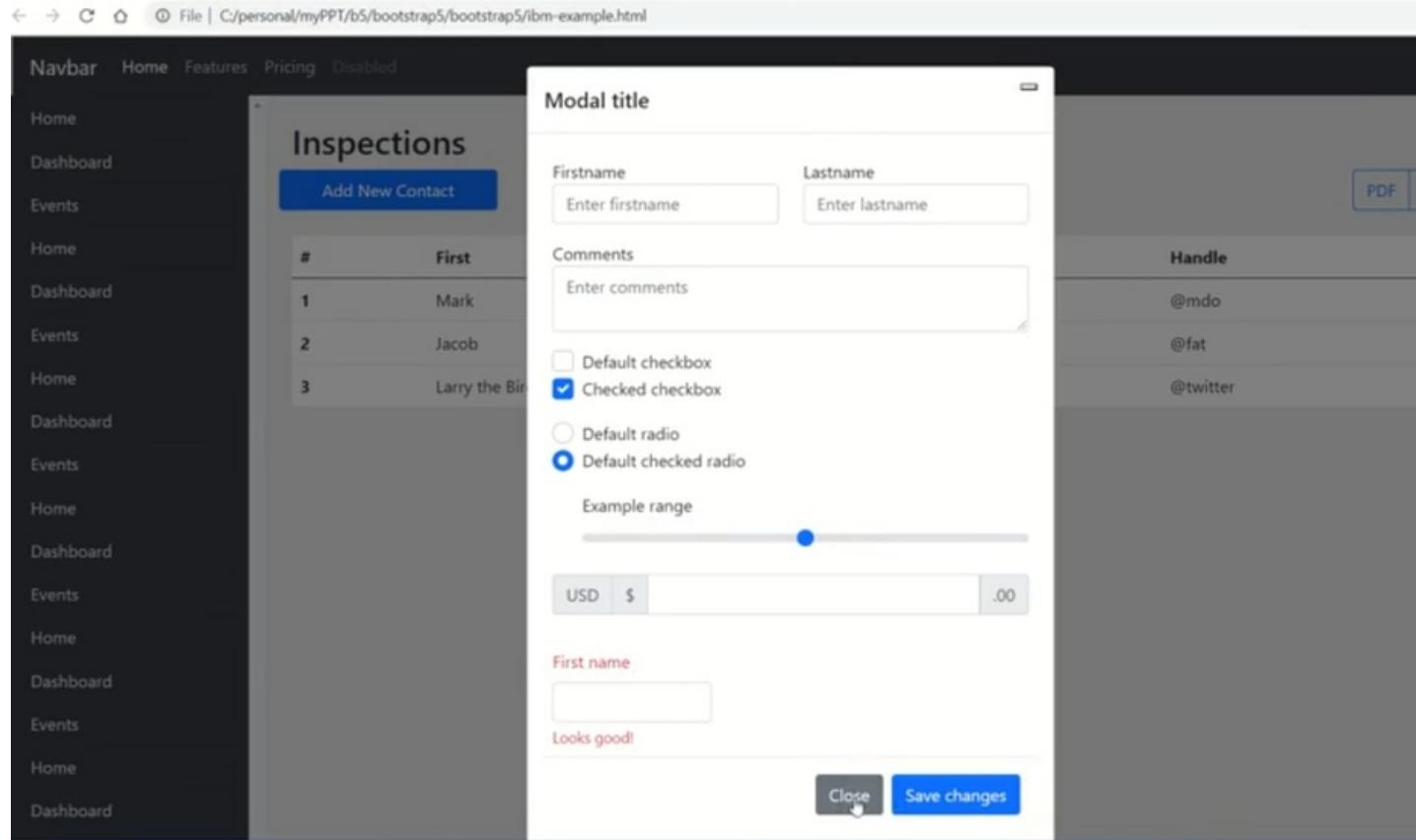




Bootstrap : Forms

- **Bootstrap Forms classes**

- form-label
- form-check-input
- form-control
- Input Groups
- File Upload
- Input Range
- Validations





Bootstrap : Tooltips

- **Bootstrap Tooltips**

- Tooltips rely on the 3rd party library Popper.js for positioning.
- You must include popper.min.js before bootstrap.js or use bootstrap.bundle.min.js / bootstrap.bundle.js which contains Popper.js in order for tooltips to work!
- Tooltips are opt-in for performance reasons, so you must initialize them yourself.
- **You need to initialize the script one-time**

- ```
var tooltipTriggerList = [].slice.call(document.querySelectorAll('[data-toggle="tooltip"]'))
var tooltipList = tooltipTriggerList.map(function (tooltipTriggerEl) {
 return new bootstrap.Tooltip(tooltipTriggerEl)
})
```
- <button type="button" class="btn btn-secondary" data-toggle="tooltip" data-placement="top" title="Tooltip on top">  
• Tooltip on top  
• </button>



## Bootstrap : Popovers

- **Bootstrap Popover classes**

- Just like ToolTip – Popover used popper.js – so before using it make sure you have included in your app
- `<button type="button" class="btn btn-lg btn-danger" data-toggle="popover" title="Popover title" data-content="And here's some amazing content. It's very engaging. Right?">Click to toggle popover</button>`



## Bootstrap : Progress

- **Bootstrap Progress**

- <div class="progress">
- <div class="progress-bar" role="progressbar" aria-valuenow="0" aria-valuemin="0" aria-valuemax="100"></div>
- </div>
  
- <div class="progress">
- <div class="progress-bar progress-bar-striped" role="progressbar" style="width: 10%" aria-valuenow="10" aria-valuemin="0" aria-valuemax="100"></div>
- </div>



## Bootstrap : Spinners

- **Bootstrap Spinners**

- <div class="spinner-border text-primary" role="status">
- <span class="visually-hidden">Loading...</span>
- </div>
  
- <div class="spinner-border text-secondary" role="status">
- <span class="visually-hidden">Loading...</span>
- </div>