

});

Bootstrap (Introduction & Installation)

→ HTML → website
CSS → styles
 { Inline
 Internal
 external (iv.css)

To link these
2 styles
<link>

if I want to add color then I can use
`h1 { color: blue; }`

Previously we discussed about 'jQuery plugin' | Bootstrap is a predefined framework for user interfaces & themes.

→ for example want to add color properties to a document like
 → Content Center &
 → color: Blue
 } By all the students P1 P2 and so on. 1000
 } without writing separate code we can add plugin

eg: `body { color: blue; }`
 } → like this all the students will write the same code

→ for example if I have created a file bootstrap.css & write the code `body { color: blue; }`
so that all the 1000 students can access this file & need not to write the separate code.

→ Bootstrap is a kind of pre-defined framework (To design user interfaces & themes)

A file → (studying the file, understanding the file & try to apply same at the org-location)

(bootstrap.css)
↳ predefined org (Already written).
→ Also have bootstrap.js.

Bootstrap → (Understanding the framework)
 ↳ CSS (Reuse) → forms, buttons, tables etc. to apply various kind of styles
 ↳ JS (Reuse)
 ↳ Interactive design
 By using BS we can develop it faster, & easier development

→ we have to reuse the built-in things

→ uses → decreases time of code

→ development speed increase.

→ Time ↓, Cost ↓

→ customize BS (code can be edited)

→ support (community)

eg: Version 5 ... V1 (2010)

SO
5.1 (later)

Enhanced Grid
V4 - V5 :- Enhanced grid system, customize
some changes
took place

→ some kind of new components added (upto version 4)
(Popovers)

→ Attributes (proper support for IE) security
Various kind of other options

→ some kind of components removed.

XL, gutter classes,
vertical spacing classes

} more Responsive website will
be automatically adjust with screen
based on the device
→ browser compatibility ✓

1) Bootstrap

2) uses of BS

3) From V4 to V5 (version)

4) how we are going to link

→ either inline directly
or by using
①
②
③
④

we need to work with jquery
also the installation of "

But V5 (not jquery we can use plugin)

Installation:

1) Manual → Direct download

2) CDN → use { google, microsoft }

3) ~~Browser~~ → side package manager

4) NPM → Node Package Manager → Backend

html program

index.html

{
...
}

+ Bootstrap → CSS, JS
↓
Install

→ bootstrap.com → readable.
(0)

→ bootstrap min .zip
↳ minified.

rules:

① how to install Bootstrap

② linking (with corresponding href)

③ example + customization.

→ BS contains various kind of
Predefined keywords.

1) HTML5 doctype

2) viewport of html file - To define width of web
to screen size

3) classes - container → contains something (some kind
of elements)

→ container class

↳ To define fixed width of the container

→ container-fluid class - full width of "

file:

first create an html file.

```
<!doctype html>
<html>
<head>
  <meta charset="utf-8">
  <title></title>
  <link rel="stylesheet" type="text/css" href="jv.css">
  </head>
  <body>
    <div style="padding-left: 30px; color: blue;">
      Bootstrap Programming
    </div>
  </body>
</html>
```

→ write this in external file & save it as jv.js (or) jv.css

→ how to add bootstrap to this program?

```
<link rel="stylesheet" type="text/css" href="css/bootstrap.css">
```

* add cdn link

→ After this we can add like this

```
<style type="text/css">
  .container {
    color: red;
  }
</style>
```

cannot write this code all the time

we can write

```
<div class="container">
  ...
</div>
```

and can also add another class

```
<div class="container-fluid">
  ...
</div>
```

→ can also take cdn from w3schools.

→ And also we can customize & change properties in bootstrap.css → in the body file

Typography:- Bootstrap

style & appearance (working with some kind of font styles)

Take a Program (html)

<!--

-->

<body>

<div class = "container">

<h1><h1>

<p class = "h1"><p>

"h2"

⋮

"h6"

</div>

"text-muted"

>

<h1 class = "display-1"></h1>

<p class = "display-1"></p>

(Typography in bootstrap In google).

Keep all these lines in comment and write this code.

hi hello <mark> welcome </mark> to rgukt

<small> sklm</small> . it is located at <u>three</u>

location

<p class = "text-decoration-underline"> display heading are configured class also can combine here like text-overflow

<p class = "text-left"> arrange text to left side </p>

<p class = "text-capitalize"> caps of text </p>

- lowercase

- uppercase

→ abbreviation

① <abbr title = "JV"> JV </abbr>

② <abbr title = "JV" class = "initialism"> JV </abbr>

<blockquote>

RGUKT SKLM

</blockquote>

- JV

} ① execute like this

you want to highlight the text let's exclude it like this

(1)

<figure>

<blockquote class="blockquote">

Welcome to bootstrap programming

</blockquote>

<figcaption class="blockquote-footer">

by JV

</figcaption>

</figure>

→ lists

<ul class="list-unstyled">

↳ remove all kind of styles.

CSE

ECE

Mech

Civil

gfg have written a separate list with in this list

JV

Priya

Then it will apply the style to these elements
these list-styled won't be applied to the new elements.

→ Also we have <class="list-inline">

can also take like this <ul class="list-inline">

<li class="list-inline-item">CSE

"

"

 - - - >

→ It will give horizontal list
like this CSE ECE ...

<kbd> </kbd>

→ please type cd command to change the directory
<kbd> CTRL </kbd> <kbd> + </kbd>

<P> <h1> this is the tag for h1 </h1> </P>

<!-- <h1> this is the tag example for h1 </h1> -->

↳ I want the above code to look like this, then with that above code it may not look like this

then we have

(<code> < h1 > this is the tag for h1 < /h1 >)

col combinations can be used everywhere. → background
→ text
→ symbols

success → text
→ bg.

→ green
< p class = "text-success" > computer science and trig </p>
"text-danger" → red.
- info
- warning → danger
- primary
- dark
- muted
- secondary.

Instead of text we can use "bg-success" for background

Buttons - forms - Icons - Images - Bootstrap:

Buttons can be created by using <button> tag.

<button class = "btn btn-success" > button </button>

you can apply the above code danger & seen colors.

link. .

→ how to convert link to button.

by we can take.

8

Link

<input type="submit" name="" value="submit">

for large buttons → btn-lg
 btn-sm

<button class="btn btn-success btn-lg">Button </button>

form → To send data to server

<form class="form-group" class="form-control">
 <div class="form-group">
 <label>Name: </label> <input type="text" name=""> </div>
 <label>password: </label> <input type="password" name="">
 <label>branches: </label>
 CSE <input type="checkbox" name="">
 ECE <input type="checkbox" name="">
 <label>Gender </label>
 Male <input type="radio" name="k">
 Female <input type="radio" name="k">
 <label>class </label>
 <select class="form-control">
 <option>1 </option>
 <option>2 </option>
 <option>3 </option>
 <option>4 </option>
 </select>

→ form-control (to make use of 100% available width)

<input> <text-area> <select>

continue with Address: <textarea class="form-control">
 </textarea>

`<input type="button" class="form-control" name="" value=""`

`</form>`

`</div>`

Based upon the size of the device bootstrap is flexible.

→ form-group class (Group corresponding elements).

In some webpages we observe like this (Name:) ①

how to write code for this, we use input class

→ see name `<div class="form-group">`

`<name>`
`</div>`

email @gmail.com
ju

This can be done by using
(input-group) class

`<div class="input-group">`

`<name> Name `

`</div>`

`<input class="form-control" type="text" name="" >`

→ we can also add envelope symbols.

Those symbols can be called as Icons (small pictorial images - Adding logo to webpage).

our own images to the webpage

Icons are not open free source (But there MIT made it free)

We have SVG's - scalable vector graphics.

↳ width=1, height=1.3 → resize with font-size attribute

We need to follow certain approach for this

→ install. (1. By downloading corresponding file or 2. CDN. or 3. Node Package Manager)

`<form> <div class="form-group">`

` name </div>`

`<input class="form-control" type="text" name="" > </div>`

- Icons in Bootstrap file
- 2) click on learn more about BS flow
- 3) click on install.
- 4) go with cdn & copied in head section.

usage: → → Embed direct given code.

~~Add~~ External Image.
→ Glomfont

(Before the `<body>` tag).

Glomfont

- ⇒ download & install them or use the cdn link.
- & Paste it in header section.

→ `<i class = "text-success" style = "font-size: 1.2em;">`

Q In the div class also we can add this one.

`<div class = "input-group">`
`` `<i class = "text-success" style = "font-size: 1.2em;">`

- Rang form → explanation (bg color etc...)
- Table. (working with tables).
- next about images.

Responsive web design - Grid system - Bootstrap:

until now we have seen CSS components, buttons, colors, forms etc, Typography, Icons.
In CSS → when we want to resize the page, we need to rearrange the elements

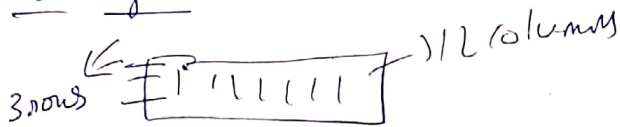
- ⇒ screensize will differ from device to device (look & feel)
 - like computer, laptop, tab, mobile device.
 - look & feel will vary from device to device. (some discomfort will occur)
 - in order to overcome this we need to develop a responsive web design site

→ In this elements are going to rearrange in a effective manner

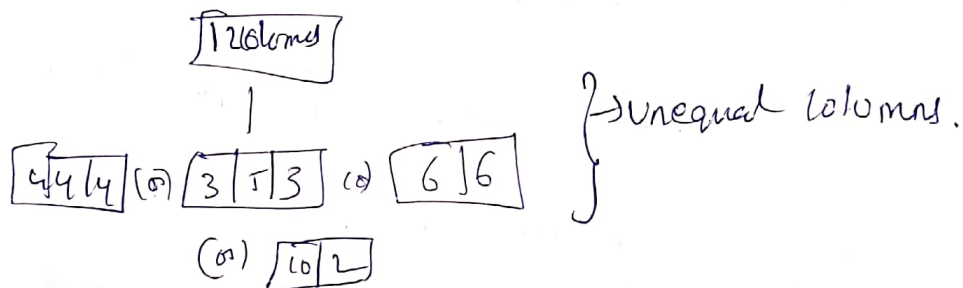
with the help of BS → It can be more responsive

→ To achieve responsiveness we can use Gridsystem & flex

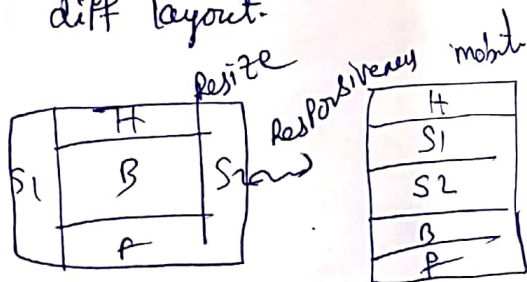
Grid system:



1 laptop } screensize 12 columns
 desktop
 mobile
 tab }
 ↓
 each column
 ↓
 can be combined.



→ with help of grid system in BS. we can create webpage with diff layout.



By using grid system
 → whenever these columns open in a new device. It will adjust to the screensize. This is called Responsiveness

We have standard classes (breakpoints)

→ too-small, small, medium, large, extra large or extra extra large.

↓ ↓ ↓ ↓ ↓
 <576px ≥576 ≥768 ≥992 ≥1200 ≥1400px
 SM MD LG XL XXL → (Predefined)
 ↳ breakpoints

For large screen It will be like this



div { container
can be split into multiple rows
{
each row split into multiple cols

col \Rightarrow * \leftarrow *
 \downarrow \downarrow
 device columnsize
 type (how many columns
 you want to concatenate).

\rightarrow `<div class="container">`

`<div class="row">`

`<div class="col"> A </div>`

`<div class="col"> B </div>`

`<div class="col"> C </div>`

`</div>`

`</div>`

\rightarrow col-sm-2

\rightarrow example program .

\rightarrow next example

3	6	3
2	8	2

(a)

\rightarrow

col-1
 \rightarrow 2 parts

col-2
8px

col-3
2 parts
 \rightarrow total - 12 parts

with this size .

If it of medium file . It has 2 be like

<p>class="col-md-2"</p> <p>"=" "col-md-8"</p> <p>"=" "col-md-2"</p>	}	<p>and also the diff b/w</p> <p>col-lg-2</p> <p>col-lg-8</p> <p>col-lg-2</p>
---	---	--

(combine \rightarrow col-md-2 col-sm-6

" 8 " - 2

" - 2 " - 4

Nested rows \rightarrow example done (explanation).

Responsiveness fixed system with the help of

Navigation Bar:

Navigate (move from one page to another web page)

→ no to regular page & show the error.
simple (no menus)

→ horizontal nav. Bar (n)
Vertical " " "

(max & min) → max look & feel (nav. Bar)

nav-class - ul/ol
nav-item - li
nav-link - a
Remove all symbols & convert into integers

how to implement nav menus?

cul

justify-content: center → to make it center

In vertical representation → "nav flex-column"

for links = "nav nav-stacked"

for active state add class like

```
ca class = "nav-link"
href = " " > </a>
</li>
```

```
ca class = "nav-link active" & " "
nav-link disabled
```

In this nav menu we can create dropdown.

Now - nav. Bar → horizontal
vertical
more responsive → creating navigation bar

nav-bar-expand-md → Stack list of items

nav-bar-rev-ul (screen size)

nav-item

nav-link

With these 5 things we can develop nav bar