



WELCOME



CCBP 4.0

21st Century Skills

Bootstrap Grid System

Agenda

Bootstrap Grid System

Bootstrap Grid System
What is RWD?

Recap

Bootstrap
Grid System

Responsive
Breakpoints

Using Breakpoints in Combination
Class Name Prefixes

Column Wrapping

Responsive Web Design

What is Responsive Web Design?

An approach to make web pages give best user experience in all the devices

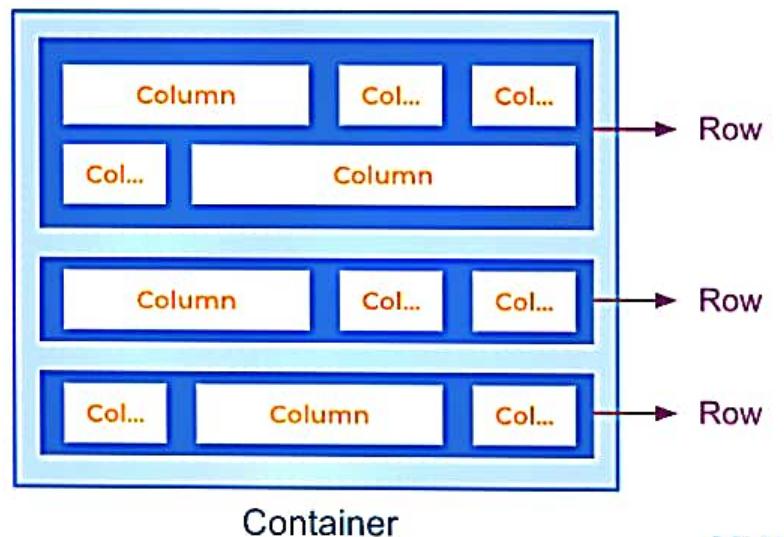


How it works

Bootstrap Grid System

Bootstrap Grid system is made up of 3 things:

- Container
- Rows
- Columns

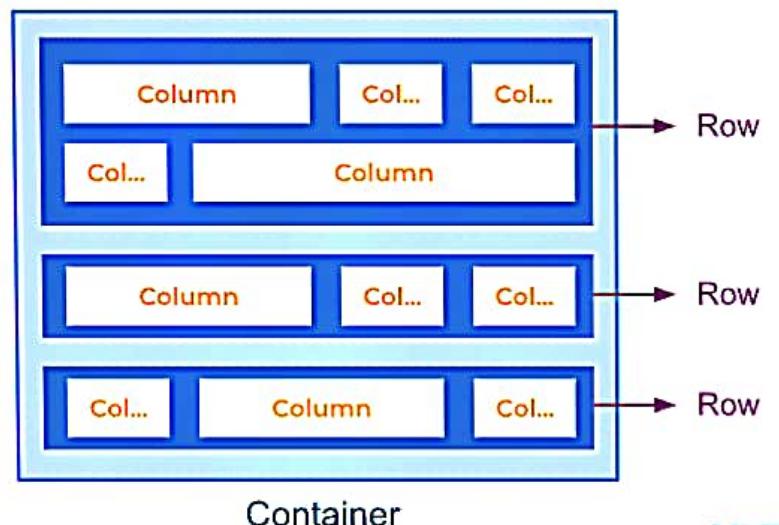


Bootstrap Grid System

How it works

A **Container** consists of Rows and Columns

All the **Content** should be placed inside these Columns



Bootstrap

Five Responsive Tiers

To make websites responsive,
Bootstrap categorizes devices into
Five Responsive Tiers

These are known as **Responsive Breakpoints**

Device	Device Size(width)
Extra small devices	< 576px
Small devices	$\geq 576px$
Medium devices	$\geq 768px$
Large devices	$\geq 992px$
Extra large devices	$\geq 1200px$

Bootstrap

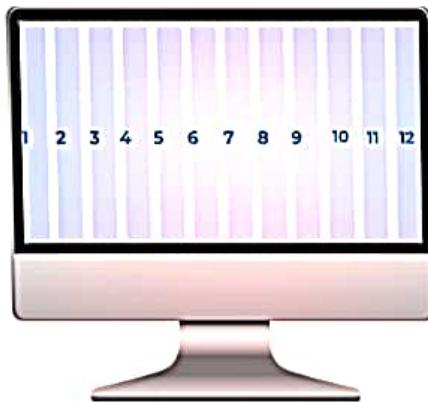
Grid System

Bootstrap Grid System uses
12 column system for layouting
We can create up to **12 columns**
across the page

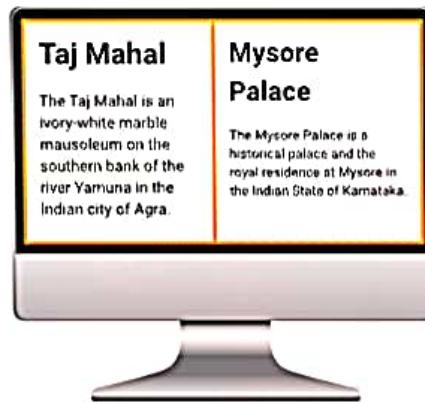


Bootstrap Grid System

12 Column System

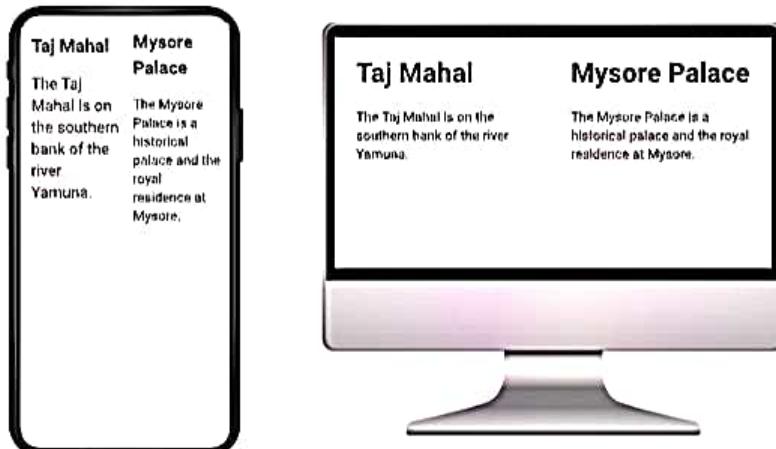


12 Grid Columns



2 Bootstrap
Grid Columns

How to achieve the below layout using Bootstrap Grid System?



Bootstrap Grid System

Adding Container and Row

HTML

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

Bootstrap Grid System

Adding Bootstrap Grid Columns

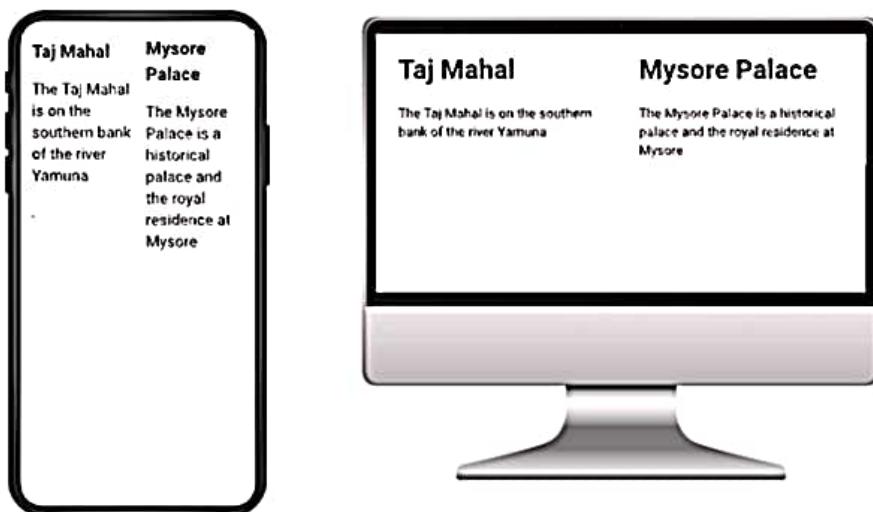
HTML

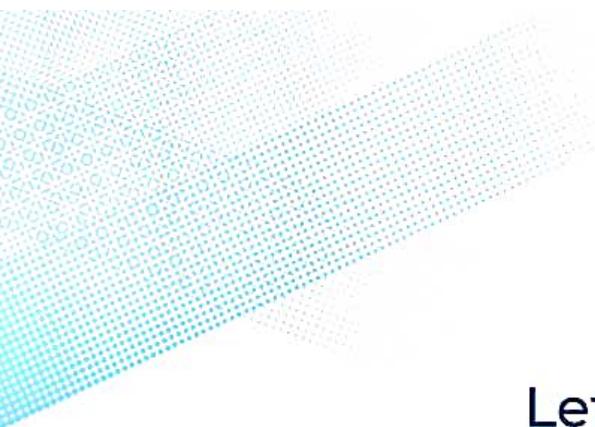
```
<div class="container">
<div class="row">
  <div class="col-6">
    <h1 class="heading"> Taj Mahal </h1>
    <p> The Taj Mahal is on the ... </p>
  </div>
  <div class="col-6">
    <h1 class="heading"> Mysore Palace </h1>
    <p> The Mysore Palace is a ... </p>
  </div>
</div>
</div>
```

CSS

```
.heading{
  font-size: 24px;
  font-weight: bold;
}
```

Bootstrap Grid System Output





Let's add one more
Bootstrap Grid Column



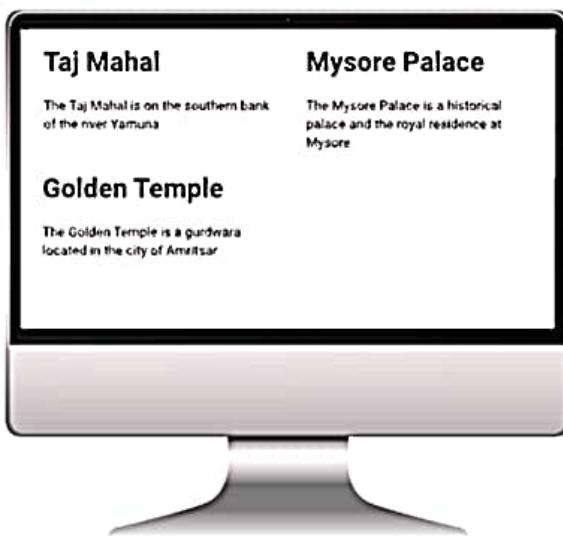
Bootstrap Grid System

Adding Third Bootstrap Grid Column

HTML

```
<div class="container">
  <div class="row">
    <div class="col-6">...</div>
    <div class="col-6">...</div>
    <div class="col-6">
      <h1 class="heading">Golden Temple</h1>
      <p>
        The Golden Temple is a gurdwara...
      </p>
    </div>
  </div>
</div>
```

Bootstrap Grid System Output





Why did the Third Bootstrap Grid Column come in the next line?

Taj Mahal

The Taj Mahal is on the southern bank of the river Yamuna

Mysore Palace

The Mysore Palace is a historical palace and the royal residence at Mysore

Golden Temple

The Golden Temple is a gurdwara located in the city of Amritsar

Column Wrapping

When more than 12 grid columns are placed in a single row, the extra columns wrap in a new line but in the same row



Bootstrap Grid System

Column Wrapping

HTML

```
<div class="container">
  <div class="row">
    <div class="col-6">...</div>
    <div class="col-6">...</div>
    <div class="col-6">...</div>
  </div>
</div>
```

$$6+6+6 > 12$$

Column Wrapping Output

HTML

```
<div class="container">  
  <div class="row">  
    <div class="col-6">...</div>  
    <div class="col-6">...</div>  
    <div class="col-6">...</div>  
  </div>  
</div>
```

Taj Mahal

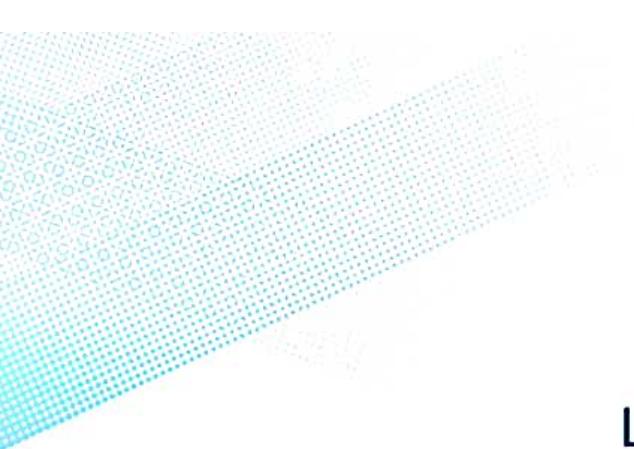
The Taj Mahal is on the southern bank of the river Yamuna

Golden Temple

The Golden Temple is a gurdwara located in the city of Amritsar

Mysore Palace

The Mysore Palace is a historical palace and the royal residence at Mysore



Let's add the
Fourth Bootstrap Grid Column

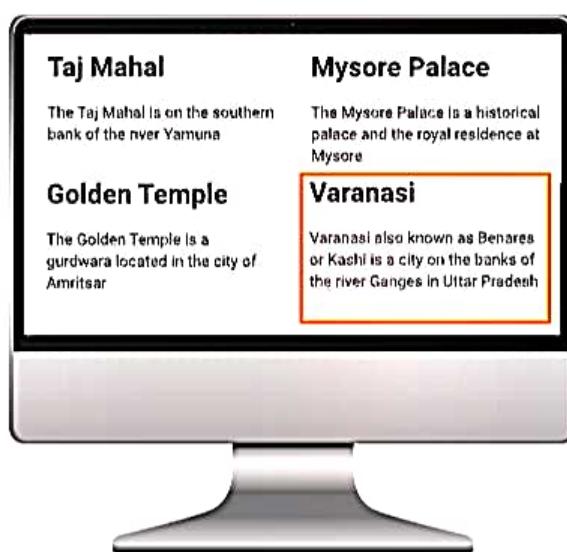


Adding Bootstrap Grid Column

HTML

```
<div class="container">
  <div class="row">
    <div class="col-6">...</div>
    <div class="col-6">...</div>
    <div class="col-6">...</div>
    <div class="col-6">
      <h1 class="heading">Varanasi</h1>
      <p>Varanasi also known as ...</p>
    </div>
  </div>
</div>
```

Bootstrap Grid System Output

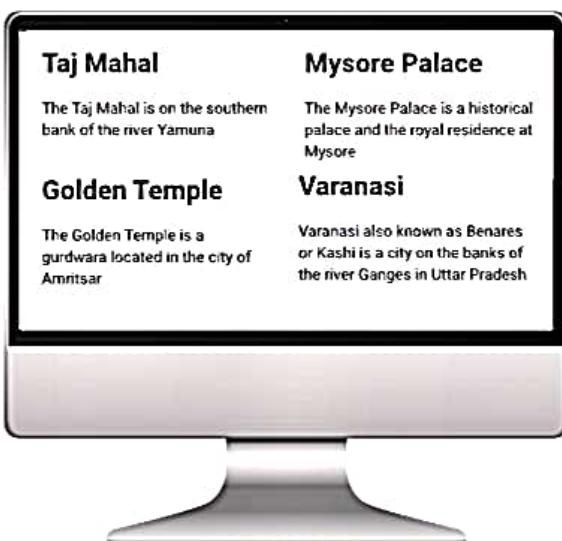


How to Achieve Different Layouts in Different Responsive Breakpoints?



Responsive Breakpoints

Layout in Different Breakpoints



Bootstrap Grid System

Responsive Breakpoints

Bootstrap provides different column class name prefixes for Five Responsive Tiers (Responsive Breakpoints)

Device	Device Size(width)	Class Name Prefix
Extra small devices	< 576px	col-
Small devices	≥ 576px	col-sm-
Medium devices	≥ 768px	col-md-
Large devices	≥ 992px	col-lg-
Extra large devices	≥ 1200px	col-xl-

Bootstrap Grid System

Responsive Breakpoints

Bootstrap provides different column class name prefixes for Five Responsive Tiers (Responsive Breakpoints)

Device	Device Size(width)	Class Name Prefix
Extra small devices	< 576px	col-
Small devices	≥ 576px	col-sm-
Medium devices	≥ 768px	col-md-
Large devices	≥ 992px	col-lg-
Extra large devices	≥ 1200px	col-xl-

Bootstrap Grid System

Responsive Breakpoints

If we define the behaviour of the column in a particular device, a similar behaviour is guaranteed in all devices with **larger sizes**

Device	Device Size(width)	Class Name Prefix
Extra small devices	< 576px	col-
Small devices	≥ 576px	col-sm-
Medium devices	≥ 768px	col-md-
Large devices	≥ 992px	col-lg-
Extra large devices	≥ 1200px	col-xl-

Bootstrap Grid System

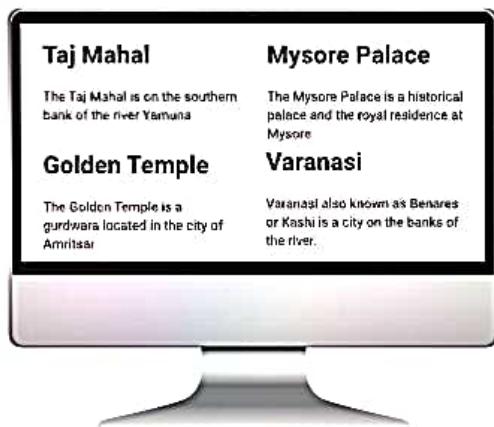
Responsive Breakpoints

A column with class name `col-6` will behave similarly in all the devices with larger sizes

HTML

```
<div class="container">
  <div class="row">
    <div class="col-6">
      The Taj Mahal is on the ...
    </div>
  </div>
</div>
```

Let's achieve this Responsive Layout



NXT
WAVE

Responsive Breakpoints

Using Class Names in Combination

Use a combination
of different class names
for Breakpoints

Device	Class Name Prefix
Extra small devices	col-
Small devices	col-sm-
Medium devices	col-md-
Large devices	col-lg-
Extra large devices	col-xl-

Responsive Breakpoints

Extra Small and Larger Devices

HTML

```
<div class="container">
  <div class="row">
    <div class="col-12">...</div>
    <div class="col-12">...</div>
    <div class="col-12">...</div>
    <div class="col-12">...</div>
  </div>
</div>
```

Extra Small and Larger Devices Output



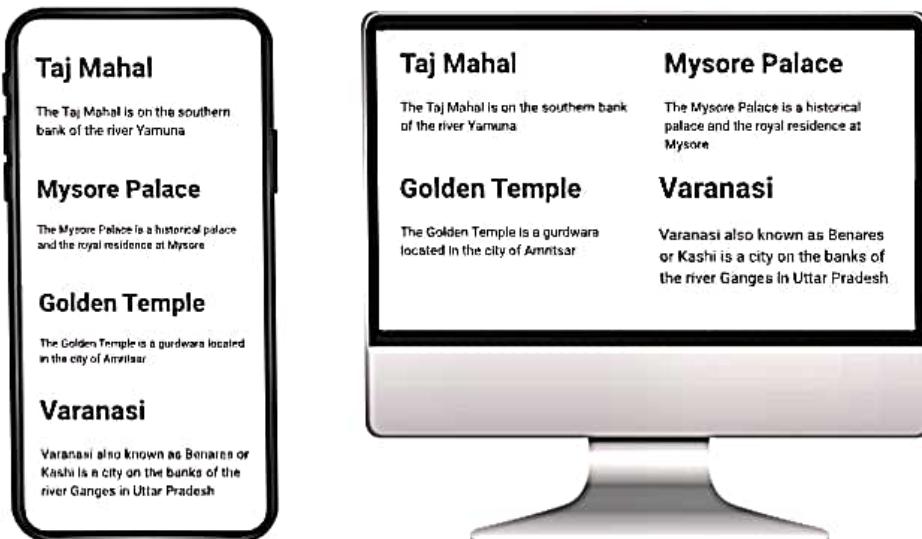
Responsive Breakpoints

Large and Extra Large Devices

HTML

```
<div class="container">
  <div class="row">
    <div class="col-12 col-lg-6">...</div>
    <div class="col-12 col-lg-6">...</div>
    <div class="col-12 col-lg-6">...</div>
    <div class="col-12 col-lg-6">...</div>
  </div>
</div>
```

Large and Extra Large Devices Output



Bootstrap

Mobile First Approach

Bootstrap follows

Mobile First Approach

First, design the layout of **mobile version**

This will be adopted by devices with larger sizes



Checking Responsiveness of a Website



Desktop View

Click on the Settings Icon

The screenshot shows a desktop browser window with the following details:

- Header:** NXT WAVE logo, Home, Vinod, a user icon.
- Code Editor (Left):** Shows the source code for the page, including Bootstrap and jQuery imports, and the HTML structure for the Taj Mahal and Mysore Palace cards.
- Taj Mahal Card:** Contains the heading "Taj Mahal" and the text "The Taj Mahal is on the southern bank of the river Yamuna."
- Mysore Palace Card:** Contains the heading "Mysore Palace" and the text "The Mysore Palace is a historical palace and the royal residence at Mysore."
- Settings Icon:** A yellow box highlights the settings icon (gear icon) located in the top right corner of the Taj Mahal card's header area.

Mobile View

Click on the Settings Icon



The screenshot shows the NXT wAVE web editor. At the top, there's a toolbar with icons for refresh, save, and other functions. Below the toolbar is a navigation bar with tabs for 'Code' (which is selected), 'Output', 'Inspect', 'HTML' (selected), 'CSS', and 'JAVASCRIPT'. The main area is a code editor with the following HTML code:

```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <link rel="stylesheet" href="https://st...
5     <script src="https://code.jquery.com/jq...
6     <script src="https://cdn.jsdelivr.net/n...
7     <script src="https://stackpath.bootstrapcdn...
8   </head>
9   <body>
10    <div class="container">
11      <div class="row">
12        <div class="col-6">
13          <h1 class="heading">Taj Mahal</h1>
14          <p>The Taj Mahal is on the souther...
15    </div>
```

At the bottom of the code editor, there are buttons for 'SAVE', 'DOWNLOAD', and 'Web'. To the right of the editor, there's a small 'NXT wAVE' logo.

Desktop View

Select Extra Small Breakpoint

The screenshot shows a web development interface with a code editor on the left and a preview area on the right. The code editor contains basic HTML and CSS code for a travel guide. The preview area displays three cards: 'Taj Mahal', 'Mysore Palace', and 'Varanasi'. A modal window titled 'Inspect' is open, showing the Bootstrap breakpoint selector. The 'Extra Small' option is selected, highlighted with a red border. Below it are other breakpoint categories: 'Small' (<576), 'Medium' (>768), 'Large' (>992), and 'Extra Large' (>1200). At the bottom of the selector are two input fields: 'Width' set to 768 and 'Height' set to 790, with 'RESET' and 'PREVIEW' buttons.

```
<!DOCTYPE html>
<html>
<head>
<link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css">
<script src="https://code.jquery.com/jquery-3.5.1.slim.min.js">
<script src="https://cdn.jsdelivr.net/npm/popper.js@1.16.1/dist/umd/popper.min.js">
<script src="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/js/bootstrap.min.js">
</head>
<body>
<div class="container">
<div class="row">
<div class="col-6">
<h3>Taj Mahal</h3>
<p>The Taj Mahal is on the southern bank of the river Yamuna.</p>
</div>
<div class="col-6">
<h3>Mysore Palace</h3>
<p>The Mysore Palace is a historical palace and the royal residence at Mysore.</p>
</div>
<div class="col-6">
<h3>Golden Temple</h3>
<p>The Golden Temple is a Gurdwara located in the city of Amritsar.</p>
</div>
<div class="col-6">
<h3>Varanasi</h3>
<p>Varanasi is also known as Benares or Kashi. It is a city located on the bank of the river Ganges in Uttar Pradesh.</p>
</div>
</div>
</div>
</body>

```

Mobile View

Select Extra Small Breakpoint



NXT
WAVE

Desktop View

Click on Preview Button

The screenshot shows the NXT WAVE developer tools interface. On the left, there is an HTML code editor with the following code:

```
<!DOCTYPE html>
<html>
<head>
<link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.1/css/bootstrap.min.css">
<script src="https://code.jquery.com/jquery-3.5.1.slim.min.js">
<script src="https://cdn.jsdelivr.net/npm/popper.js@1.16.1/dist/umd/popper.min.js">
<script src="https://stackpath.bootstrapcdn.com/bootstrap/4.1.1/js/bootstrap.min.js">
</head>
<body>
<div class="container">
<div class="row">
<div class="col-6">
<h3>Taj Mahal</h3>
<p>The Taj Mahal is on the southern bank of the river Yamuna in Agra, India. It was built by Mughal Emperor Shah Jahan in memory of his wife Mumtaz Mahal. It is a white marble mausoleum.

The Mysore Palace is a historical palace and the royal residence at Mysore.


</div>
<div class="col-6">
<h3>Mysore Palace</h3>
<p>The Mysore Palace is a historical palace and the royal residence at Mysore. It is a large, ornate building with intricate carvings and gold leaf decorations. It was built in the early 19th century by King Krishnaraja Wodeyar IV.
</div>
</div>
</div>
</body>

```

In the center, there is an "Inspect" panel showing a dropdown menu for screen sizes: Extra Small, Small, Medium, Large, and Extra Large. Below it are sliders for "Width" (set to 320) and "Height" (set to 480). There are "RESET" and "PREVIEW" buttons. The "PREVIEW" button is highlighted with a red box. To the right, there is a preview area showing two cards: "Mysore Palace" and "Varanasi".

Mysore Palace
The Mysore Palace is a historical palace and the royal residence at Mysore.

Varanasi
Varanasi is also known as Benares or Kashi. It is a city located on the bank of the river Ganges in Uttar Pradesh.

Mobile View

Click on Preview Button



NXT
WAVE

Desktop View

Preview For Extra Small Breakpoint

The screenshot shows a desktop browser window displaying a website with a checkered background. The page content is organized into three columns. The left column contains the website's source code in a code editor. The middle column contains two cards: one for the Taj Mahal and one for Mysore Palace. The right column contains two cards: one for the Golden Temple and one for Varanasi. The browser interface includes tabs for HTML, CSS, and JavaScript, as well as navigation and inspection tools.

Taj Mahal
The Taj Mahal is on the southern bank of the river Yamuna.

Mysore Palace
The Mysore Palace is a historical palace and the royal residence at Mysore.

Golden Temple
The Golden Temple is a gurdwara located in the city of Amritsar.

Varanasi
Varanasi is also known as Benares or Kashl. It is a city located on the bank of the river Ganges in Uttar Pradesh.

```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css"
5       crossorigin="anonymous"/>
6     <script src="https://code.jquery.com/jquery-3.5.1.slim.min.js" integrity="sha384-DfXdz2htPH0lsSInClpu
7     <script src="https://cdn.jsdelivr.net/npm/popper.js@1.16.0/dist/umd/popper.min.js" integrity="sha384-9/S
8     <script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js" integrity="sha384-
9</head>
10   <body>
11     <div class="container">
12       <div class="row">
13         <div class="col-6">
14           <h2 class="heading">Taj Mahal</h2>
15           <p>The Taj Mahal is on the southern bank of the river Yamuna.</p>
16         </div>
17         <div class="col-6">
18           <h2 class="heading">Mysore Palace</h2>
19           <p>
20             The Mysore Palace is a historical palace and the royal residence at Mysore.
21           </p>
22         </div>
23       </div>
24     </div>
25   </body>
26 </html>
```

Mobile View

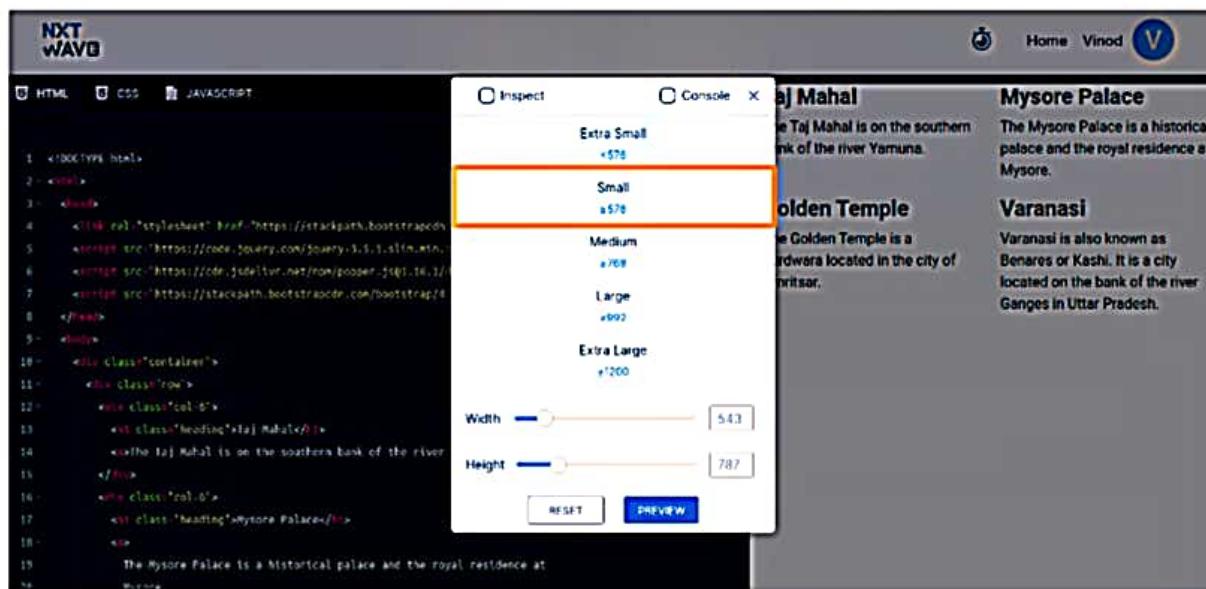
Preview For Extra Small Breakpoint

The screenshot shows a mobile preview interface for a web application. At the top, there's a header with the logo 'NXT wAVB'. Below the header, there are three tabs: 'Code' (disabled), 'Output' (selected), and 'Inspect'. Underneath the tabs, there are two cards. The first card is for 'Taj Mahal' and contains the text: 'The Taj Mahal is on the southern bank of the river Yamuna.' The second card is for 'Mysore Palace' and contains the text: 'The Mysore Palace is a historical palace and the royal residence at Mysore.' Below these cards, there are two more cards: 'Golden Temple' and 'Varanasi'. The 'Golden Temple' card has the text: 'The Golden Temple is a gurdwara located in the city of Amritsar.' The 'Varanasi' card has the text: 'Varanasi also known as Benares or Kashi is a city on the banks of the river Ganges in Uttar Pradesh.'

NXT
wAVB

Desktop View

Select Small Breakpoint



The screenshot shows a browser window with developer tools open. The 'Inspect' panel is active, displaying a dropdown menu for selecting a breakpoint. The 'Small' option is highlighted with a red box. The menu also includes 'Extra Small', 'Medium', 'Large', and 'Extra Large'. Below the menu, there are input fields for 'Width' (set to 543) and 'Height' (set to 787), along with 'RESET' and 'PREVIEW' buttons. To the left of the inspect panel, the page's HTML code is visible. On the right, there are three cards: 'Taj Mahal', 'Golden Temple', and 'Mysore Palace', each containing a brief description.

```
<!DOCTYPE html>
<html>
<head>
<link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css">
<script src="https://code.jquery.com/jquery-3.3.1.slim.min.js">
<script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.14.7/umd/popper.min.js">
<script src="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/js/bootstrap.min.js">
</head>
<body>
<div class="container">
<div class="row">
<div class="col-6">
<h3>Taj Mahal</h3>
<p>The Taj Mahal is on the southern bank of the river Yamuna.</p>
</div>
<div class="col-6">
<h3>Golden Temple</h3>
<p>The Golden Temple is a Gurdwara located in the city of Amritsar.</p>
</div>
</div>
<div class="row">
<div class="col-6">
<h3>Mysore Palace</h3>
<p>The Mysore Palace is a historical palace and the royal residence at Mysore.</p>
</div>
<div class="col-6">
<h3>Varanasi</h3>
<p>Varanasi is also known as Benares or Kashi. It is a city located on the bank of the river Ganges in Uttar Pradesh.</p>
</div>
</div>
<p>The Mysore Palace is a historical palace and the royal residence at Mysore.</p>
</div>
</body>

```

Mobile View

Select Small Breakpoint



NXT
WAVE

Desktop View

Preview For Small Breakpoint

The screenshot displays a browser's developer tools with the "Inspect" tab open, showing a desktop preview for a small breakpoint. The left side shows the HTML code, and the right side shows the rendered desktop view.

HTML View:

```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css"
5       integrity="sha384-BFkdz2hPh0t555mETp
6     <script src="https://code.jquery.com/jquery-3.5.1.slim.min.js" integrity="sha384-DfXdz2htPh0t555mETp
7     <script src="https://cdn.jsdelivr.net/npm/popper.js@1.16.0/dist/umd/popper.min.js" integrity="sha384-9/
8     <script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js" integrity="sha384-
9</head>
10 <body>
11   <div class="container">
12     <div class="row">
13       <div class="col-6">
14         <h2 class="heading">Taj Mahal</h2>
15         <p>The Taj Mahal is on the southern bank of the river Yamuna.</p>
16       </div>
17       <div class="col-6">
18         <h2 class="heading">Mysore Palace</h2>
19         <p>The Mysore Palace is a historical palace and the royal residence at
20           Mysore.

Desktop Preview (Right Panel):



The desktop preview shows a travel guide website with two cards. The first card is for the Taj Mahal, which is described as being on the southern bank of the river Yamuna. The second card is for the Mysore Palace, described as a historical palace and the royal residence at Mysore. The preview includes a header bar with icons for Home, Vinod, and a profile picture.


```

Mobile View

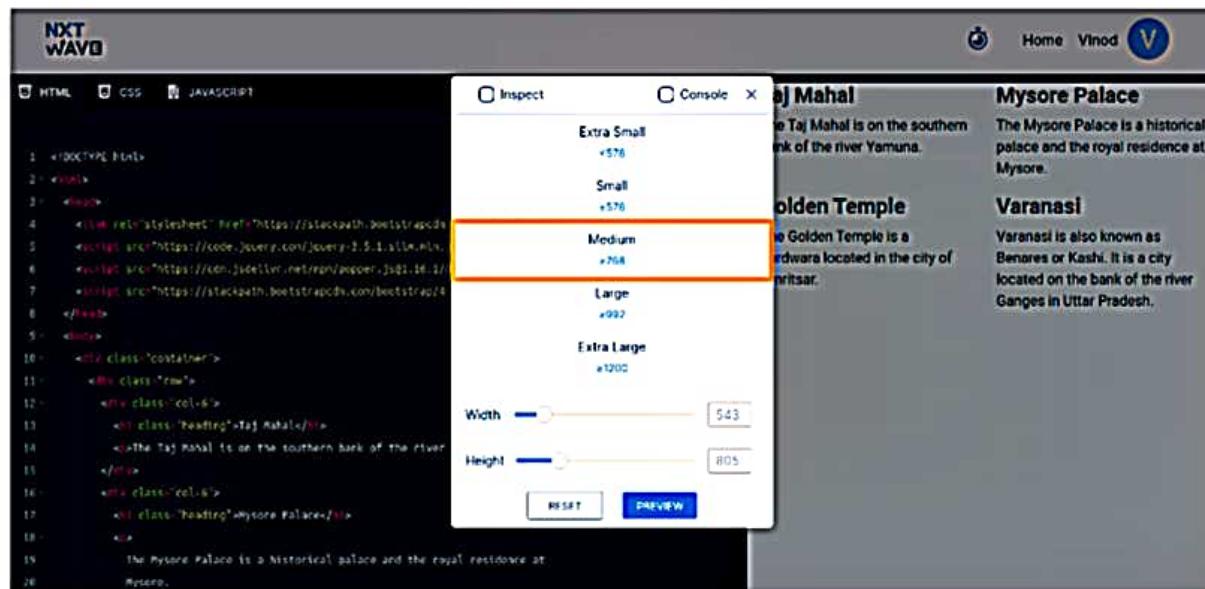
Preview For Small Breakpoint



NXT
WAVE

Desktop View

Select Medium Breakpoint



The screenshot shows the NXT WAVE developer tools interface. On the left, there is an 'Inspect' panel with a dropdown menu showing breakpoint sizes: Extra Small, Small, Medium (which is highlighted with a red box), Large, and Extra Large. Below the dropdown are two sliders for 'Width' and 'Height'. The 'Width' slider is set to 543 and the 'Height' slider is set to 805. At the bottom of the inspect panel are 'RESET' and 'PREVIEW' buttons. To the right of the inspect panel, there are three cards: 'Taj Mahal', 'Golden Temple', and 'Mysore Palace'. Each card contains a heading, a short description, and a detailed paragraph.

```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
5     <script src="https://code.jquery.com/jquery-3.5.1.slim.min.js">
6     <script src="https://cdn.jsdelivr.net/npm/popper.js@1.16.0/dist/umd/popper.min.js">
7     <script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js">
8   </head>
9   <body>
10    <div class="container">
11      <div class="row">
12        <div class="col-6">
13          <h3 class="heading">Taj Mahal</h3>
14          <p>The Taj Mahal is on the southern bank of the river Yamuna.</p>
15        </div>
16        <div class="col-6">
17          <h3 class="heading">Mysore Palace</h3>
18          <p>The Mysore Palace is a historical palace and the royal residence at Mysore.</p>
19        </div>
20      </div>
21    </div>
22  </body>
23</html>
```

Taj Mahal
The Taj Mahal is on the southern bank of the river Yamuna.

Golden Temple
The Golden Temple is a Gurdwara located in the city of Amritsar.

Mysore Palace
The Mysore Palace is a historical palace and the royal residence at Mysore.

Varanasi
Varanasi is also known as Benares or Kashi. It is a city located on the bank of the river Ganges in Uttar Pradesh.

Mobile View

Select Medium Breakpoint



NXT
WAVE

Desktop View

Preview For Medium Breakpoint

The screenshot shows a browser window with developer tools open. On the left, the code editor displays the HTML structure for a two-column layout. The right side shows the rendered preview for a medium breakpoint, featuring a grid with two columns. The first column contains information about the Taj Mahal and the Golden Temple. The second column contains information about Mysore Palace and Varanasi.

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4 <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css" integrity="sha384-BVYiiSIFeK1dGmJRAkycuHAHRg32OmUcww7on3RYdg4Va+PmSTsz/K6Q" crossorigin="anonymous">
5 <script src="https://code.jquery.com/jquery-3.5.1.slim.min.js" integrity="sha384-DfXdz2htPH0lsSSs5nCTpuj/zy4C+OGpamoFVy30oU5U27X1pifgY" crossorigin="anonymous">
6 <script src="https://cdn.jsdelivr.net/npm/popper.js@1.16.1/dist/umd/popper.min.js" integrity="sha384-9/reFTGAW83EW2RDu2S0VKaIzap3H66lZH81Po53l4lexwVlA5MqRSDDQ9BZ" crossorigin="anonymous">
7 <script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js" integrity="sha384-Bvkav8M543rT+DdC1jZdXuJ3OZtW1DFL4t7R+HvDp1c1E1+g3J0IyvG0JG" crossorigin="anonymous">
8 </head>
9 <body>
10 <div class="container">
11 <div class="row">
12 <div class="col-6">
13 <h3>Taj Mahal</h3>
14 <p>The Taj Mahal is on the southern bank of the river Yamuna.</p>
15 </div>
16 <div class="col-6">
17 <h3>Golden Temple</h3>
18 <p>The Golden Temple is a gurdwara located in the city of Amritsar.</p>
19 </div>
20 <div class="col-6">
21 <h3>Mysore Palace</h3>
22 <p>The Mysore Palace is a historical palace and the royal residence at Mysore.</p>
23 </div>
```

Taj Mahal
The Taj Mahal is on the southern bank of the river Yamuna.

Golden Temple
The Golden Temple is a gurdwara located in the city of Amritsar.

Mysore Palace
The Mysore Palace is a historical palace and the royal residence at Mysore.

Varanasi
Varanasi is also known as Benares or Kashi. It is a city located on the bank of the river Ganges in Uttar Pradesh.

NXT
WAVE

Desktop View

Preview For Medium Breakpoint

 Home Vinod 

Mobile View

Preview For Medium Breakpoint



NXT
WAVE

Desktop View

Select Large Breakpoint

The screenshot shows a web development environment with the following interface elements:

- Top Bar:** Includes 'Home' and 'Vinod' links, and a blue circular icon with a white letter 'V'.
- Left Sidebar:** Contains tabs for 'HTML', 'CSS', and 'JAVASCRIPT'. The 'HTML' tab is selected.
- Code Editor:** Displays the HTML code for a website. The code includes doctype, head, and body sections with various tags like `<div>`, `<h1>`, and ``.
- Inspect Panel:** A modal window titled 'Inspect' is open, showing a list of breakpoints:
 - Extra Small (`<576`)
 - Small (`≥576`)
 - Medium (`≥768`)
 - Large** (`≥992`)
 - Extra Large (`≥1200`)The 'Large' option is highlighted with a red border.
- Preview Area:** Shows the website's layout for the 'Large' breakpoint. It features a grid layout with two columns. The first column contains a heading 'Taj Mahal' and a paragraph about the Taj Mahal. The second column contains headings 'Mysore Palace' and 'Varanasi' with their respective descriptions.
- Control Buttons:** At the bottom of the inspect panel are 'RESET' and 'PREVIEW' buttons.

Mobile View

Select Large Breakpoint



NXT
WAVE

Desktop View

Preview For Large Breakpoint

NXT
WAVG

Home Vinod V

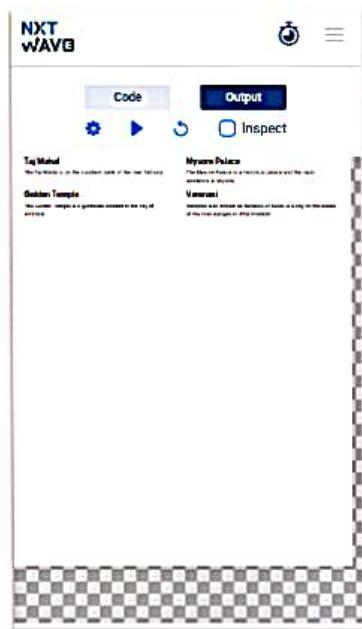
HTML CSS JAVASCRIPT Inspect

```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css" integrity="sha384-BPq5aF8tB9spDQZ509tOGtV9P5vYmN/4" crossorigin="anonymous">
5     <script src="https://code.jquery.com/jquery-3.5.1.slim.min.js" integrity="sha384-DfXdz2htPH0lsSSs5nCTpuj/zy4C+OGpamoFVy30oU5U27X1pIfzPYO9KfumadLJ" crossorigin="anonymous"></script>
6     <script src="https://cdn.jsdelivr.net/npm/popper.js@1.16.1/dist/umd/popper.min.js" integrity="sha384-9/reFTGAW83EW2RDu2S0VKaIzap3H66lZH81Po53l4lexwVlA5MqRxXxiVgR尚</script>
7     <script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js" integrity="sha384-B7i3oDd6u3o7zmdlCNxdpi+D0teggZD9Hn6kxQDppJ0uH9ZJL9mHnE70ZJ4d5Q==" crossorigin="anonymous"></script>
8   </head>
9   <body>
10    <div class="container">
11      <div class="row">
12        <div class="col-6">
13          <h2 class="heading">Taj Mahal</h2>
14          <p>The Taj Mahal is on the southern bank of the river Yamuna.</p>
15        </div>
16        <div class="col-6">
17          <h2 class="heading">Mysore Palace</h2>
18          <p>The Mysore Palace is a historical palace and the royal residence at Mysore.</p>
19        </div>
20      </div>
21    </div>
```

NXT
WAVE

Mobile View

Preview For Large Breakpoint



NXT
wAVE

Desktop View

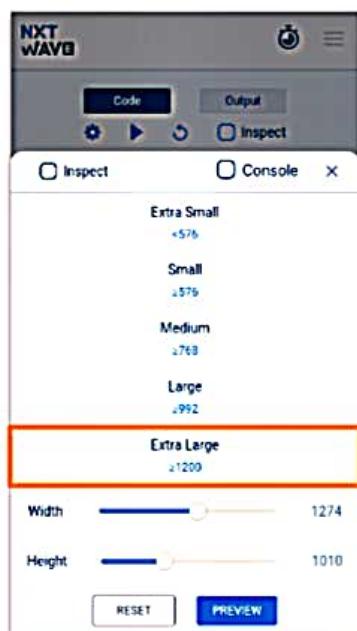
Select Extra Large Breakpoint

The screenshot shows a browser window with developer tools open. On the left, there's an HTML code editor with some sample code. In the center, there's a preview area with three cards: 'Mysore Palace', 'Temple', and 'Varanasi'. To the right of the preview area is a sidebar with 'Inspect' and 'Console' tabs, and a dropdown menu for breakpoints. The 'Extra Large' breakpoint is currently selected, highlighted with a red border. Below the dropdown, there are sliders for 'Width' (set to 638) and 'Height' (set to 616), and 'RESET' and 'PREVIEW' buttons.

```
<!DOCTYPE html>
<html>
<head>
<link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.0.0-alpha.6/dist/css/bootstrap.min.css">
<script src="https://code.jquery.com/jquery-3.5.1.slim.min.js">
<script src="https://cdn.jsdelivr.net/npm/popper.js@1.16.1/dist/umd/popper.min.js">
<script src="https://stackpath.bootstrapcdn.com/bootstrap/4.0.0-alpha.6/dist/js/bootstrap.min.js">
</script>
</head>
<body>
<div class="container">
<div class="row">
<div class="col-6">
<h3>Taj Mahal</h3>
<p>The Taj Mahal is on the southern bank of the river Yamuna.</p>
</div>
<div class="col-6">
<h3>Mysore Palace</h3>
<p>The Mysore Palace is a historical palace and the royal residence at Mysore.</p>
</div>
</div>
<div class="row">
<div class="col-6">
<h3>Temple</h3>
<p>Temple is a gurdwara in the city of Amritsar.</p>
</div>
<div class="col-6">
<h3>Varanasi</h3>
<p>Varanasi is also known as Benares or Kashi. It is a city located on the bank of the river Ganges in Uttar Pradesh.</p>
</div>
</div>
<p>The Mysore Palace is a historical palace and the royal residence at Mysore.</p>
</div>
</body>
```

Mobile View

Select Extra Large Breakpoint



NXT
WAVE

Desktop View

Preview For Extra Large Breakpoint

NXT
WAVE

HTML CSS JAVASCRIPT

```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css" integrity="sha384-Bmbx7f4dAdeyTsg0Pw5w9KaFqxfDdC9zQWZ5OOGaJUgkzjHnGKJLmJYXNlJLc"/>
5     <script src="https://code.jquery.com/jquery-3.5.1.slim.min.js" integrity="sha384-DfXdz2htPH0lsSSs5nCTpuj/zy4C+OGpamoFVy30oU5U27X1pifg8PbWtB0" crossorigin="anonymous"></script>
6     <script src="https://cdn.jsdelivr.net/npm/popper.js@1.16.1/dist/umd/popper.min.js" integrity="sha384-9/reFTGAW83EW2RDu2S0VKaIzap3H6PoMo3qVrP5yRnQaOrXqAnZD9AuVqsiA" crossorigin="anonymous"></script>
7     <script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js" integrity="sha384-Bvkav8M543rT+eJG/xtEoCcgh9i0Z8qACr6AO46oVscwvHAEFzRQ5WgZC" crossorigin="anonymous"></script>
8   </head>
9   <body>
10     <div class="container">
11       <div class="row">
12         <div class="col-6">
13           <h3 class="heading">Taj Mahal</h3>
14           <p>The Taj Mahal is on the southern bank of the river Yamuna.</p>
15         </div>
16         <div class="col-6">
17           <h3 class="heading">Mysore Palace</h3>
18           <p>The Mysore Palace is a Historical palace and the royal residence at Mysore.</p>
19         </div>
20     </div>
21   </div>
```

Tag Mahal
The Taj Mahal is an historic monument in the city of Agra.
Golden Temple

Mysore Palace
The Mysore Palace is a Historical palace and the royal residence at Mysore.
Vinod

NXT
WAVE

Mobile View

Preview For Extra Large Breakpoint



NXT
WAVE

Desktop View

Select Reset

The screenshot displays a desktop browser interface. On the left, there's a code editor with three tabs: HTML, CSS, and JAVASCRIPT. The HTML tab contains the following code:

```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
5     <script src="https://code.jquery.com/jquery-3.5.1.slim.js">
6     <script src="https://cdn.jsdelivr.net/npm/popper.js@1.16.0/dist/umd/popper.js">
7     <script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js">
8   </head>
9   <body>
10     <div class="container">
11       <div class="row">
12         <div class="col-6">
13           <h1 class="heading">Mysore Palace</h1>
14           <p>The Mysore Palace is a historical palace and the royal residence at Mysore.</p>
15         </div>
16         <div class="col-6">
17           <h1 class="heading">Mysore Palace</h1>
18         </div>
19       </div>
20     <div>
21       <p>The Mysore Palace is a historical palace and the royal residence at Mysore.</p>
22     </div>
23   </body>
24 </html>
```

On the right, there's a responsive design preview. It shows a grid layout with a heading and some text. Below the preview, there are sliders for 'Width' (set to 1200) and 'Height' (set to 992), and two buttons: 'RESET' (highlighted with a red box) and 'PREVIEW'.

Mobile View

Select Reset



NXT
WAVE

Desktop View

```
NXT  
WAVE  
HTML CSS JAVASCRIPT Inspect  
  
1 <!DOCTYPE html>  
2 <html>  
3 <head>  
4   <link rel="stylesheet" href="https://stackauth.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css" integrity="sha384-BBhMlRQk+JnYqCpHfT8eXqzJcuqjNlEo0I6v0cUkAj9wzrD+uPZLmOOGdKJGg==" crossorigin="anonymous" referrerpolicy="no-referrer"/>  
5   <script src="https://code.jquery.com/jquery-3.5.1.slim.min.js" integrity="sha384-DfgtrV4uLJyq0hWtqOOGdKJGg==" crossorigin="anonymous" referrerpolicy="no-referrer"/>  
6   <script src="https://cdn.jsdelivr.net/npm/popper.js@1.16.1/dist/umd/popper.min.js" integrity="sha384-9fD13sByO3PwAJIiEAoJY8tFmIiOcq5L8rE03dUk0" crossorigin="anonymous" referrerpolicy="no-referrer"/>  
7   <script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js" integrity="sha384-B3IyHIOqVLMaiVQqV7PzAO+S0AldyYQJY�JYqjZd3UWxclqJ100tPj5uXu4" crossorigin="anonymous" referrerpolicy="no-referrer"/>  
8 </head>  
9 <body>  
10   <div class="container">  
11     <div class="row">  
12       <div class="col-6">  
13         <h1 class="heading">Taj Mahal</h1>  
14         <p>The Taj Mahal is on the southern bank of the river Yamuna.</p>  
15       </div>  
16       <div class="col-6">  
17         <h1 class="heading">Mysore Palace</h1>  
18         <p>The Mysore Palace is a historical palace and the royal residence at Mysore.  
19         </p>  
20       </div>
```

 Home Vinod 

Mobile View Preview

The screenshot shows a mobile application interface for 'NXT WAVE'. At the top, there are tabs for 'Code' (grayed out), 'Output' (selected, blue background), and 'Inspect' (white background). Below the tabs are three horizontal navigation icons: a left arrow, a right arrow, and a circular arrow.

Destination	Description
Taj Mahal The Taj Mahal is on the southern bank of the river Yamuna.	Mysore Palace The Mysore Palace is a historical palace and the royal residence at Mysore.
Golden Temple The Golden Temple is a gurdwara located in the city of Amritsar.	Varanasi Varanasi also known as Benares or Kashi is a city on the banks of the river Ganges in Uttar Pradesh.

Bootstrap Grid System

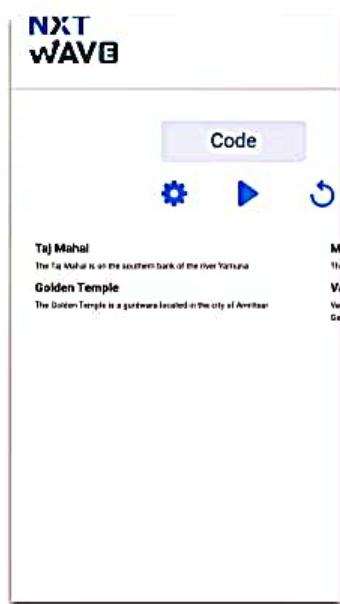
Spacing Around the Container

The screenshot shows a web page with a blue header bar. On the left, there's a code editor window displaying an HTML file with Bootstrap CSS imports. On the right, there's a preview area showing a grid layout with four cards: 'Taj Mahal', 'Mysore Palace', 'Golden Temple', and 'Varanasi'. Each card has a heading and a short description. A red arrow points from the text 'Space' to the vertical gap between the two columns of cards.

```
<!DOCTYPE html>
<html>
<head>
  <link rel="stylesheet" href="https://code.jquery.com/jquery-3.5.1.min.css">
  <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap@4.5.2/dist/css/bootstrap.min.css">
  <script src="https://code.jquery.com/jquery-3.5.1.slim.min.js">
  <script src="https://cdn.jsdelivr.net/npm/@popperjs/core@2.5.2/dist/umd/popper.min.js">
  <script src="https://cdn.jsdelivr.net/npm/bootstrap@4.5.2/dist/js/bootstrap.min.js">
</head>
<body>
  <div class="container">
    <div class="row">
      <div class="col-6">
        <h3>Taj Mahal</h3>
        <p>The Taj Mahal is on the southern bank of the river Yamuna.</p>
      </div>
      <div class="col-6">
        <h3>Mysore Palace</h3>
        <p>The Mysore Palace is a historical palace and the royal residence at Mysore.</p>
      </div>
      <div class="col-6">
        <h3>Golden Temple</h3>
        <p>The Golden Temple is a gurdwara located in the city of Amritsar.</p>
      </div>
      <div class="col-6">
        <h3>Varanasi</h3>
        <p>Varanasi is also known as Benares or Kashi. It is a city located on the bank of the river Ganges in Uttar Pradesh.</p>
      </div>
    </div>
  </div>
</body>
```

Mobile View

Zoom In and Zoom Out



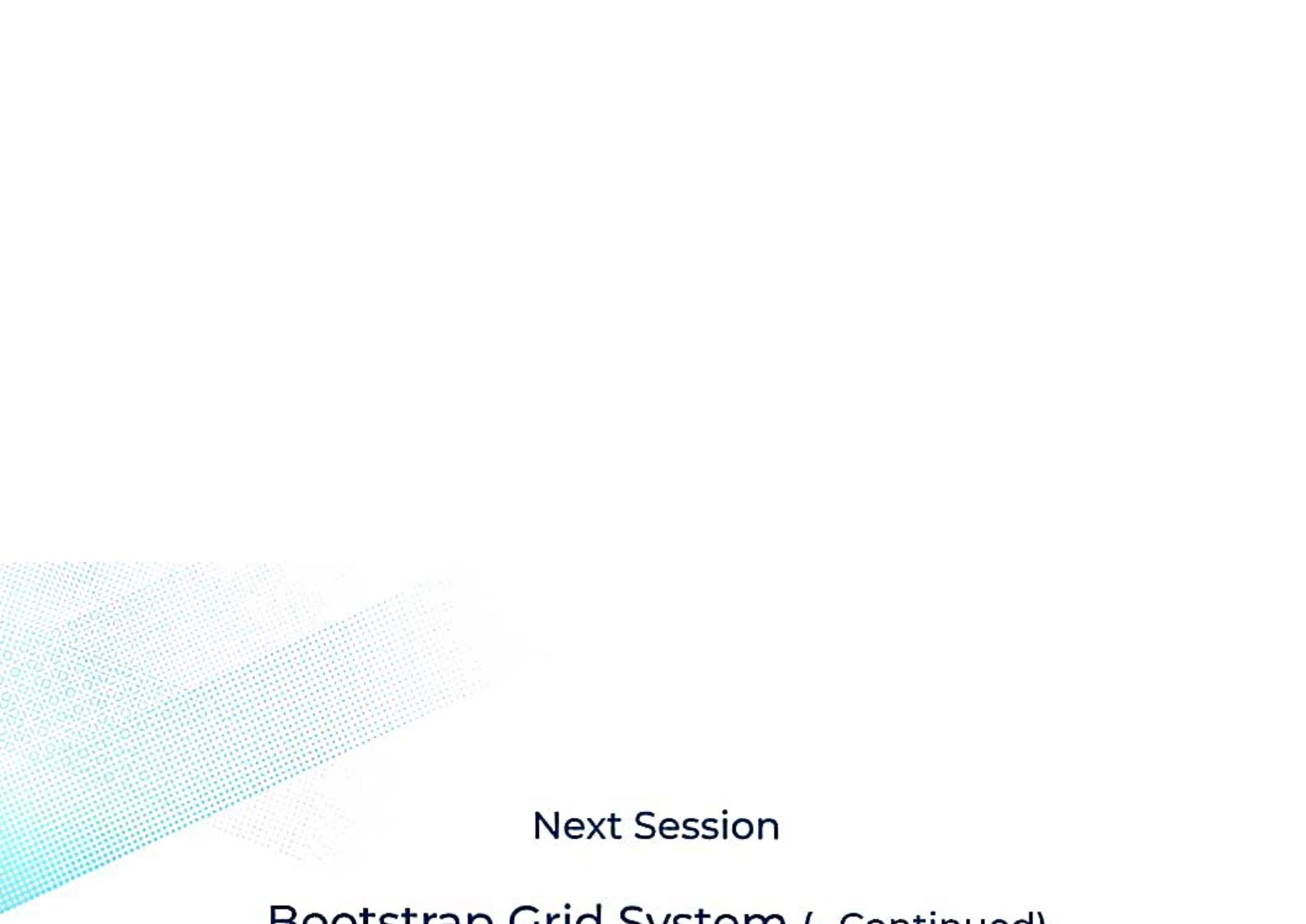
NXT
WAVE

Bootstrap Grid System

Key Takeaways

- ✓ Column Wrapping
- ✓ Bootstrap Responsive Breakpoints
 - Class name prefixes for different Breakpoints
 - Using class name prefixes in combination





Next Session

Bootstrap Grid System (...Continued)





THANK YOU



ALL THE BEST
