1. **Explain what is Bootstrap?**

Bootstrap is a HTML, CSS, and JS framework for building the rich web applications with minimal effort. This framework emphasis more on building mobile web applications.

1. **Explain why to choose Bootstrap for building the websites?**

* Mobile Support: For mobile devices it provides full support in one single file rather than in separate file. It supports the responsive design including adjusting the CSS based on the different types of device, size of the screen etc. It reduces extra effort for developers.
* Easy to learn: Writing application in bootstrap is easy if you know CSS and HTML
* Browser Support: It supports all the popular browsers like Firefox, Opera, Safari, IE etc.
* It is a **free** and **open-source** Web Designing Framework.
* Bootstrap has the support of all the **web browsers** like Internet Explorer, Google Chrome, Firefox, Opera, Safari, etc.
* It is a very powerful mobile first **front-end** framework.
* Also, it is very easy to start as one needs to have an idea of **HTML** and **CSS** only to work with it.
* We can design a **responsive website** through it which adjust to desktop, tablet, and mobile.
* It comprises functional **built-in components** which are easy to customize.

**3. What are the key components of Bootstrap?**

* CSS : It comes with plenty of CSS files
* Scaffolding : It provides a basic structure with Grid system , link styles and background
* Layout Components : List of layout components
* JavaScript Plugins: It contains many jQuery and JavaScript plugins
* Customize: To get your own version of framework you can customize your components

**4. Explain what are class loaders in Bootstrap?**

Class loader is a part of JRE (Java Runtime Environment) which loads Java classes into Java virtual environment. Class loaders also does the process of converting a named class into its equivalent binary form.

**5. What are the types of layout available in Bootstrap?**

* Fluid Layout: Fluid layout is used when you want to create a app that is 100% wide and use up all the width of the screen
* Fixed Layout: For a standard screen you will use fixed layout (940 px) option

**6. Explain what is Bootstrap Grid System?**

For creating page layout through a series of rows and columns that house your content Bootstrap Grid Sytem is used.

**7. What are offset columns in Bootstrap?**

For more specialized layouts offsets are a useful feature. For more spacing they can be used by pushing column over.

For example, .col-xs=\* classes do not support offset but they are easily replicated using an empty cell

**8. What is column ordering in Bootstrap?**

Column ordering is one of the feature available in bootstrap and you can easily write columns in an order and show them in another one. With **.col-md-push-\*** and **.col-md-pull-\***

**9. What function you can use to wrap a page content?**

To wrap a page content you can use **.container** and using that you can also center the content.

**10. Explain what pagination in bootstrap is and how they are classified?**

Pagination is the handling of an unordered list by bootstrap. To handle pagination bootstrap provides following classes

* .pagination: To get pagination on your page you have to add this class
* .disabled, .active: Customize links by .disabled for unclickable links and .active to indicate the current page
* .pagination-Ig, .pagination-sm: Use these classes to get different size item

**11. What is the use of Jumbotron in Bootstrap?**

In bootstrap, Jumbotron is generally used for content that you want to highlight like some slogan or marketing headline etc. in other words it is used to enlarge the size of the headings and to add a margin for landing page content

To use the Jumbotron in Bootstrap

* Create a container <div> with the class of .jumbotron

**12. What is the difference between Bootstrap and Foundation?**

|  |  |
| --- | --- |
| Bootstrap | Foundation |
| – Bootstrap offers unlimited number of UI elements | – In Foundation UI element options are very limited in numbers |
| – Bootstraps uses pixels | – Foundation use REMs |
| – Bootstrap encourages to design for both desktop and mobile. | – Foundation encourages to design mobile first |
| – Bootstrap support LESS as its preprocessor | – Foundation support Sass and Compass as its preprocessor |

**13. In Bootstrap what are the two ways you can display the code?**

In bootstrap you can display code in two ways

* <code> tag : If you are going to display code inline, you should use <code> tag
* <pre> tag: If you want to display the code as a standalone block element or it has multiple lines then you should use <pre> tag

**14. Explain what are the steps for creating basic or vertical forms?**

* Add a role ***form*** to the parent <form> element
* Wrap labels and controls in a <div> with class ***.form-group***. To achieve optimum spacing this is needed
* Add a class of ***.form-control*** to all texturl <input> , <textarea> , and <select> elements

**15. Explain what is Modal plugin used for in Bootstrap?**

A modal is a child window that is layered over its parent window. Using a custom Jquery Plugin, Bootstrap Modal are created. To enrich user experience and to add functionality to users, modal windows are created with the help of Modal plugin.

**16. Explain what is Bootstrap Container?**

Bootstrap container is a class which is useful and creates a centred area within the page where our site content can be put within. The advantage of the bootstrap .container is that it is responsive and will place all our other HTML code.

**17. Explain what is Bootstrap collapsing elements?**

Bootstrap collapsing elements enables you to collapse any particular element without writing any JavaScript code or the accordion markup. In Bootstrap to apply collapsing elements you have to add data-toggle= “collapse” to the controller element along with a data-target or href to automatically assign control of a collapsible element. Likewise, you can use .collapse (options), .collapse (‘show’) or .collapse (‘hide’)

**18. Explain what is list group in Bootstrap and what is the use of it?**

List groups are components to display both simple and complex element with custom content

For example, a simple list group is created using class **.list-group** to address the list, and class .list-group-item to address individual item.

**19. How you can add badge to list group in Bootstrap?**

To add badge to list group in Bootstrap you have to simply add **<span class = “badge”>** within the <li> element.

**20. Explain what media object in Bootstrap is and what are their types?**

Media objects in Bootstrap enables to put media object like image, video or audio to the left or right of the content blocks. Media element can be created using the class **.media** and the source is specified in using the class **.media-object.** Media-objects are of two types,

They are of two types

* .media
* .media-list

**21. Explain what is Bootstrap well?**

Bootstrap well is a container <div> that makes the content to appear sunken or an inset effect on the page. In order to create a well, wrap the content that you would like to appear in the well with a <div> containing the class of .well.

**22. Explain how you can create Nav elements in Bootstrap?**

Bootstrap offers various options for styling navigation elements all of them use the same markup and base class .nav.

To create Tabular Navigation or Tabs

* Start with a basic unordered list with the base class of **.nav**
* Then add class **.nav-tabs**

**23. Explain what is the use of Bootstrap Carousel plugin?**

The Carousel plugin is used to add a slider to your site. It is useful in condition where you want to display huge amount of contents within a small space on the web pages. Some of the standard carousel includes

* .carousel (options)
* .carousel (‘cycle’)
* .carousel (‘pause’)
* .carousel (‘number’)
* .carousel (‘prev’)
* .carousel (‘next’)

Bootstrap can be used as −

* **Mobile first approach** − Since Bootstrap 3, the framework consists of Mobile first styles throughout the entire library instead of in separate files.
* **Browser Support** − It is supported by all popular browsers.
* **Easy to get started** − With just the knowledge of HTML and CSS anyone can get started with Bootstrap. Also the Bootstrap official site has a good documentation.
* **Responsive design** − Bootstrap's responsive CSS adjusts to Desktops,Tablets and Mobiles.
* Provides a clean and uniform solution for building an interface for developers.
* It contains beautiful and functional built-in components which are easy to customize.
* It also provides web based customization.
* And best of all it is an open source.

**24. What does Bootstrap package includes?**

Bootstrap package includes −

* **Scaffolding** − Bootstrap provides a basic structure with Grid System, link styles, background. This is is covered in detail in the section **Bootstrap Basic Structure**
* **CSS** − Bootstrap comes with feature of global CSS settings, fundamental HTML elements styled and enhanced with extensible classes, and an advanced grid system. This is covered in detail in the section **Bootstrap with CSS**.
* **Components** − Bootstrap contains over a dozen reusable components built to provide iconography, dropdowns, navigation, alerts, popovers, and much more. This is covered in detail in the section **Layout Components**.
* **JavaScript Plugins** − Bootstrap contains over a dozen custom jQuery plugins. You can easily include them all, or one by one. This is covered in details in the section **Bootstrap Plugins**.
* **Customize** − You can customize Bootstrap's components, LESS variables, and jQuery plugins to get your very own version.

**25. What is Contextual classes of table in Bootstrap?**

The Contextual classes allow you to change the background color of your table rows or individual cells.

|  |  |
| --- | --- |
| **Sr.No.** | **Class & Description** |
| 1 | **.active**  Applies the hover color to a particular row or cell |
| 2 | **.success**  Indicates a successful or positive action |
| 3 | **.warning**  Indicates a warning that might need attention |
| 4 | **.danger**  Indicates a dangerous or potentially negative action |

**26. What is Bootstrap Grid System?**

Bootstrap includes a responsive, mobile first fluid grid system that appropriately scales up to 12 columns as the device or viewport size increases. It includes predefined classes for easy layout options, as well as powerful mixins for generating more semantic layouts.

**27. What are Bootstrap media queries?**

Media Queries in Bootstrap allow you to move, show and hide content based on viewport size.

Show a basic grid structure in Bootstrap.

Following is basic structure of Bootstrap grid −

<div class = "container">

<div class = "row">

<div class = "col-\*-\*"></div>

<div class = "col-\*-\*"></div>

</div>

<div class = "row">...</div>

</div>

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

**28. What are Offset columns?**

Offsets are a useful feature for more specialized layouts. They can be used to push columns over for more spacing, for example. The .col-xs = \* classes don't support offsets, but they are easily replicated by using an empty cell.

**29. How can you order columns in Bootstrap?**

You can easily change the order of built-in grid columns with .col-md-push-\* and .col-md-pull-\* modifier classes where \* range from 1 to 11.

**30. How do you make images responsive?**

Bootstrap 3 allows to make the images responsive by adding a class .img-responsive to the <img> tag. This class applies max-width: 100%; and height: auto; to the image so that it scales nicely to the parent element.

**31. Explain the typography and links in Bootstrap.**

Bootstrap sets a basic global display (background), typography, and link styles −

* **Basic Global display** − Sets *background-color: #fff;* on the *<body>* element.
* **Typography** − Uses the *@font-family-base*, *@font-size-base*, and *@line-height-base* attributes as the typographic base
* **Link styles** − Sets the global link color via attribute *@link-color* and apply link underlines only on *:hover*.

**32. What is Normalize in Bootstrap?**

Bootstrap uses Normalize to establish cross browser consistency.

Normalize.css is a modern, HTML5-ready alternative to CSS resets. It is a small CSS file that provides better cross-browser consistency in the default styling of HTML elements.

**33. What is Lead Body Copy**

To add some emphasis to a paragraph, add class = "lead". This will give you larger font size, lighter weight, and a taller line height

**34. Explain types of lists supported by Bootstrap.**

Bootstrap supports ordered lists, unordered lists, and definition lists.

* **Ordered lists** − An ordered list is a list that falls in some sort of sequential order and is prefaced by numbers.
* **Unordered lists** − An unordered list is a list that doesn't have any particular order and is traditionally styled with bullets. If you do not want the bullets to appear then you can remove the styling by using the class *.list-unstyled*. You can also place all list items on a single line using the class *.list-inline*.
* **Definition lists** − In this type of list, each list item can consist of both the <dt> and the <dd> elements. <dt> stands for *definition term*, and like a dictionary, this is the term (or phrase) that is being defined. Subsequently, the <dd> is the definition of the <dt>.

You can make terms and descriptions in <dl> line up side-by-side using class *dl-horizontal*.

**35. What are glyphicons?**

Glyphicons are icon fonts which you can use in your web projects. Glyphicons Halflings are not free and require licensing, however their creator has made them available for Bootstrap projects free of cost.

**36. How do you use Glyphicons?**

To use the icons, simply use the following code just about anywhere in your code. Leave a space between the icon and text for proper padding.

<span class = "glyphicon glyphicon-search"></span>

**37. What is a transition plugin?**

The transition plugin provides simple transition effects such as Sliding or fading in modals.

**38. What is a Modal Plugin?**

A modal is a child window that is layered over its parent window. Typically, the purpose is to display content from a separate source that can have some interaction without leaving the parent window. Child windows can provide information, interaction, or more.

**39. What is button group**

Button groups allow multiple buttons to be stacked together on a single line. This is useful when you want to place items like alignment buttons together.

**40. Which class is used for basic button group**

.btn-group class is used for a basic button group. Wrap a series of buttons with class .btn in .btn-group.

**41. Which class is used to draw a toolbar of buttons**

.btn-toolbar helps to combine sets of <div class = "btn-group"> into a <div class = "btn-toolbar"> for more complex components.

**42. Which classes can be applied to button group instead of resizing each button**

.btn-group-lg, .btn-group-sm, .btn-group-xs classes can be applied to button group instead of resizing each button.

**43. Which class make a set of buttons appear vertically stacked rather than horizontally**

.btn-group-vertical class make a set of buttons appear vertically stacked rather than horizontally.

**44. What are input groups**

Input groups are extended [Form Controls](https://www.tutorialspoint.com/bootstrap/bootstrap_forms.htm). Using input groups you can easily prepend and append text or buttons to the text-based inputs.

By adding prepended and appended content to an input field, you can add common elements to the user's input. For example, you can add the dollar symbol, the @ for a Twitter username, or anything else that might be common for your application interface.

To prepend or append elements to a **.form-control** −

* Wrap it in a <div> with class **.input-group**
* As a next step, within that same <div> , place your extra content inside a <span> with class **.input-group-addon**.
* Now place this <span> either before or after the <input> element.

**45. How will you create a tabbed navigation menu**

To create a tabbed navigation menu −

* Start with a basic unordered list with the base class of .nav.
* Add class .nav-tabs.

**46. How will you create a pills navigation menu**

To create a pills navigation menu −

* Start with a basic unordered list with the base class of .nav.
* Add class .nav-pills.

**47. How will you create a vertical pills navigation menu**

You can stack the pills vertically using the class .nav-stacked along with the classes: .nav, .nav-pills.

**48. What is bootstrap navbar**

The navbar is one of the prominent features of Bootstrap sites. Navbars are responsive 'meta' components that serve as navigation headers for your application or site. Navbars collapse in mobile views and become horizontal as the available viewport width increases. At its core, the navbar includes styling for site names and basic navigation.

**49. What is bootstrap breadcrumb**

Breadcrumbs are a great way to show hierarchy-based information for a site. In the case of blogs, breadcrumbs can show the dates of publishing, categories, or tags. They indicate the current page's location within a navigational hierarchy.

A breadcrumb in Bootstrap is simply an unordered list with a class of .breadcrumb. The separator is automatically added by CSS (bootstrap.min.css).

**50. Which class is used for basic pagination**

.pagination class is uesed to add the pagination on a page.

**51. How will you customize links of pagination**

You can customize links by using .disabled for unclickable links and .active to indicate the current page.

**52. What are bootstrap labels**

Bootstrap labels are great for offering counts, tips, or other markup for pages. Use class .label to display labels.

**53. What are bootstrap badges**

Badges are similar to labels; the primary difference is that the corners are more rounded. Badges are mainly used to highlight new or unread items. To use badges just add <span class = "badge"> to links, Bootstrap navs, and more.

**54. What is Bootstrap Jumbotron**

As the name suggest this component can optionally increase the size of headings and add a lot of margin for landing page content. To use the Jumbotron −

* Create a container <div> with the class of .jumbotron.
* In addition to a larger <h1>, the font-weight is reduced to 200px.

**55. What is Bootstrap page header**

The page header is a nice little feature to add appropriate spacing around the headings on a page. This is particularly helpful on a web page where you may have several post titles and need a way to add distinction to each of them. To use a page header, wrap your heading in a <div> with a class of .page-header.

**56. What are bootstrap alerts?**

Bootstrap Alerts provide a way to style messages to the user. They provide contextual feedback messages for typical user actions.

**57. How will you create a bootstrap alert?**

You can add a basic alert by creating a wrapper <div> and adding a class of .alert and one of the four contextual classes (e.g., .alert-success, .alert-info, .alert-warning, .alert-danger).

**58. How will you create a stacked progress bar using bootstrap**

You can even stack multiple progress bars. Place the multiple progress bars into the same .progress to stack them.

**59. What is the purpose of .media-list class in bootstrap**

If you are preparing a list where the items will be part of an unordered list, use a class. useful for comment threads or articles lists.

**60. How will you create a bootstrap panel with footer**

You can add footers to panels, by wrapping buttons or secondary text in a <div> containing class .panel-footer.

**61. What contextual classes are available to style the panels**

Use contextual state classes such as, panel-primary, panel-success, panel-info, panel-warning, panel-danger, to make a panel more meaningful to a particular context.

**62. Can you put a table within bootstrap panel**

Yes! To get a non-bordered table within a panel, use the class .table within the panel. Suppose there is a <div> containing .panel-body, we add an extra border to the top of the table for separation. If there is no <div> containing .panel-body, then the component moves from panel header to table without interruption.

**63. Can you put a listgroup within bootstrap panel**

Yes! You can include list groups within any panel. Create a panel by adding class .panel to the <div> element. Also add class .panel-default to this element. Now within this panel include your list groups.

**64. What is bootstrap well**

A well is a container in <div> that causes the content to appear sunken or an inset effect on the page. To create a well, simply wrap the content that you would like to appear in the well with a <div> containing the class of .well.

**65. What is Scrollspy plugin**

The Scrollspy (auto updating nav) plugin allows you to target sections of the page based on the scroll position. In its basic implementation, as you scroll, you can add .active classes to the navbar based on the scroll position.

**66. What is affix plugin**

The affix plugin allows a <div> to become affixed to a location on the page. You can also toggle it's pinning on and off using this plugin. A common example of this are social icons. They will start in a location, but as the page hits a certain mark, the <div> will be locked in place and will stop scrolling with the rest of the page.

**67. Explain the features of Bootstrap.**

* Open Source for use
* Compatibility with all browsers.
* Responsive designs
* Easy to use and fast.

**68. What do you mean by Bootstrap Classloader?**

Bootstrap class loader is a part of java and a main parental class of class loader.

**69. When will you use <code>tag and <pre>tag?**

<code>tag is used to show the code inline and <pre>tag is used to show code with multiple lines.

**70. What is a progress bar in bootstrap?**

Progress bar is used with HTML tag style in HTML element using <**progress**> keyword. In bootstrap we used html5 <**progress**> with CSS classes that have special features in bootstrap, that is only made for the progress bar.

**71. Name the contextual classes that are used with the progressive bar in bootstrap.**

* Progress-success, Progress-info, Progress-warning, Progress-danger

**72. What are the different button styles in Bootstrap?**

.btn-default, .btn-primary, .btn-success, .btn-info, .btn-warning, .btn-danger, .btn-link.

**73. How can we customize links of pagination in Bootstrap?**

We can customize the links by using **.disabled** for unclickable links and **.active** for indicating the current page..

**74. How navbar works in Bootstrap?**

In bootstrap, navbar is an eminent feature to make responsive meta component that works as navigation headers for your application and site. In mobile view, navbar collapses and become horizontal as the available viewport width increases.

**75. What are labels in Bootstrap?**

Bootstrap labels are used for offering counts, tips or other things to provide markup on web pages. To use the label in Bootstrap we use the class **.labels** to indicate the labels.

**76. What are badges in Bootstrap?**

Badges are homogeneous to labels, the main difference between them is corners are more rounded. The main work of badges in the bootstrap is to highlight new or unread items. To use badges just add <span class=”badge”> to links and bootstrap navs.

**77. How can we make image responsive in Bootstrap?**

After the updates in Bootstrap, currently the feature to make an image responsive has been added, we can do this by adding a class **.img-responsive** to the <img> tag. This class makes the width max-width =100%; and height=auto; to the image so that it matches nicely to the parent element.

**78. What is lead body copy in Bootstrap?**

It is used to add some ascent to the paragraph if we add class=”lead”. This will enlarge the font size and a taller line height.

**79. How will you create a Bootstrap panel with heading?**

There are two ways by which we can add panel heading.

First is, we can directly use **.panel-heading** class to add heading container in a panel and the second way is by using any heading tag like <h1> to <h6> with a **.panel-title** class to give more styles on the heading.

**80. What is a scrollspy plugin in Bootstrap?**

It is an auto-updating nav plugin which allows in fetching section of the page based on the scroll position. This can be done by **the .active class** to the navbar based scroll position.

**81. What are Grid classes in the Bootstrap?**

* xs (It is used for phone screens less than 786px wide).
* sm (It is used for the tablet screens which are greater than 786px wide).
* md (It is for small laptop screen of size equal to or greater than 992px wide).
* LG ( It is for laptop and desktop screens which are equal to greater than 1200px wide).

**82. What are global styles that are used in Bootstrap Default Typography?**

In Bootstrap the global default font-size is 14px and the line height is 1.428. The default font changes to Helvetica and Arial are with sans-serif fallback and all these styles are applicable for both body and all paragraphs.

**83. What dependencies does Bootstrap require to work properly?**

jQuery is the only dependency that bootstrap requires for working properly and this is only for JavaScript plugins in bootstrap.

**84. What is a transition plugin in Bootstrap?**

It provides simple transition effects like sliding or fading in modals.

**85. Explain the concept of creating a vertical or basic form in Bootstrap.**

For this first we have to add a role form to the parent <form> element then we have to wrap labels and controls in a <div> with class.form-group and then we have to add a class of .form-control to all text url <input>,<textarea> and <select> elements.

**86. Explain why Bootstrap is preferred for website development.**

Bootstrap has better features as compared to other web development platforms. It provides extensive browser support for almost every known browser such as Opera, Chrome, Firefox, Safari, etc. If you are well-acquainted with [CSS](https://www.edureka.co/blog/what-is-css/) and HTML, web development becomes easy on Bootstrap.

Also, it supports mobile applications with the help of responsive design and can adjust CSS as per the device, screen size, etc. Instead of creating multiple files, it creates only a single file

**87. What are the bootstrap media objects?**

The media objects are abstract object styles for building various types of components like blog comments, Tweets, etc. It features a left-aligned or right-aligned image alongside the textual content. The goal of the media object is to make the code for developing these blocks of information drastically shorter. And, this goal is achieved by applying classes to some of the simple markups.

**88. Why do we use Jumbotron in Bootstrap?**  
Jumbotron is a user-attractive function of Bootstrap. it is a brilliant way to highlight the key contents of a page. the content could be a slogan or probably a headline or any other catchy element of the page. Jumbotron works by increasing the content of the landing page and also increasing the heading size of the content. In order to implement Jumbotron in a Bootstrap use:

**89. Who Developed The Bootstrap?**

Mark Otto and Jacob Thornton at Twitter

**90. Would You Differentiate Between Fluid Layout & Responsive Layout?**

Yes, sure. The main difference is that Fluid Layout are built using widths percentages and they are based on proportionally laying out the website so elements take up the same percent of space on different screen sizes. Responsive Layout is built on a fluid grid and here CSS Media Queries are used to present different layouts based on different screen sizes.

**91. What Is Twitter Bootstrap?**

Bootstrap is a sleek, intuitive, and powerful mobile first front-end framework for faster and easier web development. It uses HTML, CSS and Javascript.

**92. How to classified pagination in bootstrap?**  
Add class "pagination" on your page for pagination.  
.disabled, .active are available  
.pagination-Ig, .pagination-sm to get different sizes  
  
**93. In Which language Bootstrap is written?**  
HTML, CSS, LESS, Sass and JavaScript