Explain Bootstrap?

Bootstrap is a platform for web development that is based on front-end framework and creates exceptional responsive designs. It is fast, easy and has multiple templates designed using HTML, and CSS. These templates are used for forms, tables, buttons, typography, modals, tables, navigation, carousels and images. Bootstrap also has Javascript plugins, which are optional. Bootstrap is preferred for developing mobile web applications.

What is Bootstrap? *

Bootstrap is CSS/Javascript framework for building the rich web applications with minimal effort. This framework emphasis more on building mobile web applications.

What are the key components of Bootstrap?

The key components of Bootstrap are:

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

What is a Bootstrap Container? *

Bootstrap `.container` is again a class that is used for creating an area in the center of the webpage to place the content. There are row elements which act as containers for columns thereby making a grid system. Rows are used for creating horizontal column groups.

Using the `.container`, you can get a responsive design, which will include all the other HTML code.

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

The steps for creating basic or vertical forms are

• 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

How many different media queries are used by the Bootstrap grid system by default? *

The Bootstrap grid system provides four tiers of classes:

`xs` for phones (<768px),
`sm` for tablets (≥768px),
`md` for desktops (≥992px),
`lg` for large desktops (≥1200px).

Since Bootstrap is developed to be mobile first, we use a handful of media queries to create sensible breakpoints for our layouts and interfaces. These breakpoints are mostly based on minimum viewport widths and allow us to scale up elements as the viewport changes.

Bootstrap primarily uses the following media query ranges—or breakpoints—in our source Sass files for our layout, grid system, and components.

```
/* Extra small devices (phones, less than 768px) */
/* No media query since this is the default in Bootstrap */

/* Small devices (tablets, 768px and up) */
@media (min-width: @screen-sm-min) { ... }

/* Medium devices (desktops, 992px and up) */
@media (min-width: @screen-md-min) { ... }

/* Large devices (large desktops, 1200px and up) */
@media (min-width: @screen-lg-min) { ... }
```

What will be the default Bootstrap look of the alert created with this following code?

Consider:

```
<div class="alert" role="alert">Warning! I'm missing something.</div>
```

What will be the default Bootstrap look of the alert created with this following code?

Alert messages are used to provide feedback messages that usually require the attention of the user. Here it is important to note that Bootstrap Alerts don't have default class. If a contextual class such as `.alert-success`, `.alert-info`, `.alert-warning`, or `.alert-danger`, is not provided, a default grey alert will be created.

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-tab`

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 conditions where you want to display a huge amount of content 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')`

What are the different color classes available in Bootstrap 4? *

The main colors classes in Bootstrap 4 are:

- `Primary`
- `Secondary`
- `Success`
- `Danger`
- `Warning`
- `Info`
- `Light`
- `Dark`

What are the units of measurement that Bootstrap uses to measure different sizes and widths?

While Bootstrap uses ems or rems for defining most sizes, pxs are used for grid breakpoints and container widths. This is because the viewport width is in pixels and does not change with the font size.

What are breadcrumbs in Bootstrap?

Breadcrumbs depict the navigational hierarchy of a site, separators in the hierarchy are automatically added by means of CSS.

Bootstrap breadcrumb used for,

- `Documentation page`
- `Magazine`
- `ERP system`

A breadcrumb in Bootstrap is simply an unordered list with a class of `.breadcrumb`.

What is collapse?

The collapse JavaScript plugin is used to show and hide content. Buttons or anchors are used as triggers that are mapped to specific elements you toggle. Collapsing an element will animate the height from its current value to 0. Given how CSS handles animations, we cannot use padding on a `.collapse` element. Instead, we have to use the class as an independent wrapping element.

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.

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

What do you mean by normalize in Bootstrap?

Bootstrap normalize is a small CSS file which is used to make cross-browser consistency.

Navigation bar in Bootstrap? *

It resembles the navigation header in the top of the page, the navigation bar can be created with Nav tag. Navbars and their contents are fluid by default. The horizontal width can be scaled and controlled using Navigation containers. Navbars are concealed by default while printing.

```
<nav class="navbar navbar-expand-lg navbar-light bg-light">
    <div class="dropdown-menu" aria-labelledby="navbarDropdown">
        <a class="dropdown-item" href="#">Action</a>
        <a class="dropdown-item" href="#">Another action</a>
    <div class="dropdown-divider"></div>
        <a class="dropdown-item" href="#">Something else here</a>
    </div>
</nav>
```