

**1. What is Bootstrap and why is it popular?**

Bootstrap is a front-end framework for developing responsive and mobile-first websites. It is popular due to its pre-designed components, grid system, and ease of use.

**2. Explain the Bootstrap Grid System.**

Bootstrap uses a 12-column grid system based on flexbox, allowing responsive layouts with different breakpoints (col-sm-\*, col-md-\*, col-lg-\*, etc.).

**3. What are Bootstrap Utility Classes?**

Utility classes are predefined classes for spacing, colors, typography, borders, flex, and more, allowing quick styling without custom CSS.

**4. What is the difference between Bootstrap Container and Container-fluid?**

container has a fixed width that adapts at different breakpoints, while container-fluid spans the full width of the screen.

**5. How to create a responsive navigation bar using Bootstrap?**

Use the <nav> element with navbar, navbar-expand, and navbar-light/navbar-dark along with bg-\* classes.

**6. How to create a Bootstrap Modal?**

Use the modal class along with data-bs-toggle="modal" and data-bs-target="#modalID" attributes for triggering.

**7. Explain the key features of Bootstrap.**

- Responsive grid system
- Pre-styled components (buttons, forms, modals, etc.)
- Utility classes
- Mobile-first approach
- JavaScript plugins

**8. Explain the concept of a responsive web design.**

Responsive design ensures a website adjusts to different screen sizes using flexible layouts, images, and CSS media queries.

**9. What are the advantages of using Bootstrap?**

- Speeds up development
- Consistency across browsers
- Mobile-first design
- Large community support
- Predefined components

**10. How can you create a responsive image in Bootstrap?**

Use the img-fluid class: .

**11. What is the purpose of Bootstrap's Jumbotron component?**

The jumbotron (deprecated in Bootstrap 5) was used to highlight content with a large, padded section.

**12. Explain the Bootstrap Modal component.**

The modal component creates a pop-up dialog box that can contain text, forms, buttons, or other elements.