**Module (Bootstrap Basic & Advanced) – 6**

1. **What are the advantages of Bootstrap?**

**Ans:-**

* **Responsive Design:** Provides a mobile-first approach with a responsive grid system.
* **Pre-designed Components:** Offers reusable UI components like buttons, cards, modals, etc.
* **Cross-browser Compatibility:** Ensures consistent performance across major browsers.
* **Customization:** Easily customizable through Sass variables.
* Comprehensive Documentation: Extensive guides, examples, and references.
* **Ease of Use:** Requires basic knowledge of HTML, CSS, and JS to get started.

1. **What is a Bootstrap Container, and how does it work?**

**Ans:-**

* A Bootstrap container is a fundamental layout structure used to align and center content. It comes in two types:
* **.container:** Provides a fixed-width layout that adjusts based on the screen size.
* **.container-fluid:** Stretches the layout to occupy the full width of the screen.
* These containers house the rows and columns of the Bootstrap Grid System, ensuring consistent spacing and alignment.

1. **What are the default Bootstrap text settings?**

**Ans:-**

* Bootstrap provides utility classes for text customization:
* **Alignment:** text-start, text-center, text-end.
* **Transformations:** text-uppercase, text-lowercase, text-capitalize.
* **Colors:** text-primary, text-secondary, text-success, etc.
* **Weight and Style:** fw-bold, fw-light, fst-italic.
* **Truncation:** text-truncate for truncating text with ellipsis.

1. **What do you know about the Bootstrap Grid System?**

**Ans:-**

* The Bootstrap Grid System is a responsive layout system based on 12 columns. It uses rows and columns to organize and structure content:
* **Classes:** .row for rows and .col-\* for columns.
* **Breakpoints:**
* **xs (extra small):** <576px
* **sm (small):** ≥576px
* **md (medium):** ≥768px
* **lg (large):** ≥992px
* **xl (extra large):** ≥1200px
* **xxl (extra-extra large):** ≥1400px
* Columns auto-adjust based on the screen size and available space.

1. **What is the difference between Bootstrap 4 and Bootstrap 5**

**Ans:-**

|  |  |  |
| --- | --- | --- |
| **Feature** | **Bootstrap 4** | **Bootstrap 5** |
| jQuery | Requires jQuery | No jQuery dependency |
| Grid System | Based on flexbox | Introduces CSS grid (optional) |
| Form Controls | Custom elements via classes | Enhanced styling and utility classes |
| Icons | No built-in icons | Bootstrap Icons (optional) |
| Gutters | .gutter-\* classes | .g-\* utility classes |

1. **What is a Button Group, and what is the class for a basic Button Group?**

**Ans:-**

* A Button Group allows grouping multiple buttons together to form a single block.
* **Basic class:** .btn-group

1. **How can you use Bootstrap to make thumbnails?**

**Ans:-**

* Thumbnails are created using the **.img-thumbnail** class, which adds a border and padding around images.

1. **In Bootstrap 4, what is flexbox?**

**Ans:-**

* Flexbox is a layout model used in Bootstrap 4 for creating flexible and responsive layouts. It replaces older float-based layouts.
* **Classes:**
* **d-flex:** Enables flexbox for an element.
* **justify-content-\*:** Aligns items horizontally.
* **align-items-\*:** Aligns items vertically.
* **flex-row / flex-column:** Defines row or column layout.

1. **How can one create an alert in Bootstrap?**

**Ans:-**

* Bootstrap alerts are used to display messages. Use the **.alert** class with contextual classes like **.alert-success, .alert-danger,** etc.

1. **What is a bootstrap card and how would you create one?**

**Ans:-**

* A Bootstrap Card is a flexible content container with various options for headers, footers, images, and more.