

1. Name 5 different Bootstrap components and describe how they work.

- **Jumbotron:** This enlarges and makes particular content or information more noticeable and attractive. For example:

```
<div class="container">  
  
  <div class="jumbotron">  
  
    <h1 class="text-center text-success">  
  
      Hello World!  
  
    </h1>  
  
    <h3>introduction</h3>  
  
  <p>
```

Bootstrap is a set of tools available for free and can be used to develop responsive websites and web applications. It is also open-source, meaning its source code is available for anyone to access, use and modify.

```
  </p>  
  
  </div>  
  
</div>
```

- **Alerts:** A pre-defined message that pops up after a particular action. For example:

```
<an alert!>  
  
<h1>Alert:</h1>  
  
<div class="alert alert-info"  
  
  role="alert">  
  
    an alert!  
  
  </div>
```

- **Buttons:** Customizable buttons that can trigger actions in forms, dialogue boxes, and more. They come in different sizes, styles, and states. For example:

```
<button  
  type="button"  
  class="close"  
  data-dismiss="modal"  
  aria-label="Close">  
  <span aria-hidden="true">×</span>  
</button>
```

- **Button group:** A set of buttons arranged in a line, which can be aligned vertically or horizontally. For example:

```
<div class="modal-footer">  
  <button type="button"  
    class="btn btn-primary"  
    data-dismiss="modal">  
    Close  
  </button>  
  <button type="button"  
    class="btn btn-secondary">  
    Save  
  </button>  
</div>
```

- **Badge:** A label used to provide additional information.

```
<h1>Example heading <span class="badge badge-secondary">New</span></h1>  
<h2>Example heading <span class="badge badge-secondary">New</span></h2>  
<h3>Example heading <span class="badge badge-secondary">New</span></h3>
```

`<h4>Example heading New</h4>`

`<h5>Example heading New</h5>`

`<h6>Example heading New</h6>`

Sources:

<https://www.geeksforgeeks.org/explain-the-components-of-bootstrap/>

<https://getbootstrap.com/docs/4.0/components/badge/>

2. How does the Bootstrap grid system work?

Bootstrap's grid system relies on a sequence of containers, rows, and columns to organize and align content. For example:

```
<div class="container">
  <div class="row">
    <div class="col-sm">
      One of three columns
    </div>
    <div class="col-sm">
      One of three columns
    </div>
    <div class="col-sm">
      One of three columns
    </div>
  </div>
</div>
```

The example above utilizes pre-existing grid classes to generate three equally-sized columns across small, medium, large, and extra-large devices. These columns are centered on the page using the parent element, .container.

Source:

<https://getbootstrap.com/docs/4.0/layout/grid/>