TITLE : Design a webpage that showcases use of bootstrap and card flip.

- **Aim:-** Implement a responsive web page utilizing Bootstrap to create a visually appealing card-flip effect, enabling users to interactively reveal additional content on the back side of each card. The implementation should prioritize compatibility across different devices and screen sizes, offering an engaging user experience.

- **Used Tags :-**

  ◆ *<!DOCTYPE html>:* Declares the HTML version being used (HTML5).

  ◆ *<html>:* The root element of an HTML document.

  ◆ *<head>:* Contains meta-information about the HTML document, such as character encoding, viewport settings, and external resource links.

  ◆ *<meta charset="UTF-8">:* Specifies the character encoding.

  ◆ *<meta name="viewport" content="width=device-width, initial-scale=1.0">:* Sets the viewport for responsive design.

  ◆ *<title>:* Sets the title of the HTML document.

  ◆ *<link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">:* Links the Bootstrap CSS stylesheet and an external CSS file.

  ◆ *<body>:* Contains the content of the HTML document, including headings, paragraphs, images, and divisions.

  ◆ *<div>:* Represents a generic container or division in an HTML document.

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◆ *<h1>:* Represents the highest level of heading in HTML, typically used for main headings.

◆ *<h5>:* Represents a lower level of heading in HTML, used for subheadings or less important headings.

◆ *<p>:* Represents a paragraph of text in HTML, used for grouping and displaying text content.

◆ *<img>:* Embeds an image into the HTML document, allowing visual content to be displayed.

◆ *<!-- -->:* Represents a comment in HTML, which is not displayed in the browser but can be used to add notes or explanations within the code.

○ *CSS Tags Used (with details):*

➔ *.theme-heading h1:* Targets the <h1> element inside elements with the class .theme-heading. It styles the main heading of the theme.

➔ *font-size: 2.5rem;:* Sets the font size of the heading to 2.5 rem units.

➔ *color: #0056b3;:* Sets the text color of the heading to a shade of blue.

➔ *margin-bottom: 30px;:* Adds a bottom margin of 30 pixels to the heading.

➔ *.card-container:* Targets elements with the class .card-container. It styles the container for the cards.

➔ *display: flex;:* Uses a flexbox layout for its children.

➔ *flex-wrap: wrap;:* Allows the flex items to wrap onto multiple lines if needed.

➔ *justify-content: center;:* Centers the flex items horizontally within the container.

➔ *.card:* Targets elements with the class .card. It styles individual cards.

➔ *width: 300px;:* Sets the width of each card to 300 pixels.

➔ *height: 500px;:* Sets the height of each card to 500 pixels.

➔ *perspective: 1000px;:* Defines the depth perspective for 3D transforms.

➔ *margin: 20px;:* Adds a margin of 20 pixels around each card.

➔ *.card-inner:* Targets elements with the class .card-inner. It styles the inner container of each card for 3D transformations.

➔ *width: 100%; height: 100%;:* Sets the width and height of the inner container to 100%.

➔ *transition: transform 0.5s;:* Specifies a smooth transition effect for the transform property over 0.5 seconds.

➔ *transform-style: preserve-3d;:* Specifies that the child elements should be rendered in a 3D space.

➔ *.card-front, .card-back:* Targets elements with the classes .card-front and .card-back. It styles the front and back faces of each card.

➔ *width: 100%; height: 100%;:* Sets the width and height of the faces to 100%.

➔ *position: absolute;:* Positions the faces absolutely within the card container.

➔ *backface-visibility: hidden;:* Hides the back face of the element during 3D transformations.

➔ *border-radius: 10px;:* Adds rounded corners to the card faces for aesthetic purposes.

➔ *.card:hover .card-inner:* Targets the .card-inner element when the card is hovered over. It triggers a rotation effect.

➔ *transform: rotateY(180deg);:* Rotates the card 180 degrees around the Y-axis when hovered over.

➔ *.card-back:* Targets elements with the class .card-back. It styles the back face of each card.

➔ *transform: rotateY(180deg);:* Rotates the back face of the card to be visible initially.

➔ *background-color: #FFC0CB;:* Sets the background color of the back face to a shade of pink.

➔ *.card-front:* Targets elements with the class .card-front. It styles the front face of each card.

➔ *background-color: #87CEEB;:* Sets the background color of the front face to a shade of light blue.

➔ *.card-title, .card-text:* Targets elements with the classes .card-title and .card-text. It styles the title and text content of each card.

➔ *color: #333;:* Sets the text color to a shade of dark gray for better readability.

● *Source Code :-*

   ● *Styles.css*

```
/* Theme Heading Styling */
.theme-heading h1 {
    font-size: 2.5rem;
    color: #0056b3;
    margin-bottom: 30px;
}

.card-container {
```

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```css
    display: flex;
    flex-wrap: wrap;
    justify-content: center;
}
.card {
    width: 300px;
    height: 500px;
    perspective: 1000px;
    margin: 20px;
}
.card-inner {
    width: 100%;
    height: 100%;
    transition: transform 0.5s;
    transform-style: preserve-3d;
}
.card-front, .card-back {
    width: 100%;
    height: 100%;
    position: absolute;
    backface-visibility: hidden;
    border-radius: 10px; /* Added for rounded corners */
}
.card:hover .card-inner {
    transform: rotateY(180deg);
}
.card-back {
    transform: rotateY(180deg);
    background-color: #FFC0CB; /* Pink background for the back */
}
.card-front {
    background-color: #87CEEB; /* Light blue background for the front */
}
.card-title {
    color: #333; /* Dark text for better readability */
}
.card-text {
    color: #333; /* Dark text for better readability */
}
```

- ***Index.html***

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
         <meta    name="viewport"    content="width=device-width,
initial-scale=1.0">
  <title>Famous Personalities Card Flip</title>
                                        <link        rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.c
ss">
  <link rel="stylesheet" href="styles.css"> <!-- External CSS file -->
</head>
<body>
<!-- Theme Heading -->
<div class="theme-heading text-center my-5">
  <h1>Famous Personalities</h1>
</div>
  <div class="container">
    <div class="card-container">
      <!-- Albert Einstein -->
      <div class="card">
        <div class="card-inner">
          <div class="card-front">
            <!-- Placeholder image -->
                        <img  src="albert-einstein-1933340_1280.jpg"
class="card-img-top" alt="Albert Einstein">
            <div class="card-body">
              <h5 class="card-title">Albert Einstein</h5>
                <p class="card-text">German-born theoretical physicist
who developed the theory of relativity.</p>
            </div>
          </div>
          <div class="card-back">
            <!-- Placeholder image -->
                                                                <img
src="albert-einstein-pictures-1920-x-1080-1he1l0164zv5bb0x.jpg"
class="card-img-top" alt="Einstein's Achievements">
              <div class="card-body">
```

```html
                        <h5 class="card-title">Notable Work: Theory of Relativity</h5>
                  <p class="card-text">Einstein's work is also known for its influence on the philosophy of science.</p>
            </div>
          </div>
        </div>
      </div>
      <!-- Marie Curie -->
      <div class="card">
        <div class="card-inner">
          <div class="card-front">
            <!-- Placeholder image -->
            <img src="Marie-Curie.jpg" class="card-img-top" alt="Marie Curie">
              <div class="card-body">
                <h5 class="card-title">Marie Curie</h5>
                    <p class="card-text">Polish and naturalized-French physicist and chemist who conducted pioneering research on radioactivity.</p>
              </div>
          </div>
          <div class="card-back">
            <!-- Placeholder image -->
            <img src="download.jpeg" class="card-img-top" alt="Curie's Achievements">
              <div class="card-body">
                  <h5 class="card-title">Notable Achievements: Nobel Prizes in Physics & Chemistry</h5>
                  <p class="card-text">The first woman to win a Nobel Prize and the only person to win in multiple sciences.</p>
              </div>
          </div>
        </div>
      </div>
      <!-- Leonardo da Vinci -->
      <div class="card">
        <div class="card-inner">
          <div class="card-front">
            <!-- Placeholder image -->
```

```
                                                        <img
src="portrait-of-leonardo-da-vinci-1452-1519-getty.jpg"
class="card-img-top" alt="Leonardo da Vinci">
                <div class="card-body">
                    <h5 class="card-title">Leonardo da Vinci</h5>
                        <p class="card-text">Italian polymath of the Renaissance
known for his contributions to art, science, and engineering.</p>
                </div>
            </div>
            <div class="card-back">
                <!-- Placeholder image -->
                                                        <img
src="F5BECB09-D6B2-487E-A4268CC92DA3FBD4_source.webp"
class="card-img-top" alt="da Vinci's Works">
                <div class="card-body">
                        <h5 class="card-title">Masterpieces: Mona Lisa & The
Last Supper</h5>
                        <p class="card-text">His works and journals influenced
countless fields, demonstrating a uniquely curious and inventive mind.</p>
                </div>
            </div>
        </div>
    </div>
    <!-- Isaac Newton -->
    <div class="card">
        <div class="card-inner">
            <div class="card-front">
                <!-- Placeholder image -->
                        <img  src="3buDqF4oZrEByNRVBgYwmm.jpg"
class="card-img-top" alt="Isaac Newton">
                <div class="card-body">
                    <h5 class="card-title">Isaac Newton</h5>
                        <p class="card-text">English mathematician, physicist,
astronomer, and author who is widely recognised as one of the most
influential scientists of all time.</p>
                </div>
            </div>
            <div class="card-back">
                <!-- Placeholder image -->
```

```
                    <img src="Isaac-Newton-formulation-law-gravitation.webp"
class="card-img-top" alt="Newton's Discoveries">
                <div class="card-body">
                    <h5 class="card-title">Key Contributions: Laws of Motion
& Universal Gravitation</h5>
                        <p class="card-text">Newton made groundbreaking
contributions to mathematics, optics, and physics, laying the foundation for
classical mechanics.</p>
                </div>
            </div>
        </div>
    </div>
    <!-- Nikola Tesla -->
    <div class="card">
        <div class="card-inner">
            <div class="card-front">
                <!-- Placeholder image -->
                    <img  src="64316606522fa.image_-1170x700.jpg"
class="card-img-top" alt="Nikola Tesla">
                <div class="card-body">
                    <h5 class="card-title">Nikola Tesla</h5>
                    <p class="card-text">Serbian-American inventor, electrical
engineer, mechanical engineer, and futurist best known for his contributions
to the design of the modern alternating current (AC) electricity supply
system.</p>
                </div>
            </div>
            <div class="card-back">
                <!-- Placeholder image -->
                                                                    <img
src="never-before-seen-nikola-tesla-inventions-v0-yu194epuelvb1.webp"
class="card-img-top" alt="Tesla's Inventions">
                <div class="card-body">
                    <h5 class="card-title">Innovations: AC Power & The
Tesla Coil</h5>
                    <p class="card-text">Tesla's work formed the basis of
wireless communication and the electrical power grid.</p>
                </div>
            </div>
        </div>
```
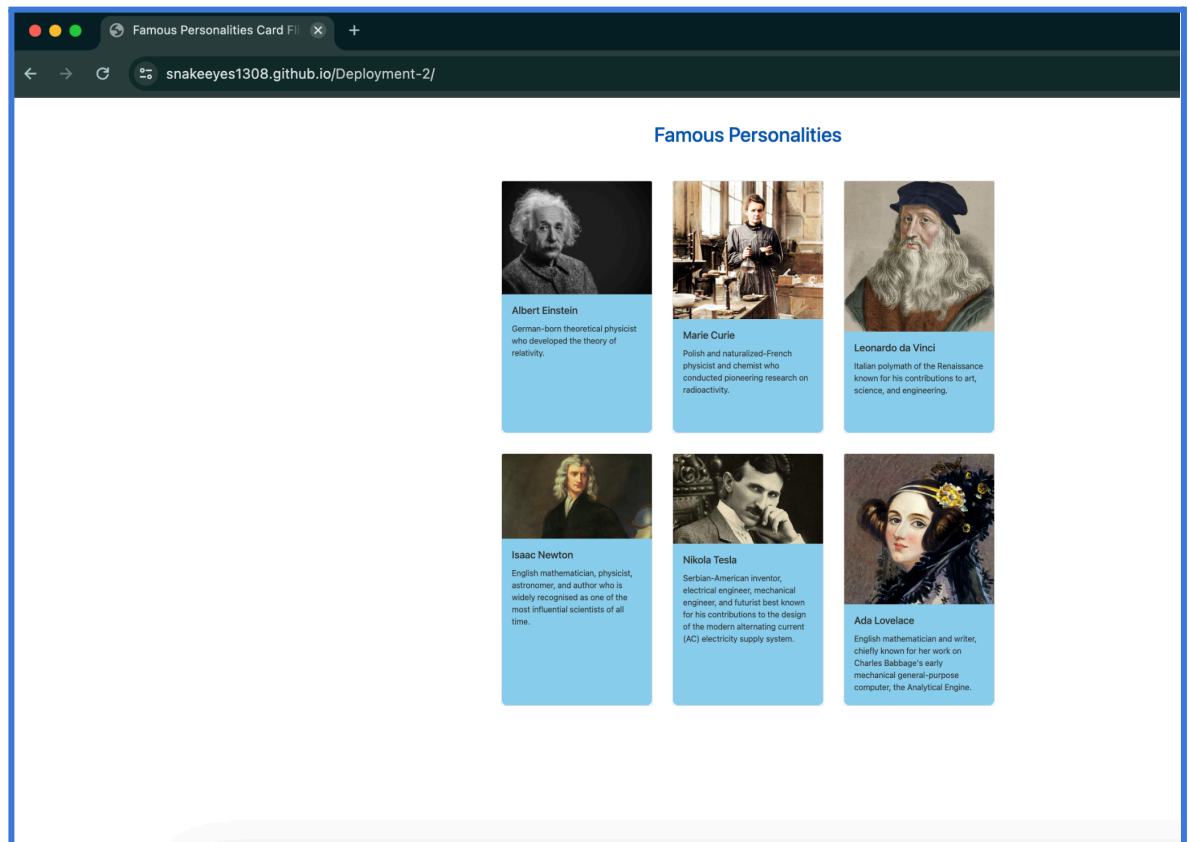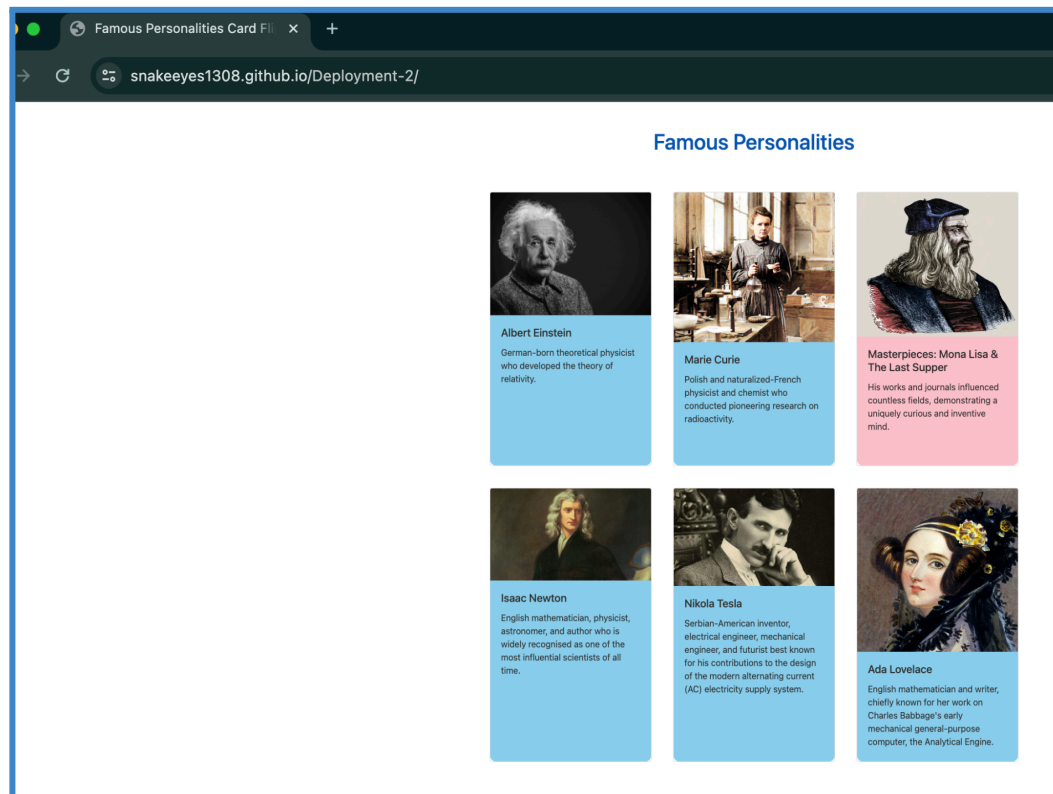
```
        </div>
        <!-- Ada Lovelace -->
        <div class="card">
           <div class="card-inner">
              <div class="card-front">
                 <!-- Placeholder image -->
                                                    <img
src="Ada_Lovelace_Chalon_portrait-1-1024x1024-1.jpg"
class="card-img-top" alt="Ada Lovelace">
                 <div class="card-body">
                    <h5 class="card-title">Ada Lovelace</h5>
                       <p class="card-text">English mathematician and writer,
chiefly known for her work on Charles Babbage's early mechanical
general-purpose computer, the Analytical Engine.</p>
                 </div>
              </div>
              <div class="card-back">
                 <!-- Placeholder image -->
                  <img src="ada-lovelace-first-computer-programmer.webp"
class="card-img-top" alt="Lovelace's Contributions">
                 <div class="card-body">
                    <h5 class="card-title">Pioneer of Computing</h5>
                       <p class="card-text">Lovelace's notes on the Analytical
Engine include what is essentially the first algorithm intended to be
processed by a machine, making her one of the first computer
programmers.</p>
                 </div>
              </div>
           </div>
        </div>
      </div>
   </div>
</body>
</html>
```

● **Outputs :-**

  ● *Front Side Card :-*

- *Back-side Card :-*

- *Description :-*

  - The project's HTML structure provides a seamless user experience, with a neat and organized layout constructed using tables. Each card represents a famous personality, offering a glimpse into their achievements and contributions to society.

  - Upon landing on the page, users are greeted with a captivating heading "Famous Personalities," setting the tone for exploration. The cards, featuring prominent figures like Albert Einstein, Marie Curie, Leonardo da Vinci, Isaac Newton, Nikola Tesla, and Ada Lovelace, invite users to delve into their remarkable lives and accomplishments.

  - The card flip effect adds an element of interactivity, allowing users to effortlessly transition between the front and back faces of each card. On the front side, users encounter captivating images and brief descriptions of the personalities. Meanwhile, flipping the card reveals additional insights, such

as notable works, achievements, and contributions, providing a comprehensive overview of each individual's legacy.

- To enhance user-friendliness, labels are thoughtfully associated with each input field, ensuring clear descriptions of the expected information. Specific validation rules, such as password complexity requirements, are implemented to maintain data accuracy.

- A standout feature is the tooltip associated with the password field, offering users clear guidelines on password creation. This tooltip dynamically appears when hovering over the input field or when the field is focused, providing valuable insights into password strength.

- With a responsive design, the project ensures optimal viewing across various screen sizes, ensuring a seamless user experience on both desktop and mobile devices. Whether exploring on a laptop, tablet, or smartphone, users can enjoy a visually appealing and informative journey through the lives of famous personalities.

- ***GitHub Link***

- ***Live Link***