WIF2003 Web Programming

Lab 04: Implementing CSS for JavaJam Coffee House website Using Bootstrap

In this exercise, you have to do the following tasks:

Task 1: Create a folder

Create a folder on your hard drive or portable storage device (USB or SD card) called "**javajam4**" to contain your JavaJam website files. Copy **all** the files from your Lab 3's folder (javajam2 or javajam3) into the javajam4 folder.

Task 2: Configure the CSS of your JavaJam Coffee House website using Bootstrap Components

1. Launch a text editor, and open the index.html file. You will modify this file to apply styles from the Bootstrap external style sheet and JavaScript as follows:

    a) Remove the <link> for javajam.css external style sheet file, include meta tags and Bootstrap CDN link (hosted online) using the <link> tag.

    You can use either Bootstrap version 4.6 or version 5.1 in this lab.
    - Version 4.6: https://getbootstrap.com/docs/4.6/getting-started/introduction/
    - Version 5.1: https://getbootstrap.com/docs/5.1/getting-started/introduction/

    ```
    <head>
    <title>JavaJam Coffee House</title>
    <!-- Required meta tags -->
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <!-- Bootstrap CSS -->
    <link
    href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css" rel="stylesheet" integrity="sha384-1BmE4kWBq78iYhFldvKuhfTAU6auU8tT94WrHftjDbrCEXSU1oBoqyl2QvZ6jIW3" crossorigin="anonymous">
    </head>
    ```

    b) To use Bootstrap's compiled JavaScript, include jQuery and Popper.js CDN links before it. Add all the jQuery, Popper.js and Bootstrap JS's CDN links **at the end of <body> </body>** division:

    ```
    <body>

    <!-- Include Bootstrap JavaScript plugin -->
    ```

```
<script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/js/boot
strap.bundle.min.js" integrity="sha384-
ka7Sk0Gln4gmtz2MlQnikT1wXgYsOg+OMhuP+IlRH9sENBO0LRn5q+8nbTov4+
1p" crossorigin="anonymous"></script>
</body>
```

c) Configure the layout of the page **body** area using the Bootstrap's basic layout element, **container** to **replace** the `<div id="wrapper">` with Bootstrap's layout `class` named `container`.

```
<body>
<div class="container">


</div> <!—end of body container →
</body>
```

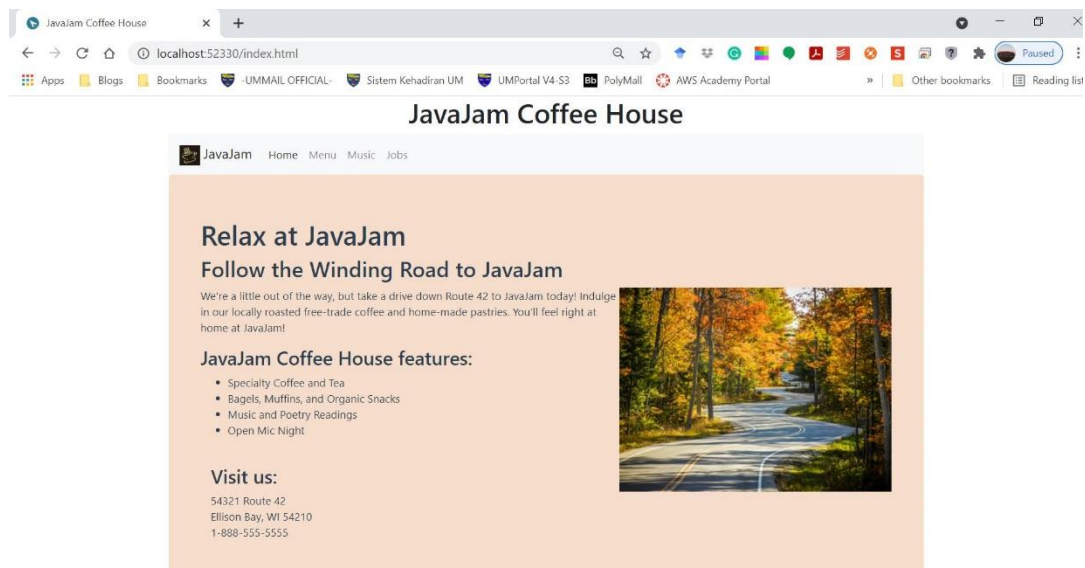**Reference:** https://getbootstrap.com/docs/5.1/layout/containers/

d) Configure the page footer area using Bootstrap **container**.
Add a **horizontal line** before the footer information. Explore the **Bootstrap Text utilities** to use the Bootstrap CSS classes **for italicize text** and **center aligned text** on all viewport sizes in the **<footer>** tag.

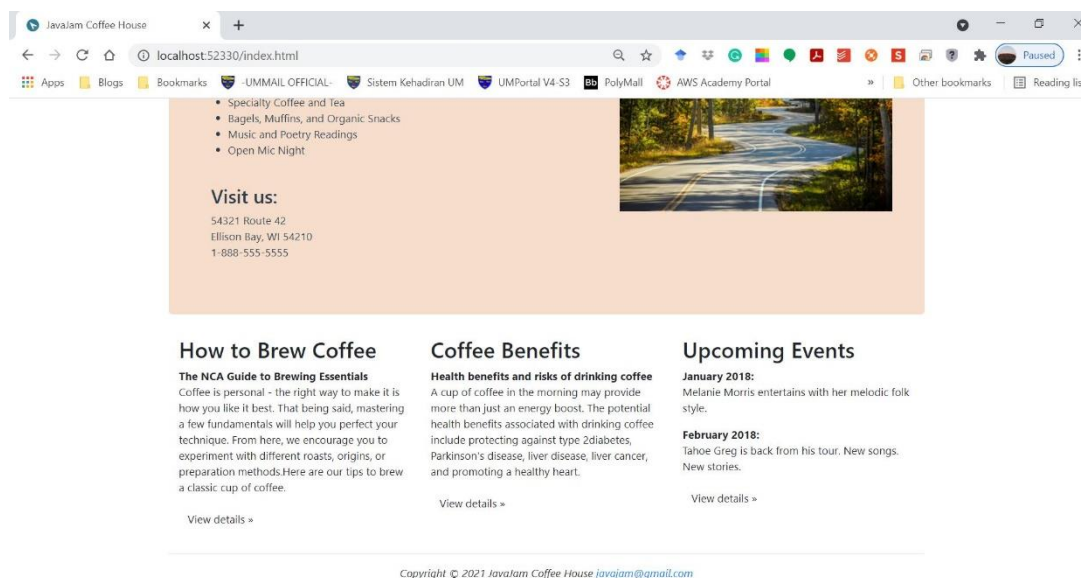**Reference:** https://getbootstrap.com/docs/5.1/utilities/text/

2. Explore the Bootstrap CSS and Components. Use suitable styles on index.html. Figure 1 shows a new home page (index.html) after using bootstrap css styles.

   Hints: You may consider modifying your index.html using Bootstrap CSS and components such as navbar, images, forms, buttons, containers. For example, you may modify your navigation menu (<nav></nav>) using the Bootstrap navbar (https://getbootstrap.com/docs/5.1/components/navbar/) and modify your main content using some suitable components provided by Bootstrap.

3. Save the index.html file, and test it in a browser.

4. Repeat this to all html files.

Figure 1 new JavaJam index.html after using Bootstrap CSS (part 1)

Figure 2 new JavaJam index.html after using Bootstrap CSS (part 2)

Task 3: The Menu, Music and Jobs

1. Explore the Bootstrap CSS **Layout**, **Components**, **Utilities and Examples**. Use your creativity to apply suitable styles on the menu.html, music.html and jobs.html.

   Reference links:

   - Bootstrap Layout:
     - Container: https://getbootstrap.com/docs/5.1/layout/containers/
     - Grid System: https://getbootstrap.com/docs/5.1/layout/grid/
     - CSS Grid: https://getbootstrap.com/docs/5.1/layout/css-grid/
   - Bootstrap Forms:

- o Forms: https://getbootstrap.com/docs/5.1/forms/overview/

- o Input group: https://getbootstrap.com/docs/5.1/forms/input-group/

- o Validation: https://getbootstrap.com/docs/5.1/forms/validation/

- Bootstrap Components:

  - o Buttons: https://getbootstrap.com/docs/5.1/components/buttons/

  - o Card: https://getbootstrap.com/docs/5.1/components/card/

  - o Alerts: https://getbootstrap.com/docs/5.1/components/alerts/

  - o Carousel: https://getbootstrap.com/docs/5.1/components/carousel/

- Bootstrap Utilities:

  - o Background: https://getbootstrap.com/docs/5.1/utilities/background/

  - o Text: https://getbootstrap.com/docs/5.1/utilities/text/

  - o Float: https://getbootstrap.com/docs/5.1/utilities/float/

- Bootstrap Content:

  - o Typography: https://getbootstrap.com/docs/5.1/content/typography/

  - o Images: https://getbootstrap.com/docs/5.1/content/images/

  - o Tables: https://getbootstrap.com/docs/5.1/content/tables/

  - o Figures: https://getbootstrap.com/docs/5.1/content/figures/

- Bootstrap Examples: https://getbootstrap.com/docs/5.1/examples/

2. Override a few Bootstrap css styles using a new external cascading style sheet, save it as `app.css`. Add a <link> element to associate the web page with the `app.css` external style sheet file.

```
<head>
    <title>JavaJam Coffee House</title>
    <link rel="stylesheet" href="stylesheets/app.css">
</head>
```

3. Save the html files after implementing Bootstrap CSS styles, and test it in a browser.