Web GIS Project 7: Webpage Functionality with JavaScript and jQuery

Grading: 50 Points

Description: Create a website that demonstrates how to use JavaScript and jQuery to complete the following tasks. For each task, you should include a header identifying the problem, a paragraph explaining the solution, and an example implementation of the solution.

Notes:

❖ You will need to use some HTML and CSS in this assignment.
❖ Link to the required CDNs as opposed to storing the source code in your website directory. This is so that your deliverable has a smaller file size.
❖ This does not need to be a fully configured/developed web page. You are just using it to present your answers.

Rubric:

❖ Task 1: Use jQuery to show and hide an image on the page with the press of a button. (Up to 5 Points)
❖ Task 2: Use jQuery to toggle between two images on the page with the press of a button. When you click the button Image 1 should change to Image 2 (or vise versa). (Up to 10 Points)
❖ Task 3: Repeat Task 2. However, this time Image 1 should display if the “A” key is pressed and Image 2 should display if the “B” key is pressed. (Up to 5 Points)
❖ Task 4: Use jQuery to change the background color and text color used on the page with the press of a button. The user should be able to press the button and toggle between the two color modes. (Up to 5 Points)
❖ Task 5: Use jQuery to toggle between two styles applied to a div on the page with the click of a button. (Up to 5 Points)
❖ Task 6: Use jQuery to add a new paragraph to the page with the click of a button. (Up to 5 Points)
❖ Task 8: Use jQuery to alter the styling of three separate elements with a single click of a button. (Up to 5 Points)
❖ Task 7: Use jQuery and Bootstrap to create a collapsible sidebar on the page. Users should be able to click a button to toggle between an expanded and collapsed sidebar. (Up to 10 Points)
**Deliverables:**

- Entire website directory in a compressed folder. This should include any needed files and the HTML/CSS files generated. Make sure to link to the required CDNs.