

## Project 7: jQuery and JavaScript for Web Development (100 Points)

**Task:** 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.

**Tasks:**

- ❖ **Task 1:** Use jQuery to show and hide an image on the page with the press of a button. (Up to 10 Points)
- ❖ **Task 2:** Use jQuery to toggle between two images on the page with the press of a button. When the user clicks the button Image 1 should change to Image 2 (or vice 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 10 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 10 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 10 Points)
- ❖ **Task 6:** Use jQuery to add a new paragraph to the page with the click of a button. (Up to 5 Points)
- ❖ **Task 7:** Use jQuery to alter the styling of three separate elements with a single click of a button. (Up to 10 Points)
- ❖ **Task 8:** 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 30 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 or include the source code in your directory.