

## Chapter 1: Algorithms &amp; Abstraction

HelloWorld.html

Date: \_\_\_\_\_ Teacher: \_\_\_\_\_

**File To Create:** *Examples \ HelloWorld.html*

```
<!DOCTYPE HTML>

<html>
<head>
    <title>
        My First Webpage
    </title>

    <style>
        body {
            background-color: yellow;
        }
        h1 {
            font-size: 300%;
            text-align: center;
            color: green;
        }
        h2 {
            font-size: 150%;
            text-align: center;
            font-style: italic;
            color: gray;
        }
        div {
            text-align: center;
        }
    </style>

    <script>
        /**
         * The function changePicture() sets the source of the image to 'fremd.jpg'
         */
        function changePicture(){
            document.getElementById('pictureId').src='fremd.jpg';
        }

        // Create a variable, and call it 'name'
        var name;

        // Create a variable, and call it 'nameMessage'
        var nameMessage;

        /**
         * When called, the showName() function will display a message
         * between the <div> tags with an Id of 'div3Id'
         */
        function showName(){
            name = document.getElementById('inputId').value;
            nameMessage = 'Thanks for visiting, ';
            nameMessage = nameMessage + name;
            nameMessage = nameMessage + '.'
        }
    </script>
</html>
```

```

        document.getElementById('div3Id').innerHTML = nameMessage;
    }

    /**
     * When called, the background() function will change the
     * webpage background to white.
     */
    function background(){
        document.body.style.backgroundColor = 'white';
    }
</script>
</head>

<body id="bodyId">
    <h1>Hello world!</h1>
    <div id="div1Id">
        <input type="button" id="button2Id" value="Change Picture" onClick = "changePicture()"></input>
        <br>
        <br>
        <input type="input" id="inputId" value="Type Your Name Here"></input>
        <input type="button" id="button3Id" value="Submit Name" onClick="showName()"></input>
        <br>
        <br>
        <input type="button" id="button4Id" value="Change Background" onClick = "background()"></input>
        <br>
        <br>
        <div id="div2Id">
            
        </div>
        <br>
        <br>
        <div id="div3Id"></div>
    </div>
</body>
</html>

```

### Enhancements (in this order):

1. Your page has a header <h1> that displays “Hello world!” Add code that creates a separate, **different sized** header that says “This is my first website!”
  - Try visiting [https://www.w3schools.com/tags/tag\\_header.asp](https://www.w3schools.com/tags/tag_header.asp) if you need help!
2. Uh-oh...your new header isn’t centered! Add code in between the <style> tag that can align your text in the center of the page.
  - Try visiting [https://www.w3schools.com/cssref/tryit.asp?filename=trycss\\_text-align](https://www.w3schools.com/cssref/tryit.asp?filename=trycss_text-align) if you need help!  
Make sure to keep the tag you used consistent.
3. When you click on the “Change Picture,” the picture changes an image of Fremd High School. If you click the button again, nothing happens. Add code that creates another button, and when clicked the picture switches back to “vikings.jpg”. You may need to create a new function!
4. When you click on the “Change Background” button, the background changes to white. If you click the button again, nothing happens. Add code that allows this button to **toggle** the background color back and forth between “white” and “yellow”. No new buttons or functions should be needed.
5. Create a button named “Reset.” When clicked, it should set the page back to what it looked like in the beginning (display the original Viking picture, yellow background, and no on-screen message).