Homework Turnin

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Course:	CSE 154 16au
Assignment:	hw3
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Turnin Successful!

The following file(s) were received:

speedreader.html   *(2613 bytes)*

```html
<!DOCTYPE html>
<!--
    CSE 154 AD
    Stephen Hung
    HTML file for setting up basic structure for SpeedReading
    website.
    The website takes in text from the user and displays them at
    varying speeds & sizes to facilitate better speed reading skills.
-->
<html>
    <head>
        <link type="text/css" rel="stylesheet" href="speedreader.css">
        <script type="text/javascript" src="speedreader.js"></script>
        <title>SpeedReader</title>
    </head>

    <body>
        <h1 id="header">
            SpeedReader
        </h1>
        <div id="reader" class="reader_medium">

        </div>
        <div id="controls">
            <fieldset>
                <legend>Play Controls:</legend>
                <button id="start_button" type="button">Start</button>
                <button id="stop_button" type="button">Stop</button>
            </fieldset>

            <fieldset>
                <legend>Speed:</legend>
                <select>
                    <option value="500">50 wpm</option>
                    <option value="200">300 wpm</option>
                    <option value="171" selected="selected">350 wpm</option>
                    <option value="150">400 wpm</option>
                    <option value="133">450 wpm</option>
                    <option value="120">500 wpm</option>
                </select>
            </fieldset>

            <fieldset>
                <legend>Size:</legend>
                <label><input type="radio" name="size" value="Medium" checked> Medium</label>
                <label><input type="radio" name="size" value="Big"> Big</label>
                <label><input type="radio" name="size" value="Bigger"> Bigger</label>
            </fieldset>
        </div>
        <div id="text_area">
```

```html
            <fieldset>
                <legend>Input Text</legend>
                <textarea id="input" rows="10" cols="80" ></textarea>
            </fieldset>
        </div>

        <div id="validators">
            <a href="https://webster.cs.washington.edu/validate-html.php">
                <img src="https://webster.cs.washington.edu/images/w3c-html-blue.png" alt="Valid HTML5" />
            </a>
            <a href="https://webster.cs.washington.edu/validate-css.php">
                <img src="https://webster.cs.washington.edu/images/w3c-css-blue.png" alt="Valid CSS" />
            </a>
            <a href="https://webster.cs.washington.edu/jslint/?referer">
                <img src="https://webster.cs.washington.edu/images/w3c-js-blue.png" alt="Valid CSS" />
            </a>
        </div>

    </body>
</html>
```

speedreader.css   (1148 bytes)

```css
/*
    CSE 154 AD
    Stephen Hung
    CSS page for setting up style in speedreader.html
*/
body {

    background-color: #EAF6F6;
    font-family: Garamond, Serif;
    font-size: 12pt;
}

button {

    background-color:white;
    border:solid gray 1px;
    width:70px;
}

button:disabled{
    background-color:lightgray;
}

#controls {
    margin:0;
}

#controls, #reader, #text_area, h1{
    text-align: center;
}

fieldset{
    border:0;
    display: inline;
    vertical-align: top;
}

#input, #reader{
    background-color: #FFFFFF;
}

#input {

    border: solid gray 1px;
}

legend, #reader{
    font-weight:bold;
}

legend {

    border-bottom: solid 1px #8EBEBE;
    padding: 2px;
    text-align: left;
    width: 100%;
}
```

```css
#reader {

    border: 2px solid #8EBEBE;
    border-radius: 5px;
    font-family: monospace;
    height: 100px;
    line-height: 100px;
    margin:auto;
    width: 80%;
}

.reader_medium{
    font-size:36pt;
}

.reader_big {
    font-size:48pt;
}

.reader_bigger {
    font-size:60pt;
}

#validators{
    padding-left: 5px;
    bottom:0;
    left:0;
    position:absolute;
}

#validators img {
    width:70px;
}
```

speedreader.js (4480 bytes)

```javascript
/*
    CSE 154 AD
    Stephen Hung
    This JavaScript file helps run the logic behind a speed reading website.
    It takes in an input from the user and displays one word at a time in a
    reading box at varying speeds and sizes.
*/

// Anonymous function to facilitate correct JS style.
(function(){
    "use strict";

    var textBox_Array;
    var textNum = 0;
    var textTimer;

    // Once the window finishes loading, sets onclick and on change
    // of various elements.
    window.onload = function(){
        var radioButtons = document.querySelectorAll('input');
        for(var i = 0; i < radioButtons.length; i++){
            radioButtons[i].onchange = changeSize;
        }
        var startButton = document.getElementById('start_button');
        startButton.onclick = startSpeedReader;
        var selectBox = document.querySelector('select');
        selectBox.onchange = changeSelect;
        var stopButton = document.getElementById('stop_button');
        stopButton.onclick = stopClicked;
        stopButton.disabled = true;
    };

    // Changes the size of displayed text depending on what radio button
    // is clicked.
    function changeSize(){
        var buttonName = this.value;
        var readingBox = document.getElementById('reader');
        if(buttonName == 'Medium'){
            readingBox.className = 'reader_medium';
        }else if(buttonName == 'Big'){
            readingBox.className = 'reader_big';
        }else if(buttonName == 'Bigger'){
            readingBox.className = 'reader_bigger';
```

```javascript
        }
    }

    // Stops speed reading once the stop button is clicked.
    function stopClicked(){
        clearInterval(textTimer);
        textTimer = null;
        var startButton = document.getElementById('start_button');
        startButton.disabled = false;
        var stopButton = document.getElementById('stop_button');
        stopButton.disabled = true;
        var readingBox = document.getElementById('reader');
        readingBox.innerText = "";
        textBox_Array = [];
        textNum = 0;
    }

    // Starts speed reading once the start button is clicked.
    function startSpeedReader(){
        var inputBox = document.querySelector('textarea');
        var inputBox_String = inputBox.value;
        var result = inputBox_String.split(/[ \t\n]+/);
        textBox_Array = result;

        var selectBox = document.querySelector('select');
        var currentSelected = selectBox.value;
        var timer = parseInt(currentSelected);
        textTimer = setInterval(changeText,timer);

        disableButtons(true,false);
    }

    // Changes the speed at which words are being shown.
    function changeSelect(){
        if(textTimer !== null){
            clearInterval(textTimer);
            textTimer = null;
            var selectBox = document.querySelector('select');
            var currentSelected = selectBox.value;
            var timer = parseInt(currentSelected);
            textTimer = setInterval(changeText,timer);
        }
    }

    // Helper function to determine if the word contains punctuation.
    function isPunctuation(input){
        var lastChar = input.charAt(input.length-1);
        if((lastChar == ',') || (lastChar == '.') || (lastChar == ';')||
            (lastChar == '!') || (lastChar == '?') || (lastChar == ':')){
            return true;
        }
        return false;
    }

    // Changes the text in the display box.
    function changeText(){
        var readingBox = document.getElementById('reader');
        var currentText = textBox_Array[textNum];
        if(isPunctuation(currentText)){
            currentText = currentText.substring(0,currentText.length-1);
            textBox_Array[textNum] = currentText;
            textBox_Array.splice(textNum,0,currentText);
        }
        textNum++;
        console.log(currentText);
        console.log(textNum);

        readingBox.innerText = currentText;
        if(textNum >= textBox_Array.length){
            clearInterval(textTimer);
            textTimer = null;
            textNum = 0;
            textBox_Array = [];
            disableButtons(false,true);
        }
    }

    // Disables buttons depending on parameters.
    function disableButtons(start, stop){
        var startButton = document.getElementById('start_button');
        startButton.disabled = start;
```

```
        var stopButton = document.getElementById('stop_button');
        stopButton.disabled = stop;
    }

})();
```