JavaScript - Creating a Custom Image Slider

What is an image slider?

Image Slider or **Image Carousel** is an expedient way to show multiple images on a website. Alluring flashy images can draw many visitors to the site. [Demo in class]

Step – 1: Create the sructure of image slider using HTML and insert images from the respective sources. Below is the complete HTML code for doing this:

```html
<!--HTML Code-->
<!-- Slideshow Container Div -->
<div class="container">

  <!-- Full-width images with caption text -->
  <div class="image-sliderfade fade">
    <img src="img1.jpg" style="width:100%">
    <div class="text">Image caption 1</div>
  </div>

  <div class="image-sliderfade fade">
    <img src="img2.jpg" style="width:100%">
    <div class="text">Image caption 2</div>
  </div>

  <div class="image-sliderfade fade">
    <img src="img3.jpg" style="width:100%">
    <div class="text">Image caption 3</div>
  </div>

  <div class="image-sliderfade fade">
    <img src="img3.jpg" style="width:100%">
    <div class="text">Image caption 4</div>
  </div>

</div>
<br>

<!-- The dots/circles -->
<div style="text-align:center">
  <span class="dot"></span>
  <span class="dot"></span>
  <span class="dot"></span>
</div>
```

NOTE: img1.jpg, img2.jpg, img3.jpg, and img4.jpg are my photos, and the files are in the same directory as the JavaScript, HTM and CSS.

Step – 2: Once we have created the HTML structure for our image slider, the next step is to style the slider using CSS. We will add styles to the images, backgrounds etc. We will also style the dots and make our images responsive and browser friendly using CSS. Below is the complete CSS code for styling our image slider:

```css
// CSS code
*
{
  box-sizing: border-box;
}
body
{
  font-family: Verdana, sans-serif;
}

.image-sliderfade
{
  display: none;
}

img
{
  vertical-align: middle;
}

/* Slideshow container */
.container
{
  max-width: 1000px;
  position: relative;
  margin: auto;
}

/* Caption text */
.text
{
  color: #f2f2f2;
  font-size: 15px;
  padding: 20px 15px;
  position: absolute;
  right: 10px;
  bottom: 10px;
  width: 40%;
  background: rgba(0, 0, 0, .7);
  text-align: left;
}
```

```css
/* The dots/bullets/indicators */
.dot
{
  height: 15px;
  width: 15px;
  margin: 0 2px;
  background-color: transparent;
  border-color: #ddd;
  border-width: 5 px;
  border-style: solid;
  border-radius: 50%;
  display: inline-block;
  transition: border-color 0.6s ease;
}

.active
{
  border-color: #666;
}

/* Animation */
.fade
{
  -webkit-animation-name: fade-image;
  -webkit-animation-duration: 1.5s;
  animation-name: fade-image;
  animation-duration: 1.5s;
}

@-webkit-keyframes fade-image
{
  from {opacity: .4}
  to {opacity: 1}
}

@keyframes fade-image
{
  from {opacity: .4}
  to {opacity: 1}
}



/* On smaller screens, decrease text size */
@media only screen and (max-width: 300px)
{
  .text {font-size: 11px}
}
```

Step – 3: After adding styles to the slider, the last thing left is to use javascript to add the functionality of auto changing of images after a specific time interval.

In the code snippet below, at the very beginning, we took all the div elements with class name 'image-sliderfade' in an array and did the same for div's with class name 'dots' by using getElementByClassName() listener. After that, we set the display for all of the divs, containing images. In the last for-loop, we have erased the class name for each element of array dots[]. After we are done with these, we set the display as a block of the image to shown and append the class name to the corresponding element of dots[] array. Function setTimeout is used for calling the function showslides() in an interval of 2 seconds.

Below is the complete JavaScript code:

```
var slideIndex = 0;
showSlides(); // call showslide method

function showSlides()
{
    var i;

    // get the array of divs' with classname image-sliderfade
    var slides = document.getElementsByClassName("image-sliderfade");

    // get the array of divs' with classname dot
    var dots = document.getElementsByClassName("dot");

    for (i = 0; i < slides.length; i++) {
        // initially set the display to
        // none for every image.
        slides[i].style.display = "none";
    }

     // increase by 1, Global variable
    slideIndex++;

     // check for boundary
    if (slideIndex > slides.length)
    {
        slideIndex = 1;
    }

    for (i = 0; i < dots.length; i++) {
        dots[i].className = dots[i].className.
                            replace(" active", "");
    }

    slides[slideIndex - 1].style.display = "block";
    dots[slideIndex - 1].className += " active";

    // Change image every 2 seconds
    setTimeout(showSlides, 2000);
}
```

Once we are done with all of the above steps, we will get the slider up and working as shown below:

Slides 1, 2, 3 and 4…

Your task is to replace the my img1, 2, 3 and 4.jpg, with your photos with the following parameters.

1. In your portfolio project, in addition to your css, docs, img subdirectories, create a another **js** subdirectory, save the javascript file inside this **js** subdirectory.

2. From your responsive web template, please create another web page, call it **slideshow.html**.

3. Please put all of your images or photos inside the img sub directory and update the path in your html tags.

4. Link this page from your from your Projects.html page.

5. With Filezilla, up load to your webXXXX directory.