```
/*
_____
   Load css links in document head
   _____
   I googled the link below and found this cool method to link CSS
files dynamically into the HTML page
   https://www.geevent.keysforgeevent.keys.org/how-to-load-css-files-
using-javascript/
*/
document.addEventListener("DOMContentLoaded", function(event) {
   const head = document.getElementsByTagName('HEAD')[0];
   const resetLink = document.createElement('link');
   resetLink.rel = 'stylesheet';
   resetLink.type = 'text/css';
   resetLink.href = 'https://cdnjs.cloudflare.com/ajax/libs/meyer-
reset/2.0/reset.min.css';
   head.appendChild(resetLink);
   const link = document.createElement('link');
   link.rel = 'stylesheet';
link.type = 'text/css';
   link.href = 'style.css';
   head.appendChild(link);
});
/*
______
  ______
   SET INSTRUCTIONS
   ===========
   Here is the instructions part on top of the gallery to display the
required KEYs to press to navigate the gallery
*/
const $instructions = document.getElementById('instructions');
$instructions.title = "<h2>Instructions</h2>"
$instructions.description = "In order to navigate using Keyboard,
<strong> K </strong> key <strong>MUST</strong> be pressed to begin to
the first image, then <strong>LEFT</strong> and <strong>RIGHT</strong>
to move to the previous / next images. Press <strong>Enter</strong> to
select the image and view it in a modal mode. Press <strong>ESC</
strong> key to go back to the normal view.<strong>PLEASE DO NOT
USE</strong> <strong class='disabled'>Tab</strong> OR <strong
class='disabled'>SHIFT + Tab</strong> keys as I applied the functions
to the LEFT and RIGHT arrow keys only "
```

```
$instructions.innerHTML = $instructions.title +
$instructions.description;
/*
______
_____
   GALLERY BUILD
   ==========
   1- Retrieve gallery and lightbox from HTML
   2- set the image address path
   3- create a gallervItems array
   4- Loop through the images
   5- Add zero before numbers less than ten
   6- Push dynamic tags to Array
   7- Include TABINDEX to conform with ARIA
   8- Insert galleryItems to gallery using JOIN
   9- Set an ARRAY for the items which will be used many times later
*/
const $gallery = document.getElementById('gallery');
const $lightbox = document.getElementById('lightbox');
const $closeBtn = document.querySelector('.closeBtn');
const $leftBtn = document.querySelector('.leftBtn');
const $rightBtn = document.querySelector('.rightBtn');
const imgAddress = "./img/";
const gallervItems = [];
const lightboxItems = [];
for(i=1; i<13; i++) {
   let i = i;
   if (j < 10) {
       i = 0${i};
   qalleryItems.push(`
       <imq src="${imgAddress}img${j}.jpg" alt="img${j}">
           < h2 > imq - \{i\} < /h2 >
       `);
   lightboxItems.push(`
       class="lightbox-item">
           <div class="lightbox-header">
              <span class="closeBtn">&times;</span>
              <h2>img${j}</h2>
           </div>
```

```
<div class="lightbox-content">
               <img src="${imgAddress}img${j}.jpg" alt="img${j}">
               <h4 class="caption">This is a bigger view of img${j}</
h4>
           </div>
           <div class="lightbox-footer">
               <span class="leftBtn">&lt;</span>
               <span class="rightBtn">&gt;</span>
           </div>
       `);
}
$gallery.innerHTML = galleryItems.join('');
const $qalleryItems = document.querySelectorAll(".gallery-item");
$lightbox.innerHTML = lightboxItems.join('');
const $lightboxItems = document.querySelectorAll(".lightbox-item");
// let $lightbox = document.createElement('div');
// $lightbox.setAttribute("id", "lightbox");
// $lightbox.appendChild(document.createTextNode('top div'));
// let $container = document.getElementsByTagName('container');
// $container.innerHTML.appendChild($lightbox);
/*
_____
   INIT SHOW / HIDE GALLERY & LIGHTBOX
   _____
   This is the initial SHOW / HIDE Gallery and lightbox control
*/
// $gallery.style.display = "none";
$lightbox.style.display = "none";
// $gallery.style.visibility = "hidden";
// $lightbox.style.visibility = "hidden";
/*
______
   GALLERY FUNCTIONS
   1- checkItem fn that resets the focus of all elements in the list
then apply it on the new focused / selected list element
*/
```

```
// =========
// reset selection variables
let activeItem;
let activeLightboxItem;
let currentItem;
let currentLightboxItem;
let navStatus = false;
let lightbox0n = false;
// ==========
// reset items focus
function resetItems () {
   for (const $galleryItem of $galleryItems) {
       $galleryItem.classList.remove("activeItem");
       $galleryItem.blur();
   }
}
// ==========
// reset lightbox items focus
function resetLightboxItems () {
   for (const $lightboxItem of $lightboxItems) {
       $lightboxItem.classList.remove("largeImg");
       $lightboxItem.style.display = "none";
   }
}
// ===========
// Check Gallery item
function checkItem(param) {
   console.log("|| START checkItem AND currentItem = " + currentItem
+ " || activeItem = " + activeItem);
    let flagType = typeof param;
   console.log("param => " + param + " | param.key => " + param.key +
" | flagType = " + flagType);
    if (flagType === 'number') {
       activeItem = param;
       navStatus = true;
       lightboxOn = true;
       // $lightbox.style.visibility = "visible";
       lightboxOpen();
   } else if (flagType === 'string' && !navStatus) {
```

```
if (param === 'k' && !lightboxOn) {
            activeItem = 1;
            navStatus = true;
        }
    } else if (flagType === 'string' && navStatus) {
        if (param === 'next' && !lightboxOn) {
            if (currentItem < $galleryItems.length) {</pre>
                activeItem = activeItem + 1;
            } else {
                activeItem = 1;
        } else if (param === 'tabNext' && !lightboxOn) {
            if (currentItem < $galleryItems.length) {</pre>
                // activeItem = activeItem + 1;
                activeItem = activeItem + 1;
            } else {
                activeItem = 1;
        } else if (param === 'prev' && !lightboxOn) {
            if (currentItem > 1) {
                activeItem = activeItem - 1;
            } else {
                activeItem = $galleryItems.length;
        } else if (param === 'tabPrev' && !lightboxOn) {
            if (currentItem > 1) {
                activeItem = activeItem - 1;
            } else {
                activeItem = $galleryItems.length;
        } else if (param === 'enter' && !lightboxOn) {
            lightbox0n = true:
            // $lightbox.style.visibility = "visible";
            lightboxOpen();
            return;
        } else if (param === 'esc' && lightboxOn) {
            lightboxOn = false;
            // $lightbox.style.visibility = "hidden";
            lightboxClose();
            return;
        }
    console.log("activeItem => " + activeItem + " | TYPE = " + typeof
activeItem);
    resetItems();
    if (!lightbox0n) {
        $galleryItems[activeItem -1].classList.add("activeItem");
```

```
$galleryItems[activeItem -1].focus();
    }
    currentItem = activeItem;
    console.log("|| END checkItem AND currentItem = " + currentItem +
  || activeItem = " + activeItem);
// ==========
// Open lightbox
function lightboxOpen() {
    lightboxOn = true;
    $lightbox.style.display = "block";
   console.log("LB open "+ activeItem);
    // $lightboxItems[activeItem].style.display = "block";
    // $lightboxItems[activeItem -1].classList.add("largeImg");
    for (const $lightboxItem of $lightboxItems) {
        $lightboxItem.classList.remove("largeImg");
        $lightboxItem.style.display = "none";
    activeLightboxItem = activeItem;
    $lightboxItems[activeLightboxItem-1].style.display = "block";
    $lightboxItems[activeLightboxItem -1].classList.add("largeImg");
    currentLightboxItem = activeLightboxItem;
    // $lightbox.innerHTML =
}
// ==========
// lightbox left
function lightboxLeft() {
    resetLightboxItems();
    if (currentLightboxItem > 1) {
        activeLightboxItem = activeLightboxItem - 1;
    } else {
        activeLightboxItem = $lightboxItems.length;
    $lightboxItems[activeLightboxItem - 1].style.display = "block";
    $lightboxItems[activeLightboxItem - 1].classList.add("largeImg");
    currentLightboxItem = activeLightboxItem;
}
// ==========
```

```
// lightbox left
function lightboxRight() {
    resetLightboxItems();
   if (currentLightboxItem < $lightboxItems.length) {</pre>
       activeLightboxItem = activeLightboxItem + 1;
    } else {
       activeLightboxItem = 1;
    $lightboxItems[activeLightboxItem -1].style.display = "block";
   $lightboxItems[activeLightboxItem -1].classList.add("largeImg");
   currentLightboxItem = activeLightboxItem;
}
// ==========
// Close lightbox
function lightboxClose() {
    lightboxOn = false;
   $lightbox.style.display = "none";
}
// ===========
// Close If Outside Click
function outsideClick(e) {
   if (e.target == $lightbox) {
       lightboxOn = false;
       $lightbox.style.display = "none";
   }
}
/*
_____
   EVENT LISTENERS
   _____
    1- Add an MOUSE CLICK Event Listener to the gallery
       a- If the element exists
   2- Add an KEY Event Listener to the document
*/
// ==========
// GALLERY
$gallery.addEventListener('click', function (event) {
   const $targetItem = event.target.closest('.gallery-item');
    if($targetItem) {
       console.log(">> checkItem >>" + $targetItem.tabIndex);
       checkItem($targetItem.tabIndex);
   }
```

```
})
// ==========
// LIGHTBOX
$lightbox.addEventListener('click', function (event) {
    const $lightboxCloseBtn = event.target.closest('.closeBtn');
    const $lightboxLeftBtn = event.target.closest('.leftBtn');
   const $lightboxRightBtn = event.target.closest('.rightBtn');
    if($lightboxCloseBtn) lightboxClose();
    else if($lightboxLeftBtn) lightboxLeft();
   else if($lightboxRightBtn) lightboxRight();
})
document.addEventListener('click', outsideClick);
// ==========
// KEYBOARD LISTENER
document.addEventListener('keydown', function (event) {
    // if (event.key === '1') checkItem(1);
    if (event.key === 'k') checkItem('k');
    if (navStatus === true && !lightboxOn) {
        if (event.key === 'ArrowRight')
                                            checkItem('next');
       else if (event.key === 'ArrowLeft')
                                            checkItem('prev');
       else if (event.key === 'Tab') {
               if(event.shiftKey) {
                   checkItem('tabPrev');
                   console.log("tabPrev");
               }
               else {
                   checkItem('tabNext');
                   console.log("tabNext");
               }
       else if (event.key === 'Enter')
                                            checkItem('enter'):
       else if (event.key === 'Escape')
                                            checkItem('esc');
   } else if (lightbox0n === true) {
       // return false;
       // TIME HAS NOT HELPED ME FINISH THIS PART
       // THIS IS WHAT WAS BROKEN IN CODE
       if (event.key === 'ArrowRight')
                                            lightboxRight();
       else if (event.key === 'ArrowLeft')
                                            lightboxLeft();
       else if (event.key === 'Escape')
                                            lightboxClose('esc');
```

```
} else {
        console.log("That is not an option but " + event.key);
      // return false;
}):
/*
______
REFERENCE HTML SAMPLE TREE
      -----
   The following is the tree that I'm building using JS
   <div id="container">
      <div class="instructions">.....</div>
      ul id="gallery">
          class="gallery-item">
             <img src="./img/img01.jpg" alt="img01">
             < h2 > imq - 01 < /h2 >
          :....
      ul id="lightbox" class="lightbox">
          class="lightbox-item">
             <div class="lightbox-header">
                 <span class="close">&times;</span>
                 <h2>lightbox Header</h2>
             </div>
             <div class="lightbox-content">
                 <img src="./img/img01.jpg" alt="img01"</pre>
class="large-img">
                 <h4 class="caption">A large imag</h4>
             </div>
             <div class="lightbox-footer">
                 <span class="left">&lt;</span>
                 <span class="right">&gt;</span>
             </div>
          ....
```

</div>