

Digital Photo Frame

Project Setup

```
<> index.html  
JS  script.js  
#   style.css
```

Create a directory called 'Digital Photo Frame', inside that, create three empty file as shown.

We index.html as main web page. While script.js will have all the logic of downloading the images and style will have beautification of single page app.

Index.html , main web page

<> index.html ×

<> index.html > ...

```
1  <!DOCTYPE html>
2  <head>
3      <meta charset="UTF-8">
4      <meta name="viewport" content="width=device-width, initial-scale=1.0" />
5      <meta http-equiv="refresh" content="5";>
6      <title>Random Image Feed</title>
7      <link rel="stylesheet" type="text/css" href="style.css">
8  </head>
9
10 <body>
11     <h2>Digital Photo Frame via Internet (auto refresh every 5 secs)</h2>
12
13     <div class="container"></div>
14
15     <script src="script.js"></script>
16 </body>
17
18 </html>
```

Index page is simple and straightforward.

The page can be rendered on any device using viewport.

The page refreshes every 5 seconds using meta tag.

Then it uses container class, which will modify in style.css and calls the script.js which has all the logic.

script.js , the logic page

JS script.js ×

JS script.js >  getRandomNumber

```
1  const container = document.querySelector('.container')
2  const unsplashURL = 'https://source.unsplash.com/random/'
3  const rows = 1
4  const col = 1
5  const framesize = 600
6
7  for(let i =0; i < rows*col; i++){
8      const img = document.createElement('img')
9      img.src = `${unsplashURL}${getRandomSize()}`
10     container.appendChild(img)
11 }
12
13 function getRandomSize() {
14     return `${getRandomNumber()}x${getRandomNumber()}`
15 }
16
17 function getRandomNumber(){
18     return Math.floor(Math.random()*10) + framesize
19 }
```

This file gets random images from a website called [unsplash.com](https://source.unsplash.com/random/), and we have ONLY 1 row and 1 column and frame size of 600 (we are going to display 600x600 images).

There are only 3 methods here. The random number generator is getting us a Random number between 600 and 610. The reason for this ($\text{Math.random()} * 10$) is that MOST images in the [unsplash.com/random](https://source.unsplash.com/random/) URL is appended by a pixel number of 600 x 600 or 610 x 610, so that every image we are getting is in that range. Later, I will show you how to adjust these numbers and maybe have different style gallery.

style.css , the view logic page

```
# style.css ×
# style.css > ...
1
2  *{
3    |   box-sizing: border-box;
4  }
5
6  body{
7    |   font-family: monospace;
8    |   display: flex;
9    |   flex-direction: column;
10   |   align-items: center;
11   |   justify-content: center;
12   |   height: 100vh;
13   |   /* overflow: hidden; */
14   |   margin: 0;
15  }
16
17  .title{
18  |   margin: 10px 0 0;
19  |   text-align: center;
20  }
```

```
21
22  .container{
23  |   display: flex;
24  |   align-items: center;
25  |   justify-content: center;
26  |   flex-wrap: wrap;
27  |   max-width: 1000px;
28  }
29
30  .container img{
31  |   object-fit: cover;
32  |   margin: 10px;
33  |   height: 600px;
34  |   width: 600px;
35  |   max-width: 100%;
36  }
```

style.css is pretty basic, it has border box throughout the page, the font we are using is monospace, you can use what you like.

Height is 100vh to middle the photo frame, and there are no margins and basically everything is centered.

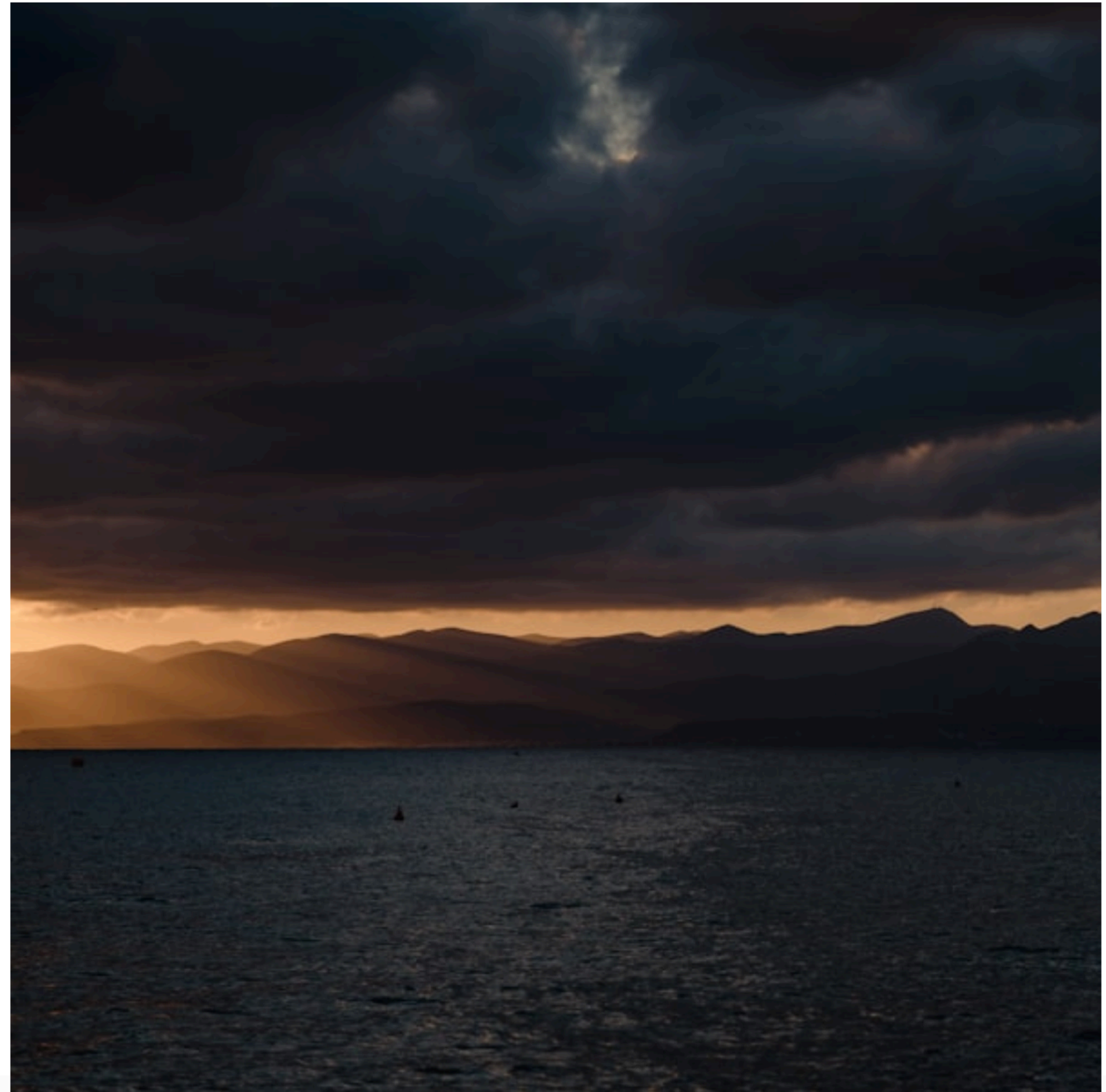
Container class has max width of 1000 pixels and flex display to adjust.

Container image is where we are defining that every image is of 600x600 pixels with margin of 10pixel. This is where previously calculated random number of 610x610 max will be able to show.

Digital Photo Frame

<http://127.0.0.1:5500>

Digital Photo Frame via Internet (auto refresh every 5 secs)



Final View of the Digital Photo Frame!

script.js , the logic page

JS script.js ×

JS script.js > [🔗] framesize

```
1  const container = document.querySelector('.container')
2  const.unsplashURL = 'https://source.unsplash.com/random/'
3  // const rows = 1
4  // const col = 1
5  // const framesize = 600
6
7  const rows = 2
8  const col = 3
9  const framesize = 300
10
11 for(let i =0; i < rows*col; i++){
12     const img = document.createElement('img')
13     img.src = `${unsplashURL}${getRandomSize()}`
14     container.appendChild(img)
15 }
16
17 function getRandomSize() {
18     return `${getRandomNumber()}x${getRandomNumber()}`
19 }
20
21 function getRandomNumber(){
22     return Math.floor(Math.random()*10) + framesize
23 }
```

Just change rows, columns and frame size constants as shown here to have a 2x3 matrix and 300 pixel images.

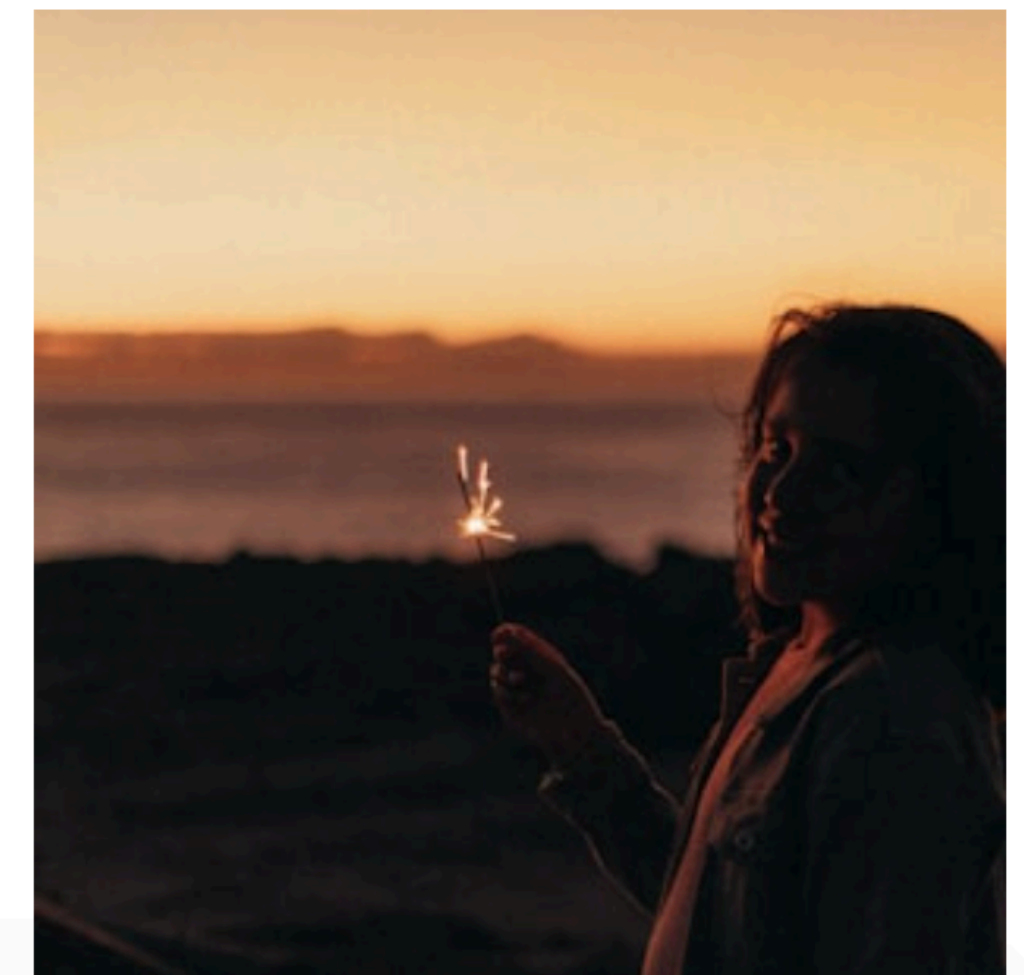
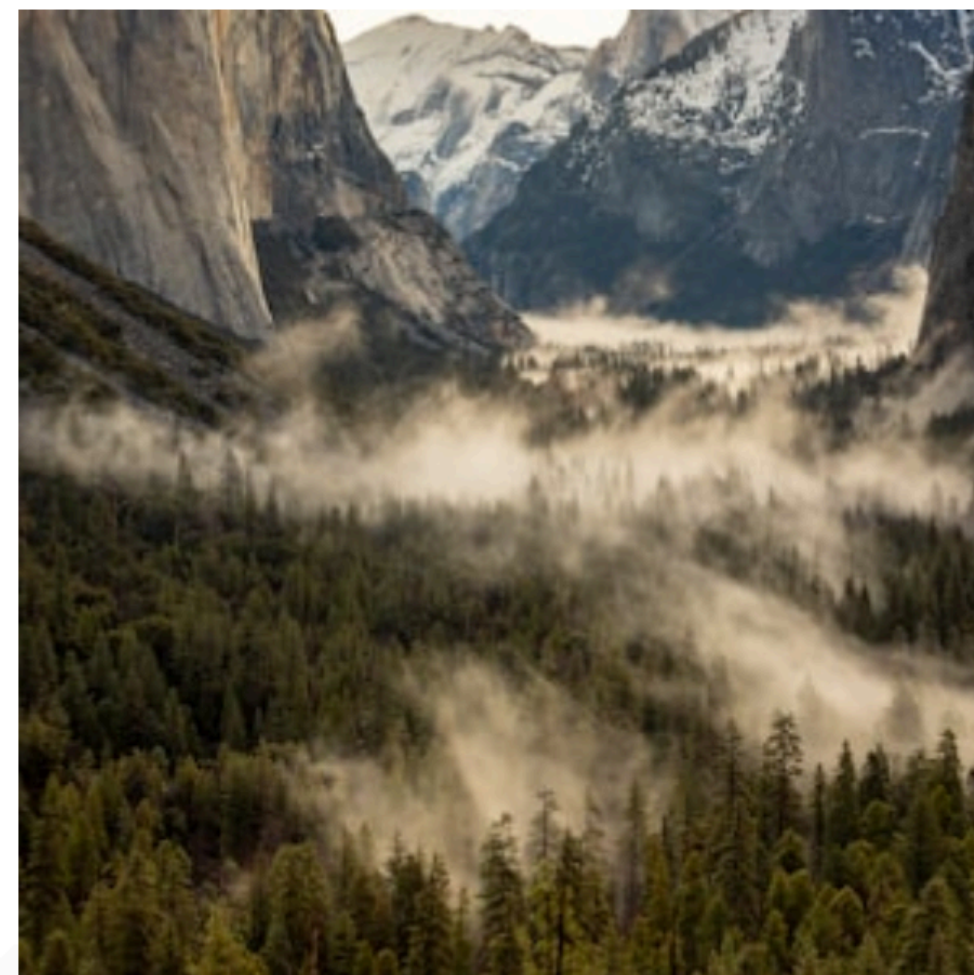
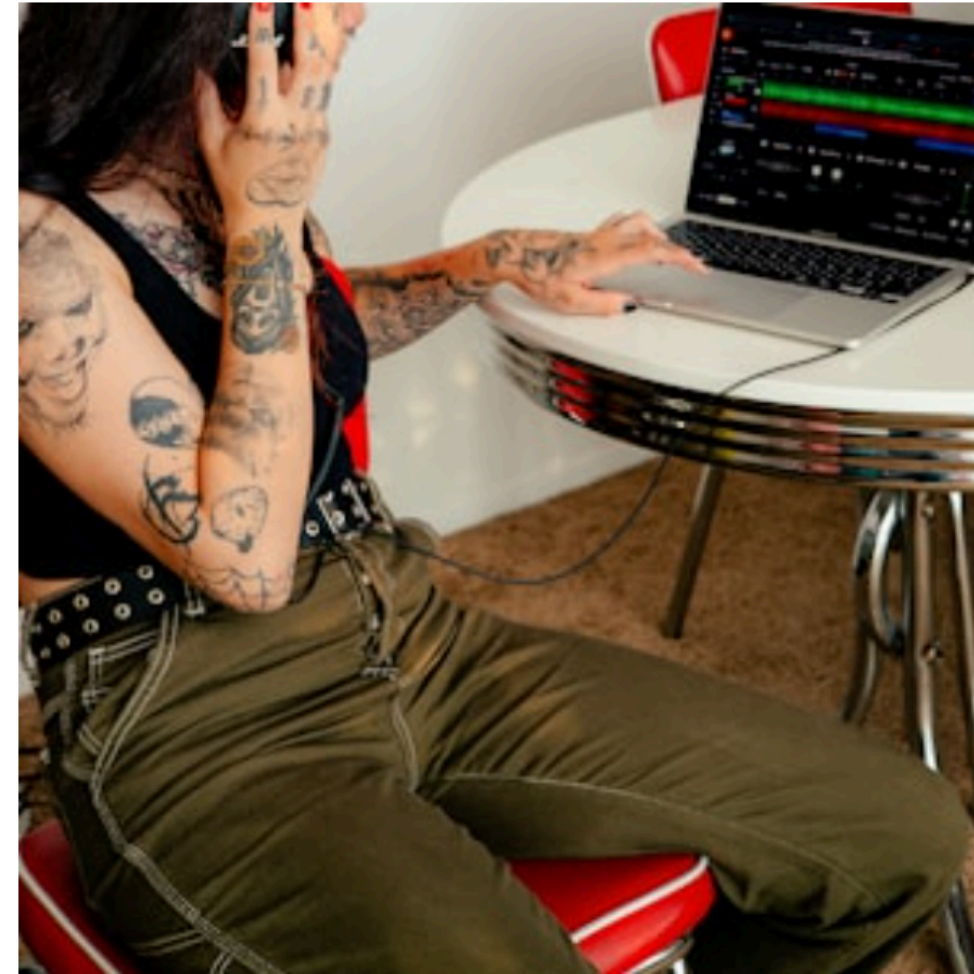
style.css , the view logic page

```
30  .container img{
31      object-fit: cover;
32      margin: 10px;
33      /* height: 600px;
34      width: 600px; */
35      height: 300px;
36      width: 300px;
37      max-width: 100%;
38  }
```

Finally in the style.css, change the height and width of the container image to be 300x300 pixels.

Digital Photo Frame with 2 x 3 matrix of 300 pixel images!

Digital Photo Frame via Internet (auto refresh every 5 secs)



Final View of the Digital Photo Frame! - 6 images frame of 300 pixel each

Thank you !!!