

Project Description

1. Name:

Digital clock

2. Description:

The content of the system includes a digital clock based on reading the system time, an animation effect of a layer of raindrops falling, with the ticking sound of the clock and the sound of rain. A digital clock and raindrops combine to create a relaxing animation, supplemented by white noise music with random volume changes, it creates a feeling of ignoring the external environment when entering a state of concentration. So that the whole system can be used to zone out yourself, and it can also be used as wallpaper.

3. Procedure:

- Style:

Overall:

Define the colour of the canvas to be #0f3854 and fill the entire page and frame 100%. And no white edges and no bleed lines (Margin: 0px)

Clock:

Overall: Set the font for the entire clock module to Arial,sans-serif, in the light blue colour #daf6ff, positioned absolutely centred. Add a shading/glowing effect with a 20px size and a gradient from #0aafe6 to #0AAFE6.

Separate-content (time, date, text): Set the relative character spacing of the time displayed by the time parameter to 0.05em, and the size is 80px and the padding is 5px. The date has a character spacing of 0.1em and a size of 24px.

The description text has a character spacing of 0.1em, a size of 14px and a padding of 24px.

Rain:

Set the scope of the 'rain' element to be the entire screen and fixed. Set the position of the raindrops to be absolute and filled with a pure white transparency gradient.

- Background:

Libraries& Sources added:

```
<link rel="stylesheet" href="styleCSS" />
```

```
<meta charset="utf-8">
```

```
<style type="text/css">
```

```
<script src="https://cdn.bootcss.com/vue/2.4.4/vue.min.js"></script>
```

- Body:

Script (clock):

Building a front-end framework - Vue

Define how the week shows (Monday, etc.)

Use the get function to get the system time (day/ month/ year and hours/ minutes/ seconds) to fill the created zeroPadding and limit or extend the step size to 2 or 4 (e.g. 4 digits for the year), while the code to get month needs +1 (zeroPadding(cd.getMonth()+1, 2)). As a variable for the updateTime parameter defined in the previous step.

Define the numeric display to show 0 when the first digit is 0.

Script (Rain):

Variations that limit the element's "rain" style are not affected. And associate the size of the rainbox with the style of the rainbox defined in 'style'.

Add a class name to the raindrop after defining it, and set the position of the raindrop to fall from the top, and apply the transparency randomly generated by `math.random`. At the same time, define a timer function to set the frequency and falling speed of raindrops.

`Script(Audio):`

After uploading and reading the required audio, because the native JS does not have a direct fade-in and fade-out effect, and this system is not worth introducing the jQuery library, the next best thing is to use `Math.random` to change the volume of the audio to a random size and set it to Loop playback, use the play function to play.

4. Results:

A digital clock effect with rain has been created to create the atmosphere of a pleasant rainy day listening to the white noise of the rain and feeling the passage of time.