Part Two:

Create Your Own Web Operating System (OS)

HackBook Pro

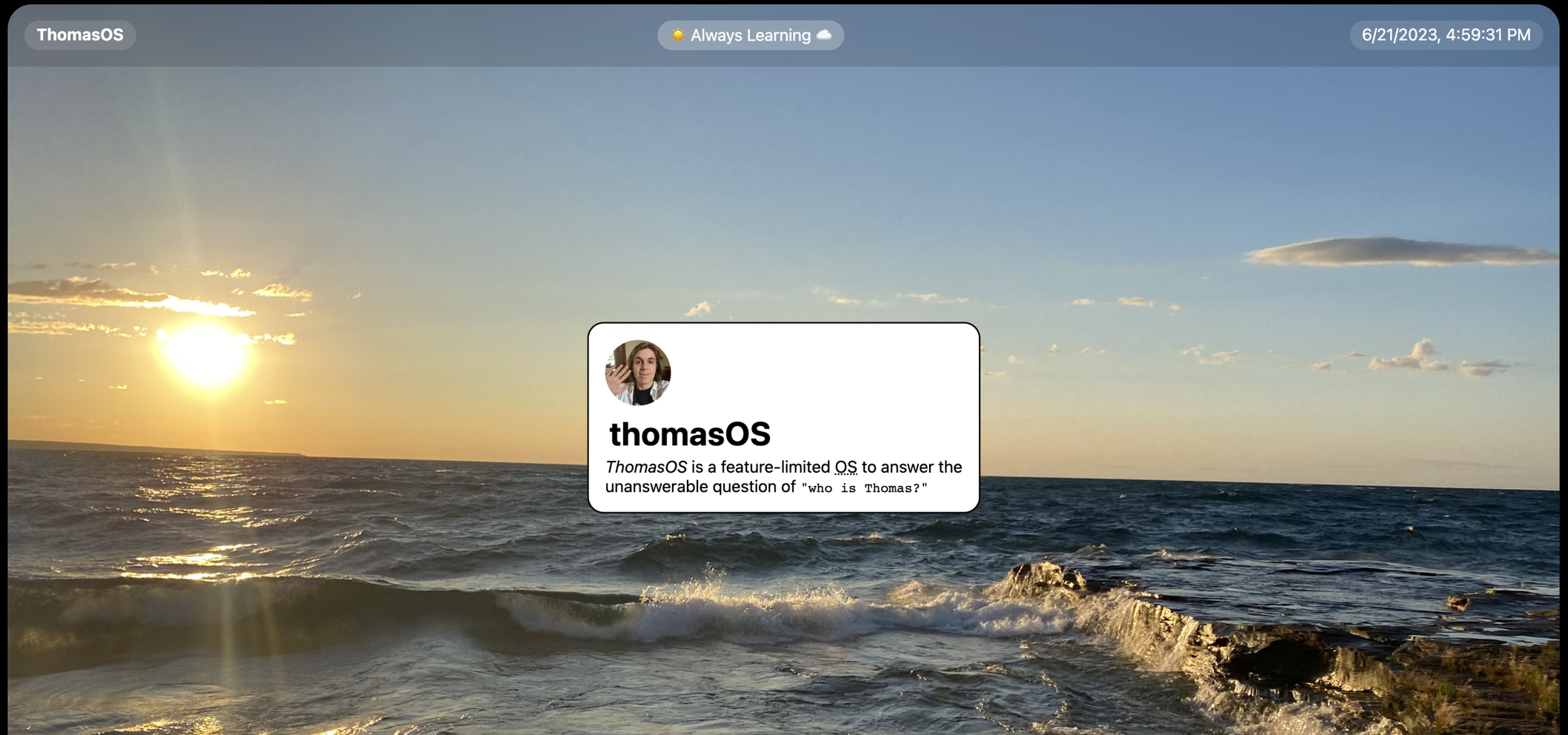
Tap Laptop for Live Demo

HackBook Pro

Build Your Own personalOS (that's all about you!)

Today We're Going To Be...

Making The Desktop!



Where we left off:

index.html

index.html

```
<!DOCTYPE html>
<html>

<body>
  <img src="https://cloud-pc8imajxj-hack-club-bot.vercel.app/1img_1181.jpg"
    style="width: 64px; height: 64px; border-radius: 32px; object-fit:
cover;" />
  <h1 style="margin: 4px;">thomasOS</h1>
  <p style="margin: 0px;">
    <dfn>ThomasOS</dfn> is a feature-limited <abbr title="Operating
System">OS</abbr> to answer the <br /> unanswerable
    question of <code>"who is Thomas?"</code>
  </p>
</body>

</html>
```

Webview | Shell

melodicdevotedscales.thomasstubblef2.repl.co

thomasOS

ThomasOS is a feature-limited OS to answer the unanswerable question of `"who is Thomas?"`

We Created Our Welcome Screen

We need to turn our welcome screen into a “window”

We can do that using a...

Divs are beloved by all Hackers.

We refer to groupings/boxes as divs. You can create divs inside of divs if, for example:

The Div Can Be Used to Define Where Our Windows Begins and Where it Ends

Create a Div!

```
<body>

        <div>

                (the content of your site)

        </div>

</body>
```

(this groups your content)

Outline Your Window

```
<div style="border: solid;">

        (content)

</div>
```

(this makes it obvious where your window begins & where it ends)

index.html

```
<!DOCTYPE html>
<html>

<body>
  <div style="border: solid">
    <img src="https://cloud-pc8imajxj-hack-club-bot.vercel.app/1img_1181.jpg"
      style="width: 64px; height: 64px; border-radius: 32px; object-fit: cover;" />
    <h1 style="margin: 4px;">thomasOS</h1>
    <p style="margin: 0px;">
      <dfn>ThomasOS</dfn> is a feature-limited <abbr title="Operating System">OS</abbr> to answer the <br />
      unanswerable
      question of <code>"who is Thomas?"</code>
    </p>
  </div>
</body>

</html>
```

Ln 11, Col 19 History

Webview Shell

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thomasOS

ThomasOS is a feature-limited OS to answer the unanswerable question of `"who is Thomas?"`

Provide a Width

```
<div style="border: solid; width: 128px;">
        (content)

</div>
```

(pick your own width)

(you can also add a border-radius
if you want rounded corners)

index.html

```
<!DOCTYPE html>
<html>

<body>
  <div style="border: solid; border-radius: 16px; width: fit-content;">
    <img src="https://cloud-pc8imajxj-hack-club-bot.vercel.app/1img_1181.jpg"
      style="width: 64px; height: 64px; border-radius: 32px; object-fit: cover;" />
    <h1 style="margin: 4px;">thomasOS</h1>
    <p style="margin: 0px;">
      <dfn>ThomasOS</dfn> is a feature-limited <abbr title="Operating System">OS</abbr> to answer the <br />
      unanswerable
      question of <code>"who is Thomas?"</code>
    </p>
  </div>
</body>

</html>
```

Ln 16, Col 1 History

Webview Shell

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thomasOS

ThomasOS is a feature-limited OS to answer the unanswerable question of `"who is Thomas?"`

WE NEED MORE SPACE IN HERE

We Should Add Some _____

(fill in the blank)

We Should Add Some PADDING!

```
<div style="padding: 16px; (additional styles)">

        (content)

</div>
```

Ah... that feels much better!
So much more space

Great. We now have our window.

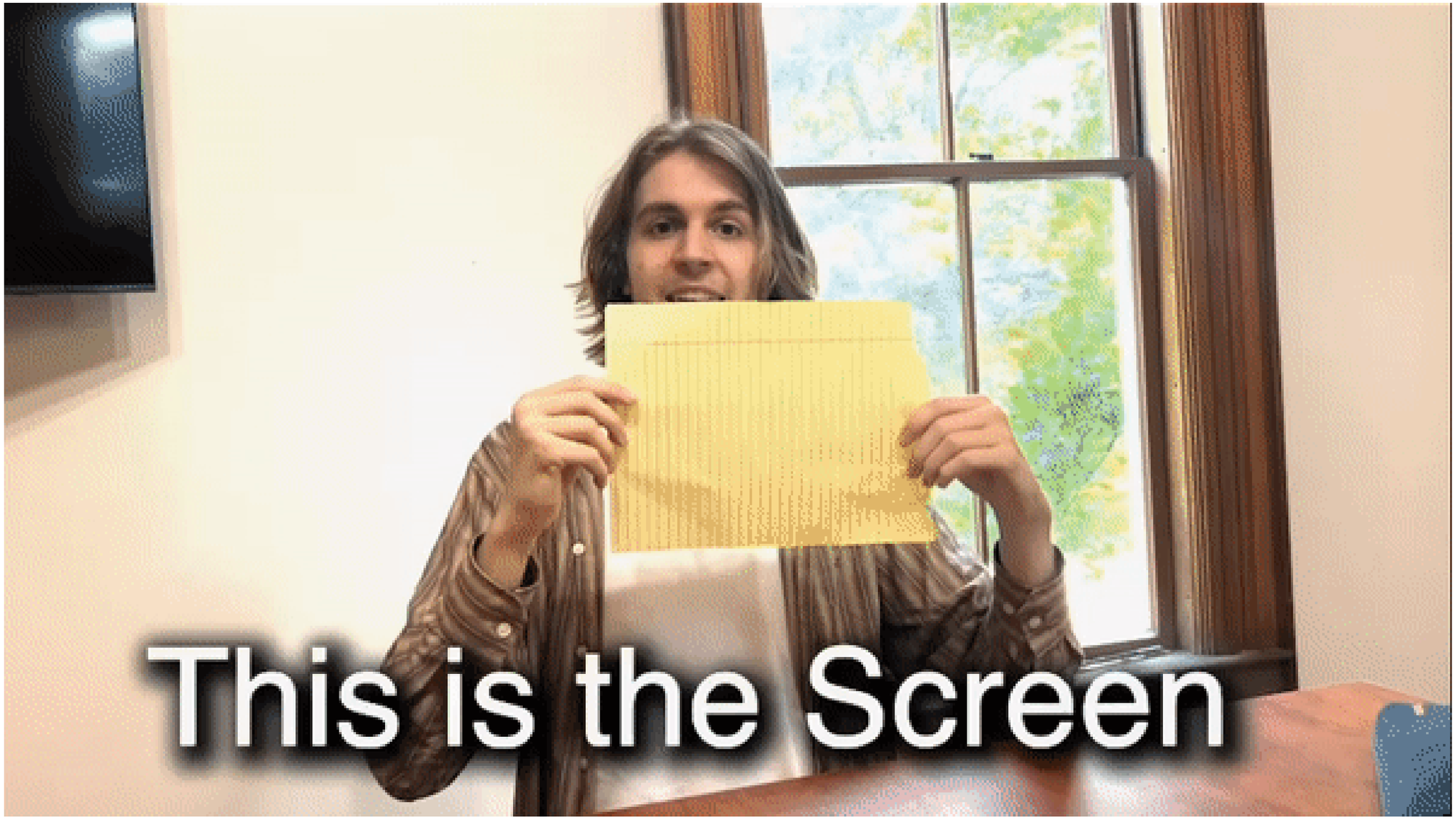
Let's Place it On Top Of Our Desktop

Let's use Position Absolute

```
<div style="position: absolute; (additional styles)">

        (content)

</div>
```


This is the Screen

Let's Center It

```
        <div style="position: absolute; top: 50%; left: 50%;
transform: translate(-50%, -50%); (additional styles)">
                (content)
        </div>
```

(the Transform allows us to position around the center instead of the top right)

index.html - MelodicDevotedSc

melodicdevotedscales.thomas

melodicdevotedscales.thomasstubblef2.repl.co

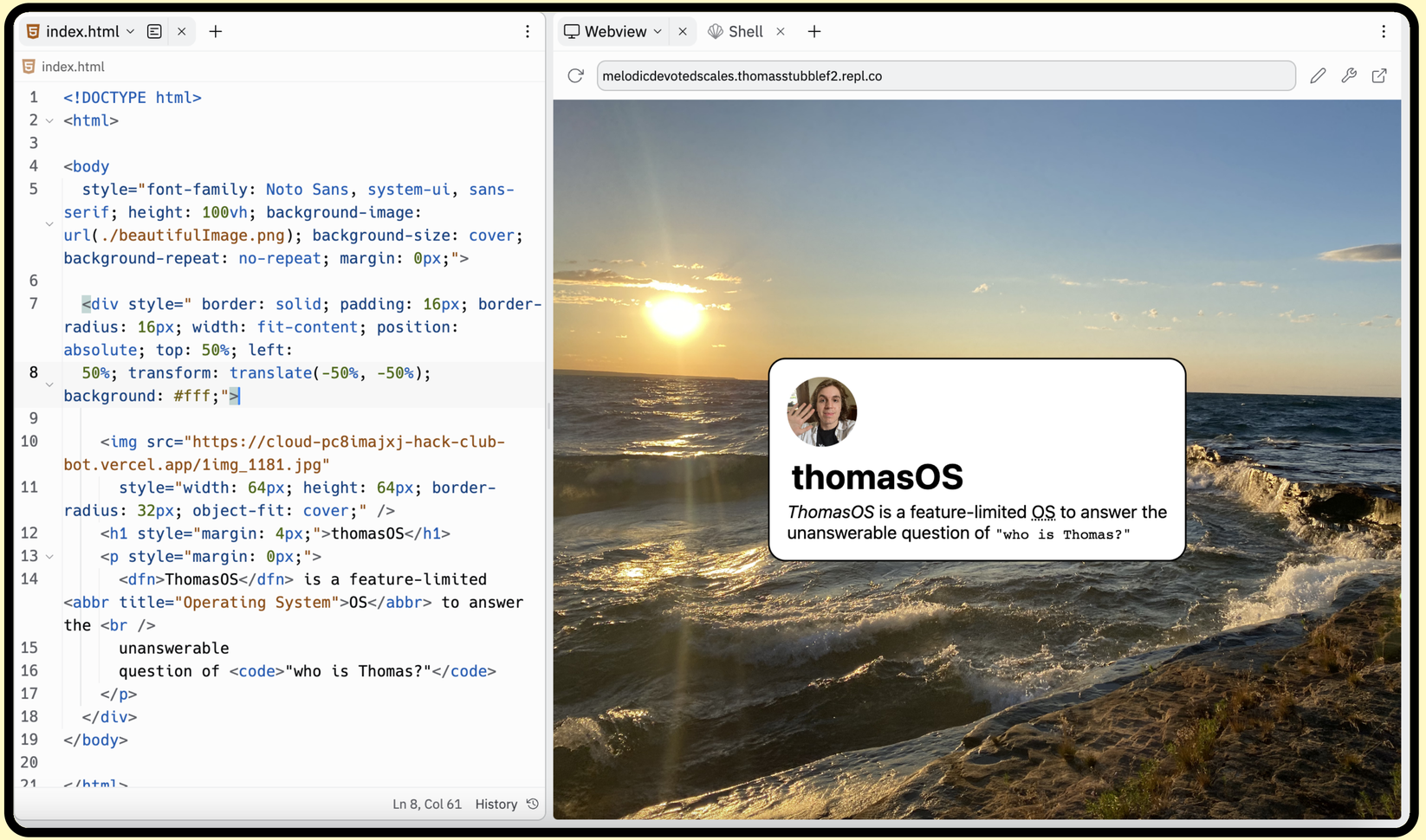
thomasOS

ThomasOS is a feature-limited OS to answer the unanswerable question of `"who is Thomas?"`

Add Background Image

1. Find your image (I'll be using a photo I took in Michigan)
2. Drag it into Replit (the file manager)
3. On your body tag as the style property of `background-image: url(./NAME_OF_YOUR_IMAGE.png)`
4. Adding `background-size: cover;` to the body to make the size of the image fit the screen.
5. If your image still isn't quite fitting, add `height: 100vh` as a property to your body. This will make the height of the background 100% of the vertical height of your browser.

Beautiful!


index.html
index.html
<!DOCTYPE html>
<html>
<body
style="font-family: Noto Sans, system-ui, sans-serif; height: 100vh; background-image: url(./beautifulImage.png); background-size: cover; background-repeat: no-repeat; margin: 0px;">

<img src="https://cloud-pc8imajxj-hack-club-bot.vercel.app/1img_1181.jpg"
style="width: 64px; height: 64px; border-radius: 32px; object-fit: cover;" />
<h1 style="margin: 4px;">thomasOS</h1>

<dfn>ThomasOS</dfn> is a feature-limited <abbr title="Operating System">OS</abbr> to answer the
unanswerable
question of <code>"who is Thomas?"</code>

</body>
</html>
Ln 8, Col 61
History
Webview
Shell
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thomasOS
ThomasOS is a feature-limited OS to answer the unanswerable question of "who is Thomas?"

Let’s Make a Top Bar for our OS

Create a new Div Inside Your Body

Align Items Horizontally

```
<div style="display: flex;">
        <p>
                ThomasOS
        </p>
        <p>
                6/21/2023 3:41 PM
        </p>
</div>
```

Customize Spacing

w3schools.com/cssref/playdemo.php?filename=playcss_justify-content

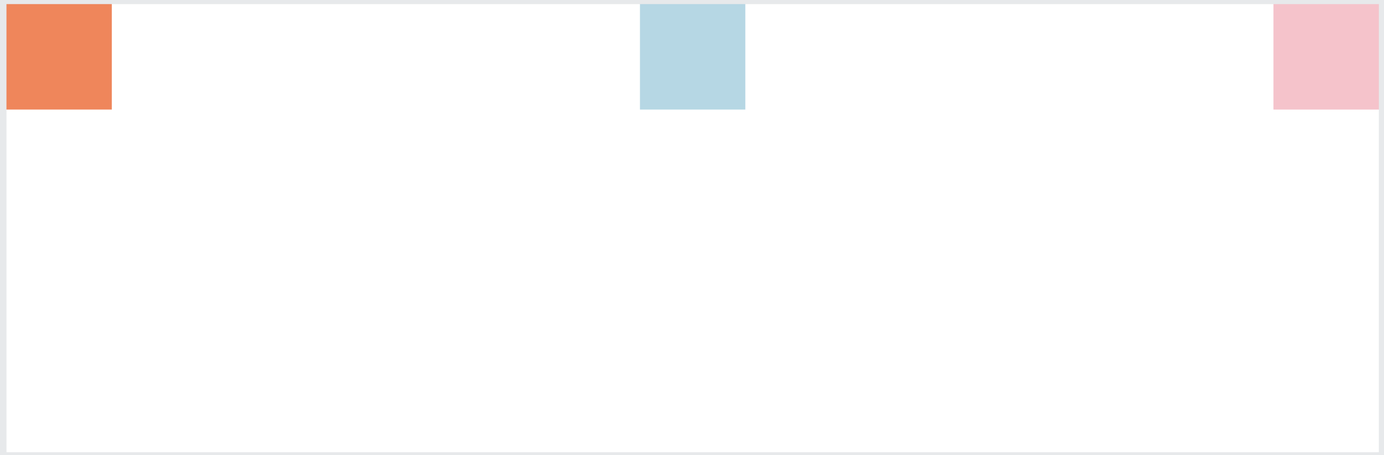
CSS justify-content

❮ Previous | justify-content | Next ❯

Demo of the different values of the justify-content property.

Click the property values below to see the result:

- justify-content: flex-start;
- justify-content: flex-end;
- justify-content: center;
- justify-content: space-between;
- justify-content: space-around;
- justify-content: space-evenly;



Play more with the code in our Tryit yourself editor: Try it Yourself ❯

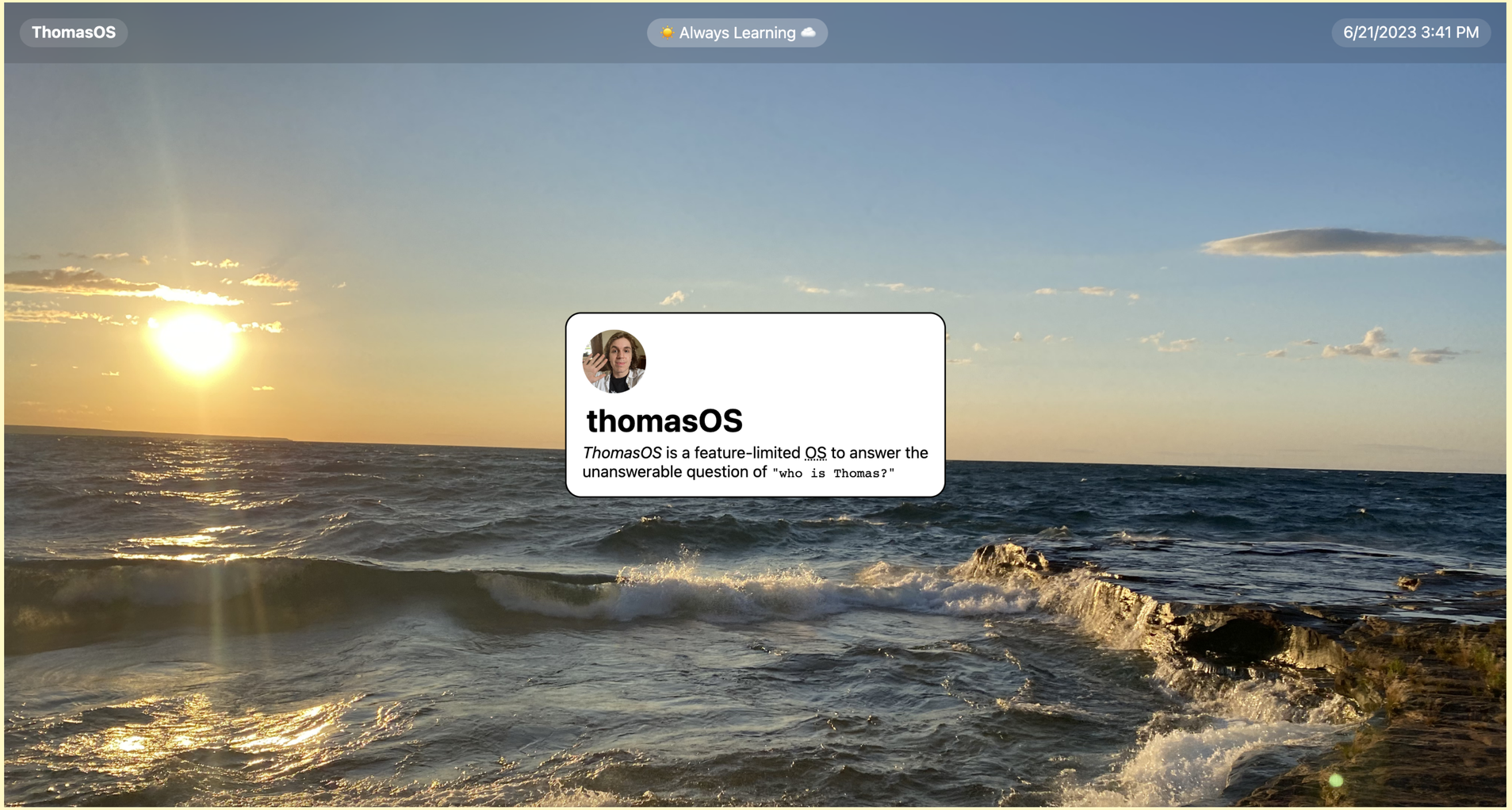
Add a Topbar Overlay

```
<div
  style="background-color: rgba(0, 0, 0, 0.25); color: #fff; (other styles)">
  <p style="margin-left: 16px;">
    ThomasOS
  </p>
  <p style="margin-right: 16px;">
    6/21/2023 3:41 PM
  </p>
</div>
```

p.s. you can add backdrop-filter: blur(10px); to blur background

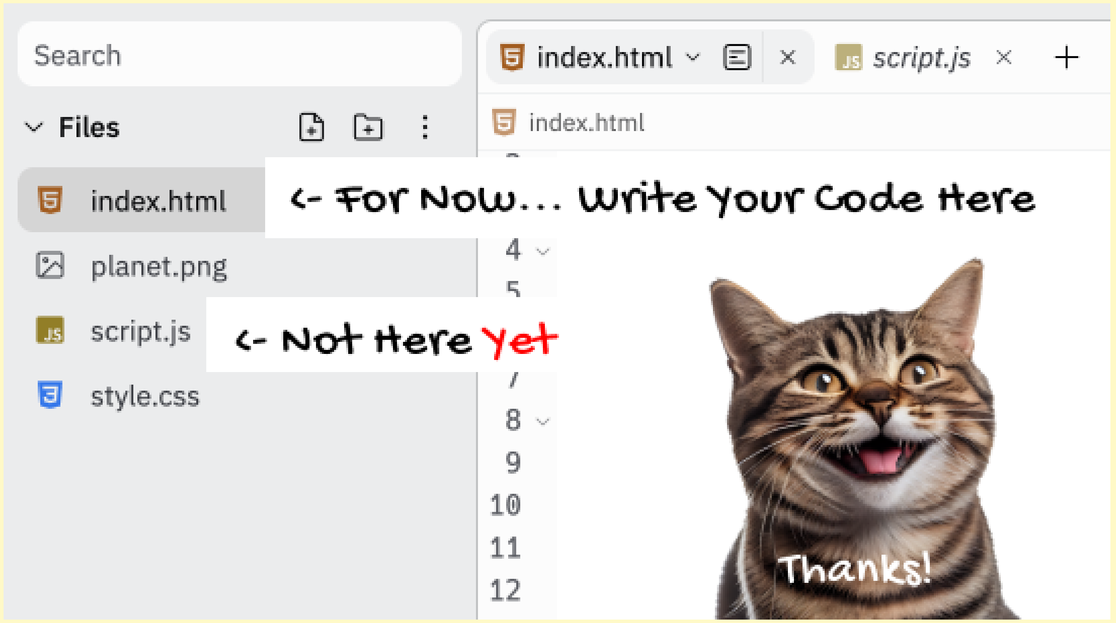
You Can Add Anything You Want in Your Top Bar & Style It However You'd Like

Here's an example:



We need to keep up with time within our application for the top bar :D

Let's start w/ a Script Tag




```
<html>
        <body>
                (site content)
                <script>
                        (JavaScript Code)
                </script>
        </body>
</html>
```

Let's Get the Time

```
<script>

        var currentTime = new Date().toLocaleString();

</script>
```

Get The Time Text Element

```
<p id="timeElement"
   style="(YOUR STYLES)">
   Time
</p>
```

Add an ID to the Element

```
<script>
        var currentTime = new Date().toLocaleString();
        var timeText = document.querySelector("#timeElement");
</script>
```

& Select the Element by it's ID

Set The Time Once

```
<script>

        var currentTime = new Date().toLocaleString();

        var timeText = document.querySelector("#timeElement");

        timeText.innerHTML = currentTime

</script>
```

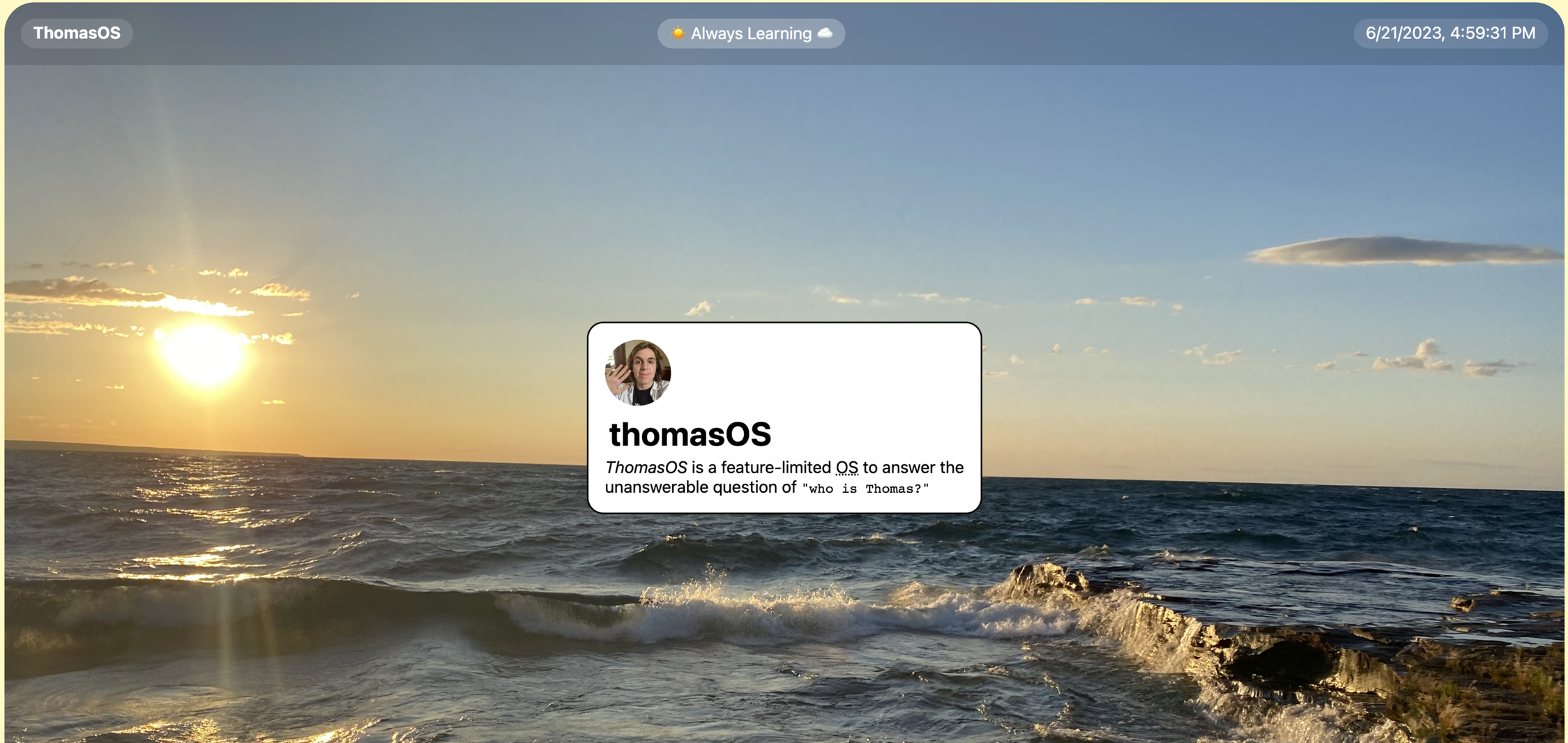
Set The Time Every Second

```
<script>


        function updateTime() {
                var currentTime = new Date().toLocaleString();
                var timeText = document.querySelector("#timeElement");
                timeText.innerHTML = currentTime;
        }
        setInterval(updateTime, 1000);


</script>
```

Great! We're done!



Hope you enjoyed part 2.
See You Next Time :D