DAY 6

Note: The names for my HTML, CSS, and JavaScript files (like DAYTHREE.html, DAYTHREE.css, DAYTHREE.js) are not recommended as they are considered bad practice in professional projects. However, since this is a mini project, I prefer using these names to distinguish them from my other files. For larger or professional projects, it's better to use standard and descriptive file names like index.html, style.css, and script.js.

DAYSIX.HTML

<div class="group"> ... </div>

This is the main container that holds all your content.

<h1 id="heading">DAY 6</h1>

A heading saying "DAY 6".

<h1>Password Strength Checker</h1>

Main heading. The word "Strength" is given a special style using the tag (you'll color it differently in CSS).

<| <| abel for="password">Password</|abel>

A label telling the user to enter their password.

<div class="input-container"> ... </div>

A box containing:

- The password input field
- The eye icon (□) to show/hide the password
- <input type="password" id="password" ... />

This is the actual **password box**.

This is the **eye icon** the user can click to toggle visibility of the password.

<| <|abel>Strength of password</label>

Another label — telling the user the next box shows **how strong their password is**.

<div class="slide"> <div id="point"></div> </div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div>

This is the password strength bar:

- slide is the outer bar (gray background)
- point is the inner bar that grows in width and changes color based on password strength

DAYSIX.CSS

Styling the whole page

```
body {
   margin: 0;
   font-family: monospace;
   min-height: 100vh;
   display: flex;
   justify-content: center;
   align-items: center;
   background-color: rgb(5, 52, 50);
   font-size: 20px;
   color: white;
}
```

- margin: 0 → Removes default browser space around the page.
- font-family: monospace → All text uses a fixed-width font.
- min-height: 100vh → Page height is always at least full screen.
- **display: flex; justify-content: center; align-items: center;** → Centers everything in the middle of the screen.
- background-color → Dark green background.
- font-size and color → Base text size and color (white).

Styling the "DAY 6" heading

```
#heading {
  color: white;
  text-decoration: underline;
}
```

• Makes the text white and underlined.

All main headings

```
h1 {
  font-family:'Times New Roman';
  color: white;
}
```

• All <h1> elements use a serif font and are white.

Only the word "STRENGTH"

```
#highlight {
  color: darkorange;
}
```

• Makes just the word **STRENGTH** in your heading orange for emphasis.

Wrapper for all content

```
.group {
  text-align: center;
}
```

• Centers all inner content (like text and labels).

Text above inputs

```
.group label {
  display: block;
  padding: 20px 0 10px;
  color: white;
}
```

- Labels take up the whole line (block).
- Adds spacing above and below the text.
- Keeps the color white.

Box that holds the password field and eye icon

```
.input-container {
  position: relative;
  width: 100%;
```

• Sets up **relative positioning** so the icon can be placed inside.

Password field

```
.input-container input {
  width: 100%;
  padding: 15px 15px 15px 15px;
  font-size: 18px;
  border: none;
  border-radius: 10px;
  background-color: #eaeff2;
  color: #3ba62f;
  outline: none;
}
```

- Full-width password box with padding inside.
- No border and rounded corners.
- Light gray background.
- Green text inside (#3ba62f).
- No outline when clicked.

Eye icon to show/hide password

```
.input-container span {
  position: absolute;
  right: 0px;
  top: 50%;
  transform: translateY(-50%);
  cursor: pointer;
  font-size: 18px;
}
```

- The □ icon is **placed inside the input box**, on the right.
- cursor: pointer makes it clickable.

Outer password strength bar

```
.slide {
 background-color: #2E424D;
 width: 100%;
 height: 15px;
 border-radius: 5px;
 margin-top: 10px;
}
```

- Gray background bar to hold the strength meter.
- Rounded and full-width.

The colored strength level inside the bar

```
#point {
  background-color: #D73F40;
  width: 1%;
  height: 100%;
  border-radius: 5px;
  transition: 0.5s ease;
}
```

- Starts small (1% width), grows with stronger passwords.
- Color and size change dynamically (via JavaScript).
- Transition makes the bar grow smoothly.

DAYSIX.JS

The code has two main purposes:

- 1. To check the strength of the password as the user types.
- 2. To show or hide the password using the \square icon.

1. These lines get HTML elements:

```
let password = document.getElementById("password");
let power = document.getElementById("point");
let toggle = document.getElementById("togglePwd");
```

- password = refers to the password input field.
- power = refers to the strength bar (the colored one inside the grey bar).
- toggle = refers to the \square icon used to show/hide the password.

2. When the user types in the password box:

```
password.oninput = function () {
```

• This **runs the function every time** you type or change something in the password box.

3. Setup points, colors, and bar widths:

```
let point = 0;
let value = password.value;
let widthPower = ["1%", "25%", "50%", "75%", "100%"];
let colorPower = ["#D73F40", "#DC6551", "#F2B84F", "#BDE952", "#3ba62f"];
```

- point = 0; → Starts with 0 strength.
- value stores the current password value.
- widthPower → Different bar sizes for different strengths.
- colorPower \rightarrow Different colors to show weak 2 to strong 2 passwords.

4. Check if password is long enough:

```
if (value.length >= 6) {
```

Only checks strength if password is at least 6 characters long.

5. Test the password using 4 checks:

```
let checks = [/[0-9]/, /[a-z]/, /[A-Z]/, /[^0-9a-zA-Z]/];
checks.forEach((regex) => {
    if (regex.test(value)) point++;
});
```

- It uses 4 rules to check your password:
 - 1. Has a **number**? (0-9)

- 2. Has a **small letter**? (a-z)
- 3. Has a capital letter? (A-Z)
- 4. Has a **symbol**? (@, #, \$, !, etc.)
- For **each match**, it adds 1 point. So max = 4 points.

6. Update the strength bar:

```
power.style.width = widthPower[point];
power.style.backgroundColor = colorPower[point];
};
```

- Based on how strong the password is, it:
 - o Changes the length of the bar.
 - Changes the color of the bar.

Examples:

- 0 points → Red, small bar ②
- 4 points → Green, full bar ②

7. Show or hide the password when clicking \square

```
toggle.onclick = function () {
```

• When the user clicks the □ icon, this part runs.

8. If it's hidden, show it:

```
if (password.type === "password") {
  password.type = "text";
  toggle.textContent = "2";
  toggle.title = "Hide Password";
```

- If the password is **currently hidden**, it will:
 - Change input to visible (type = text).
 - \circ Change icon from \square to oting.
 - Change tooltip text to say "Hide Password".

9. If it's visible, hide it again:

```
} else {
   password.type = "password";
   toggle.textContent = "\[
    toggle.title = "Show Password";
}
};
```

- If it was already visible, it goes back to:
 - Hidden password
 - \circ Icon goes back to \square

o Tooltip becomes "Show Password"