* **INTRODUCTION:**

Passwords have been used to grant access to unknown persons since ancient times. Military, spy organizations, high security organizations have seen a rampant use of passwords. Even today, it is not only used to secure computers in the traditional sense but is used to control access to mobile phones, homes, ATMs (automatic teller machines) and many more. Most often, passwords are the only security one enforces to protect an application against unauthorized access and unfortunately many users do not realize the importance of passwords fully. They tend to set short, easy-to-remember passwords which are highly vulnerable to attacks. This paper aims to impress upon users just how vulnerable their private data can be with weak passwords by showing how easy or hard it is to break passwords of different strengths. Of course, with enough computing power and speed, no password is ultimately secure against a brute force attack. Yet with a little vigilance and knowledge, it is easy to make the job significantly harder for potential attackers

* **CODING**
* **Index.html:**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>Password Strength Checker</title>

<link rel="stylesheet" href="./style.css">

</head>

<body>

<!-- partial:index.partial.html -->

<div class="container">

<h2>Password Strength Checker</h2>

<div class="inputArea">

<input type="password" placeholder=" Password" id="YourPassword">

<div class="show"></div>

</div>

<div class="strengthMeter"></div>

</div>

<!-- partial -->

<script src="./script.js"></script>

</body>

</html>

* **Style.css:**

@import url("https://fonts.googleapis.com/css2?family=Poppins:wght@100;200;300;400;500;600;700;800;900&display=swap");

\* { margin: 0;

padding: 0;

box-sizing: border-box;

font-family: "Poppins", sans-serif;}

body {

display: flex;

align-items: center;

justify-content: center;

min-height: 100vh;

background: #222;}

.container {

position: relative;

width: 400px;

border-radius: 20px 20px 0 0;

padding: 30px;

background: #333;

display: flex;

justify-content: center;

/\* align-items: center; \*/

flex-direction: column;

border-radius: 1px solid #111;

gap: 10px;

padding-bottom: 70px;

-webkit-box-reflect: below 1px

linear-gradient(transparent, transparent, #0005);}

.container h2 {color: #666;

font-weight: 500;}

.container .inputArea {

position: relative;

width: 100%;}

.container .inputArea input {

position: relative;

width: 100%;

background: #222;

border: none;

outline: none;

padding: 10px;

color: aliceblue;

font-size: 1.1em;}

.container .strengthMeter {

position: absolute;

left: 0;

bottom: 0;

width: 100%;

height: 3px;

background: #222;}

.container .strengthMeter::before {

content: "";

position: absolute;

width: 0;

height: 100%;

transition: 0.5s;

background: #f00;}

.container.weak .strengthMeter::before {

width: 10%;

background: #f00;

filter: drop-shadow(0 0 5px #f00) drop-shadow(0 0 10px #f00)

drop-shadow(0 0 20px #f00);}

.container.moderate .strengthMeter::before {

width: 70%;

background: #eedc3d;

filter: drop-shadow(0 0 5px #eedc3d) drop-shadow(0 0 10px #eedc3d)

drop-shadow(0 0 20px #eedc3d);}

.container.strong .strengthMeter::before {

width: 100%;

background: #18e605;

filter: drop-shadow(0 0 5px #18e605) drop-shadow(0 0 10px #18e605)

drop-shadow(0 0 20px #18e605);}

.container .strengthMeter::after {

position: absolute;

top: -45px;

left: 30px;

transition: 0.5s;

color: aliceblue;}

.container.container.weak .strengthMeter::after {

content: "Weak Password";

color: #f00;

filter: drop-shadow(0 0 5px#f00);}

.container.container.container.moderate .strengthMeter::after {

content: "Moderate Password"

color: #eedc3d;

filter: drop-shadow(0 0 5px#eedc3d);}

.container.container.container.container.strong.strengthMeter::after{

content:"Strong Password";

color: #18e605;

filter: drop-shadow(0 0 5px#18e605);}

.show {

position: absolute;

top: 0;

right: 0;

width: 60px;

height: 100%;

background: #333;

border: 6px solid #222;

cursor: pointer;

justify-content: center;

align-items: center;

display: flex;}

.show::before {

content: "Show";

font-size: 0.6em;

color: aliceblue;

letter-spacing: 0.15em;

text-transform: uppercase;}

.show.hide::before { content: "Hide";}

* **script.js:**

function Strength(password)

{

let i = 0;

if (password.length > 6) {

i++;

}

if (password.length >= 10) {

i++;

}

if (/[A-Z]/.test(password)) {

i++;

}

if (/[0-9]/.test(password)) {

i++;

}

if (/[A-Za-z0-8]/.test(password)) {

i++;

}

return i

}

let container = document.querySelector(".container");

document.addEventListener("keyup", function (e)

{

let password = document.querySelector("#YourPassword").value;

let strength = Strength(password);

if (strength <= 2)

{

container.classList.add("weak");

container.classList.remove("moderate");

container.classList.remove("strong");

}

else if (strength >= 2 && strength <= 4)

{

container.classList.remove("weak");

container.classList.add("moderate");

container.classList.remove("strong");

}

else {

container.classList.remove("weak");

container.classList.remove("moderate");

container.classList.add("strong");

}

});

let password = document.querySelector("#YourPassword");

let show = document.querySelector(".show");

show.onclick = function ()

{

if (password.type === "password")

{

password.setAttribute("type", "text");

show.classList.add("hide");

}

else { password.setAttribute("type", "password");

show.classList.remove("hide");

}

};

**OUTPUT:**





