**Objective:-** Design and Implement Tic-Tac-Toe game using HTML, CSS and JavaScript.

**HTML Code :-**

<!DOCTYPE html>

<html lang="en">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<head>

<title>Tic Tac Toe</title>

<link href="https://fonts.googleapis.com/css2?family=Raleway:wght@700&display=swap" rel="stylesheet">

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

</head>

<body>

<div class="wrapper">

<div class="container">

<button class="button-option"></button>

<button class="button-option"></button>

<button class="button-option"></button>

<button class="button-option"></button>

<button class="button-option"></button>

<button class="button-option"></button>

<button class="button-option"></button>

<button class="button-option"></button>

<button class="button-option"></button>

</div>

<button id="restart">Restart</button>

</div>

<div class="popup hide">

<button id="new-game">New Game</button>

</div>

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

</body>

</html>

**CSS Code :-**

\* {

padding: 0;

margin: 0;

box-sizing: border-box;

font-family: "Raleway", sans-serif;

}

body {

height: 100vh;

background: linear-gradient(135deg, #8052ec, #d161ff);

}

html {

font-size: 16px;

}

.wrapper {

position: absolute;

transform: translate(-50%, -50%);

top: 50%;

left: 50%;

}

.container {

width: 70vmin;

height: 70vmin;

display: flex;

flex-wrap: wrap;

gap: 2vmin;

}

.button-option {

background: #ffffff;

height: 22vmin;

width: 22vmin;

border: none;

border-radius: 8px;

font-size: 12vmin;

color: #d161ff;

box-shadow: 0 0 15px rgba(0, 0, 0, 0.1);

}

#restart {

font-size: 1.3em;

padding: 1em;

border-radius: 8px;

background-color: #0a0027;

color: #ffffff;

border: none;

position: relative;

margin: 1.5em auto 0 auto;

display: block;

}

.popup {

background: linear-gradient(135deg, #8052ec, #d161ff);

height: 100%;

width: 100%;

position: absolute;

display: flex;

z-index: 2;

align-items: center;

justify-content: center;

flex-direction: column;

gap: 1em;

font-size: 12vmin;

}

#new-game {

font-size: 0.6em;

padding: 0.5em 1em;

background-color: #0a0027;

color: #ffffff;

border-radius: 0.2em;

border: none;

}

#message {

color: #ffffff;

text-align: center;

font-size: 1em;

}

.popup.hide {

display: none;

}

**JavaScript Code :-**

let btnRef = document.querySelectorAll(".button-option");

let popupRef = document.querySelector(".popup");

let newgameBtn = document.getElementById("new-game");

let restartBtn = document.getElementById("restart");

let msgRef = document.getElementById("message");

let winningPattern = [[0, 1, 2],[0, 3, 6],[2, 5, 8],[6, 7, 8],[3, 4, 5],[1, 4, 7],[0, 4, 8],[2, 4, 6],];

let xTurn = true;

let count = 0;

const disableButtons = () => {

btnRef.forEach((element) => (element.disabled = true));

popupRef.classList.remove("hide");

};

const enableButtons = () => {

btnRef.forEach((element) => {

element.innerText = "";

element.disabled = false;

});

popupRef.classList.add("hide");

};

const winFunction = (letter) => {

disableButtons();

if (letter == "X") {

msgRef.innerHTML = "&#x1F389; <br> 'X' Wins";

} else {

msgRef.innerHTML = "&#x1F389; <br> 'O' Wins";

}

};

const drawFunction = () => {

disableButtons();

msgRef.innerHTML = "&#x1F60E; <br> It's a Draw";

};

newgameBtn.addEventListener("click", () => {

count = 0;

enableButtons();

});

restartBtn.addEventListener("click", () => {

count = 0;

enableButtons();

});

const winChecker = () => {

for (let i of winningPattern) {

let [element1, element2, element3] = [

btnRef[i[0]].innerText,

btnRef[i[1]].innerText,

btnRef[i[2]].innerText,

];

if (element1 != "" && (element2 != "") & (element3 != "")) {

if (element1 == element2 && element2 == element3) {

winFunction(element1);

}

}

}

};

btnRef.forEach((element) => {

element.addEventListener("click", () => {

if (xTurn) {

xTurn = false;

element.innerText = "X";

element.disabled = true;

} else {

xTurn = true;

element.innerText = "O";

element.disabled = true;

}

count += 1;

if (count == 9) {

drawFunction();

}

winChecker();

});

});

window.onload = enableButtons;

**Output :-**

