

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport"
content="width=device-width, initial-
scale=1.0">
  <title>Cosmic Tic Tac Toe</title>
  <link href="https://
fonts.googleapis.com/css2?
family=Orbitron:wght@400;700&famil
y=Press+Start+2P&display=swap"
rel="stylesheet">
  <link rel="stylesheet" href="https://
cdnjs.cloudflare.com/ajax/libs/font-
awesome/6.4.0/css/all.min.css">
<style>
document.addEventListener('DOMContentLoaded'
```

```
tentLoaded', () => {
  // DOM Elements
  const boxes =
    document.querySelectorAll('.box');
  const playButton =
    document.getElementById('play');
  const exitButton =
    document.getElementById('exit');
  const heading =
    document.getElementById('heading');
  const board =
    document.getElementById('board');
  const messBox =
    document.getElementById('mess-
    box');
  const startScreen =
    document.getElementById('start');
```

```
// Game State
let currentPlayer = 'X';
let gameActive = true;

// Winning Conditions
const winConditions = [
  [0, 1, 2], [3, 4, 5], [6, 7, 8], // rows
  [0, 3, 6], [1, 4, 7], [2, 5, 8], // columns
  [0, 4, 8], [2, 4, 6]           // diagonals
];

// Initialize Game
const initGame = () => {
  // Reset game state
  currentPlayer = 'X';
  gameActive = true;

  // Clear the board
```

```
boxes.forEach(box => {
  box.textContent = '';
  box.removeAttribute('data-value');
  box.classList.remove('win', 'lose');
});
```

```
// Clear message box
messBox.textContent = '';
messBox.className = 'message-box';
```

```
// Show game elements
```

```
document.body.classList.add('game-active');
};
```

```
// Handle Player Move
const handlePlayerMove = (e) => {
    const box = e.target;
    const boxIndex =
        box.getAttribute('data-index');

    // If box is already filled or game
    // not active, ignore
    if (box.textContent !== "" || !
        gameActive) return;

    // Make move
    box.textContent = currentPlayer;
    box.setAttribute('data-value',
        currentPlayer);

    // Check for win or draw
    if (checkWin(currentPlayer)) {
```

```
    endGame(false);  
    return;  
} else if (isDraw()) {  
    endGame(true);  
    return;  
}  
}
```

```
// Switch player  
currentPlayer = currentPlayer ===  
'X' ? 'O' : 'X';
```

```
// If it's computer's turn (0)  
if (currentPlayer === 'O') {  
    setTimeout(computerMove, 500);  
}  
};
```

```
// Computer Move
```

```
const computerMove = () => {
  if (!gameActive) return;

  // Find all empty boxes
  const emptyBoxes =
    Array.from(boxes).filter(box =>
    box.textContent === '');
}

if (emptyBoxes.length === 0) {
  endGame(true);
  return;
}
```

```
// Simple AI - random move
const randomIndex =
  Math.floor(Math.random() *
emptyBoxes.length);
const box =
```

```
emptyBoxes[randomIndex];
```

```
box.textContent = '0';
```

```
box.setAttribute('data-value', '0');
```

```
// Check for win or draw
```

```
if (checkWin('0')) {
```

```
endGame(false);
```

```
} else if (isDraw()) {
```

```
endGame(true);
```

```
} else {
```

```
currentPlayer = 'X';
```

```
}
```

```
};
```

```
// Check for Win
```

```
const checkWin = (player) => {
```

```
return
```

```
winConditions.some(condition => {
    return condition.every(index => {
        return
boxes[index].getAttribute('data-
value') === player;
    });
});
};

// Check for Draw
```

```
const isDraw = () => {
    return Array.from(boxes).every(box
=> box.textContent !== '');
};

// End Game
```

```
const endGame = (draw) => {
    gameActive = false;
```

```
if (draw) {  
    messBox.textContent = "Game  
Draw!";  
    messBox.classList.add('draw');  
} else {  
    const winner = currentPlayer ===  
    'X' ? 'You Win!' : 'Computer Wins!';  
    messBox.textContent = winner;  
  
    messBox.classList.add(currentPlayer  
    === 'X' ? 'win' : 'lose');  
  
    // Highlight winning boxes  
    const winCondition =  
    winConditions.find(condition => {  
        return condition.every(index => {  
            return
```

```
boxes[index].getAttribute('data-value') === currentPlayer;  
});  
});
```

```
if (winCondition) {  
    winCondition.forEach(index => {
```

```
        boxes[index].classList.add(currentPlayer === 'X' ? 'win' : 'lose');  
    });  
}  
}
```

```
messBox.style.opacity = '1';  
messBox.style.visibility = 'visible';  
messBox.style.transform =  
'translateY(0)';
```

};

// Reset Game

const resetGame = () => {

document.body.classList.remove('game-active');

startScreen.style.display = 'flex';

};

// Event Listeners

playButton.addEventListener('click',
initGame);

exitButton.addEventListener('click',
resetGame);

boxes.forEach(box => {

box.addEventListener('click',
handlePlayerMove);

```
});  
  
    console.log('Game initialized  
successfully');  
});  
  
<style>  
</head>  
<body>  
    <div class="stars"></div>  
  
    <div class="game-container">  
        <button id="exit" class="btn-exit"><i class="fas fa-times"></i></button>  
  
        <div id="start" class="start-screen">  
            <h1 class="title">COSMIC<br>TIC
```

TAC TOE</h1>

<button id="play" class="btn-play">START GAME</button>
</div>

<h1 id="heading" class="game-title">COSMIC TIC TAC TOE</h1>

<div id="board" class="game-board">

<div class="box" data-index="0"></div>

<div class="box" data-index="1"></div>

<div class="box" data-index="2"></div>

<div class="box" data-index="3"></div>

```
<div class="box" data-
index="4"></div>
<div class="box" data-
index="5"></div>
<div class="box" data-
index="6"></div>
<div class="box" data-
index="7"></div>
<div class="box" data-
index="8"></div>
</div>
```

```
<div id="mess-box" class="message-
box"></div>
</div>
```

```
<script>document.addEventListener('
```

```
DOMContentLoaded', () => {
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} else {
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currentPlayer = 'X';
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// End Game
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const endGame = (draw) => {
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if (draw) {  
    messBox.textContent = "Game  
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```

```
boxes[index].getAttribute('data-value') === currentPlayer;  
});  
});
```

```
if (winCondition) {  
    winCondition.forEach(index => {
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```
        boxes[index].classList.add(currentPlayer === 'X' ? 'win' : 'lose');  
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```
messBox.style.opacity = '1';  
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```

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// Reset Game

const resetGame = () => {

document.body.classList.remove('game-active');

startScreen.style.display = 'flex';

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// Event Listeners

playButton.addEventListener('click',
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boxes.forEach(box => {

box.addEventListener('click',
handlePlayerMove);

```
});  
  
    console.log('Game initialized  
successfully');  
});  
  
</script>  
</body>  
</html>
```


