

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0,
maximum-scale=1.0, user-scalable=no">
  <title>Neon Tetris</title>
  <style>
    :root {
      --bg-color: #0f172a;
      --grid-color: #1e293b;
      --text-color: #f8fafc;
      --accent-color: #38bdf8;
      --danger-color: #ef4444;
    }

    * {
      box-sizing: border-box;
      user-select: none;
      -webkit-tap-highlight-color: transparent;
    }

    body {
      background-color: var(--bg-color);
      color: var(--text-color);
      font-family: 'Segoe UI', system-ui, sans-serif;
      display: flex;
      flex-direction: column;
      align-items: center;
      justify-content: center;
      min-height: 100vh;
      margin: 0;
      overflow: hidden;
      touch-action: none;
    }

    .game-wrapper {
      display: flex;
      flex-direction: column;
      align-items: center;
      gap: 15px;
      max-width: 100vw;
      padding: 10px;
    }

    .main-layout {
      display: flex;
      gap: 20px;
```

```
background: #1e293b;
padding: 15px;
border-radius: 16px;
border: 2px solid #334155;
box-shadow: 0 25px 50px -12px rgba(0, 0, 0, 0.5);
}
```

```
canvas {
  border: 3px solid var(--accent-color);
  background-color: #000;
  border-radius: 4px;
  display: block;
  box-shadow: 0 0 15px rgba(56, 189, 248, 0.2);
}
```

```
.side-panel {
  display: flex;
  flex-direction: column;
  justify-content: space-between;
  width: 120px;
}
```

```
.stats-group {
  display: flex;
  flex-direction: column;
  gap: 10px;
}
```

```
.stat-card {
  background: #0f172a;
  padding: 10px;
  border-radius: 8px;
  text-align: center;
  border: 1px solid #475569;
}
```

```
.stat-label {
  font-size: 0.7rem;
  text-transform: uppercase;
  color: #94a3b8;
  letter-spacing: 0.05em;
}
```

```
.stat-value {
  font-size: 1.4rem;
  font-weight: 800;
  color: var(--accent-color);
}
```

```

/* Controller Buttons */
.controls-grid {
  display: grid;
  grid-template-columns: repeat(3, 70px);
  grid-template-rows: repeat(2, 70px);
  gap: 10px;
  margin-top: 10px;
}

.control-btn {
  background: #334155;
  border: none;
  border-radius: 12px;
  color: white;
  font-size: 1.5rem;
  display: flex;
  align-items: center;
  justify-content: center;
  cursor: pointer;
  box-shadow: 0 4px 0 #1e293b;
  transition: transform 0.05s, box-shadow 0.05s;
}

.control-btn:active {
  transform: translateY(2px);
  box-shadow: 0 2px 0 #1e293b;
  background: #475569;
}

.control-btn.wide { grid-column: span 3; height: 50px; font-size: 1rem; text-transform:
uppercase; font-weight: bold; }
.btn-drop { background: #0ea5e9; }
.btn-rotate { background: #8b5cf6; }

.system-btns {
  display: flex;
  gap: 10px;
  width: 100%;
  margin-top: 10px;
}

.sys-btn {
  flex: 1;
  padding: 12px;
  border: none;
  border-radius: 8px;
  font-weight: bold;

```

```

        cursor: pointer;
        background: #475569;
        color: white;
    }

    /* Overlay */
    #overlay {
        position: fixed;
        inset: 0;
        background: rgba(15, 23, 42, 0.95);
        display: none;
        flex-direction: column;
        align-items: center;
        justify-content: center;
        z-index: 100;
        text-align: center;
    }

    #overlay h1 { font-size: 3.5rem; color: var(--danger-color); margin: 0; }

    @media (max-width: 500px) {
        .main-layout { flex-direction: column; align-items: center; }
        .side-panel { width: 100%; flex-direction: row; gap: 10px; }
        .side-panel .stat-card { flex: 1; }
        canvas { width: 240px; height: 480px; }
    }
</style>
</head>
<body>

<div class="game-wrapper">
    <div class="main-layout">
        <canvas id="game"></canvas>

        <div class="side-panel">
            <div class="stats-group">
                <div class="stat-card">
                    <div class="stat-label">Score</div>
                    <div id="score" class="stat-value">0</div>
                </div>
                <div class="stat-card">
                    <div class="stat-label">Level</div>
                    <div id="level" class="stat-value">1</div>
                </div>
            </div>

            <div class="system-btns">
                <button class="sys-btn" id="pauseBtn">Pause</button>
            </div>
        </div>
    </div>
</body>

```

```

    </div>
  </div>
</div>

<!-- Touch Controls -->
<div class="controls-grid">
  <button class="control-btn btn-rotate" id="rotateBtn">🔄</button>
  <button class="control-btn" id="upBtn">↑</button>
  <button class="control-btn btn-drop" id="hardDropBtn">↓</button>

  <button class="control-btn" id="leftBtn">←</button>
  <button class="control-btn" id="downBtn">↓</button>
  <button class="control-btn" id="rightBtn">→</button>
</div>
</div>

<div id="overlay">
  <h1>GAME OVER</h1>
  <p id="finalScore" style="font-size: 1.5rem; margin: 20px 0;">Score: 0</p>
  <button class="sys-btn" style="padding: 15px 40px; background: var(--accent-color);
color: #000;" onclick="resetGame()">PLAY AGAIN</button>
</div>

<script>
  const canvas = document.getElementById('game');
  const ctx = canvas.getContext('2d');
  const scoreElement = document.getElementById('score');
  const levelElement = document.getElementById('level');
  const overlay = document.getElementById('overlay');

  const COLS = 10;
  const ROWS = 20;
  const SQ = 30; // Base size, adjusted by canvas attributes

  canvas.width = COLS * SQ;
  canvas.height = ROWS * SQ;

  const PIECES = [
    [[], [[1,1,1,1]], [], []], // I
    [[2,0,0], [2,2,2], [0,0,0]], // J
    [[0,0,3], [3,3,3], [0,0,0]], // L
    [[4,4], [4,4]], // O
    [[0,5,5], [5,5,0], [0,0,0]], // S
    [[0,6,0], [6,6,6], [0,0,0]], // T
    [[7,7,0], [0,7,7], [0,0,0]] // Z
  ];

```

```
const COLORS = [null, '#00f0f0', '#0000f0', '#f0a000', '#f0f000', '#00f000', '#a000f0', '#f00000'];
```

```
let board = Array.from({length: ROWS}, () => Array(COLS).fill(0));
let score = 0;
let level = 1;
let gameOver = false;
let paused = false;
let dropCounter = 0;
let dropInterval = 1000;
let lastTime = 0;
```

```
const player = {
  pos: {x: 0, y: 0},
  matrix: null
};
```

```
function resetPlayer() {
  const id = Math.floor(Math.random() * PIECES.length);
  player.matrix = PIECES[id];
  player.pos.y = 0;
  player.pos.x = Math.floor(COLS/2) - Math.floor(player.matrix[0].length/2);
```

```
  if (collide()) {
    gameOver = true;
    document.getElementById('finalScore').innerText = `Score: ${score}`;
    overlay.style.display = 'flex';
  }
}
```

```
function collide() {
  for (let y = 0; y < player.matrix.length; ++y) {
    for (let x = 0; x < player.matrix[y].length; ++x) {
      if (player.matrix[y][x] !== 0 &&
        (board[y + player.pos.y] && board[y + player.pos.y][x + player.pos.x]) !== 0) {
        return true;
      }
    }
  }
  return false;
}
```

```
function merge() {
  player.matrix.forEach((row, y) => {
    row.forEach((value, x) => {
      if (value !== 0) board[y + player.pos.y][x + player.pos.x] = value;
    });
  });
}
```

```

}

function rotate(matrix) {
  const m = matrix.map((_, i) => matrix.map(row => row[i]).reverse());
  return m;
}

function playerRotate() {
  const pos = player.pos.x;
  let offset = 1;
  const oldMatrix = player.matrix;
  player.matrix = rotate(player.matrix);
  while (collide()) {
    player.pos.x += offset;
    offset = -(offset + (offset > 0 ? 1 : -1));
    if (offset > player.matrix[0].length) {
      player.matrix = oldMatrix;
      player.pos.x = pos;
      return;
    }
  }
}

function clearLines() {
  let rowCount = 0;
  for (let y = ROWS - 1; y >= 0; y--) {
    if (board[y].every(value => value !== 0)) {
      board.splice(y, 1);
      board.unshift(Array(COLS).fill(0));
      rowCount++;
      y++;
    }
  }
  if (rowCount > 0) {
    score += [0, 10, 30, 50, 100][rowCount] * level;
    scoreElement.innerText = score;
    if (score >= level * 100) {
      level++;
      levelElement.innerText = level;
      dropInterval = Math.max(100, 1000 - (level * 80));
    }
  }
}

function drop() {
  player.pos.y++;
  if (collide()) {
    player.pos.y--;
  }
}

```

```

        merge();
        clearLines();
        resetPlayer();
    }
    dropCounter = 0;
}

function hardDrop() {
    while(!collide()) { player.pos.y++; }
    player.pos.y--;
    merge();
    clearLines();
    resetPlayer();
    dropCounter = 0;
}

function move(dir) {
    player.pos.x += dir;
    if (collide()) player.pos.x -= dir;
}

function draw() {
    ctx.fillStyle = '#000';
    ctx.fillRect(0, 0, canvas.width, canvas.height);

    // Board
    board.forEach((row, y) => {
        row.forEach((value, x) => {
            if (value) drawSquare(x, y, COLORS[value]);
        });
    });

    // Player
    player.matrix.forEach((row, y) => {
        row.forEach((value, x) => {
            if (value) drawSquare(player.pos.x + x, player.pos.y + y, COLORS[value]);
        });
    });
}

function drawSquare(x, y, color) {
    ctx.fillStyle = color;
    ctx.fillRect(x * SQ, y * SQ, SQ, SQ);
    ctx.strokeStyle = 'rgba(255,255,255,0.1)';
    ctx.strokeRect(x * SQ, y * SQ, SQ, SQ);
}

function update(time = 0) {

```



```

    if (!paused && !gameOver) {
      const deltaTime = time - lastTime;
      lastTime = time;
      dropCounter += deltaTime;
      if (dropCounter > dropInterval) drop();
      draw();
    }
    requestAnimationFrame(update);
  }

  function resetGame() {
    board = Array.from({length: ROWS}, () => Array(COLS).fill(0));
    score = 0;
    level = 1;
    gameOver = false;
    scoreElement.innerText = '0';
    levelElement.innerText = '1';
    overlay.style.display = 'none';
    resetPlayer();
  }

  // Input Handling
  window.addEventListener('keydown', e => {
    if (gameOver || paused) return;
    if (e.key === 'ArrowLeft') move(-1);
    if (e.key === 'ArrowRight') move(1);
    if (e.key === 'ArrowDown') drop();
    if (e.key === 'ArrowUp') playerRotate();
    if (e.key === ' ') hardDrop();
  });

  // Button Listeners
  document.getElementById('leftBtn').onclick = () => move(-1);
  document.getElementById('rightBtn').onclick = () => move(1);
  document.getElementById('downBtn').onclick = () => drop();
  document.getElementById('upBtn').onclick = () => drop(); // Logic for fast drop
  document.getElementById('rotateBtn').onclick = () => playerRotate();
  document.getElementById('hardDropBtn').onclick = () => hardDrop();
  document.getElementById('pauseBtn').onclick = (e) => {
    paused = !paused;
    e.target.innerText = paused ? 'Resume' : 'Pause';
  };

  resetPlayer();
  update();
</script>
</body>
</html>

```

