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<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Flappy Bird Clone</title>
  <style>
    body { text-align: center; font-family: Arial, sans-serif; }
    canvas { background-color: skyblue; display: block; margin: auto; }
  </style>
</head>
<body>
  <h1>Flappy Bird Clone</h1>
  <canvas id="gameCanvas" width="400" height="500"></canvas>
  <script>
    const canvas = document.getElementById("gameCanvas");
    const ctx = canvas.getContext("2d");

    let bird = { x: 50, y: 250, radius: 15, velocity: 0, gravity: 0.5, lift: -8 };
    let pipes = [];
    let frame = 0;
    let score = 0;
    let gameOver = false;

    document.addEventListener("keydown", () => { if (!gameOver) bird.velocity = bird.lift; });

    function drawBird() {
      ctx.fillStyle = "yellow";
      ctx.beginPath();
      ctx.arc(bird.x, bird.y, bird.radius, 0, Math.PI * 2);
      ctx.fill();
    }

    function drawPipes() {
      ctx.fillStyle = "green";
      pipes.forEach(pipe => {
        ctx.fillRect(pipe.x, 0, pipe.width, pipe.top);
        ctx.fillRect(pipe.x, pipe.bottom, pipe.width, canvas.height - pipe.bottom);
      });
    }
  </script>
</body>
</html>
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function updatePipes() {
  if (frame % 100 === 0) {
    let gap = 100;
    let top = Math.random() * (canvas.height / 2);
    pipes.push({ x: canvas.width, width: 40, top, bottom: top + gap });
  }

  pipes.forEach(pipe => {
    pipe.x -= 2;
    if (pipe.x + pipe.width < 0) {
      pipes.shift();
      score++;
    }
  });

  if (pipes.some(pipe => (
    bird.x + bird.radius > pipe.x && bird.x - bird.radius < pipe.x + pipe.width &&
    (bird.y - bird.radius < pipe.top || bird.y + bird.radius > pipe.bottom)
  ))) {
    gameOver = true;
  }
}

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function updateBird() {
  bird.velocity += bird.gravity;
  bird.y += bird.velocity;

  if (bird.y + bird.radius > canvas.height || bird.y - bird.radius < 0) {
    gameOver = true;
  }
}

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function drawScore() {
  ctx.fillStyle = "black";
  ctx.font = "20px Arial";
  ctx.fillText(`Score: ${score}`, 10, 30);
}

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function gameLoop() {
  if (!gameOver) {

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        ctx.clearRect(0, 0, canvas.width, canvas.height);
        drawBird();
        drawPipes();
        drawScore();
        updateBird();
        updatePipes();
        frame++;
        requestAnimationFrame(gameLoop);
    } else {
        ctx.fillStyle = "red";
        ctx.font = "30px Arial";
        ctx.fillText("Game Over!", canvas.width / 4, canvas.height / 2);
    }
}

gameLoop();
</script>
</body>
</html>
```