
Web Programming – Lab Assignment 6

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LAB 6 - HTML:

```
<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

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

    <title>CSS Animation Workshop</title>

    <link rel="stylesheet" href="styles.css">

</head>

<body>

    <h1>CSS Animation Exercises</h1>

    <div class="container">

        <div class="card">

            <h3>1. Bouncing & Morphing</h3>

            <div class="canvas">
```

```
<div class="bouncing-ball"></div>

</div>

</div>

<div class="card">

<h3>2. Horizontal Square</h3>

<div class="canvas">

<div class="moving-square"></div>

</div>

</div>

<div class="card">

<h3>3. Rotating Polygon</h3>

<div class="canvas">

<div class="triangle"></div>

</div>

</div>

<div class="card">

<h3>4. SVG Animation</h3>

<div class="canvas">

<svg width="100%" height="100">

<circle class="animated-svg-circle" cx="30" cy="50"
r="20" />

</svg>

</div>

</div>
```

```
<div class="card">

    <h3>5. Combined Animations</h3>

    <div class="canvas">

        <div class="multi-anim-box">Multi</div>

    </div>

</div>

</body>

</html>
```

LAB 6 – CSS:

```
/* General Layout Styles */

body {

    background-color: #121212;

    color: #e0e0e0;

    font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;

    display: flex;

    flex-direction: column;

    align-items: center;
```

```
padding: 20px;  
}  
  
.container {  
  
    display: flex;  
  
    flex-wrap: wrap;  
  
    gap: 20px;  
  
    justify-content: center;  
  
    max-width: 1200px;  
}  
  
  
.card {  
  
    background: #e0e0e0;  
  
    border: 1px solid #333;  
  
    border-radius: 12px;  
  
    padding: 20px;  
  
    width: 300px;  
  
    text-align: center;  
}  
  
  
.canvas {  
  
    height: 150px;  
  
    width: 100%;  
  
    position: relative;  
  
    overflow: hidden;  
  
    background: #252525;
```

```
border-radius: 8px;  
  
margin-top: 10px;  
  
display: flex;  
  
align-items: center;  
  
justify-content: center;  
  
}  
  
  
/* 1. Bouncing ball: shape and color change */  
  
.bouncing-ball {  
  
width: 50px;  
  
height: 50px;  
  
background-color: #ff4b2b;  
  
border-radius: 50%;  
  
animation: bounceMorph 2s infinite alternate ease-in-out;  
  
}  
  
  
@keyframes bounceMorph {  
  
0% {  
  
transform: translateY(-40px);  
  
border-radius: 50%;  
  
background-color: #ff416c;  
  
}  
  
100% {  
  
transform: translateY(40px);  
  
border-radius: 0%;  
  
background-color: #ffb88c;
```

```
        }

    }

/* 2. Blue square: rotate, move, color change */

.moving-square {

    width: 40px;

    height: 40px;

    background-color: #00d2ff;

    animation: slideRotate 3s infinite alternate ease-in-out;

}

@keyframes slideRotate {

    0% {

        transform: translateX(-80px) rotate(0deg);

        background-color: #00d2ff;

    }

    100% {

        transform: translateX(80px) rotate(360deg);

        background-color: #3a7bd5;

    }

}

/* 3. Rotating Triangle (Polygon) */

.triangle {

    width: 0;

    height: 0;
```

```
border-left: 30px solid transparent;
border-right: 30px solid transparent;
border-bottom: 50px solid #ffcc00;
animation: spin 4s linear infinite;
}

@keyframes spin {
  from { transform: rotate(0deg); }
  to { transform: rotate(360deg); }
}

/* 4. SVG Animation: Circle moving along X-axis */
.animated-svg-circle {
  fill: #00ff88;
  animation: svgMoveX 2s infinite alternate ease-in-out;
}

@keyframes svgMoveX {
  from { cx: 30; fill: #00ff88; }
  to { cx: 250; fill: #60efff; }
}

/* 5. Multiple Animations: Scale + Pulse + Border Color */
.multi-anim-box {
  width: 60px;
  height: 60px;
```

```
background-color: #9d50bb;

display: flex;

align-items: center;

justify-content: center;

font-weight: bold;

border: 4px solid white;

/* Applying three separate animations */

animation:

    pulse 1.5s infinite alternate,
    colorShift 3s infinite linear,
    wobble 2s infinite ease-in-out;

}

@keyframes pulse {

    from { transform: scale(1); }

    to { transform: scale(1.2); }

}

@keyframes colorShift {

    0% { border-color: #ff0080; }

    50% { border-color: #7928ca; }

    100% { border-color: #ff0080; }

}

@keyframes wobble {

    0% { transform: scale(1.2) rotate(0deg); }
```

```
25% { transform: scale(1.2) rotate(5deg); }

75% { transform: scale(1.2) rotate(-5deg); }

100% { transform: scale(1.2) rotate(0deg); }

}
```

LAB 6 – Screen Capture:



