

Lab Experiment:9

Aim: Create simple cards using MaterialUI and React. Use animations to make it more attractive.

Components/card.js

```
import React, { useState, useRef } from "react";
import "./Card.css";
export default function Card() {
  const [xRotation, setXRotation] = useState(0);
  const [yRotation, setYRotation] = useState(0);
  const cardRef = useRef(null);
  const imgRef = useRef(null);
  const titleRef = useRef(null);
  const descRef = useRef(null);
  const sizesboxRef = useRef(null);
  const purchaseRef = useRef(null);
  function handleMouseMove(event) {
    const card = cardRef.current;
    const { offsetWidth: width, offsetHeight: height } = card;
    const { clientX, clientY } = event;
    const x = clientX - card.offsetLeft - width / 2;
    const y = clientY - card.offsetTop - height / 2;
    var mult = 40;
    setXRotation((y / height) * mult);
    setYRotation((x / width) * mult);
  }
  function handleMouseEnter() {
    const img = imgRef.current;
    const title = titleRef.current;
    const sizesBox = sizesboxRef.current;
    const purchase = purchaseRef.current;
    const desc = descRef.current;
    title.style.transform = "translateZ(150px)";
    img.style.transform = "translateZ(100px) rotateZ(-45deg)";
    sizesBox.style.transform = "translateZ(100px)";
    purchase.style.transform = "translateZ(75px)";
    desc.style.transform = "translateZ(75px)";
  }
  function handleMouseLeave() {
    setXRotation(0);
    setYRotation(0);
    const img = imgRef.current;
    const title = titleRef.current;
    const sizesBox = sizesboxRef.current;
    const purchase = purchaseRef.current;
    title.style.transform = "translateZ(0px)";
    img.style.transform = "translateZ(0px) rotateZ(0deg)";
  }
}
```

```
sizesBox.style.transform = "translateZ(0px)";
purchase.style.transform = "translateZ(0px)";
}
return (

<div
  className="card"
  ref={cardRef}
  style={{
    transform: `rotateX(${xRotation}deg) rotateY(${yRotation}deg)`,
  }}
  onMouseMove={handleMouseMove}
  onMouseEnter={handleMouseEnter}
  onMouseLeave={handleMouseLeave}
>
  <img
    ref={imgRef}
    src={require("../Shoe-img/Nike-Shoe.png")}
    alt="Nike-Shoe"
    className="sneaker-img"
  />
  <h1 className="title" ref={titleRef}>
    Nike Dunk High
  </h1>
  <p ref={descRef}>
    Nike Dunk High is a high-top version of the classic Nike Dunk sneaker,
    featuring a padded collar for added support and comfort.
  </p>
  <ul className="sizes-box" ref={sizesboxRef}>
    <li>38</li>
    <li>40</li>
    <li>42</li>
    <li>44</li>
  </ul>
  <div className="button-box" ref={purchaseRef}>
    <button className="purchase" >
      Purchase
    </button>
  </div>
</div>
);
}
```

Components/Card.css

```
.container {
  position: relative;
  width: 100%;
  height: 100vh;
  display: flex;
  align-items: center;
  justify-content: center;
  background: rgb(75, 53, 118);
  background: linear-gradient(219deg,
    rgba(75, 53, 118, 1) 33%,
    rgba(248, 177, 60, 1) 100%);
  font-family: "Roboto", sans-serif;
  gap: 50px;
}

.card {
  transform-style: preserve-3d;
  position: relative;
  padding: 25px;
  width: 350px;
  height: 500px;
  border-radius: 20px;
  box-shadow: rgba(0, 0, 0, 0.35) 0px 5px 15px;
  display: flex;
  align-items: center;
  flex-direction: column;
  justify-content: space-around;
  background: linear-gradient(25deg,
    rgb(169, 53, 130) 0%,
    rgb(138, 227, 236) 86%);
  transition: all 0.1s ease;
}

.sneaker-img {
  position: relative;
  width: 90%;
  transition: all 0.5s ease;
}

.title,
.card p {
  width: 100%;
  color: rgb(220, 220, 220);
}

.sizes-box {
  width: 100%;
```

```
display: flex;
align-items: center;
justify-content: space-evenly;
gap: 10px;
}

.sizes-box li {
list-style: none;
cursor: pointer;
font-weight: bold;
border-radius: 30px;
padding: 0.5rem 1.5rem;
background-color: rgb(220, 220, 220);
box-shadow: rgba(0, 0, 0, 0.25) 0px 54px 55px,
    rgba(0, 0, 0, 0.12) 0px -12px 30px, rgba(0, 0, 0, 0.12) 0px 4px 6px,
    rgba(0, 0, 0, 0.17) 0px 12px 13px, rgba(0, 0, 0, 0.09) 0px -3px 5px;
}

.sizes-box li:hover {
background-color: rgb(134, 134, 134);
}

.button-box {
width: 100%;
}

.purchase {
cursor: pointer;
width: 100%;
border-radius: 30px;
padding: 0.8rem 1.5rem;
font-weight: bold;
border: none;
font-size: 1rem;
letter-spacing: 1px;
background-color: rgba(248, 177, 60, 1);
box-shadow: rgba(0, 0, 0, 0.25) 0px 54px 55px,
    rgba(0, 0, 0, 0.12) 0px -12px 30px, rgba(0, 0, 0, 0.12) 0px 4px 6px,
    rgba(0, 0, 0, 0.17) 0px 12px 13px, rgba(0, 0, 0, 0.09) 0px -3px 5px;
}

.purchase:hover {
background-color: rgb(222, 157, 54);
}
```

Src/app.js

```
import Card from "../components/Card";
function App() {
return (
```

```
<div className="App">
  <div className="container" >
    <Card />
  </div>
</div>
);
}
export default App;
```

index.js

```
import React from 'react';
import ReactDOM from 'react-dom/client';
import './index.css';
import App from './App';
const root = ReactDOM.createRoot(document.getElementById('root'));
root.render(
  <React.StrictMode>
    <App />
  </React.StrictMode>
);
```

index.css

```
* {
  padding: 0;
  margin: 0;
  box-sizing: border-box;
}
```

Output:

