**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="sneaaker-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;

}

.sneaaker-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**

\* {

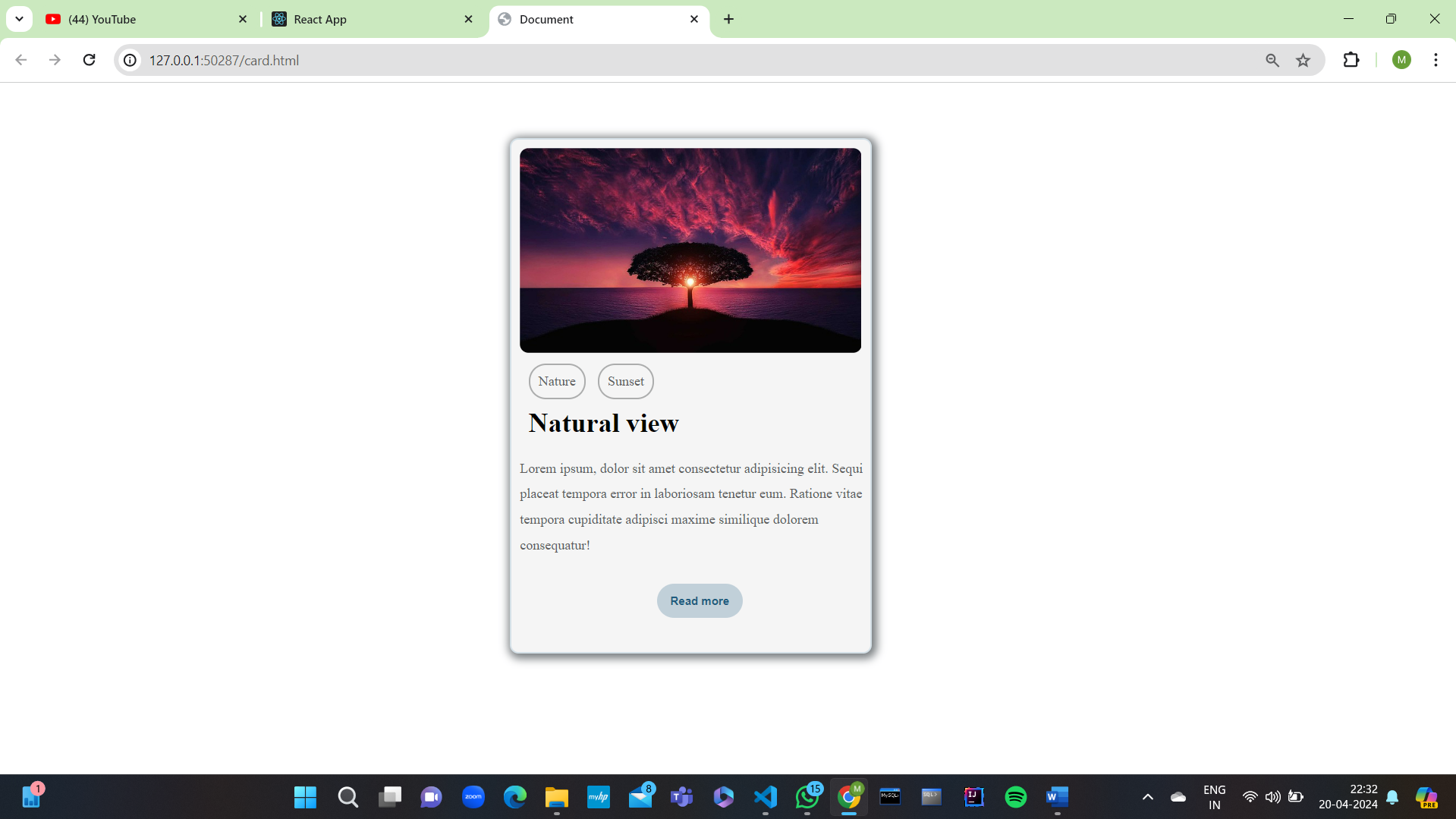
  padding: 0;

  margin: 0;

  box-sizing: border-box;

 }

**Output:**

****