MAKE A TIC-TAC-TOE USING REACT

App.js

import React, {useState} from "react";

import './App.css';

import {Board} from "./components/Board"

import { Scoreboard } from "./components/Scoreboard"

import {Resetbutton} from "./components/Resetbutton"

function App() {

  const win\_conditions =[

    [0,1,2],

    [3,4,5],

    [6,7,8],

    [0,3,6],

    [1,4,7],

    [2,5,8],

    [0,4,8],

    [2,4,6]

  ]

  const [board, setBoard] = useState(Array(9).fill(null));

  const [xPlaying, setXPlaying] = useState(true);

  const [scores, setScores] = useState({xScore : 0, oScore : 0});

  const [gameOver, setGameOver] = useState(false);

  const Boxclick = (boxidx) => {

    const updatedBoard = board.map((value, idx) => {

      if(idx === boxidx){

        return xPlaying ? "X" : "O";

      }

      else{

        return value;

      }

    })

    const winner = checkwinner(updatedBoard);

    if(winner){

      if(winner === "O"){

        let {oScore} = scores;

        oScore += 1;

        setScores({...scores, oScore});

      }

      else{

        let {xScore} = scores;

        xScore += 1;

        setScores({...scores, xScore});

      }

    }

    console.log(scores);

    setBoard(updatedBoard);

    setXPlaying(!xPlaying);

  }

  const checkwinner = (board) => {

    for(let i=0; i<win\_conditions.length; i++){

      const [x,y,z] = win\_conditions[i];

      if(board[x] && board[x] === board[y] && board[y] === board[z]){

        setGameOver(true);

        return board[x];

      }

    }

  }

  const resetBoard = () => {

    setGameOver(false);

    setBoard(Array(9).fill(null));

  }

  return (

    <div className="App">

      <Scoreboard scores={scores} xPlaying={xPlaying}/>

      <Board board={board} onClick={gameOver ? resetBoard : Boxclick}/>

      <Resetbutton resetBoard={resetBoard}/>

    </div>

  );

}

export default App;

App.css

\*{

  box-sizing: border-box;

}

body{

  background-color: #efefef;

  margin: 0;

  font-family: 'Franklin Gothic Medium', 'Arial Narrow', Arial, sans-serif;

}

Components :

Box.js

import React from 'react'

import "./Box.css"

export const Box = ({value, onClick}) => {

    const style = value === "X" ? "box x" : "box o";

    return(

        <button className={style} onClick={onClick}>{value}</button>

    )

}

Box.css

.box{

    background-color: white;

    border: none;

    border-radius: 10%;

    box-shadow: 0px 0px 8px #888;

    width: 5rem;

    height: 5rem;

    text-align: center;

    font-size: 5em;

    font-family: 'Trebuchet MS', 'Lucida Sans Unicode', 'Lucida Grande', 'Lucida Sans', Arial, sans-serif;

    font-weight: bold;

    line-height: 5rem;

    margin: 0.5rem;

}

.x{

    color: cadetblue;

}

.o{

    color: burlywood;

}

.box:hover{

    box-shadow: 0px 0px 15px #888;

}

Board .js

import React from 'react'

import {Box} from "./Box"

import "./Board.css"

export const Board = ({board, onClick}) => {

    return(

        <div className='board'>

            {board.map((value, idx) => {

            return <Box value={value} onClick = {() => value===null && onClick(idx)}/>

        })}

        </div>

    )

}

Board.css

.board{

    display: grid;

    grid-template-columns: repeat(3, 6rem);

    place-items: center;

    justify-content: center;

}

Scoreboard.js

import React from 'react'

import "./Scoreboard.css"

export const Scoreboard = ({scores, xPlaying}) => {

    const {xScore, oScore} = scores;

    return(

        <div className='scoreboard'>

            <span className={'score x-score ${!xPlaying && "inactive"}'}>X - {xScore}</span>

            <span className={'score o-score ${xPlaying && "inactive"}'}>O - {oScore}</span>

        </div>

    )

}

Scoreboard.css

.scoreboard{

    display: flex;

    flex-direction: row;

    align-items: center;

    justify-content: space-evenly;

    width: 20rem;

    font-size: 1.5em;

    background-color: white;

    margin: 3rem auto;

    box-shadow: 0px 0px 8px #888;

    border-radius: 0.5rem;

    font-weight: bold;

}

.score{

    width: 100%;

    text-align: center;

    padding: 1rem 0;

}

.x-score{

    color: cadetblue;

    border-bottom: 5px solid cadetblue;

    border-radius: 0.5rem 0 0 0.5rem;

}

.o-score{

    color: burlywood;

    border-bottom: 5px solid burlywood;

    border-radius: 0 0.5rem 0.5rem 0;

}

.inactive{

    border-bottom: 5px solid transparent;

}

Resetbutton.js

import React from 'react'

import "./Resetbutton.css"

export const Resetbutton = ({resetBoard}) => {

    return (

            <button className="reset-btn" onClick={resetBoard}>RESET</button>

    )

}

Resetbutton.css

.reset-btn{

    border: none;

    border-radius: 0.5rem;

    background-color: rgb(255, 196, 196);

    font-size: 2rem;

    padding: 0.5rem 1rem;

    margin: 2rem auto;

    display: block;

}

OUTPUT :

 