ExpenseTracker:

import "./ExpenseItem.css"

const ExpenseItem = () => {

   return (

       <div className="expense-item">

           <div>Oct 20th 2021</div>

           <div className="expense-item\_\_description">

               <h2>Paid Carpenter</h2>

               <p className="expense-item\_\_price">Rs 75000</p>

           </div>

       </div>

   )

}

export default ExpenseItem;

ExpenseItem.css

.expense-item {

display: flex;

justify-content: space-between;

align-items: center;

box-shadow: 0 2px 8px rgba(0, 0, 0, 0.25);

padding: 0.5rem;

margin: 1rem 0;

border-radius: 12px;

background-color: #4b4b4b6e;

}

.expense-item\_\_description {

display: flex;

flex-direction: column;

gap: 1rem;

align-items: flex-end;

flex-flow: column-reverse;

justify-content: flex-start;

flex: 1;

}

.expense-item h2 {

color: #3a3a3a42;

font-size: 1rem;

flex: 1;

margin: 0 1rem;

color: white;

}

.expense-item\_\_price {

font-size: 1rem;

font-weight: bold;

color: white;

background-color: #40005d;

border: 1px solid white;

padding: 0.5rem;

border-radius: 12px;

}

@media (min-width: 580px) {

.expense-item\_\_description {

flex-direction: row;

align-items: center;

justify-content: flex-start;

flex: 1;

}

.expense-item\_\_description h2 {

font-size: 1.25rem;

}

.expense-item\_\_price {

font-size: 1.25rem;

padding: 0.5rem 1.5rem;

}

}

**Outputting dynamic content**

import "./ExpenseItem.css"

const ExpenseItem = () => {

    const expDate = new Date(2021, 7, 11);

    const expTitle = "Paid carpenter";

    const expAmount = 75000

   return (

       <div className="expense-item">

{/\* single and multiline comments in JSX \*/}

           <div>{expDate.toISOString()}</div>

           <div className="expense-item\_\_description">

               <h2>{expTitle}</h2>

               <p className="expense-item\_\_price">Rs {expAmount}</p>

           </div>

       </div>

   )

}

export default ExpenseItem;

//Person.js

const person = () => {

return <p>Hi Person i am {Math.floor(Math.random() \* 30)} years old</p>

}

export default person;

**Working with props:**

import HelloComponent from "./HelloComponent"

const MessageComponent = () => {

    return (<div><HelloComponent name="Shrilata" /></div>)

}

export default MessageComponent

const HelloComponent = (props) => {

    return (<h3>Hello, welcome {props.name} </h3>)

}

export default HelloComponent;

function App() {

  const expenses = [

    {

      title: 'Groceries',

      amount: 900,

      date: new Date(2020, 7, 14),

    },

    { title: 'New TV', amount: 34000, date: new Date(2021, 2, 12) },

    { title: 'SofaSet', amount: 25000, date: new Date(2021, 2, 28),

    }

  ];

  return (

    <div className="App">

      <h2>Welcome to React!</h2>

      <ExpenseItem expDate={expenses[0].date} expTitle={expenses[0].title} expAmount={expenses[0].amount}/>

      <ExpenseItem expDate={expenses[1].date} expTitle={expenses[1].title} expAmount={expenses[1].amount}/>

      <ExpenseItem expDate={expenses[2].date} expTitle={expenses[2].title} expAmount={expenses[2].amount}/>

    </div>

  );

}

export default App;

const ExpenseItem = (props) => {

    return (

        <div className="expense-item">

            <div>{props.expDate.toISOString()}</div>

            <div className="expense-item\_\_description">

                <h2>{props.expTitle}</h2>

                <p className="expense-item\_\_price">Rs {props.expAmount}</p>

            </div>

        </div>

    )

}

export default ExpenseItem;

**Splitting components Intro:**

const ExpenseItem = (props) => {

    const month = props.expDate.toLocaleString('en-US', {month: 'long'});

    const day = props.expDate.toLocaleString('en-US', {day: '2-digit'});

    const year = props.expDate.getFullYear();

    return (

        <div className="expense-item">

            <div>

               <div>{month}</div>

                <div>{day}</div>

                <div>{year}</div>

            </div>

            <div className="expense-item\_\_description">

                <h2>{props.expTitle}</h2>

                <p className="expense-item\_\_price">Rs {props.expAmount}</p>

            </div>

        </div>

    )

}

**Splitting components further: Decluttering of components**

import ExpenseDate from "./ExpenseDate";

const ExpenseItem = (props) => {

   return (

       <div className="expense-item">

           <ExpenseDate expDate={props.expDate}/>

           <div className="expense-item\_\_description">

               <h2>{props.expTitle}</h2>

               <p className="expense-item\_\_price">Rs {props.expAmount}</p>

           </div>

       </div>

   )

}

export default ExpenseItem;

import "./ExpenseDate.css"

const ExpenseDate = (props) => {

    const month = props.expDate.toLocaleString('en-US', {month: 'long'});

    const day = props.expDate.toLocaleString('en-US', {day: '2-digit'});

    const year = props.expDate.getFullYear();

    return (

        <div className="expense-date">

            <div className="expense-date\_\_month">{month}</div>

            <div className="expense-date\_\_day">{day}</div>

            <div className="expense-date\_\_year">{year}</div>

        </div>

    );

}

export default ExpenseDate;

ExpenseDate.css

.expense-date {

display: flex;

flex-direction: column;

width: 5.5rem;

height: 5.5rem;

border: 1px solid #ececec;

background-color: #2a2a2a;

color: white;

border-radius: 12px;

align-items: center;

justify-content: center;

}

.expense-date\_\_month {

font-size: 0.75rem;

font-weight: bold;

}

.expense-date\_\_year {

font-size: 0.75rem;

}

.expense-date\_\_day {

font-size: 1.5rem;

font-weight: bold;

}

**Events and event handling**

const ExpenseItem = (props) => {

    let btnHandler = () => {

       console.log("Button clicked!")

   }

   return (

       <div className="expense-item">

           <ExpenseDate date={props.expDate}/>

           <div className="expense-item\_\_description">

               <h2>{props.expTitle}</h2>

               <p className="expense-item\_\_price">Rs {props.expAmount}</p>

           </div>

           <button onClick={btnHandler}>Change Title</button>

       </div>

   )

}

export default ExpenseItem;

**Stateful components : UseState**

import React, {useState} from 'react';

const UseStateComponent = () => {

    const [counter, setCounter] = useState(0);  //hooks go here

    const btnHandler = () => {

        setCounter(counter+1);

        console.log(counter, "  button clicked")

     }

    return(

           <div>

              Counter : {counter} &nbsp;&nbsp;

              <button onClick={btnHandler}>increment counter</button>

           </div>

        );

}

export default UseStateComponent;

import React, {useState} from 'react'

const ExpenseItem = (props) => {

    const [title, setTitle] = useState(props.expTitle);

    let btnHandler = () => {

        setTitle("updated expense")

       console.log("Button clicked!")

   }

   return (

       <div className="expense-item">

           <ExpenseDate date={props.expDate}/>

           <div className="expense-item\_\_description">

               <h2>{title}</h2>

               <p className="expense-item\_\_price">Rs {props.expAmount}</p>

           </div>

           <button onClick={btnHandler}>Change Title</button>

       </div>

   )

}

export default ExpenseItem;

**Simple form-1**

import { useState } from "react"

let SimpleForm = ()=>{

let [uname, setUname] = useState("")

let unameHandler = (event)=>{

setUname(event.target.value)

}

let submitHandler = (event) => {

event.preventDefault();

console.log("Hello",uname)

setUname("")

}

return(

<form onSubmit={submitHandler}>

Username : <input onChange={unameHandler}

value={uname} /><br />

<input type="submit" />

</form>

)

}

export default SimpleForm

import { useState } from "react"

const styles = {

heading: {

fontWeight: 'bold',

fontSize: '25px',

color: "green",

textAlign: "center",

},

subHeading: {

fontWeight: 'bold',

fontSize: '25px',

textAlign: "center",

},

form: {

backgroundColor: '#fff',

padding: '20px',

borderRadius: '8px',

boxShadow: '0 2px 4px rgba(0, 0, 0, 0.1)',

width: '100%',

maxWidth: '400px',

margin: '0 auto',

},

input: {

width: '100%',

padding: '12px',

marginBottom: '12px',

border: '1px solid #ccc',

borderRadius: '10px',

fontSize: '16px',

transition: 'border-color 0.2s ease',

},

button: {

backgroundColor: 'green',

color: '#fff',

fontWeight: 'bold',

fontSize: '16px',

padding: '12px',

border: 'none',

borderRadius: '10px',

cursor: 'pointer',

width: '40%',

transition: 'opacity 0.2s ease',

},

};

let SimpleFormWithInBuiltStyle = () => {

let [uname, setUname] = useState("")

let unameHandler = (event) => {

setUname(event.target.value)

}

let submitHandler = (event) => {

event.preventDefault();

console.log("Hello", uname)

setUname("")

}

return (

<div>

<h1 style={styles.heading}>Welcome to forms</h1>

<h3 style={styles.subHeading}>User Input </h3>

<form onSubmit={submitHandler} style={styles.form}>

Username : <input onChange={unameHandler}

style={styles.input}

value={uname} /><br />

<input type="submit" style={{ ...styles.button}}/>

</form>

</div>

)

}

export default SimpleFormWithInBuiltStyle

**New Expense Form**

import ExpenseForm from "./ExpenseForm";

import './NewExpense.css'

const NewExpense = () => {

    return (

        <div className="new-expense">

            <ExpenseForm />

        </div>

    )

}

export default NewExpense;

import './ExpenseForm.css'

const ExpenseForm = () => {

    return(

        <form >

            <div className="new-expense\_\_controls">

               <div className="new-expense\_\_control">

                   <label>Title</label>

                   <input/>

               </div>

               <div className="new-expense\_\_control">

                   <label>Amount</label>

                   <input type="number" />

               </div>

               <div className="new-expense\_\_control">

                   <label>Date</label>

                   <input type="date" min="2019-01-01" max="2022-12-31"  />

               </div>

            </div>

            <div className="new-expense\_\_actions">

                <button type="button"  >Cancel</button>

                <button type="submit">Add Expense</button>

            </div>

        </form>

      );

}

export default ExpenseForm