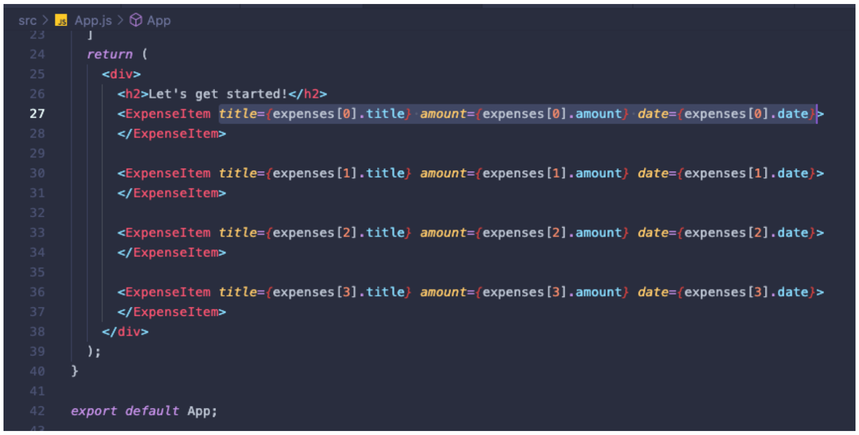
8.adding normal js logic to our components

- Recall:
  - 

    src > App.js > App

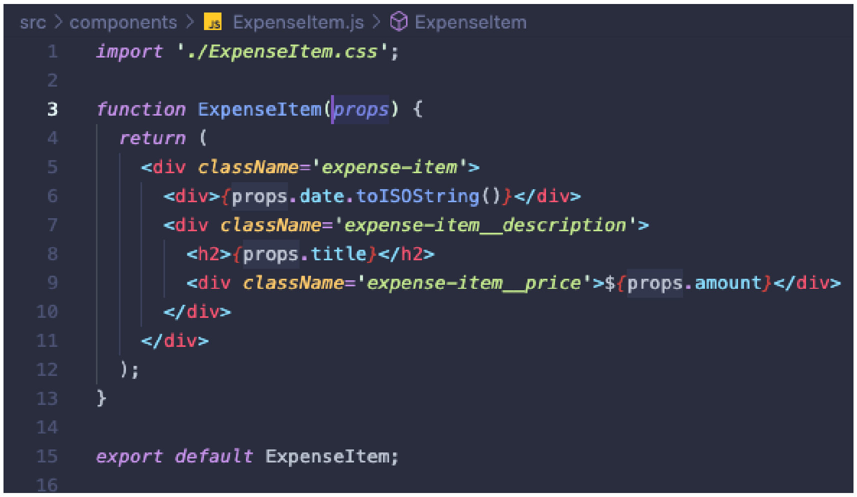
    ```
      ]
      return (
        <div>
          <h2>Let's get started!</h2>
          <ExpenseItem title={expenses[0].title} amount={expenses[0].amount} date={expenses[0].date}>
          </ExpenseItem>

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

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

          <ExpenseItem title={expenses[3].title} amount={expenses[3].amount} date={expenses[3].date}>
          </ExpenseItem>
        </div>
      );
    }

    export default App;
    ```

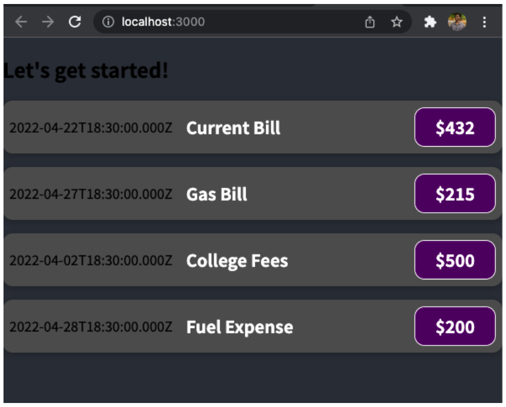
    - We have used our custom component along with it we have also sent some data as an attribute
  - 

    src > components > ExpenseItem.js > ExpenseItem

    ```
    import './ExpenseItem.css';

    function ExpenseItem(props) {
      return (
        <div className='expense-item'>
          <div>{props.date.toISOString()}</div>
          <div className='expense-item__description'>
            <h2>{props.title}</h2>
            <div className='expense-item__price'>${props.amount}</div>
          </div>
        </div>
      );
    }

    export default ExpenseItem;
    ```

    - We have received the data that is sent as attributes using a parameter named props
  - And the result is
    - 

      localhost:3000

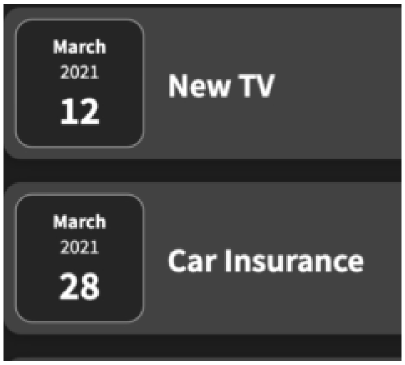
      Let's get started!

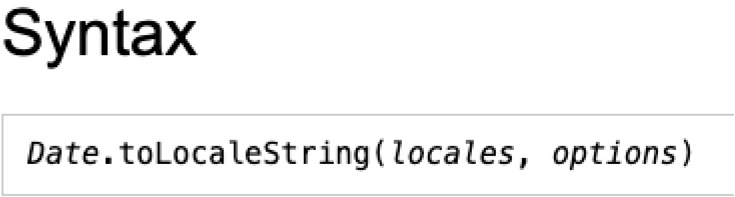
      2022-04-22T18:30:00.000Z Current Bill $432

      2022-04-27T18:30:00.000Z Gas Bill $215

      2022-04-02T18:30:00.000Z College Fees $500

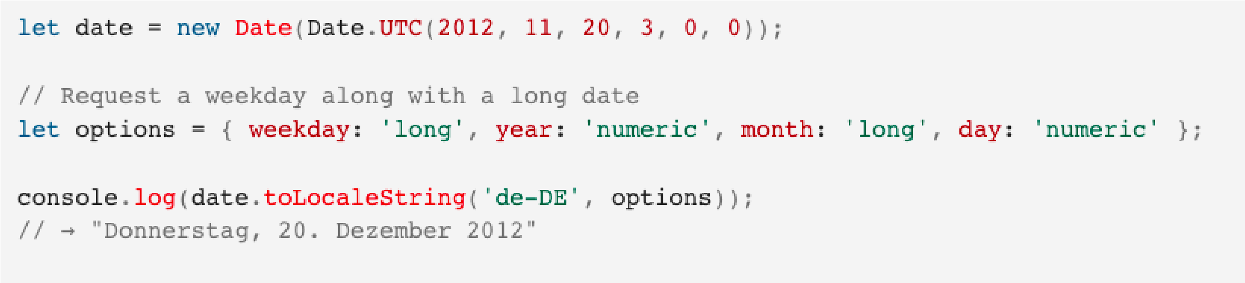
      2022-04-28T18:30:00.000Z Fuel Expense $200

- Now consider a situation if we want the date to look like this
    - 

- Js date object some built-in methods to extract the month year and date
- We have to use that methods and logic in our component to make it look like this
    - Now let us see how these methods extract month and handle these dates
    - 

Syntax

```
Date.toLocaleString(locales, options)
```

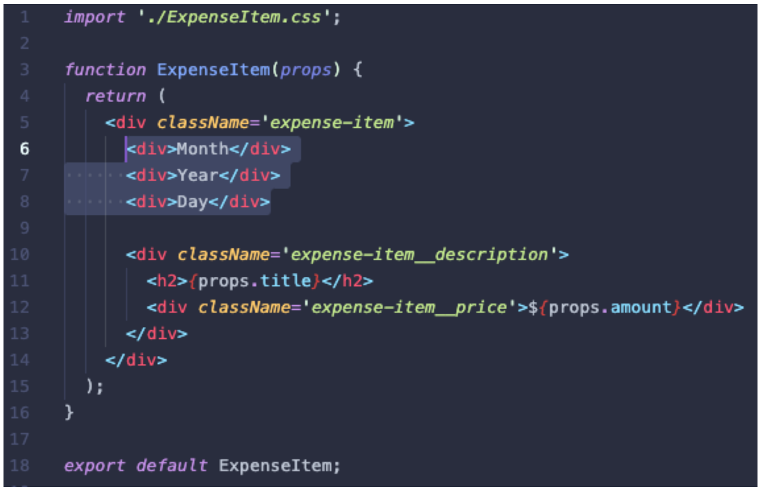
    - 

```
let date = new Date(Date.UTC(2012, 11, 20, 3, 0, 0));

// Request a weekday along with a long date
let options = { weekday: 'long', year: 'numeric', month: 'long', day: 'numeric' };

console.log(date.toLocaleString('de-DE', options));
// → "Donnerstag, 20. Dezember 2012"
```

        - From this we could see that the first parameter locales is a variable of string and the second parameter ‘options’ is an object

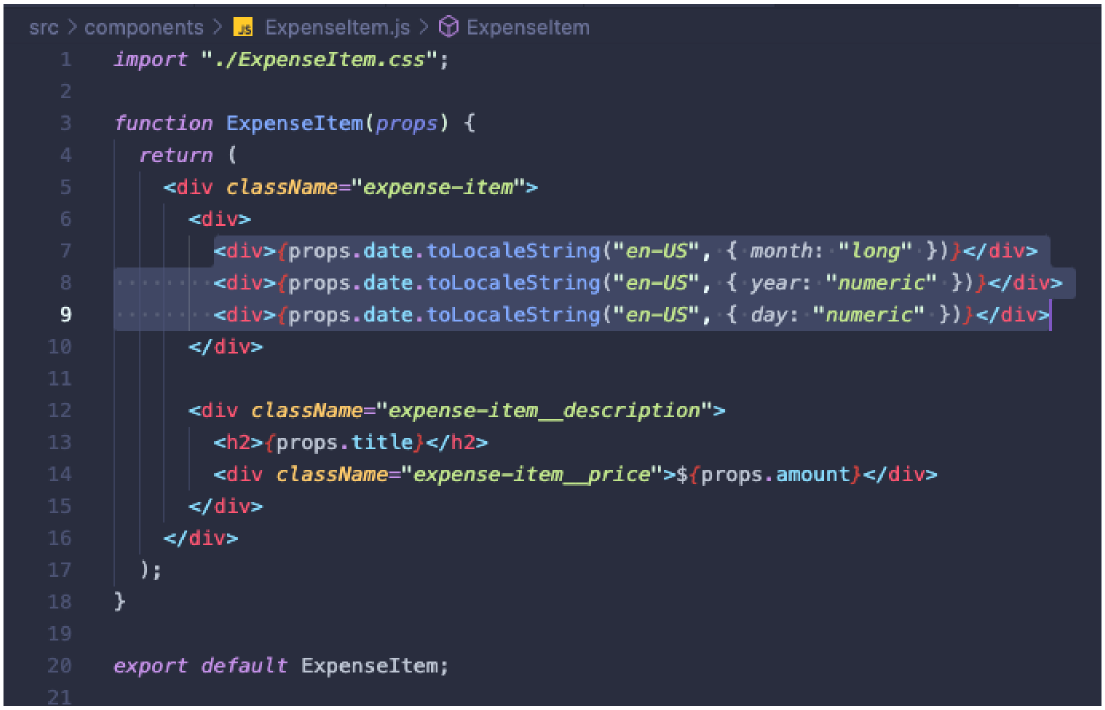
- Now the below can be change by using the above logic
    - 

```
import './ExpenseItem.css';

function ExpenseItem(props) {
  return (
    <div className='expense-item'>
      <div>Month</div>
      <div>Year</div>
      <div>Day</div>

      <div className='expense-item__description'>
        <h2>{props.title}</h2>
        <div className='expense-item__price'>${props.amount}</div>
      </div>
    </div>
  );
}

export default ExpenseItem;
```

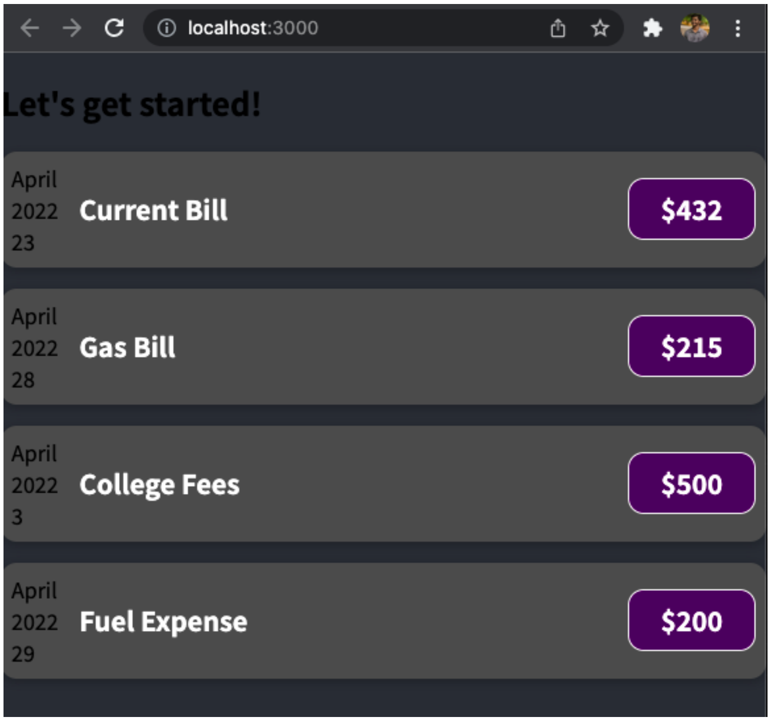
- 

  ```
  import "./ExpenseItem.css";

  function ExpenseItem(props) {
    return (
      <div className="expense-item">
        <div>
          <div>{props.date.toLocaleString("en-US", { month: "long" })}</div>
          <div>{props.date.toLocaleString("en-US", { year: "numeric" })}</div>
          <div>{props.date.toLocaleString("en-US", { day: "numeric" })}</div>
        </div>

        <div className="expense-item__description">
          <h2>{props.title}</h2>
          <div className="expense-item__price">${props.amount}</div>
        </div>
      </div>
    );
  }

  export default ExpenseItem;

  ```
- 

  Let's get started!

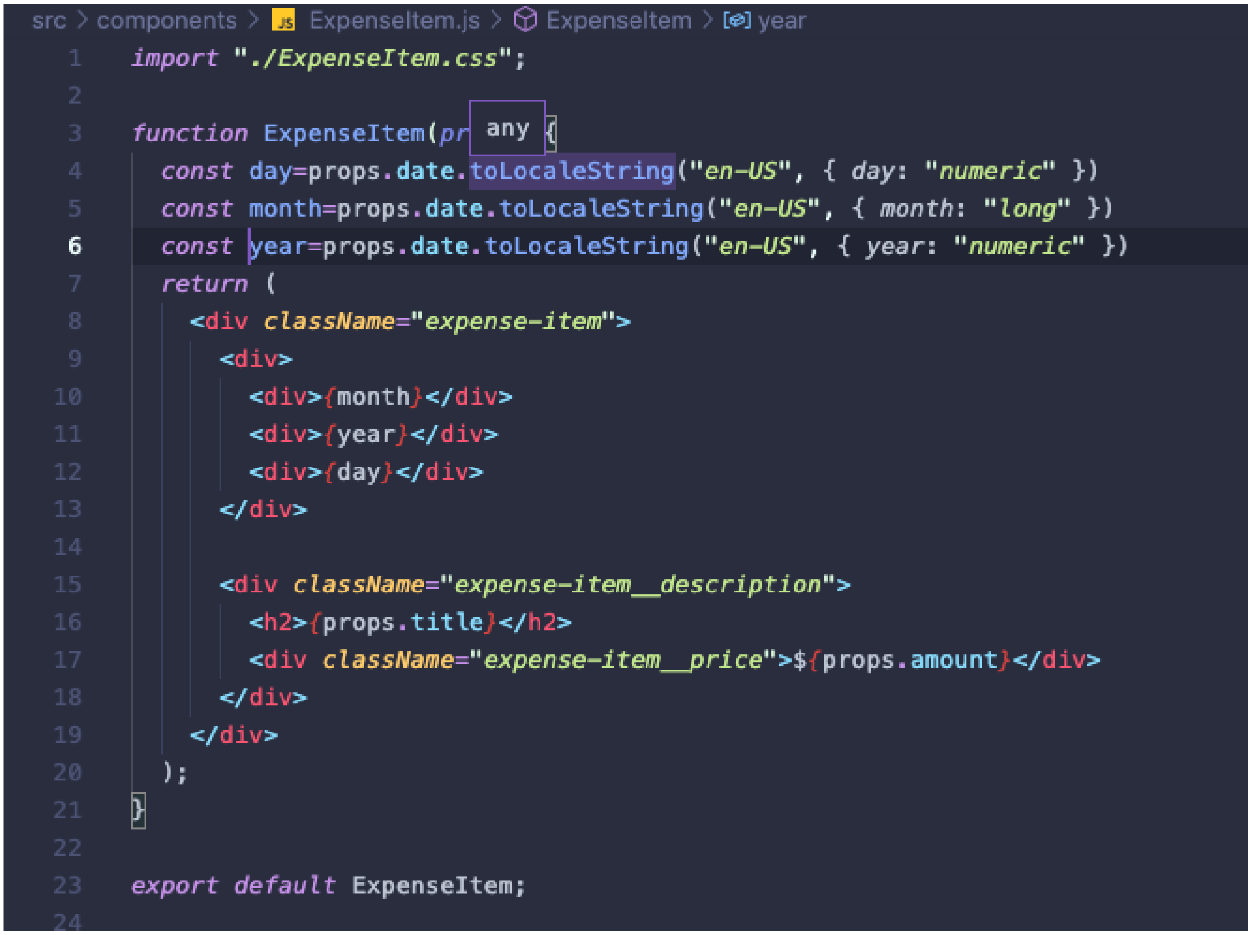
  April
2022
23 — Current Bill — $432

  April
2022
28 — Gas Bill — $215

  April
2022
3 — College Fees — $500

  April
2022
29 — Fuel Expense — $200

- Instead of writing every logic inside the JSX code we could do this,this is the better practice



```
import "./ExpenseItem.css";

function ExpenseItem(pr {
  const day=props.date.toLocaleString("en-US", { day: "numeric" })
  const month=props.date.toLocaleString("en-US", { month: "long" })
  const year=props.date.toLocaleString("en-US", { year: "numeric" })
  return (
    <div className="expense-item">
      <div>
        <div>{month}</div>
        <div>{year}</div>
        <div>{day}</div>
      </div>

      <div className="expense-item__description">
        <h2>{props.title}</h2>
        <div className="expense-item__price">${props.amount}</div>
      </div>
    </div>
  );
}

export default ExpenseItem;
```