

Props - Properties

- We can make our components reusable by using parameters and a concept called props in React.
- Props simply stands for properties. We can set properties of our own custom components.
- Props are the "attributes" of your "custom HTML elements" (Components)
- Props is object which holds all the values we get for the attributes on our custom element.
- We get key-value pairs in this props object which is passed in by React automatically.
- Props allows you to make your components reusable, and it allows you to pass data from another component to this component.

Defining data in one component

```
import Expenses from './components/Expenses/Expenses'; //loading another component

const App = () => {
  const expense = [ // created data objects that needs to be passed into another
    component.
    {
      id: "e1",
      title: "Mobile Insurance",
      amount: 320.6,
      date: new Date(2023, 2, 2),
    },
    {
      id: "e2",
      title: "Car Insurance",
      amount: 450.7,
      date: new Date(2023, 3, 3),
    }
  ];

  return ( //JSX Code
    <div>
      <h2>Let's get started!</h2>
      <Expenses items={expense} /> <!-- Expenses is another component and we are
      passing our data using curly braces or defining properties for our custom
      elements.>
    </div>
  );
}

export default App; // exporting the App function.
```

Fetching data from one component to another using Props

```
import ExpenseItems from "../ExpenseItems"; // loading another component where data
needs to be passed
import './Expenses.css' // loading css files
import Card from "../UI/Card"; // loading another component where to deduplicate
the css styling

const Expenses = (props) => { // props are passed which stores the data as in
object.

  return (
    <Card className="expenses"> <!-- in JSX code will define "class" as "className"
    bcz javaScript is having class as keyword with different meaning.-->
      <ExpenseItems
        title={props.items[0].title}
        amount={props.items[0].amount}
        date={props.items[0].date}
      /> <!-- loaded another component where data needs to be passed. prop.items
are used as data are stored in an array of objects. -->
      <ExpenseItems
        title={props.items[1].title}
        amount={props.items[1].amount}
        date={props.items[1].date}
      />
    </Card>
  );
}

export default Expenses; // Expenses are exported so that we can use this function
in another file.
```

Passing the data into another componenet

```
import './ExpenseItems.css';
import ExpenseDate from "../ExpenseDate";
import Card from "../UI/Card";

const ExpenseItems = (props) => {

  return (
    <Card className="expense-item">
      <ExpenseDate date={props.date}/> <!--using props method and passing the data.>
      <div class="expense-item__description">
        <h2>{props.title}</h2>
      </div>
      <div className="expense-item__price">${props.amount}</div>
    </Card>
  );
}

export default ExpenseItems;
```

