

PROPS

Passing data via 'Props'

- "Props" stands for properties.
 - It is a special keyword in React used for passing data from one component to another.
 - Props are arguments passed into React components.
 - props are read-only. So, the data coming from a parent component can't be changed by the child component.
 - Props are passed to components via HTML attributes.
 - Props can be used to pass any kind of data such as: String, Array, Integer, Boolean, Objects or, Functions

```
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;
```

Passing data via 'Props'

```
function App() {  
  return (  
    <div className="App">  
      <h2>Welcome to React!</h2>  
      <ExpenseItem expDate="20-12-2020" expTitle="Myntra shopping" expAmount="2500"/>  
      <ExpenseItem expDate="21-12-2020" expTitle="Microwave" expAmount="8000"/>  
    </div>  
  );  
}  
export default App;
```

you can use as many
props as you like

```
const ExpenseItem = (props) => {  
  return (  
    <div className="expense-item">  
      <div>{props.expDate}</div>  
      <div className="expense-item__description">  
        <h2>{props.expTitle}</h2>  
        <p className="expense-item__price">Rs {props.expAmount}</p>  
      </div>  
    </div>  
  )  
}  
export default ExpenseItem;
```

Welcome to React!

20-12-2020 Myntra shopping

Rs 2500

21-12-2020 Microwave

Rs 8000

React uses 'props' to pass attributes from
'parent' component to 'child' component.

Working with props

```
function App() {  
  return (  
    <div className="App">  
      <h1> Hi, welcome to React</h1>  
      <Person name="Shri" age="20"/>  
      <Person name="Soha" age="23">Hobbies : Coding</Person>  
      <Person name="sandeep" age="45"/>  
    </div>  
  );  
}
```

Hi, welcome to React

Hi i am Shri and i am 20 years old

Hi i am Soha and i am 23 years old

Hi i am sandeep and i am 45 years old

```
//Person.js  
import React from 'react';  
  
const person = (props) => {  
  return <p>Hi i am {props.name} and i am {props.age} years old</p>  
}  
export default person;
```

React uses 'props' to pass attributes from 'parent' component to 'child' component.

Working with props

```
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;
```

JSON

Welcome to React!

2020-08-13T18:30:00.000Z Groceries

Rs 900

2021-03-11T18:30:00.000Z New TV

Rs 34000

2021-03-27T18:30:00.000Z SofaSet

Rs 25000

“Javascript” in components

```
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>  
  )  
}  
export default ExpenseItem;
```

Welcome to React!		
August 14 2020	Groceries	Rs 900
March 12 2021	New TV	Rs 34000
March 28 2021	SofaSet	Rs 25000

Splitting components further

```
import ExpenseDate from "../ExpenseDate";
const ExpenseItem = (props) => {
  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>
    </div>
  )
}
export default ExpenseItem;
```

passed props as attribute

August 14 2020	Groceries	Rs 900
March 12 2021	New TV	Rs 34000
March 28 2021	SofaSet	Rs 25000

```
import "../ExpenseDate.css";
const ExpenseDate = (props) => {
  const month = props.date.toLocaleString('en-US', {month: 'long'});
  const day = props.date.toLocaleString('en-US', {day: '2-digit'});
  const year = props.date.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;
```

