

# Solution: Managing state within a component

Here is the completed solution code for the `App.js` file:

```
1  import { useState } from "react";
2
3  export default function App() {
4    const [giftCard, setGiftCard] = useState(
5      {
6        firstName: "Jennifer",
7        lastName: "Smith",
8        text: "Free dinner for 4 guests",
9        valid: true,
10       instructions: "To use your coupon, click the button below.",
11     }
12   );
13
14   function spendGiftCard() {
15     setGiftCard(prevState => {
16       return {
17         ...prevState,
18         text: "Your coupon has been used.",
19         valid: false,
20         instructions: "Please visit our restaurant to renew your gift card.",
21       };
22     });
23   }
24
25   return (
26     <div style={{padding: '40px'}}>
27       <h1>
28         Gift Card Page
29       </h1>
30       <h2>
31         Customer: {giftCard.firstName} {giftCard.lastName}
32       </h2>
33       <h3>
34         {giftCard.text}
35       </h3>
36       <p>
37         {giftCard.instructions}
38       </p>
39       {
40         giftCard.valid && (
```

Here is the output from the solution code for the `App.js` file.

## Gift Card Page

## Customer: Jennifer Smith

### Your coupon has been used.

Please visit our restaurant to renew your gift card.

## Step-by-step solution

### Step 1

You opened the `App.js` file and located the `spendGiftCard()` function.

Inside the `spendGiftCard()` function, you invoked the `setGiftCard()` state-updating function, without passing it any parameters or doing anything else with it.

```
1 function spendGiftCard() {  
2   setGiftCard()  
3 }
```

### Step 2

Inside the `setGiftCard()` function invocation's parentheses, you passed in an arrow function.

This arrow function has a single parameter, named `prevState`. After the arrow, you added a block of code.

```
1 function spendGiftCard() {  
2   setGiftCard(prevState => {  
3  
4     })  
5 }
```

### Step 3

Next, you returned a copy of the `prevState` object using the rest operator.

```
1 function spendGiftCard() {  
2   setGiftCard(prevState => {  
3     return ...prevState  
4   })  
5 }
```

### Step 4

Next, you combined this copy of the `prevState` object with those properties that you wanted updated, by updating some of the key-value pairs that already exist on the state object that were initially passed to the `useState()` function call.

```
1 function spendGiftCard() {
2   setGiftCard(prevState => {
3     return {
4       ...prevState,
5       text: "Your coupon has been used.",
6     }
7   })
8 }
```

## Step 5

Finally, you updated the remaining properties on the state object.

You updated the valid key's value to **false**.

Then, updated the instructions key's value to Please visit our restaurant to renew your gift card.

```
1 function spendGiftCard() {
2   setGiftCard(prevState => {
3     return {
4       ...prevState,
5       text: "Your coupon has been used.",
6       valid: false,
7       instructions: "Please visit our restaurant to renew your gift card.",
8     }
9   });
10 }
```