

Lists

You can build collections of elements and include them in JSX using curly braces {}.

```
const arr = [10, 20, 30, 40];
```

```
state = {  
  users: [  
    { id: 101, name: "Rahul", password: "3423ssdf" },  
    { id: 102, name: "Sonam", password: "654yuei" },  
    { id: 103, name: "Rahul", password: "687xvf" }  
  ],  
  isLoggedIn: false  
};
```

Iteration using map () Method

The map() method creates a new array with the results of calling a provided function on every element in the calling array.

map calls a provided callback function once for each element in an array, in order, and returns a new array from the results.

Syntax:- map(callback(currentValue, index, array), thisArg);

Ex:- map((num, index) => {return num})

// Declaration and Initialization of Array

```
const arr = [10, 20, 30, 40];
```

// Using Array Map Method

```
const newArr = arr.map(num => {  
    return <li>{num * 2}</li>;  
});
```

Keys

- A “key” is a special string attribute you need to include when creating lists of elements.
- Keys help React identify which items have changed, are added, or are removed.
- Keys should be given to the elements inside the array to give the elements a stable identity.
- The best way to pick a key is to use a string that uniquely identifies a list item among its siblings.
- Most often you would use IDs from your data as keys.
- Keys used within arrays should be unique among their siblings. However they don’t need to be globally unique. We can use the same keys when we produce two different arrays.
- Keys serve as a hint to React but they don’t get passed to your components.
- If you need the same value in your component, pass it explicitly as a prop with a different name.

Keys

// Declaration and Initialization of Array

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const arr = [10, 20, 30, 40];
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// Using Array Map Method

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const newArr = arr.map(num => {  
  return <li key={num}>{num * 2}</li>;  
});
```

// Declaration and Initialization of Array

```
const arr = [10, 20, 30, 40];
```

// Using Array Map Method

```
const newArr = arr.map((num, i) => {  
  return <li key={i}>{num * 2}</li>;  
});
```

Note:-

- A good rule of thumb is that elements inside the map() call need keys.
- Key should be specified inside the array.

Keys

```
state = {
  users: [
    { id: 101, name: "Rahul"},
    { id: 102, name: "Sonam"},
    { id: 103, name: "Rahul"}
  ],
};
const newUsers = this.state.users.map(user => {
  return (
    <h1>ID: {user.id} Name: {user.name} </h1>
  );
});
```

```
state = {
  users: [
    { id: 101, name: "Rahul"},
    { id: 102, name: "Sonam"},
    { id: 103, name: "Rahul"}
  ],
};
const newUsers = this.state.users.map(user => {
  return (
    <h1 key={user.id}>ID: {user.id} Name: {user.name}
    </h1>
  );
});
```

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- A good rule of thumb is that elements inside the map() call need keys.
- Key should be specified inside the array.