

REDUX

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Manage the state in your Application
in one tree

State in your App

myShop.de

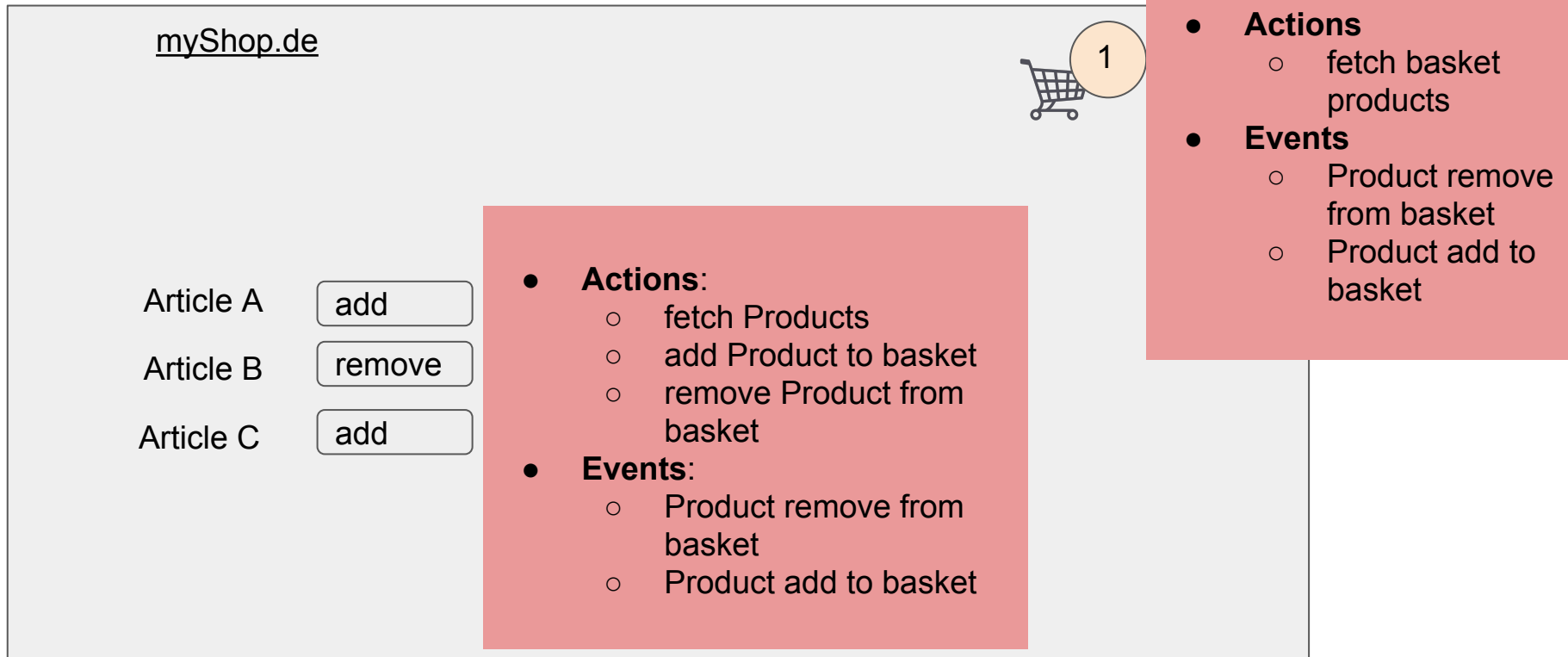


```
{
  article : ["2"]
}
```

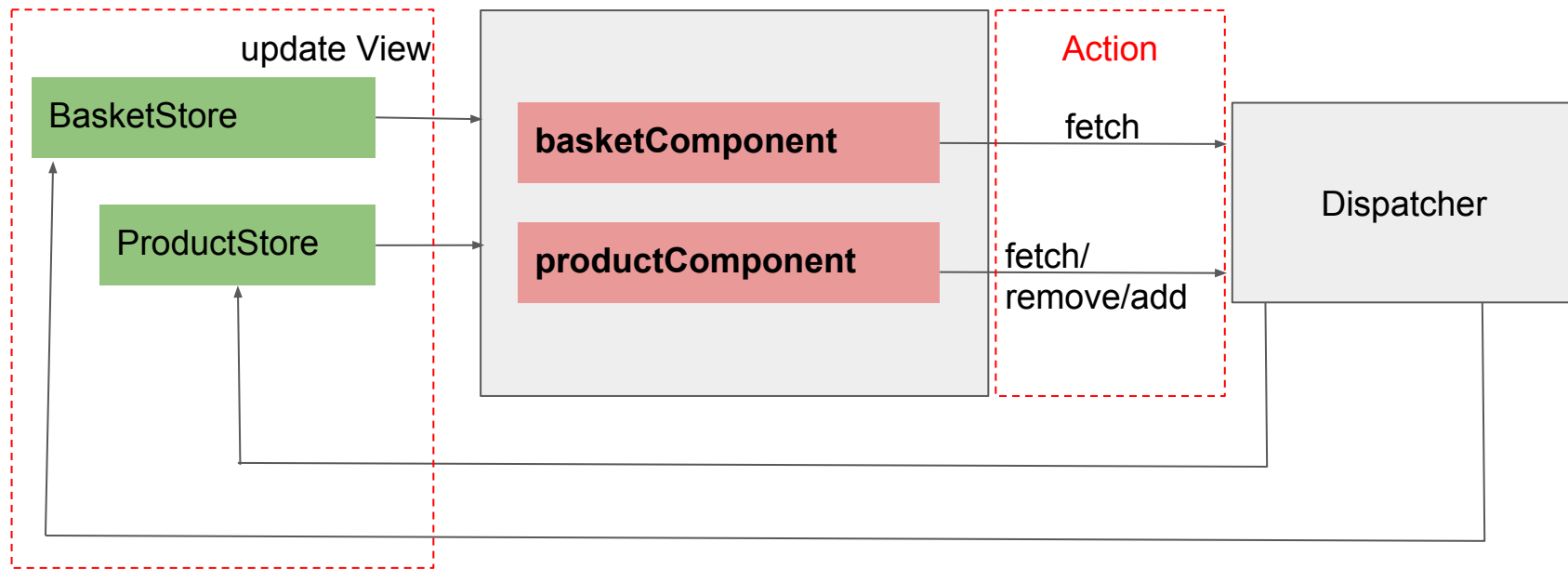
Article A	add to basket
Article B	remove from basket
Article C	add to basket

```
{
  article : [
    {
      id: "1"
      name: "Artikel A"
    },
    {
      id: "2",
      name: "Artikel B"
    },
    {
      id: "3",
      name: "Artikel C"
    }
  ]
}
```

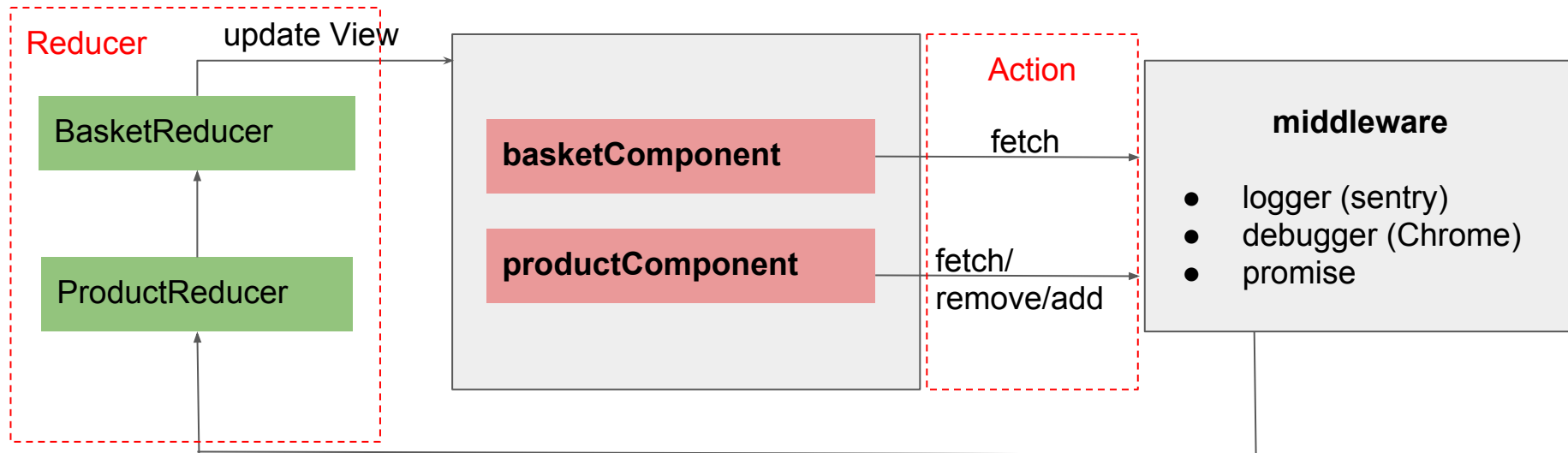
Events on page



Flux



Redux



Immutable

primitive variables

```
var x = '1',  
    y = x;  
x = '2';
```

```
console.log(x === y);
```

False

none primitive variables

```
var x = { a:'1'},  
    y = x;  
x.a = '3';  
  
console.log(x === y);
```

True

create new instance

```
var x = {a:'1'},  
    y = x;  
x = Object.assign({},x,{a:'2'});  
  
console.log(x === y);
```

False

Reducer

```
basketStore = (state = [], action) => {  
  switch (action.type) {  
    case "ADD":  
      return [  
        ...state,  
        action.productId  
      ];  
  }  
};
```

immutable

app

```
let store = createStore(/*REDUCER*/);
```

productComponent

```
store.dispatch(  
  {  
    type: "ADD",  
    productId: 'ProductId'  
  })  
);  
  
store.subscribe(() => {  
  //..Update view  
});
```

Action

middleware

- logger (sentry)
- debugger (Chrome)
- promise

Goals

- simply debugging with redux DevTools
- undo/redo
- state is immutable
- one place for Application state
- app state consists of one root tree, with x child nodes

LINKS

- Redux Docs
 - <http://redux.js.org/>
- Demo
 - <https://github.com/gernsdorfer/redux>
- immutable
 - vanilla Javascript (<http://vincent.billey.me/pure-javascript-immutable-array>)
 - Immutable-js (<https://facebook.github.io/immutable-js/>)
- Redux Browser Extensions
 - Chrome(
<https://chrome.google.com/webstore/detail/redux-devtools/lmhkpmbekcpmknklieibfkpmmfibljd>)
 - Firefox (<https://addons.mozilla.org/de/firefox/addon/remotedev/?src=cb-dl-recentlyadded>)
- Redux in Frameworks
 - react (<https://github.com/reactjs/react-redux>)
 - angular 1 (<https://github.com/angular-redux/ng-redux>)
 - angular 2 (<https://github.com/angular-redux/ng2-redux>)
- Redux Observable
 - <https://github.com/redux-observable/redux-observable>