

Redux

Internal State
Component

Component A
state = {}

Component B
state = {}

⋮

Component...
state = {}

Bisa baca tulis State,
untuk berkomunikasi
antar komponen

Application State

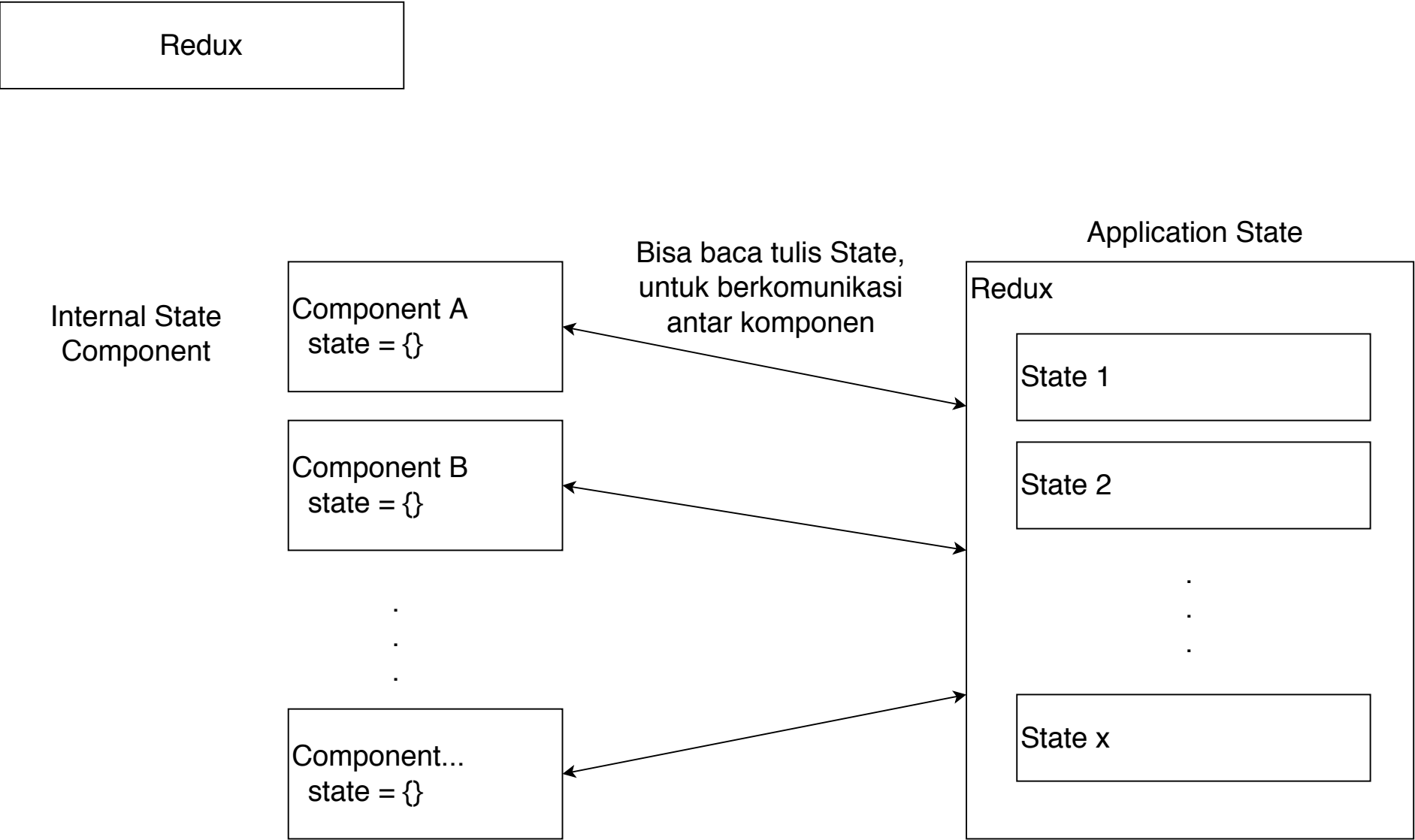
Redux

State 1

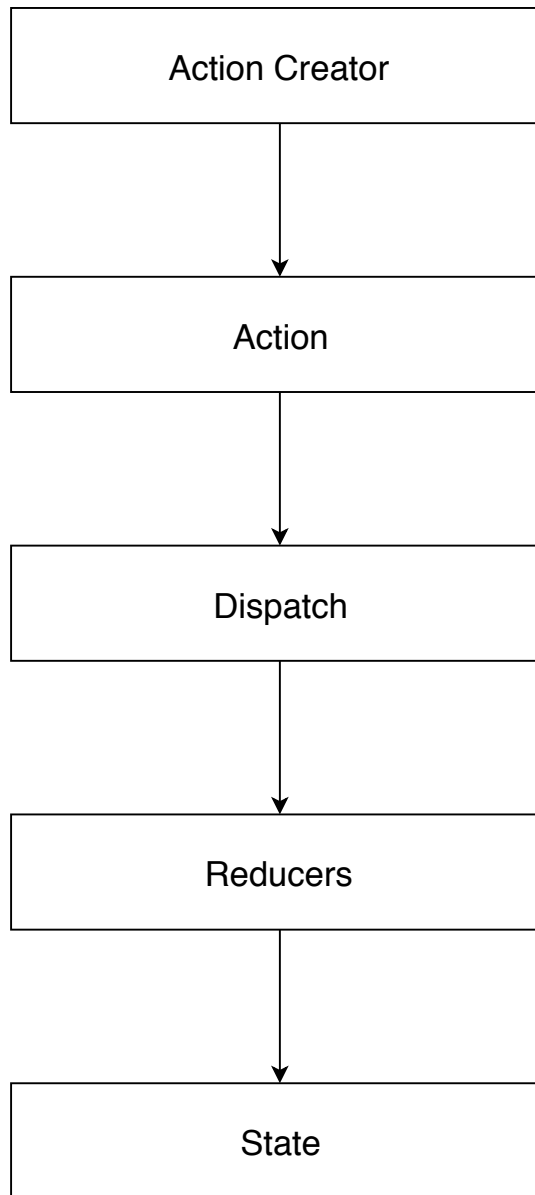
State 2

⋮

State x







Redux Cycle



Hands On

Page 1



 <https://www.draw.io>

Judul Lagu

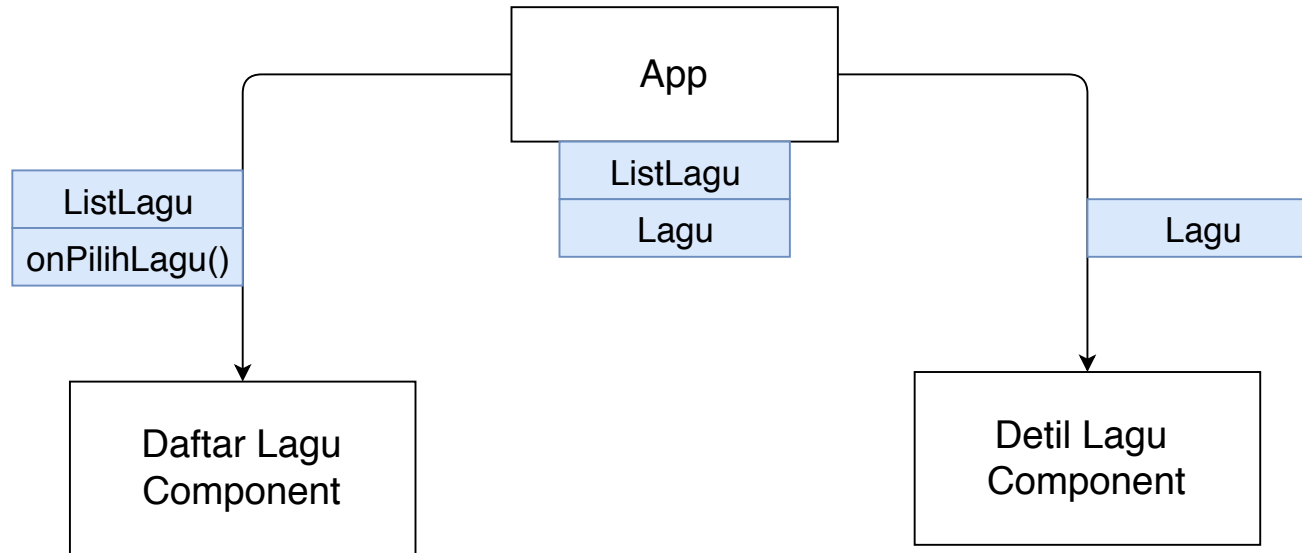
Pilih

Judul Lagu

Judul Lagu

Keterangan Lagu
Judul Lagu
2:57 menit

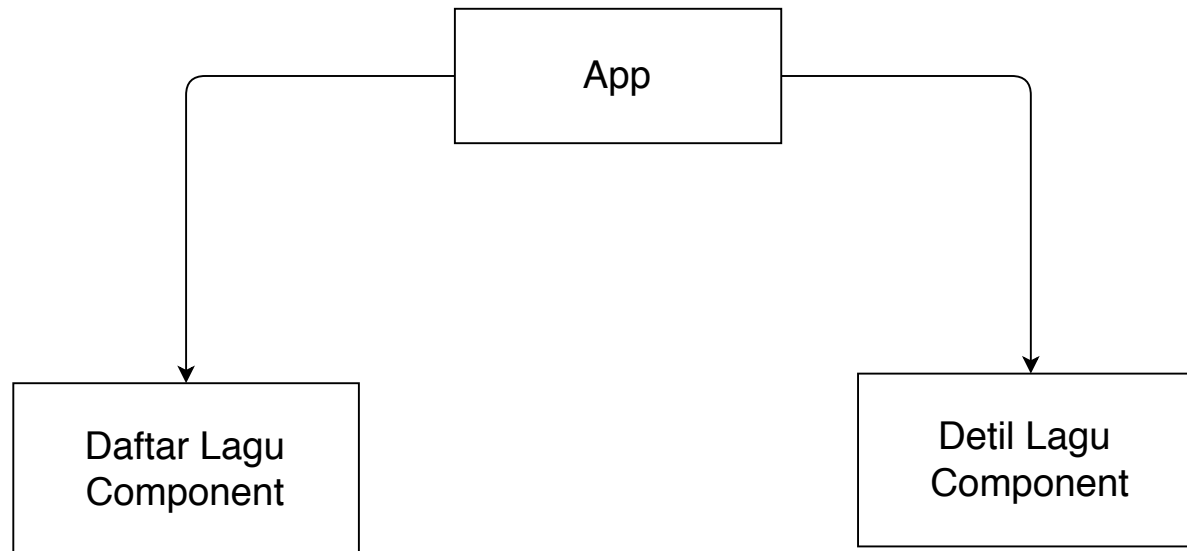
Tanpa Redux



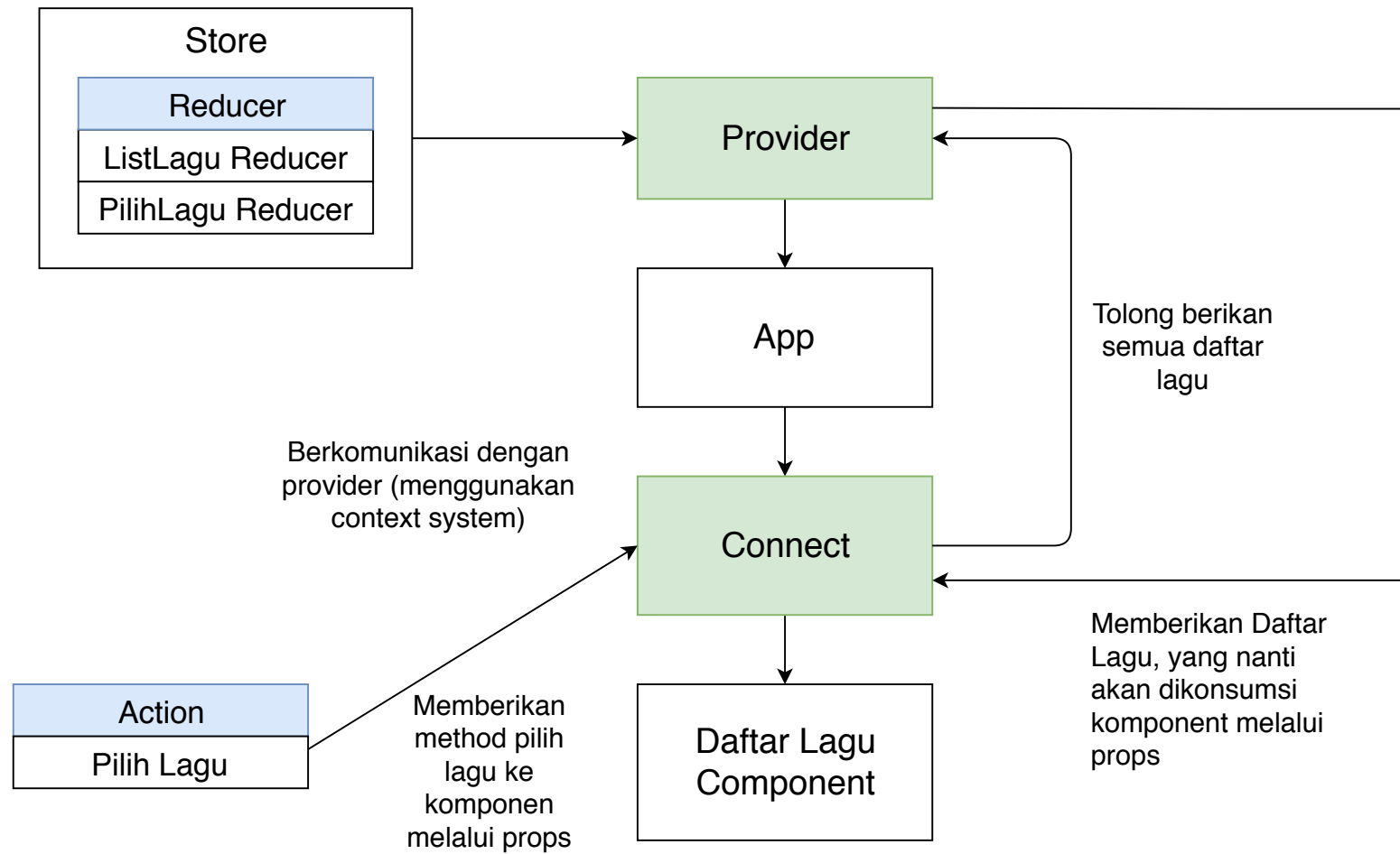
Redux

Reducer
ListLagu Reducer
PilihLagu Reducer

Action
Pilih Lagu



npm install --save redux react-redux



/src

/actions

/components

/reducers

index.js

→ Setup aplikasi untuk react
redux

buat file baru src > actions > index.js

```
// Action Creator
export const selectSong = (song) => {
  return {
    type: 'SONG_SELECTED',
    payload: song
  };
};
```

buat file baru src > reducers > index.js

```
import {combineReducers} from "redux";

const songsReducer = () => {
  return [
    {title: 'ABC', duration: '01:00'},
    {title: '123', duration: '01:30'},
  ];
};

const selectedSongReducer = (selectSong = null, action) => {
  if (action.type === 'SONG_SELECTED') {
    return action.payload;
  }
  return selectSong;
};

export default combineReducers({
  songs: songsReducer,
  selectedSong: selectedSongReducer
});
```


Ubah file src > index.js

```
import React from 'react';
import ReactDOM from 'react-dom';
import App from "../components/App";
import {Provider} from "react-redux";
import {createStore} from "redux";
import reducers from './reducers';

ReactDOM.render(
  <Provider store={createStore(reducers)}>
    <App/>
  </Provider>,
  document.querySelector('#root'));
```

Buat file baru src > components > SongList.js

```
import React from 'react';
import {connect} from "react-redux";

class SongList extends React.Component {
  renderList() {
    return this.props.songs.map((song) => {
      return (
        <div className="item" key={song.title}>
          <div className="right floated content">
            <button className="ui button primary">
              Select
            </button>
          </div>
          <div className="content">{song.title}</div>
        </div>
      )
    });
  }
  render() {
    return (
      <div className="ui divided list">
        {this.renderList()}
      </div>
    )
  }
}

const mapStateToProps = (state) => {
  return {songs: state.songs};
};

export default connect(mapStateToProps)(SongList);
```

Ubah file src > App.js

```
import React from 'react';
import {selectSong} from "../actions";
import SongList from "../components/SongList";

class App extends React.Component {
  render() {
    return (
      <div className="ui container grid">
        <div className="ui row">
          <div className="column eight wide">
            <SongList/>
          </div>
        </div>
      </div>
    )
  }
}

export default App;
```

Ubah file src > components > SongList.js

```
import React from 'react';
import {connect} from "react-redux";
import {selectSong} from "../actions";

class SongList extends React.Component {
  renderList() {
    return this.props.songs.map((song) => {
      return (
        <div className="item" key={song.title}>
          <div className="right floated content">
            <button className="ui button primary"
              onClick={()=>{this.props.selectSong(song)}}>
                Select
              </button>
            </div>
            <div className="content">{song.title}</div>
          </div>
        </div>
      )
    });
  }
  ...
}

const mapStateToProps = (state) => {
  return {songs: state.songs};
};

export default connect(mapStateToProps,{selectSong:selectSong})(SongList);
```

Buat file src > components > SongDetail.js

```
import React from 'react';
import {connect} from "react-redux";

const SongDetail = (props) => {
  if (!props.song) {
    return <div>Select a song</div>
  }

  return (
    <div>
      {props.song.title} ({props.song.duration})
    </div>
  )
};

const mapStateToPros = (state) => {
  return {song: state.selectedSong}
};

export default connect(mapStateToPros)(SongDetail);
```

Ubah file src > App.js

```
import React from 'react';
import {selectSong} from "../actions";
import SongList from "./SongList";
import SongDetail from "./SongDetail";

class App extends React.Component {
  render() {
    return (
      <div className="ui container grid">
        <div className="ui row">
          <div className="column eight wide">
            <SongList/>
          </div>
          <div className="column eight wide">
            <SongDetail/>
          </div>
        </div>
      </div>
    )
  }
}

export default App;
```