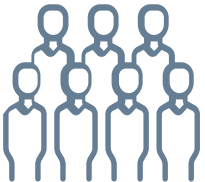
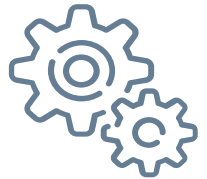


# Redux

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Fullstack Trainer



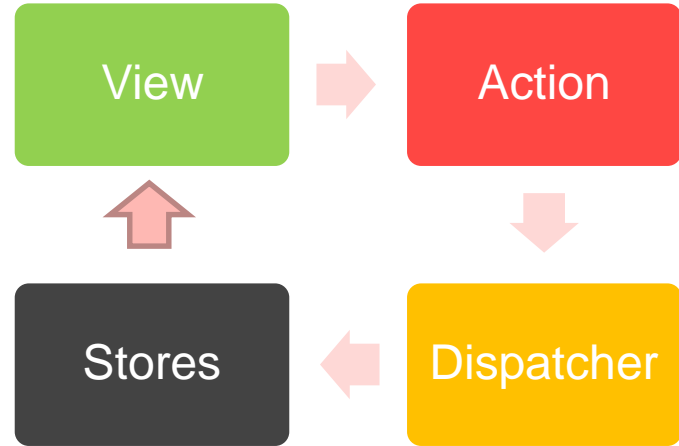
# Roadmap

- Local State vs Redux
- Reducer
- Basic Redux
- Redux & React
- Structure Project Redux
- Redux Saga

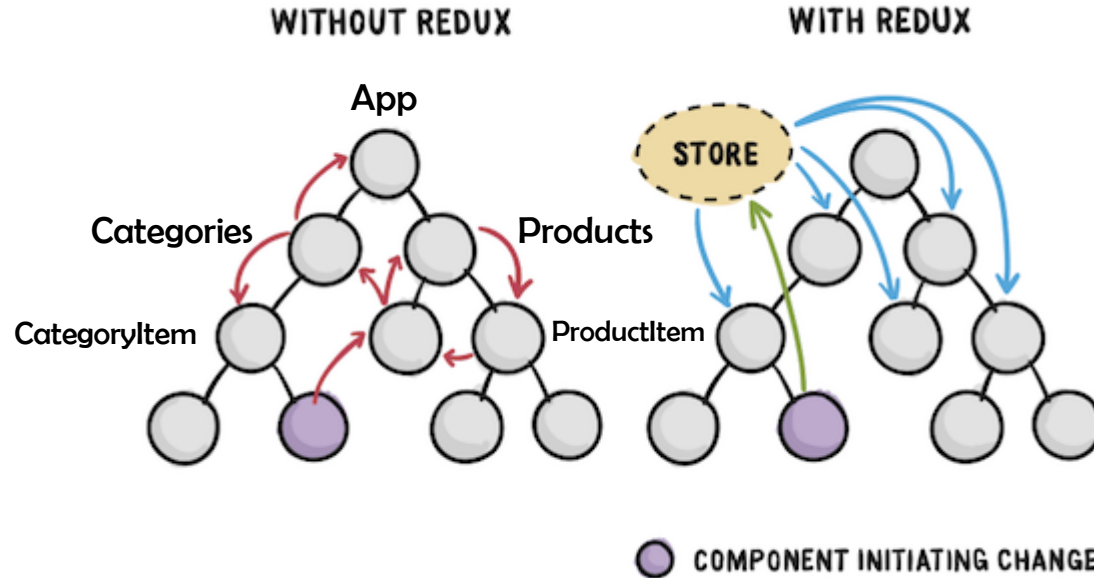
# Redux

- Redux akronim dari Reducer dan Flux.
- Redux implementasi dari flux yaitu architecture pattern untuk handle state management secara one way data binding.
- Redux digunakan agar state container bisa predictable.

## Flux Architecture



# Local State vs Global State (Redux)



# Local State vs Redux

## Local State

```
export default function Category() {
  const [categories, setCategories] = useState([]);
  let [isOpen, setIsOpen] = useState(false);
  let [isEditOpen, setIsEditOpen] = useState(false);
  let [isRefresh, setIsRefresh] = useState(false);

  const [action, setAction] = useState({
    id: undefined,
    actionType: undefined
  })

  useEffect(() => {
    fetchData();
  }, [])

  useEffect(() => {
    // if values isRefresh true, then fetchdata will
    fetchData();
    setIsRefresh(false);
  }, [isRefresh]);

  async function fetchData() {
    const response = await apiCategory.list();
    setCategories(response);
  }
}
```

Local state

## Redux

```
function Category(props) {
  const [isRefresh, setIsRefresh] = useState(false);
  let [isOpen, setIsOpen] = useState(false);
  let [isEditOpen, setIsEditOpen] = useState(false);
  const [action, setAction] = useState({
    id: undefined,
    actionType: "edit"
  });

  useEffect(() => {
    fetchData();
  }, []);

  useEffect(() => {
    fetchData();
    setIsRefresh(false);
  }, [isRefresh]);

  async function fetchData() {
    // You can await here
    const payload = {}
    props.getCategories(payload);
  }

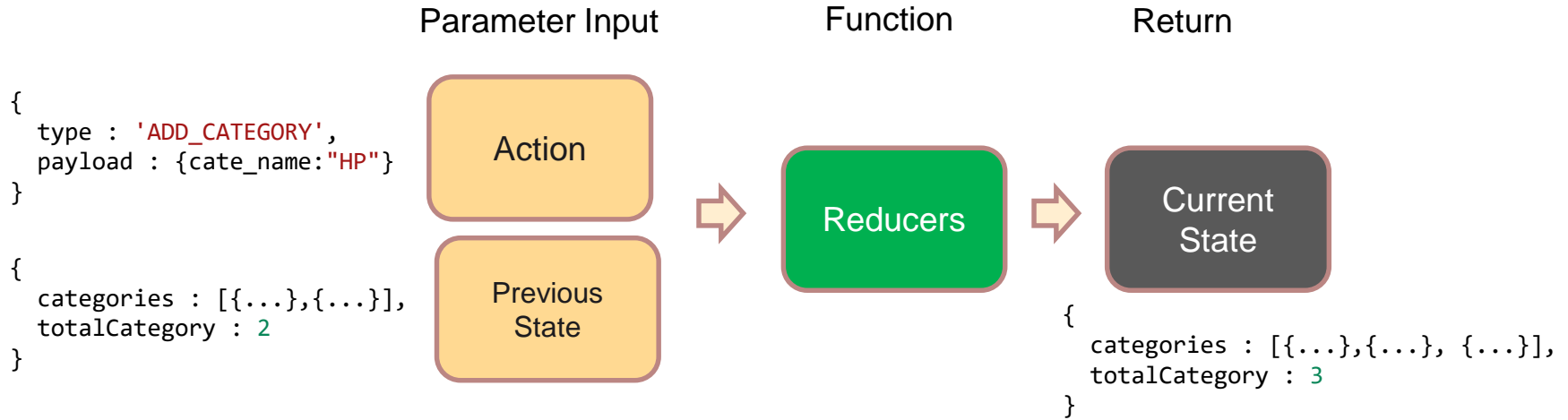
  const mapStateToProps = state => ({
    categories: state.categoryState.categories,
    succeed: state.categoryState.succeed,
    status: state.categoryState.status,
  });

  const mapDispatchToProps = (dispatch) => ({
    getCategories: payload => dispatch(doCategoryStarted(payload)),
    deleteCategory: payload => dispatch(doDeleteCategoryRequest(payload)),
  });

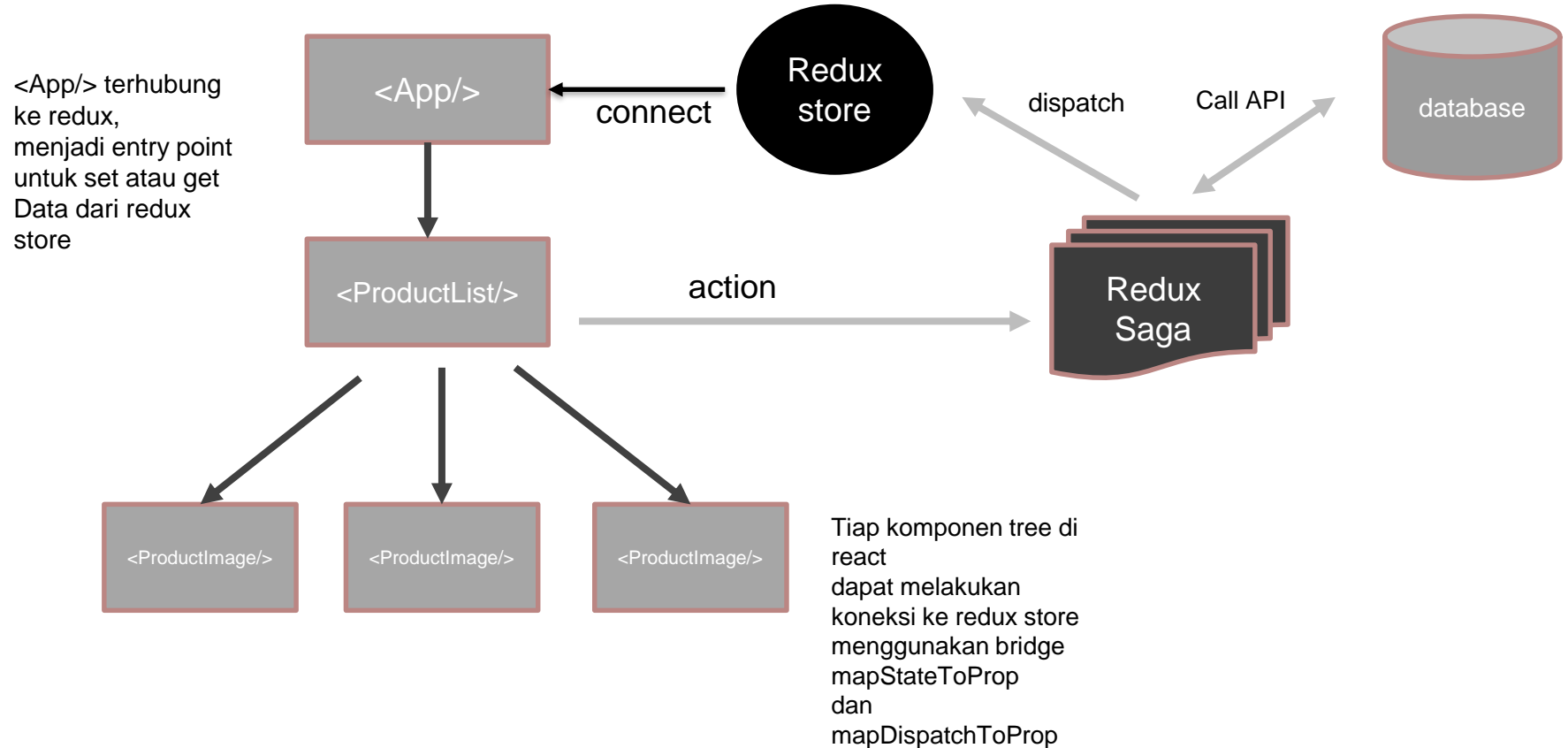
  export default connect(
    mapStateToProps,
    mapDispatchToProps
  )(Category);
}
```

# Reducer

- Reducer adalah function yang digunakan untuk meng-update state



# React & Redux



# Redux Saga Pattern

