

# Redux 1.3\_CW Exercises

## redux developer tool

### ex01: setting up redux devtools

#### challenge:

1. Install redux devtools from here:

Following are the links to install the browser add-on or extension:

- [Firefox](#)
- [Chrome](#)

2. In your application, add a line of code to integrate Redux DevTools with your store. This is done when creating your Redux store using the `createStore` function.

```
window.__REDUX_DEVTOOLS_EXTENSION__ && window.__REDUX_DEVTOOLS_EXTENSION__()
```

[COPY](#)

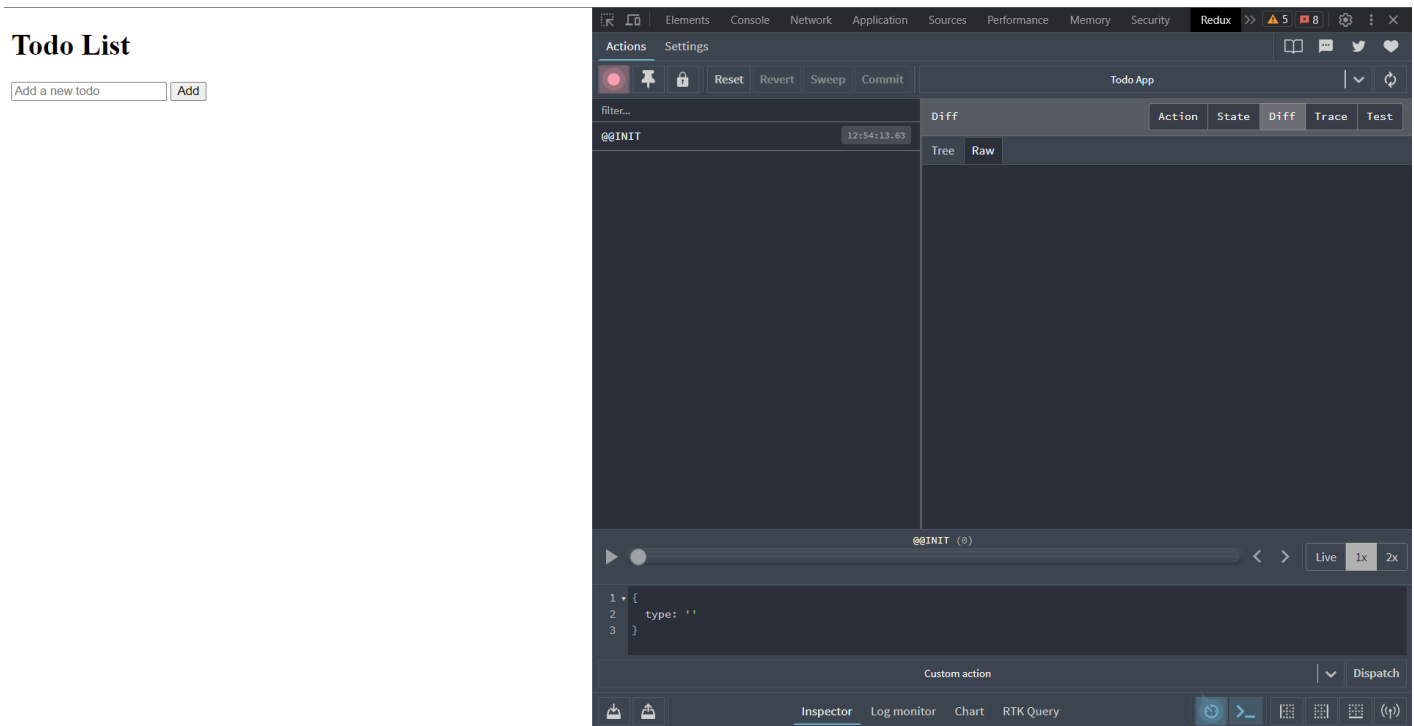
3. Open Redux DevTools:

- Open a new tab or window in their browser.
- Look for the Redux DevTools icon (located in the browser's toolbar) and click on it to open the DevTools panel.

#### solution

```
const store = createStore(  
  todosReducer,  
  window.__REDUX_DEVTOOLS_EXTENSION__ && window.__REDUX_DEVTOOLS_EXTENSION__(),  
)
```

[COPY](#)



# ex02\*\*: left-side console tools\*\*

## challenge

Observing Real-Time Actions:

- Look at the left-hand column of the DevTools panel.
- Observe the real-time actions that are firing on the current page.
- The actions are displayed with action creator types.
  - Observe the timestamps next to each action.
  - These actions represent what's happening in your Redux application and are displayed with action creator types (e.g., "ADD\_TODO," "REMOVE\_TODO").
- Select an individual action from the left-hand column.
  - To inspect an individual action, click on it in the left-hand column. When you do this, you'll see two options displayed for that action: "Jump" and "Skip."
  - "Jump" takes your application to the state at the time the selected action fired. You can see how your application's state evolved and what caused it to change.
  - "Skip" crosses out the action and updates your app view. This can be helpful if you want to skip past a particular action without affecting the rest of your debugging session.

## solution

## Todo List

Add a new todo

- Hello
- Hii
- New

The screenshot shows the Redux DevTools interface. The top bar includes tabs for Elements, Console, Network, Application, Sources, Performance, Memory, Security, and Redux. The Redux tab is active, showing a list of actions on the left and a detailed view of the selected action on the right. The selected action is a Redux action with the type 'todos/added' and a payload of 'New'. The bottom panel shows the Redux state tree, which is a simple array of objects representing the todos. The state is shown as an array of three objects, each with a 'type' property. The first object has a type of 'Hello', the second has a type of 'Hii', and the third has a type of 'New'.

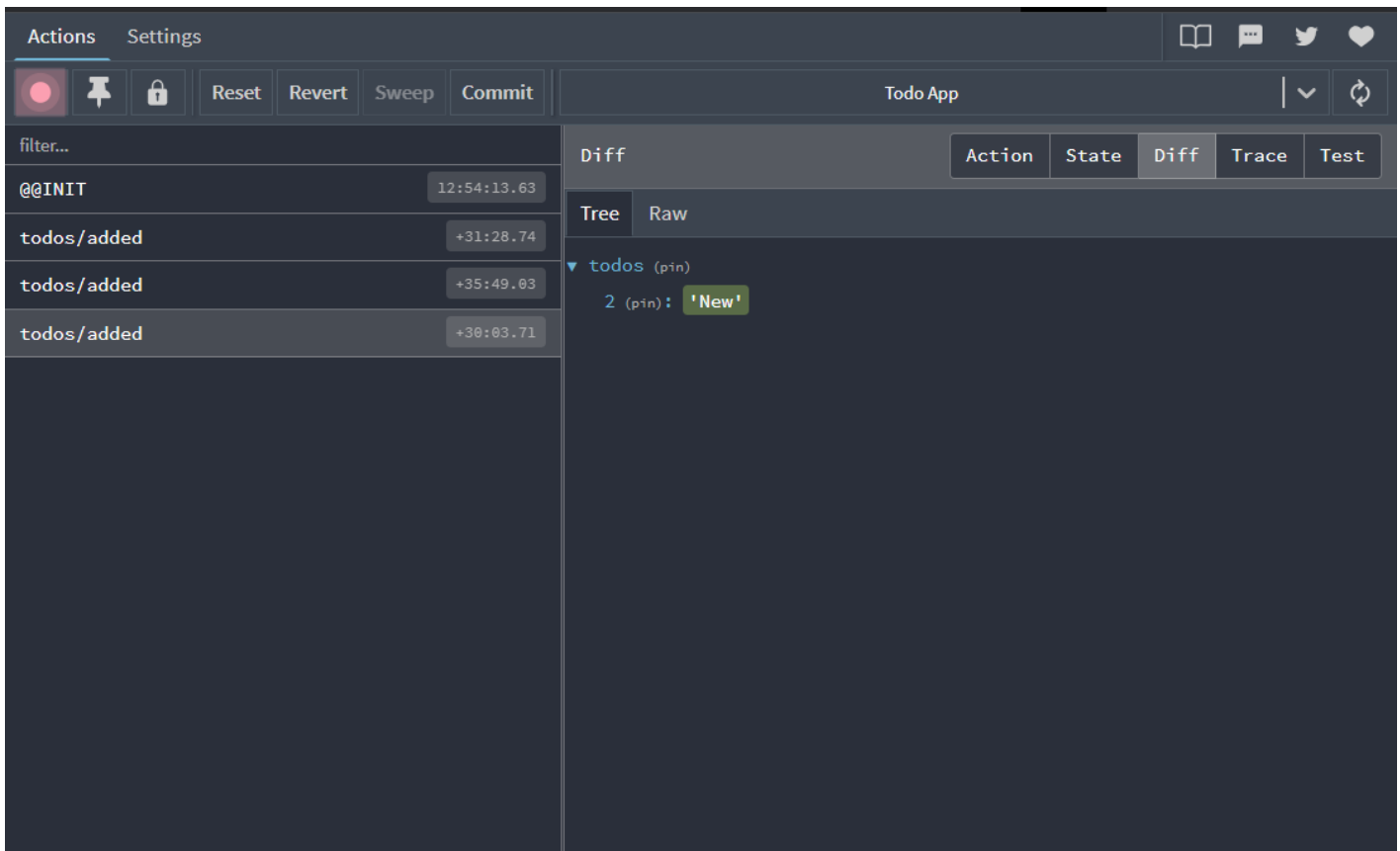
## ex03\*\*: right-side console tools - diff tab\*\*

The four tabs at the top right are in my opinion the most helpful of the tools.

## challenge

- Click on the "Diff" tab on the right side of the console.
- It displays only what the selected action changed in the state tree.
- This is especially useful when debugging and analyzing how actions affect the application's state.

## solution



## ex04: right-side console tools - action tab

### challenge

- Click on the "Action" tab on the right side of the console.
- It shows the individual action type and any data it carries to the reducers.
- It contains three different sub-tabs: Tree, Chart and Raw.
  - Tree View (Default): By default, the "Action" tab opens in the "Tree" view. In this view, the data is summarized into single lines for a compact representation of each action.
  - Chart Tab: The "Chart" tab shows an up-to-date store tree. It displays all combined reducers and their corresponding data branches. This view is helpful for visualizing the state tree structure.
  - Raw Tab: The "Raw" tab presents the action creator in a code view. It allows you to see the action's code and structure as it was originally created in your application's codebase.

### solution

Reset

Revert

Sweep

Commit

Todo App

filter...

@@INIT12:54:13.63

todos/added+31:28.74

todos/added+35:49.03

todos/added+30:03.71

Action

ActionStateDiffTraceTest

TreeChartRaw

type (pin): "todos/added"

payload (pin): "New"

ActionsSettings

Reset

Revert

Sweep

Commit

Todo App

filter...

@@INIT12:54:13.63

todos/added+31:28.74

todos/added+35:49.03

todos/added+30:03.71

Action

ActionStateDiffTraceTest

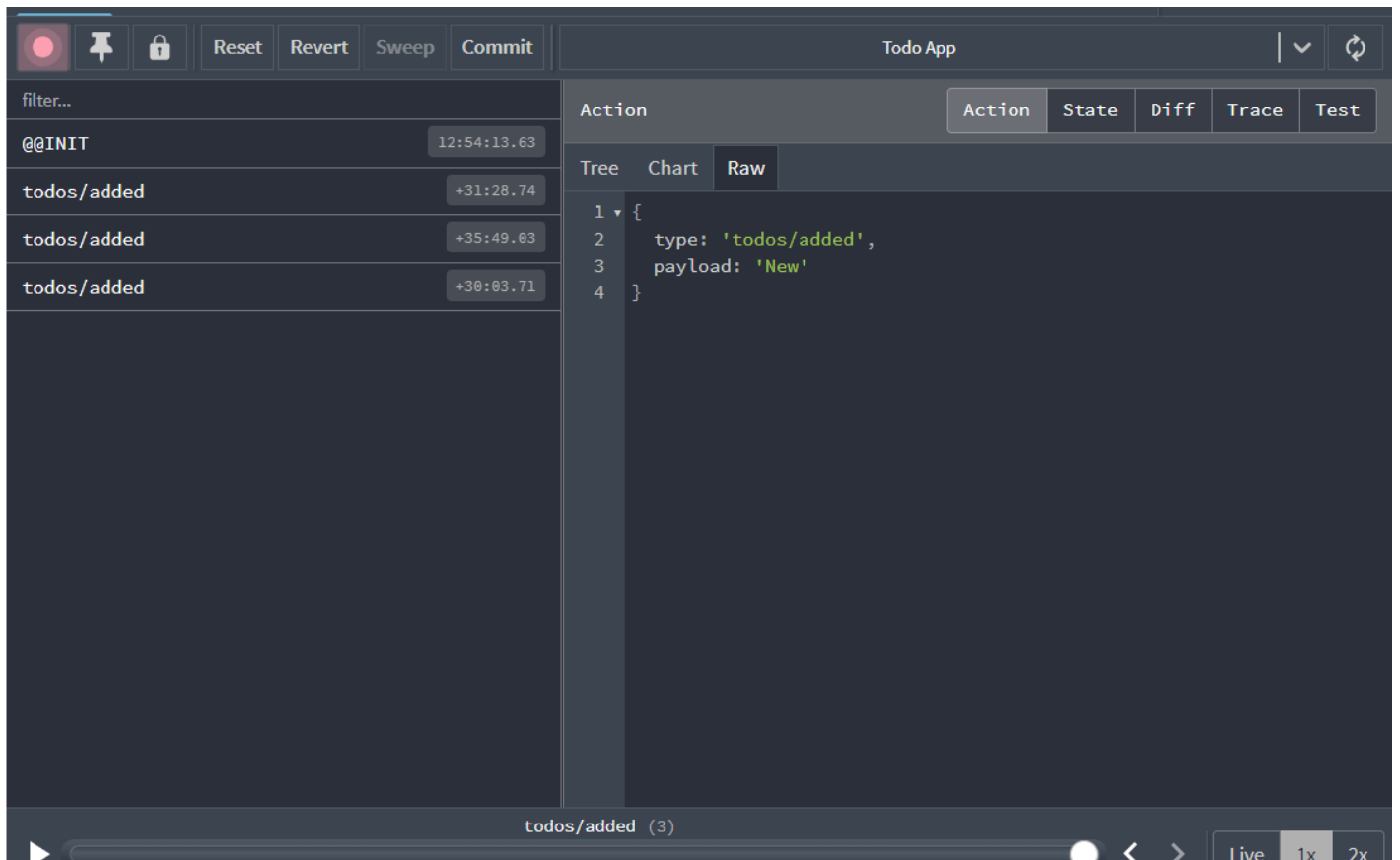
TreeChartRaw

state

type

payload

"New"



ex05\*\*: right-side console tools - state tab\*\*

challenge

- Click on the "State" tab on the right side of the console.
- The state tab shows the entire state tree at the time of the action selected in the left hand side of the console.

solution

Reset

Revert

Sweep

Commit

Todo App

filter...

@@INIT12:54:13.63

todos/added+31:28.74

todos/added+35:49.03

todos/added+30:03.71

State

Action

State

Diff

Trace

Test

Tree

Chart

Raw

▼ todos (pin)

0 (pin): "Hello"

1 (pin): "Hi"

2 (pin): "New"

Reset

Revert

Sweep

Commit

Todo App

filter...

@@INIT12:54:13.63

todos/added+31:28.74

todos/added+35:49.03

todos/added+30:03.71

State

Action

State

Diff

Trace

Test

Tree

Chart

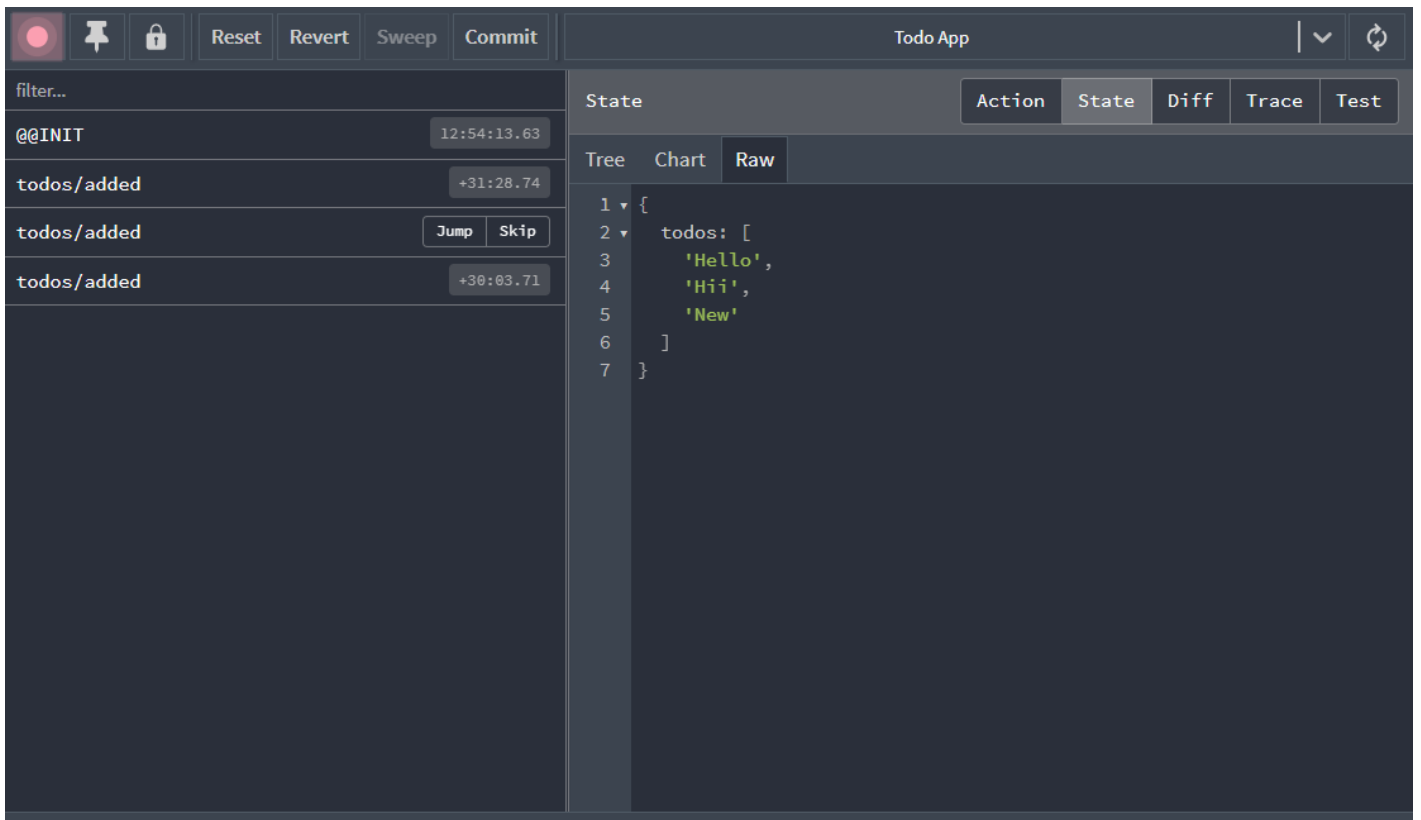
Raw

state todos

todos[0]

todos[1]

todos[2]



ex06\*\*: right-side console tools - test tab\*\*

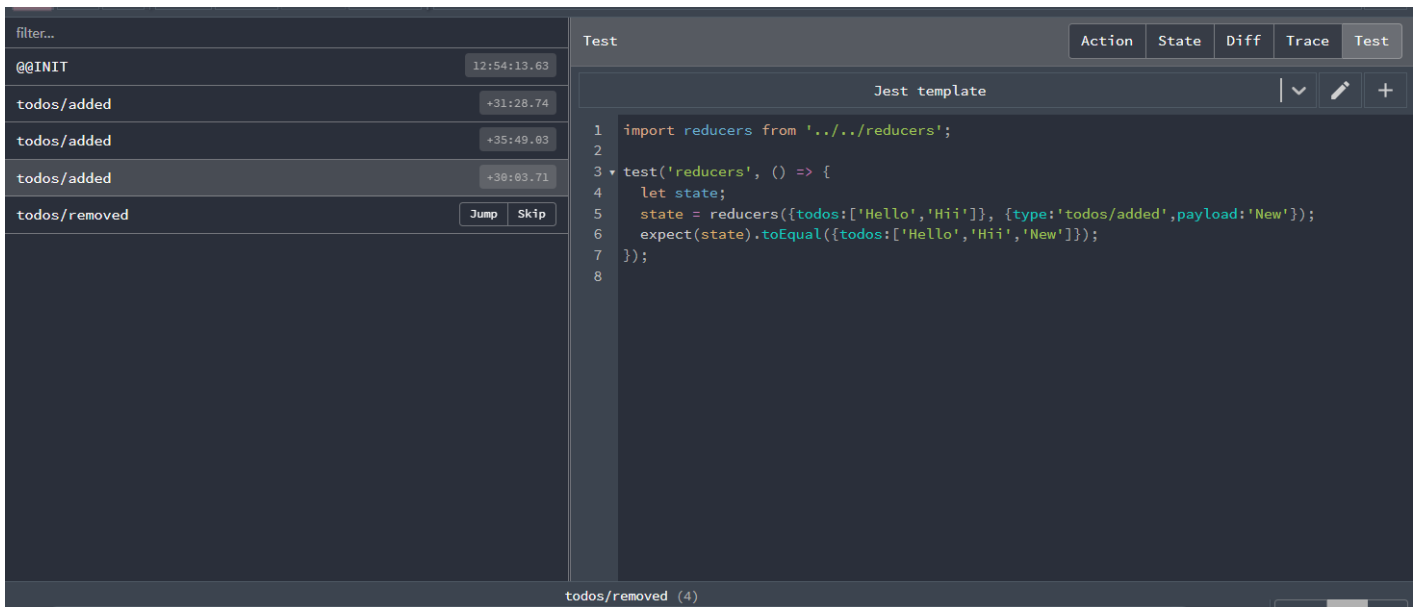
challenge

Test tab:

- It creates a test format in some pre-provided testing frameworks.
- The "Test" tab takes your root state and provides a written test on what the end state should hold.

solution





## ex07\*\*: dispatching actions from redux devtools\*\*

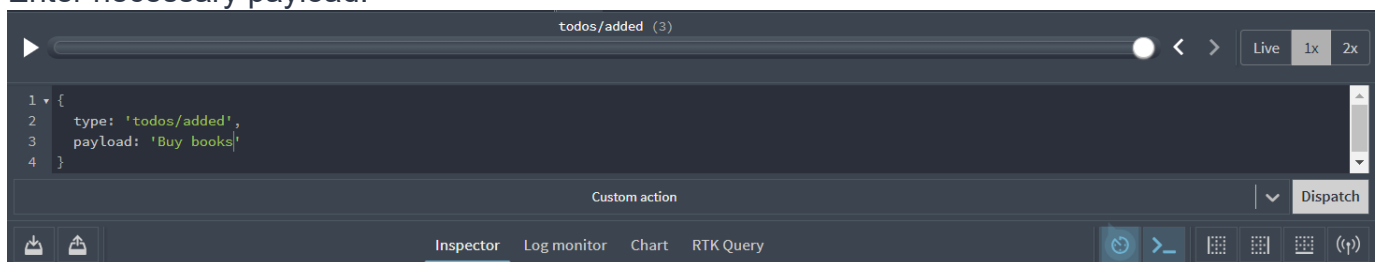
```
const someObj = {
  value: 'abc',
  nextNode: { value: 'def', nextNode: { value: 'ghi', nextNode: null } },
}
```

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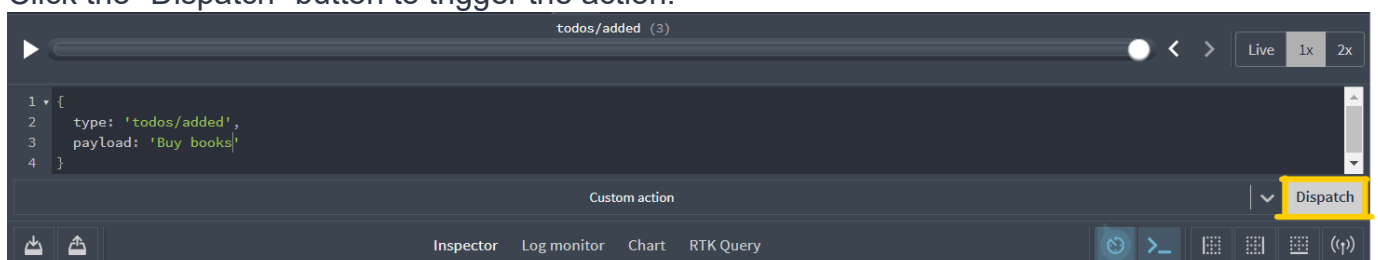
## challenge

How to dispatch actions directly from the Redux DevTools panel:

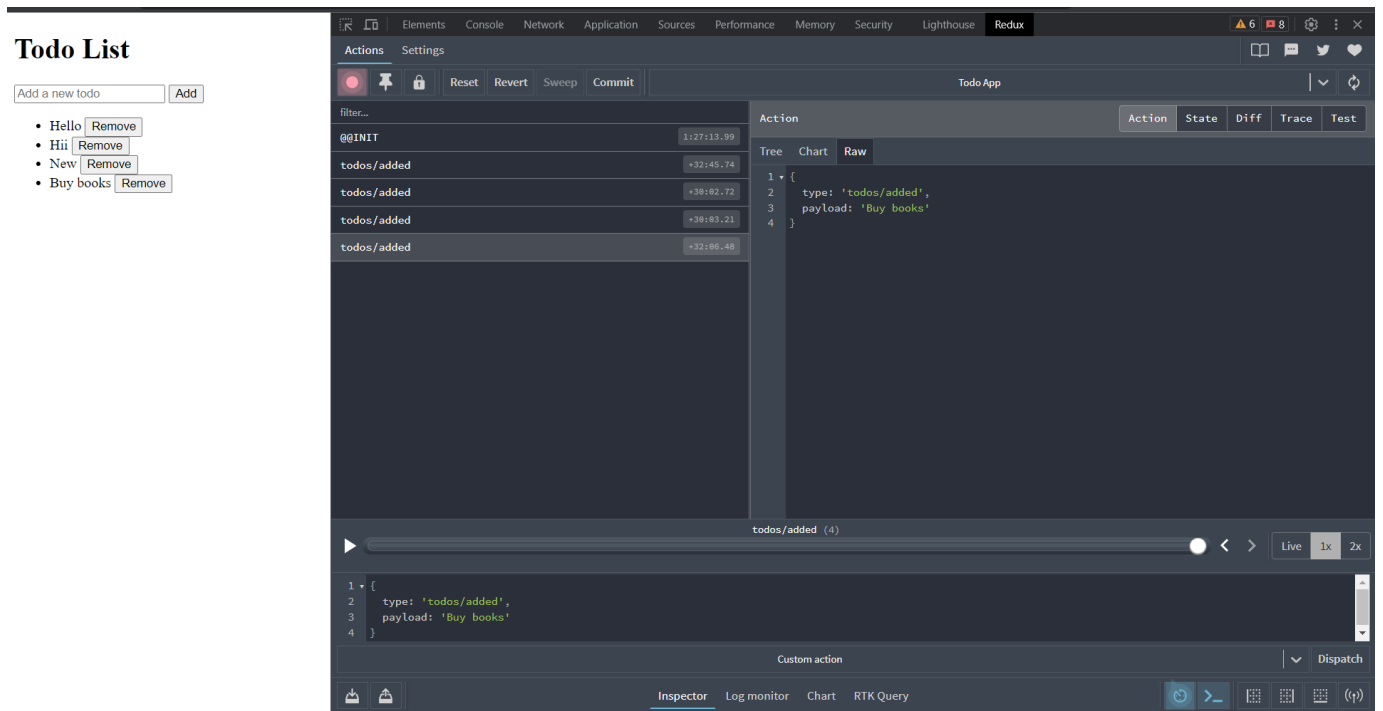
- Enter necessary payload.



- Click the "Dispatch" button to trigger the action.



- Observe how the state changes in the UI in response to the dispatched actions.



## Exercise 3: Using Time Traveler

### challenge

- The slider option will give you a smooth scroll through the actions.
- This will time travel through the actions that have fired and update the running app to show the current state and certain points in time.
- This comes packed with an auto-play, one step action arrows, and a speed interval play-through time.