# Actions and reducers 101 lab

It's time to have our store handle changing data. We've dispatched a fake action but now let's create a reducer and some actions that actually do some useful work.

1. To keep our store clean, create a new file called reducers.js. Move the reducer out of store.js into reducers.js and export it properly. Don't forget that you'll need to import it in store.js now.
2. Add a new line inside your reducer:

```
console.log("In reducer", state, action);
```

3. Run and test to make sure your refactor hasn't broken anything.

## Putting in some safeties

4. Add a check to your reducer at the top. If the action is undefined, return state unchanged. Or, if you'd prefer, give action a default value.
5. Add a switch statement to it, switching on action.type.
6. Put in a default that simply returns the old state unchanged.
7. Again, run and test. Your refactor is now safer but still doesn't do much. Let's fix that now.

## Adding in your first case

8. Create a case in the switch to say that if the user dispatches a "SET_FILMS" action, we read the films payload and set that in state. Something like this should do the trick:

```
case "SET_FILMS":
  return {...state, films: action.films}
```

9. Now edit App.js. Find the useEffect. Add this inside of it:

```
fetch("/api/films")
.then(res=>res.json())
.then(films=>store.dispatch({type:"SET_FILMS",films}));
```

What we just did was send off a request to the API server for some data; a list of films. Then, when we get a response, convert it from a stream of JSON and dispatch an action to set those films.

10. Run and test. You should be seeing a list of films in your browser. Cool, right?

## Adding in some new actions

11. This seems like a good time to add in actions that will be needed in the future. Go ahead and add these:

| action.type | action.payload |
|---|---|
| **SET_CURRENT_DATE** | date |
| **SET_CURRENT_FILM** | film |
| **SET_CURRENT_SHOWING** | showing |
| **SET_TABLES** | tables |
| **SET_THEATERS** | theaters |
| **SET_SEATS** | seats |
| **SET_SHOWINGS** | showings |
| **SET_USER** | user |
| | |

12. Bonus! Whenever you're ready, you can delete that fake dispatch that we added earlier for testing.