## **Composing Reducers**

Since we have some data (like cell and email for instance) immediately inside the main object, the data is not square so we can't use Redux's built-in combine reducer. We'll have to combine reducers manually.

## Decomposing our existing reducer

- 1. Write a subreducer for the name property. Call it nameReducer. It'll have the same shape as the parent reducer.
- 2. Pull any name logic out of the root reducer and put it in the new *name* sub-reducer. Don't forget that the input of this sub-reducer will be just the name portion of state, and not the entire state itself.
- 3. Integrate that sub-reducer into the root reducer kind of like this:

```
const rootReducer = (state, action) => {
    return {
      ...reducer(state, action),
      name: nameReducer(state.name, action)
    }
}
```

- 4. You'll want to register the rootReducer in createStore instead of your previous reducer function.
- 5. Run and test. It should work exactly as before.

## Adding the other fields

- 6. If you worked ahead in prior labs and implemented the setting of all name fields, you're done with name. But if not, now is the time! Go ahead and set first, last, and title in the name reducer.
- 7. At this point, it should be trivial to do location so go ahead and implement that one also.

See how reducer composition simplifies the writing of reducers?