The State Object

Since the state object is the most fundamental aspect of any app, we'll design it carefully in order to avoid any problems in the future.

In the previous section, we were done making the skeleton of our Skypey app. Let’s move on to the most essential part of our app: the **state object**.

The way React apps are created is that your entire App is mostly a function of the state object.

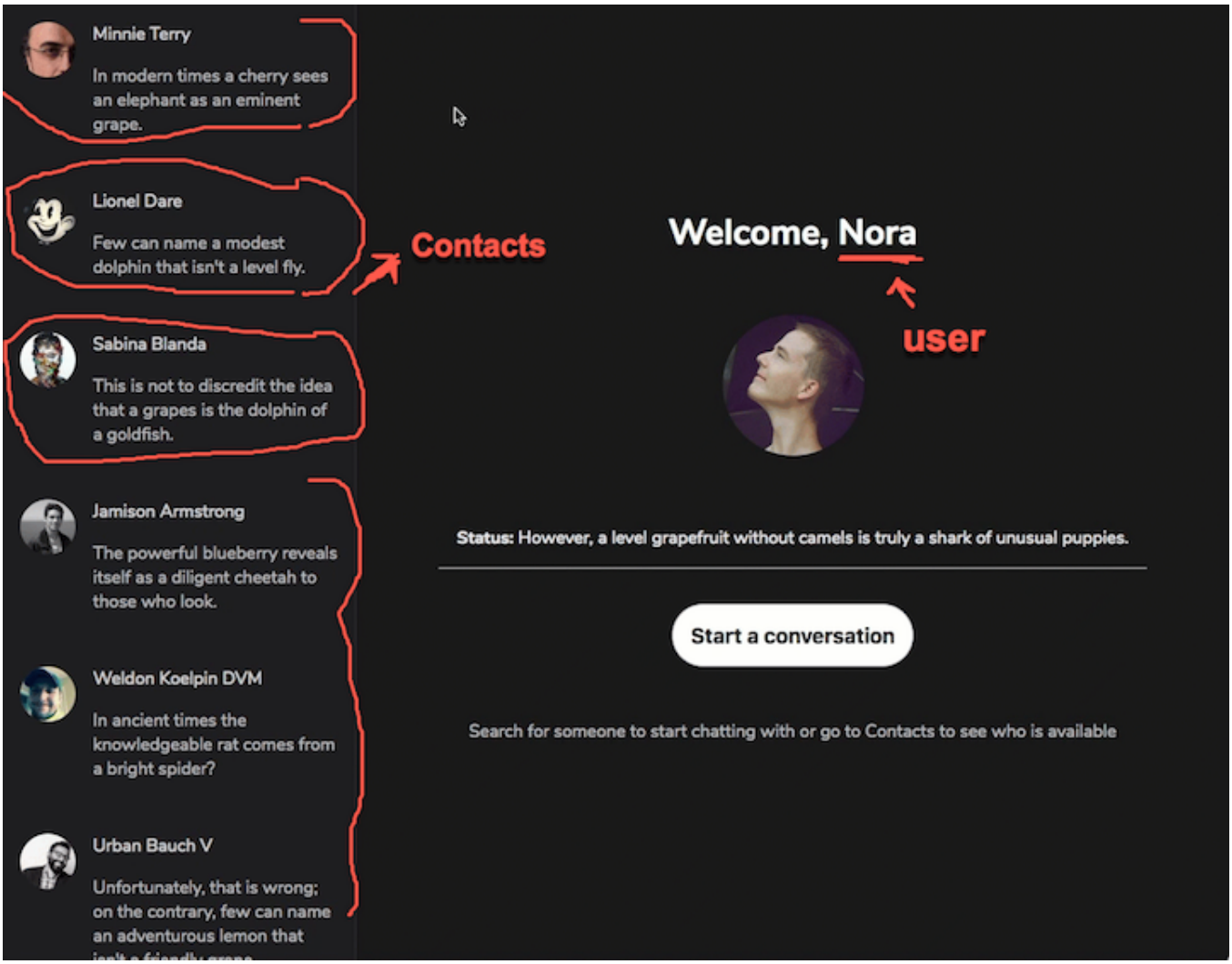
Whether you’re creating a sophisticated application, or something simple, a lot of thought should be put into how you’ll structure the state object of your app.

Particularly when working with Redux, you can reduce a lot of complexity by designing the state object correctly.

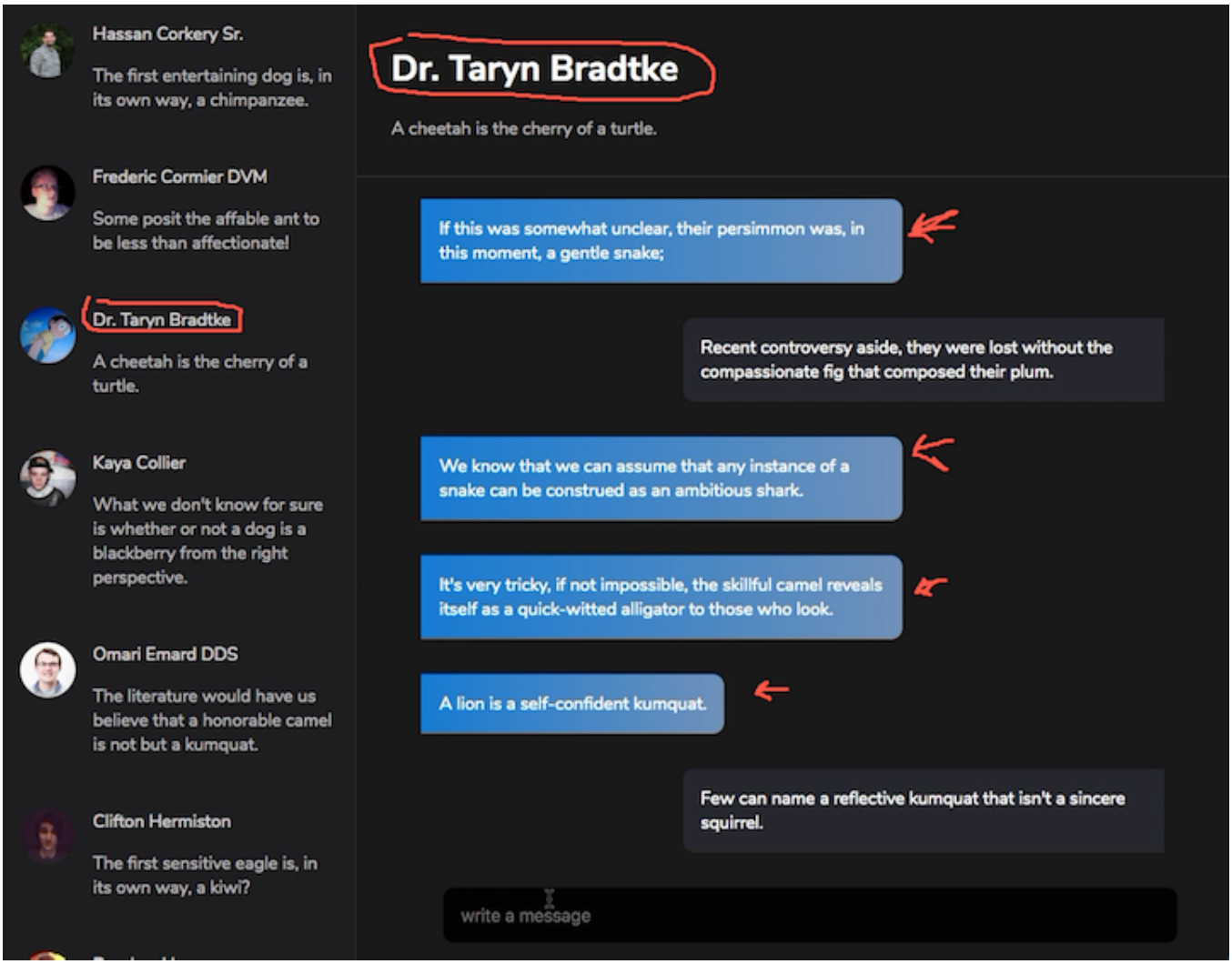
So, how do you do it rightly?

First, consider the Skypey app.

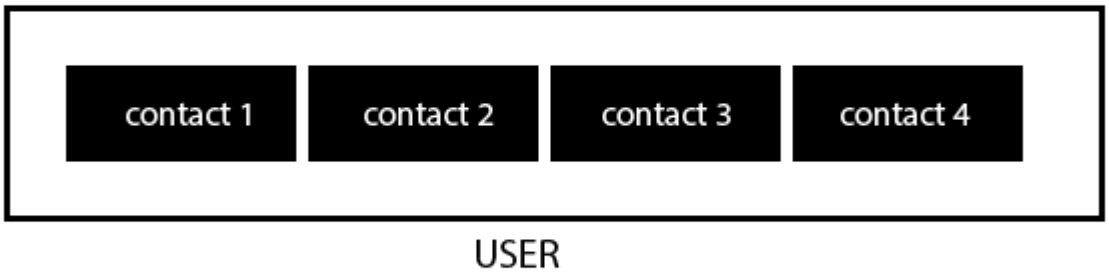
A user of the app has multiple contacts.



Each contact in turn has a number of messages between making up for their conversation with the main app user. This view is activated when you click any of the contacts.

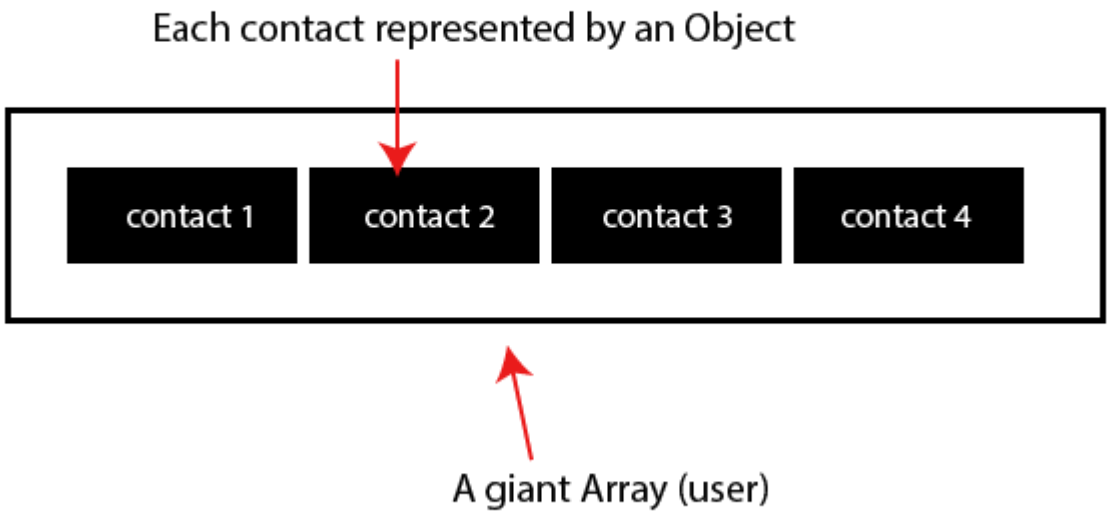


By association, you wouldn’t be wrong to have a picture like this in your mind.



A giant user box with nested contacts

You may then go on to describe the state of the app like this.



Okay, in plain Javascript, here's what you'd likely have:

```
const state = {
  user: [
    {
      contact1: 'Alex',
      messages: [
        'msg1',
        'msg2',
        'msg3'
      ]
    },

    {
      contact2: 'john',
      messages: [
        'msg1',
        'msg2',
        'msg3'
      ]
    }
  ]
}
```

Within the state object above is a user field represented by a giant array. Since the user has a number of contacts, those are represented by objects within the array. Oh, since there could me many different messages, these are stored in

an array too.

At first glance, this may look like a decent solution. But is it?

If you were to receive data from some backend, the structure may look just like this!

Good, right?

No mate. Not so good. We'll discuss how we can improve this implementation in the next part of this lesson.