How to lift state up

We learned that if we need to pass data back up to a host component from an inner we can do that by lifting state up. Effectively, it is passing a function down into the inner and running it in the inner. Let's exercise that.

On our landing page we have a list of days that we created inside <PickDate />, remember? When the user taps on a day, we want to set it as the "current date". Let's implement that by lifting state up, then let's come back around and refactor it to be cleaner. Ready? Here we go!

1. Open LandingPage.js. If currentDate is still being hardcoded as a new Date(), change that to read the currentDate from state like so:

```
const currentDate = new Date(useSelector(state => state.currentDate))
```

2. Create a new method called set_current_date(date). It should dispatch an action to the store like this:
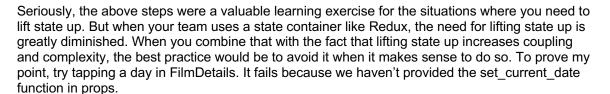
```
dispatch(actions.setCurrentDate(date))
```

3. Pass that method down to PickDate like this:

```
<PickDate onPicked={set_current_date} />
```

4. Edit PickDate. Make it work like this: when the user clicks/taps a date, we call the onPicked method passing the date chosen. (Hint: You'll need to use the arrow function form of event handling).

5. Run and test. When you tap a day, the current date should change. You'll see it on the big page header.

Got it working? Awesome. Now let's break it. 😮😉

Seriously, the above steps were a valuable learning exercise for the situations where you need to lift state up. But when your team uses a state container like Redux, the need for lifting state up is greatly diminished. When you combine that with the fact that lifting state up increases coupling and complexity, the best practice would be to avoid it when it makes sense to do so. To prove my point, try tapping a day in FilmDetails. It fails because we haven't provided the set_current_date function in props.

So let's now get some practice in refactoring. Don't worry, it will only take a few minutes.

6. Pull the set_current_date function out of LandingPage and move it into PickDate so that PickDate is more encapsulated. Change the onClick event in PickDate to call its local function. Remove the onPicked prop.
   Hint: Don't forget to change your imports statements when needed.

7. Run and test. Is It still setting the day properly? And check out FilmDetails because it now works there also. As you click a day the date and the showingTimes are changing!