Lessons

Lesson 1

Goal: Create declerative components with differing behavior based on props.

- Implement a Likes component
    - with a likes prop
    - shows a BlueLike component when likes > 0
    - shows a GreyLike component when likes <= 0
- For BlueLike / GreyLike:
    - renders a button with a specific background-color
- Add the Likes component to the FirstComponent twice
    - once with likes > 0
    - once without likes

Lesson 2

Goal: Seperate stateful and presentational components.

- Remove the likes prop from Likes component
- Add a likes state which is initially 0 (Hint: You need a stateful component now)
- Add a click-handler which increases the state
- Refactor BlueLike and GreyLike into a single component called LikeButton
- Pass the click-handler to LikeButton
- Make sure the Button components pass the click handler to the html element
- Display the amount of likes inside the Button text

Lesson 3

Goal: Add PropType validation and default prop values.

- Add propType validation for like button
    - Modify one of the props and see the error in the browser
- Add a default clickHandler to the LikeButton
    - e.g. use a console.log or alert in the new default
    - Temporarily remove the clickHandler passed from Likes and see the result

Lesson 4

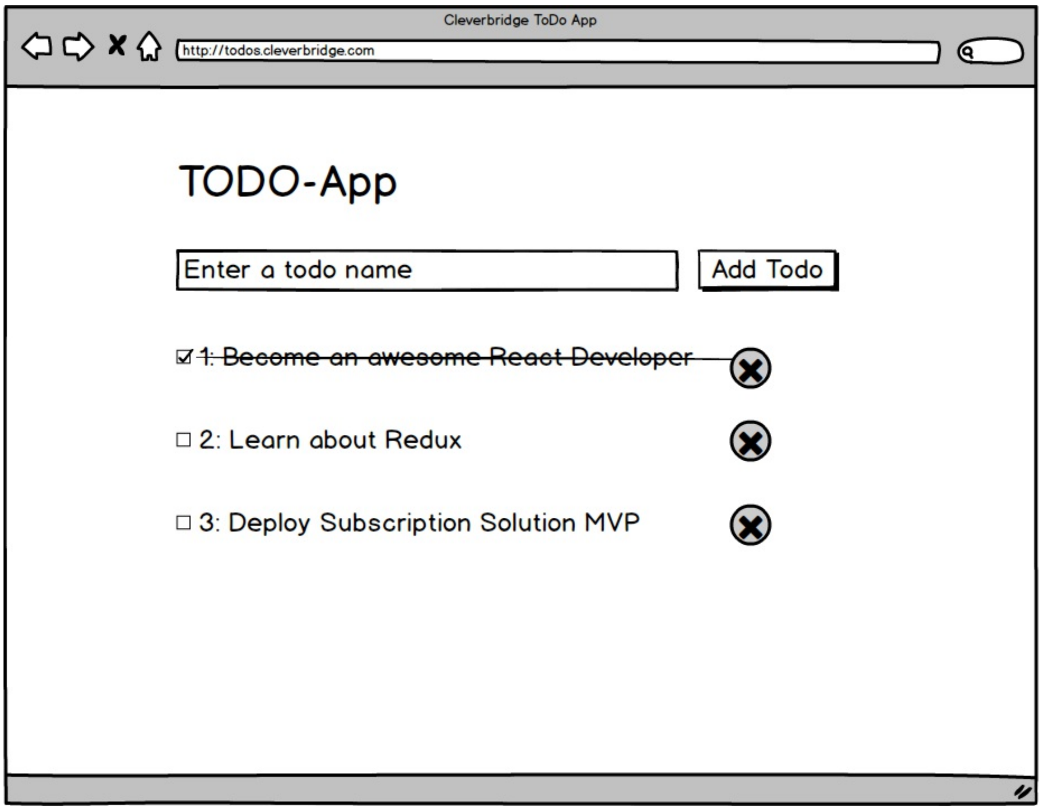
Goal: Write unit tests for React components.

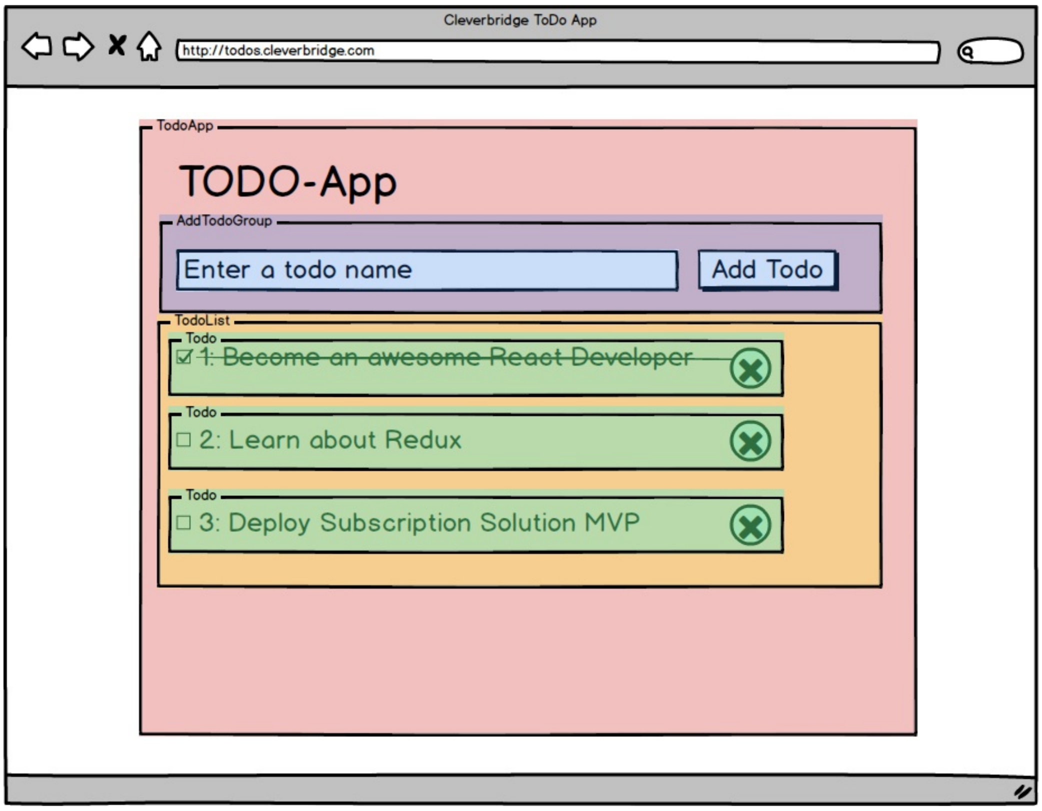
- Add Unit tests for the LikeButton component
- Make sure the file is covered 100% (branch, statemens, lines)
- Use these test suggestions:
    - **it** displays the number of likes in the text output
    - **it** passes a click Handler to the component
    - **it** has a grey background color when likes prop === 0
    - **it** has a blue background color when likes > 0

Lesson 5

Goal: Build a working todo app.

To get started please checkout origin/before-lesson-05.


Cleverbridge ToDo App
http://todos.cleverbridge.com
TODO-App
Enter a todo name
Add Todo
☑ ~~1: Become an awesome React Developer~~
☐ 2: Learn about Redux
☐ 3: Deploy Subscription Solution MVP

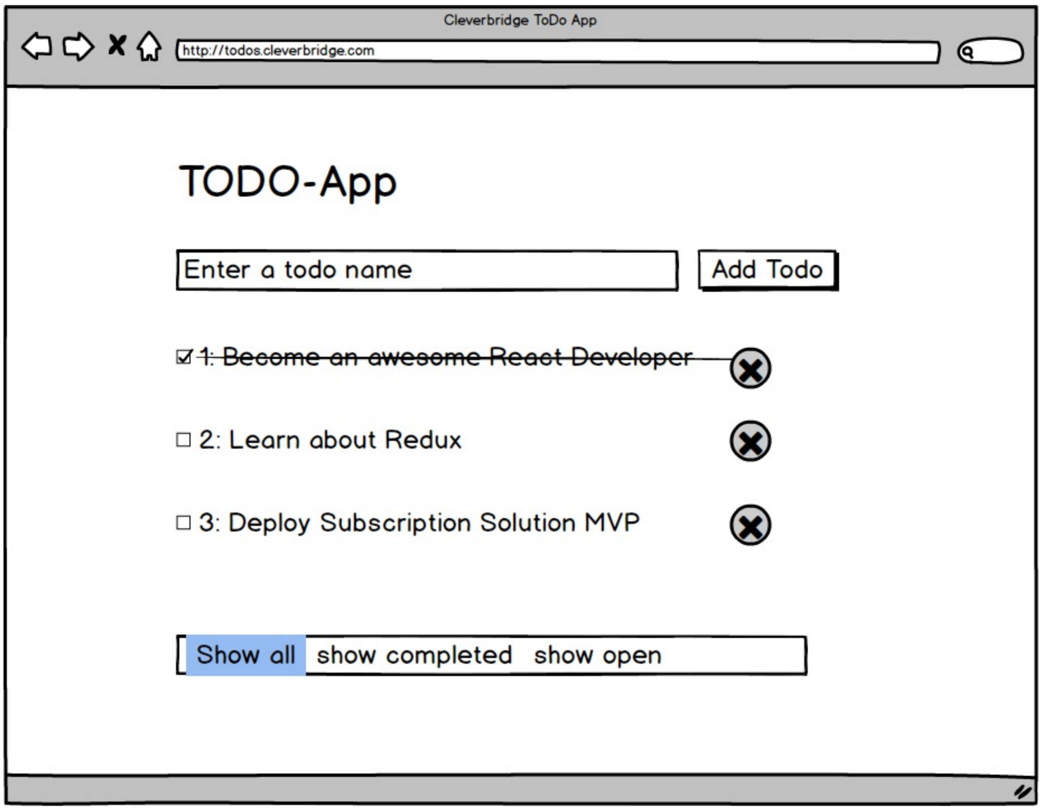


- Start building the TODO app according to the mockup.
- It should have the following features:
  - Subtask 1: There is a list of all todos (completed and open)
  - Subtask 2: Clicking on a todo will mark it as clicked (both in the state and visually)
    - Clicking it again, will mark it as open again.
  - Subtask 3: You can add a name for a new todo and add it to the list

        - After clicking the add button, the input field should be empty again
    - Subtask 4: Clicking the delete button will delete the todo
- Make sure all components which accept props, have their props validated.
- Try adding some basic styling to make it look less 1995-like.
- Tip: Centralize the state in the main component and keep all other components stateless. *Note: We'll learn about better state management later. For it's only important to respect the one-way data-flow.*
- Tip: Don't worry about assigning ids right now. Since we don't support sorting or filtering yet, you can simple use the array index to modify/delete a todo.
- **Remebmer**: State is immutable. Don't accidentaly mutate the state. this.state.todos.push() is an anti-pattern! Props.todos.push is even worse! Think about data-flow in react apps.

Lesson 6

Goal: Improve Data organization and add filtering abilities in our todo app.


Cleverbridge ToDo App
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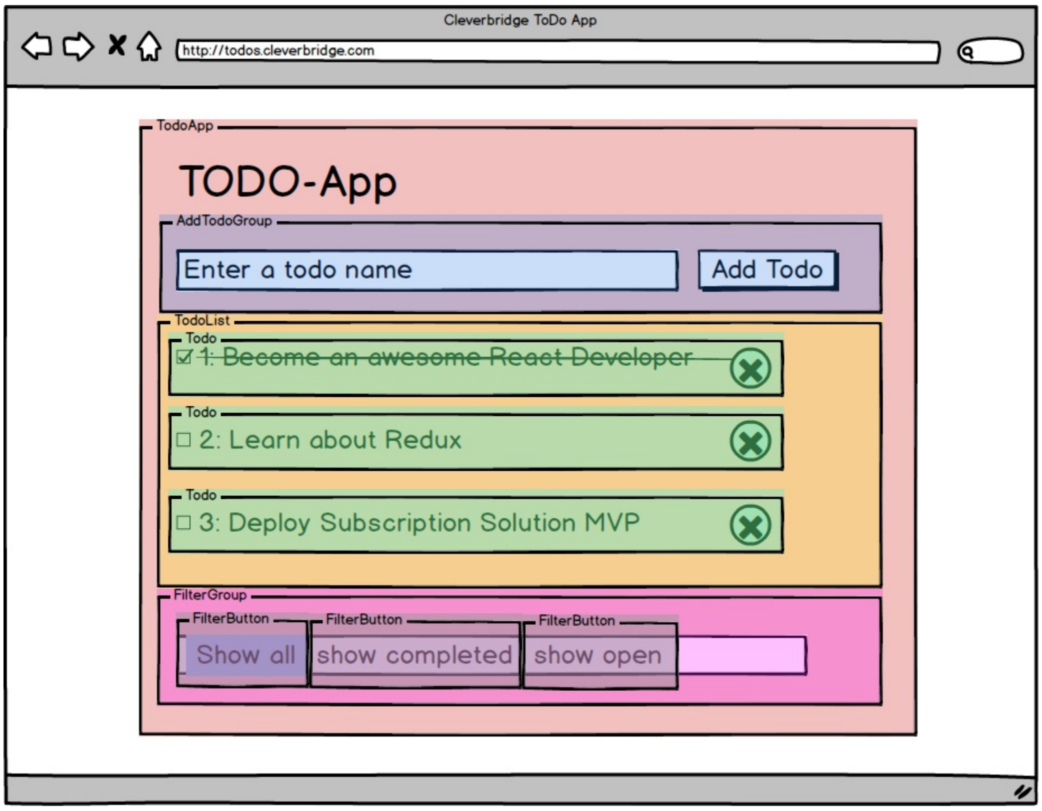
Show all
show completed
show open



- Restructure the todos array into an object which uses the id for direct property access
  - make use of ES6/ES7 methods (object desctructuring, spread operator, ...) in your toggleTodo, addTodo and deleteTodo methods.
- Add a FilterGroup with FilterButton components which can set the filter state
- Depending on the filter state (declerative!), pass a filtered list to the TodoList component.

Note: To see how the form would look with a controlled component, checkout origin/lesson-06-with-controlled-component