DMIT2008 Thinking in React Report

Introduction

For this assessment, you and your partner from the previous theory assignment will need to prepare web report (a single web page) on Thinking in React and how the concepts of the React library can be applied to create a UI solution. Your report should be well thought-out and informative.

Tasks

You and your partner are tasked with creating a short report on the use of React to create an interactive UI for a previous application – the Current Weather app (from assignment 02). You may approach this problem with the assumption that the current solution (from either one of your previous solutions) is the starting point, or you may create an entirely new UI mock up to start from. Work through and apply the theory from section 12 of the React Main Concepts guide (https://reactjs.org/docs/thinking-in-react.html) to your solution. You do not have to build a working React solution for this assignment, you need to document how you *would* go about building the React solution.

As with the previous theory assessment, how you and your partner decide to split the work is up to you, but there must be evidence that both have contributed to the assessment.

Guide

The following list provides a basic guide for how your report *may* be structured; it is based on the content from section 12 of the Main Concepts page (see link above):

- Start with a mock:
  - As mentioned above, this mock can be based on one of your current solutions, or can be a new design mock created by your pairing
  - Ensure that all previous requirements are met (e.g. location search, current weather display, and five-day forecast)
- Break the UI into a component hierarchy
  - Identify components you will need and how they will relate to each other (will they be siblings, children, etc.)
  - Name your components appropriately
- Build a static version of your app in React
  - Follow the suggestions in this section of the guide, and don't worry to much (i.e. don't worry at all) about actual performance and functionality – the intent here is to explore how your ideas will work, not *if* they work
- Identify the minimal representation of state
  - What in your app will best be represented as state vs. props (if anything)
- Identify where state will live

    - Locate the most local level for the state to exist and consider when/if state should be 'lifted up' (https://reactjs.org/docs/lifting-state-up.html)
- Add inverse data flow if, and only if, it is necessary

Requirements

- This assessment will be completed in groups of 2
- You will submit a single page website/report representing your analysis

Deliverables

A single web page on the design pattern must be delivered. Please have one partner upload a zip archive of your research notes, planning docs, sample demo code, and final web page report (self-contained) for this assessment.

If you have any questions regarding this assignment, be sure to seek guidance from you instructor.