INM420 – React TypeScript Counter

Objective

Create a working simple date counter with TypeScript and React. Start with the following repository:

https://github.com/Plasnid/reactTSCounter

Using the simple counter above as a start point, create a simple program with the following.

Begin your project with the create-react-app command and the TypeScript flag

- Create a date counter component as a React Component. The component must contain:
    - A state with entries for:
        - Year(starting at 1980)
        - Month(starting at 6)
        - Day(starting at 1)
    - A function for incrementing the year
    - A function for decrementing the year
    - A function for incrementing the month
    - A function for decrementing the month
    - A function for incrementing the day
    - A function for decrementing the day
- Create 3 counter components as functional components:
    - Year Counter
    - Month Counter
    - Day Counter
- Eact Counter should have the following
    - dynamic title display text passed in as a prop
    - A display of the appropriate year, month or day from the props
    - increment button with the correct increment function passed from the props
    - decrement button with the correct decrement function passed from the props

Requirements

- Start with create-react-app with the TypeScript flag
- Use TypeScript syntax and tsx files
- The year, month, and day counters must come from the same component
- Store all data in the state

Submission Notes

- Place all of your files in a folder named <firstInitial>_<lastName>
- Zip your folder and submit to blackboard

Evaluation Breakdown

- 10% - Comments in all files
- 15% - Proper usage of state
- 15% - Semantic HTML through TSX
- 15% - Usage of props to carry through state data and functions to components
- 15% - All visual components of the site contain rendered from React Components and React Functional Components
- 15% - Using of both React Components and Functional Components
- 15% - Proper usage of TypeScript

This project is worth 10% of your final grade.