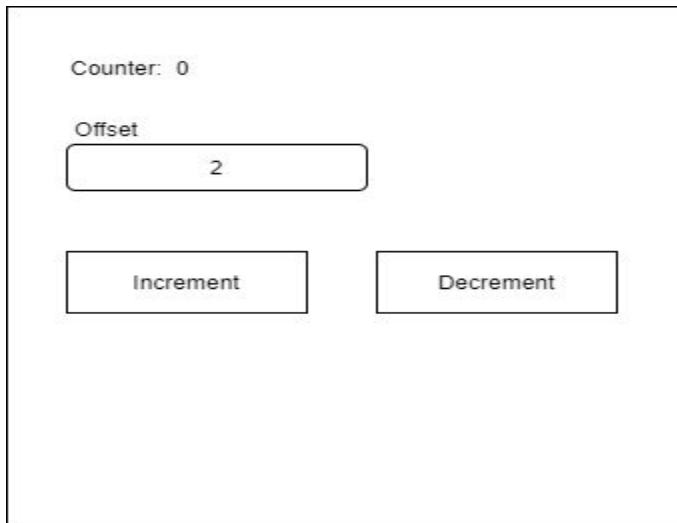


Introduction to React

Practice Problem: Week 1

1. What is the significance of Virtual DOM? How can Virtual DOM make a page more performant than original DOM? Demonstrate with a code example.
2. How JSX is different from HTML? Explain with examples.
3. The `setState()` method, is it sync or async? In either case, defend your answer why the `setState()` operates as it does.
4. Using React, create a simple counter. It would have one “Increment” and one “Decrement” button. There should be an input field named “Offset”. If Offset = 2, counter will be incremented/decremented by 2. If Offset = 5, counter will increment/decrement by 5.

For better understanding, a mock is given below:



The mock UI is contained within a rectangular border. At the top left, it says "Counter: 0". Below this, there is a label "Offset" followed by a text input field containing the number "2". At the bottom, there are two rectangular buttons side-by-side. The left button is labeled "Increment" and the right button is labeled "Decrement".

5. Using React, Create a BMI Calculator. It would take height and weight as input (from Forms) and upon a button click, show the calculated BMI.

NOTE: Please follow this video tutorial to know more about text inputs:

<https://www.youtube.com/watch?v=fcMNZ7j4JSg>

General Hint: Some answers can be found directly in the React documentation.

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