


Coding Questions

1. Challenge 1: Create a **React (preferably NextJs)** page with any design that works like a calculator that can add two numbers.

Functionality: When user place numbers on first and second input and hit the button. The sum should appear on the `Total: ` as an output.

Please refer to the image below;

Adding Two Numbers



Total:

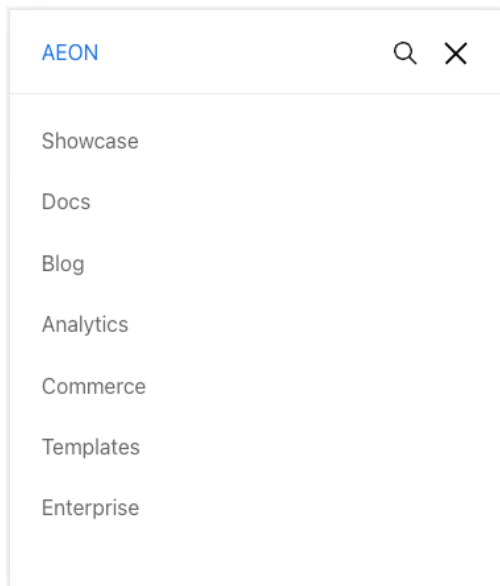
2. Challenge 2: Create a blank page using **React (preferably NextJs)** that contains the navbar as below.

- a. Navbar title can be any name. You can follow the sample image below
- b. Navbar should use `<a>` tag with `href=""`
- c. Please only create a search input without any functions.
- d. Mobile view is optional.
 - i. The navbar should close when user click [X]
 - ii. Replace X icon with Hamburger icon
 - iii. The navbar should open when user click the icon

Desktop View



Mobile View (Bonus)



3. Challenge 3: Two Sum II - Input Array Is Sorted

Create a simple page using **React (preferably NextJs)** that can cater for following functionalities;

Given a **1-indexed** array of integers numbers that is already **sorted in non-decreasing order**, find two numbers such that they add up to a specific target number. Let these two numbers be numbers[index1] and numbers[index2] where $1 \leq \text{index1} < \text{index2} < \text{numbers.length}$.

Return *the indices of the two numbers, index1 and index2, **added by one** as an integer array [index1, index2] of length 2.*

The tests are generated such that there is **exactly one solution**. You **may not** use the same element twice.

Your solution must use only constant extra space.

You can use Javascript or Typescript. Please provide your answer as sample structure below.

```
/**
 * @param {number[]} numbers
 * @param {number} target
 * @return {number[]}
 */
const twoSum = function (numbers, target) {
    // your code here
};

function twoSum(numbers: number[], target: number): number[] {
    // your code here
}

console.log(twoSum([4, 11, 17, 25], 21));
console.log(twoSum([0, 1, 2, 2, 3, 5], 4));
console.log(twoSum([-1, 0], -1));
```

Example 1:

Input: numbers = [2,7,11,15], target = 9

Output: [1,2]

Explanation: The sum of 2 and 7 is 9. Therefore, index₁ = 1, index₂ = 2. We return [1, 2].

Example 2:

Input: numbers = [2,3,4], target = 6

Output: [1,3]

Explanation: The sum of 2 and 4 is 6. Therefore index₁ = 1, index₂ = 3. We return [1, 3].

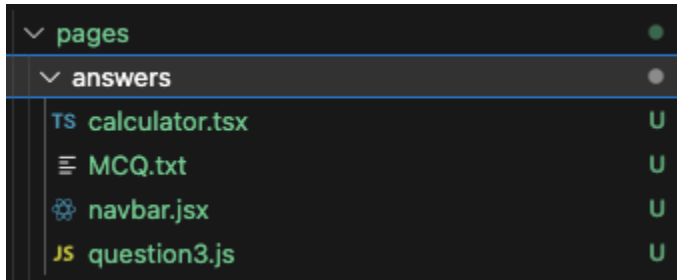
Example 3:

Input: numbers = [-1,0], target = -1

Output: [1,2]

Notes:

1. Provide us with how to run your code in a readMe file
2. Please complete the test given in **Javascript or Typescript**
3. Please use **React (preferably NextJs)** for the framework
4. Option 1: send us the answers in a zipped file via Google Drive link or Option 2: you can also provide your answers through Github. Please provide us with the repository link.
5. See example below:



6. If you are shortlisted, we are expecting you to **demo and walk us** through your solution from your machine in the interview after submission