Numeric Sequence Generator

Create an Angular/React app to generate sequence and display N numbers from the sequence in selected shape

Functionality

- 1. Welcome Page (Route: http://localhost/welcome, default route)
 - a. Show welcome message and ask users to input their name.
 - b. When clicked on the continue button, save the entered name in local storage and redirect to the home page.
 - c. When welcome page loads check,
 - i. If user name is saved in the local storage redirect to home page
 - ii. If user name is not saved in the local storage, then stay on welcome page to get name from user
- 2. Home Page (Route: http://localhost/home)
 - a. Show Hello "Name", name of the user from local storage.
 - b. Show a text box to take N, a number as input and also show a dropdown for choosing display option.
 - c. When clicked on submit, you need to generate the sequence and display N numbers from the sequence. Here, N is the number entered in the input box. The sequence should be as given below.

Sequence: 2, 4, 6, 9, 12, 15, 19, 23, 27, ... ∞.

- E.g. 1: if input N is 5, the numbers 2, 4, 6, 9, 12 should be displayed.
- E.g. 2: if input N is 9, the numbers 2, 4, 6, 9, 12, 15, 19, 23, 27 should be displayed.
- d. Display numbers in square or circle as per the selected display option in the dropdown.
- e. When home page loads check
 - i. if user name is saved in local storage, display as in the navbar component
 - ii. If user name is not saved in the local storage, redirect to welcome page
- f. Home page should have three components
 - i. Navbar,
 - ii. Input Component
 - iii. Output Component

Refer: https://share.getcloudapp.com/04uLB46L

Sequence Logic:

- The sequence starts from 2
- From 2 it increases by 2 for the next 2 numbers.
- Then it increases by 3 for the next 3 numbers.
- After that, it increases by 4 for next 4 numbers, then by 5 for next 5 numbers and so on up to infinity.

Implement assignment as below:

- Task 1: Implement welcome, home page routing along with given design
- Task 2: Create Home page components as per instructions
- Task 3: Accept name from user and display on home page
- Task 4: Generate the number series as per user input and sequence logic
- Task 5: Implement redirection logic based on whether user name is saved or not for Welcome page
- Task 6: Implement redirection logic based on whether user name is saved or not for Home page

Click here to view and download the design

You need to strictly use this design only.