Objective of this Test Case

The main objective of this test case is to gain an understanding of your approach to a relevant software development problem. The test case should take approximately 2-3 hours, but you will be given one day to complete the test case. The test case may serve as a discussion point as we proceed through the interviewing process.

Test Case Description

Write a web application to sort data.

INPUT:

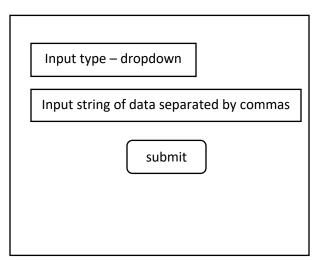
The application should receive as an input a string of values separated by comma (the values could be strings or numbers)

OUTPUT:

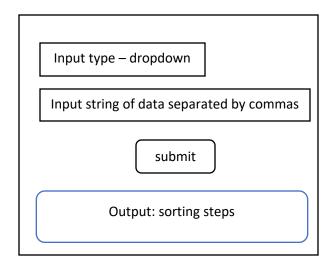
The application shows to the user all the sorting steps

PROCESS:

1. Write the client web page to receive user's input (React)



- 2. Send a request to server (NodeJS)
- 3. Server stores the request in local SQLite database
- 4. Server should **sort the array** (you may use any sorting algorithm as you see fit) and **record all step of sorting**.
- 5. Update the database with the sorting steps (demonstrate an understanding of one to many relations)
- 6. Send a response to the client with **sorting steps**.
- 7. Client shows steps of sorting from the server



LIMITS:

Input size is 1 to 100 values.

Numeric values are integer size.

String values are up to 10 characters long.

ASSESSMENT CRITERIA:

Your answer will be evaluated by:

- 1. Code organization/file structure
- 2. Algorithm implementation
- 3. Present strong knowledge of JavaScript
- 4. Present strong knowledge of NodeJS (server-side coding)
- 5. Correctness of values displayed in view/UI
- 6. Clarity of View/ UI
- 7. Responsive UI is an asset
- 8. Code clarity (e.g., layout, comments, coding structure)

Good Luck!