

****Question: Data Compression and Decompression****

Our web application is being developed to deliver and present large data sets to users quickly. To achieve faster data delivery, data needs to be compressed on the server-side, and then this compressed data needs to be decompressed and displayed on the client-side.

Here is our question: We expect you to create middleware that handles data compression and decompression. This middleware should automatically perform data compression and decompression between the server and the client.

The functionality of the middleware should be as follows:

****On the Server Side:****

1. The middleware should compress incoming data on the server-side.
2. It should send the compressed data as a response to the client.

****On the Client Side (Vue.js or React.js):****

1. The middleware should decompress incoming compressed data on the client-side.
2. Using the decompressed data, it should create a page or component on the client-side.

We grant you the freedom to determine how to create and use the middleware. You should specify which technologies and libraries you will use and explain how you implement this functionality.

Please consider the performance, reliability, and scalability of the middleware while solving this question. Also, explain how the developed middleware can be tested and used.

Pay attention to clean code design, and you can develop it using TypeScript as well.