Full-stack Engineer Assignment

Problem Statement

Develop a high performance application with an elegant user interface for basic file data analysis and masking.
The interface should provide the following features:

1. Allow a user to upload multiple large files.

2. For every file uploaded, present the user with an analytics view that includes:
   a. File name
   b. File size
   c. List, along with the count, of all the unique words in the file

3. Find the count of specific words and their synonyms present in the file.
   For finding synonyms you can use the given Yandex API or any other library/ API of your choice.

   API Details
   API: https://dictionary.yandex.net/api/v1/dicservice.json/lookup
   Documentation: https://tech.yandex.com/dictionary/doc/dg/reference/lookup-docpage/
   API Key:
   dict.1.1.20170610T055246Z.0f11bdc42e7b693a.eefbde961e10106a4efa7d852287caa49 ecc68cf (please get your own free key if this doesn't work)

4. Mask a given set of words in the file and stream the updated file back for the user.

Important things to consider

1. Build your backend using NodeJS and frontend with React.
2. You can choose any appropriate database.
3. Do not compromise on the end-user experience and the application performance.
4. Write high-quality and maintainable code.
5. Document any assumptions you are making.
6. Document the important test cases and write tests for this solution.
7. Present a detailed design of your solution that includes system architecture and interaction among components.
8. Containerize your app for easy deployment.
9. Document the steps to run your solution locally in the Dev environment.

Assignment Duration: 3 days