NOTE: You are NOT supposed to solve these questions using AI or copying and pasting open-source code.

Q1 [React, TypeScript]

Word Error Rate (WER) is a common metric for evaluating the quality of speech recognition systems. It measures how different a predicted sentence (hypothesis) is from the correct sentence (reference) at the word level.

For example:

Reference: `I like green eggs`
Hypothesis: `I like eggs`
In this case, the word `green` is missing. This corresponds to one deletion.

Reference: `THEIR THERE`
Hypothesis: `THEIR THEIR`
In this case, `THERE` is replaced by `THEIR`. This corresponds to one substitution.

Reference: `Please call me tomorrow`
Hypothesis: `Please definitely call me tomorrow`
In this case, `definitely` an extra word. This corresponds to one insertion.

WER is defined as: `WER = (S + D + I) / N` Where: `S` is the number of substitutions, `D` is the number of deletions, `I` is the number of insertions, and `N` is the number of words in the reference sentence.

Given two sentences (reference and hypothesis), implement a web application that:

1. Computes the WER between the two sentences.
2. Displays the number of substitutions, deletions, insertions, and the number of reference words.
3. Produces a word-level alignment showing matches, substitutions, deletions, and insertions.
4. Animates the alignment process used to determine the edit operations.

The application should:

1. Accept two input sentences from the user.
2. Tokenize by splitting on whitespace.
3. Be case-insensitive.
4. Clearly show how words are aligned.
5. Provide controls to start, pause, and reset.
6. The alignment visualization should clearly highlight matched, substituted, deleted, and inserted words.