Requirement

In C#, write a program that parses a sentence and replaces each word with the following: first letter, number of distinct characters between first and last character, and last letter.

For example, Smooth would become S3h. Words are separated by spaces or non-alphabetic characters and these separators should be maintained in their original form and location in the answer.

Technical Specifications.

The project considers back-end and front-end. The back-end is an API built in .Net Core and it contains the logic to parse the string according to the requirement. The front-end is a React project that calls the API, this project encodes the string and sends it to the API, then the API decodes the string and parses it.

How to run the project.

To run the application, follow these steps.

- 1. With Visual Studio Code, open the "parser" folder inside "ParserReact"
- 2. Open a new Terminal from menu/Terminal/New Terminal

```
PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

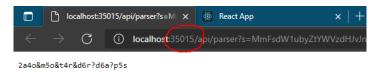
PS C:\Users\angel\Source\Repos\ParserReact\parser>
```

3. Execute the following command.

npm install

4. After a few seconds, you will see something like the following image.

5. Now, run the .Net Core API project and check the port.



- 6. Copy the port in any place and go to Visual Studio Code in src/components/parser to open the file Parser.js
- 7. Then change the port as shown.

```
import './Parser.css'

function Parser() {

   const [unparsedText,setUnparsedText] = useState("");
   const [parsedText,setParsedText] = useState("");
   const port ('35015';)
```

- 8. Click on save changes or Ctrl+s
- 9. In Visual Studio Code terminal, write and run this command.

npm start

The following web page will show:

