Touchsides Technical Assignment

Thank you for the time you're investing into our recruitment process. This is the technical challenge which I'd like you to complete. Please try do it without Googling it too much. Where you do Google resources, please cite them.

QUESTION 1

Please develop a console / GUI application that is used to determine the frequency of each word that appears in the book War and Peace by Leo Tolstoy. Your application can be written in C# or Java.

Ideally your application will have a user interface that allows the user to select/specify the input file and displays the answers to the below questions as static output.

Output:
Most frequent word: {word} occurred {x} times
Most frequent 7-character word: {word} occurred {x} times
Highest scoring word(s) (according to the score table): {word} with a score of {x}

QUESTION 2

Please assess the performance of your application using the usual measures. Please write a paragraph or two describing the performance achieved and possible ways you could improve it.

Resource 1

Project Gutenberg download for War and Peace: https://www.gutenberg.org/files/2600/2600-0.txt

Resource 2

Th score value for each letter can be seen in the tables below. These values loosely follow Scrabble. Implementing all Scrabble scoring rules is not required.

Letter	Score
A	1
B	3
C	3
D	2
E	1
F	4
G	2
H	4
I	1

Letter	Score
J	8
K	5
L	1
M	3
N	1
O	1
P	3
Q	10
R	1

Letter	Score
S	1
T	1
U	1
V	4
W	4
X	8
Y	4
Z	10