

Text Editor

IT 205

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Problem Statement for the Text Editor

- Text Editor are used to type any article or an email or change documentation file and programming source code ...

- Functions :

- ① **Add the string ::**

Here we can input the string any time during the running of the program.

- ② **Undo string ::**

We have used the undo program to remove the last string that we have added and this will store in redo stack

- ③ **Redo string ::**

We can add that string which we removed last time that stored in top of the Redo stack .

- ④ **Find and Replace string ::**

If we want to change the string then we can change the string which we have to put on that place.

- ⑤ **Search string ::**

If we want to search any word /string it will find and highlight entered word.

How you approach the problem

- Which data structure we used?
 - Here for **Undo** , **Redo** operation we have used the **Stack** data structure to perform pop and push element operation most efficiently .
 - Here We can not use Queue or any other Data structure as well as Stack because we can't insert and remove string following **Last In First Out** rule.
 - **Linked List** is used to store input string without capacity problem that we faced during using of Array .

Things you learned during the entire project

- We have learnt Most basic implementation of stack that is Undo-Redo through Pop-Push .
- Two stack based implementation will Add feature of Undo more than 1 string/word that is not available in notepad .
- We learnt about What extra features we can add or needed while making Text -Editor like , Replace string one by one if more occurrence detected , search element in text
- Some subsidiary things How to make Editor looks good by adding graphic like Font color , etc.

Limitations for your project

- We can not add string at in between of sentence at specific Position .
- We can not undo character from the any string, we have to undo whole string .
- We can not change the character from the any string, we have to replace whole string by the correct string .
- Updating screen each time after calling function will increase time complexity of program .