Project Milestone-2

Group: CS311S20PID-G58

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Project Name: Plagiarism Checker Tool

Language: C# (Desktop Application)

Algorithm: Rabin-Karp (with some of our modification + using hash tables)

Pseudo Code

string ReadFile()

```
{
        int N = total.number.of.files ;          //Number of Files
        string file_array [N] = { } ;            //array for storing read file
        for ( int i = 0 ; i-to-N ; i++ )     //Reading files from 1-to-N.files
        {
                file_array[i] = file.i ;
        }
        return file_array[];
}
```

int GenerateHashTables(string array[N])

```
{

        HT_array[N] ;                                   //array for storing hashtables
        for( int i=0  ;  i-to-file_array  ; i++ )       //for loop upto  N-files
        {
                hashtable HT(i) = new hashtable() ;     //creating hashtables
                HT_array[i] = HT(i) ;
        }
        return HT_array[] ;
}
```

string MatchingData(int HT_array)

```
{
int var = 0 ;                           //variable for indexing matching array
string MatchedArray[] ;                 //string array for storing matched words
string miniTable = HT.Smallest  ;
                /* using smallest file hashtable to compare the matching text
                of it with every other file hash table */
for(int x=1  ;  x-to-last.file  ; x++ )         //loop goes upto all files
        {
                for( int i=0  ;  i-to-end.of.file(x)  ; i++ )
```

```
                                        /*loop goes upto all words of file x */
                {


                        if( word[x] == word.of.hashtable[i] )
                                {
                                MatchedArray[var] = word[x] ;
                                                /*if the word matches then it is
                                                stored in the matchedarray  */
                                var++ ;
                                }
                        else
                                continue ;
                }
        }
        return MatchedArray[] ;
}
```