Credit Name: CSE3010 - Computer Science 3

Assignment Name: FindAndReplace.java

How has your program changed from planning to coding to now? Please explain?

Originally the code used an a FileWriter similarly to how the originale version of the Roster.java assignment used it write and add a list of each students first and last name to the the file named by the user.

Only instead of a list of each students first and last name it was replacing the first word entered by the user with a second word entered by them when it found the first word in the file that was named by the user.

The first version also attempted to use a int called counter to count how many instences of the first word are in the file so that it could replace them with the second word writing the replacement word where the instences of the first word are in the file.

Whereas the final version of the code would creates a text file after the user enters a file name and then creates a new text file with the word new at the end of the originale name in order to be able to tell which file has the originale word replaced with the second word.

The final version also reads each individual line in the text file and replaces the originale word with the second word for each line of text writing the new line of text to the new file.

Image of First version Below:

```
{

      in = new FileReader(textFile);
      readFile = new BufferedReader(in);
```

```
                while((searchWOP = readFile.readLine()) != null)
                {
                      /*score = readFile.readLine();*/
                      System.out.println(searchWOP + " " + " ");
                      /*System.out.println();*/

                }//end of while loop


                readFile.close();
                in.close();

          }catch(FileNotFoundException e)
          {
                System.out.println("File does not exist. ");
                System.err.println("FileNotFoundException: "+
e.getMessage());
          }
          catch (IOException e)
          {
                System.out.println("File could not created. ");
                System.err.println("IOException: "+ e.getMessage());
          }


          /*
          //Read data from file and process
          try
          {
                dataFile = new File(fileName);
                in = new FileReader(dataFile);
                readFile = new BufferedReader(in);

                while((searchWOP = readFile.readLine()) != null)
                {
                      score = readFile.readLine();
                      System.out.println(searchWOP + " " + " ");
                      System.out.println();

                }//end of while loop


                readFile.close();
                in.close();

          }catch(FileNotFoundException e)
          {
                System.out.println("File does not exist. ");
```

```
                System.err.println("FileNotFoundException: "+
 e.getMessage());
             }
             catch (IOException e)
             {
                   System.out.println("File could not created. ");
                   System.err.println("IOException: "+ e.getMessage());
             }

             //Determine/Check to see if the file exists
                         textFile = new File(fileName);

                         if(textFile.exists())
                         {
                               System.out.println("Find&Replace.txt file
 exists! ");
                         }
                         else
                         {
                               try
                               {
```

```
                                    textFile.createNewFile();
                                    System.out.println("Find&Replace.txt
file has been created! ");
                              }
                              catch(IOException e)
                              {

                                    System.out.println("File could not be
created. ");
                                    System.err.print("IOException: " +
e.getMessage());
                              }

                              System.out.println("File Does Not Exists!
");
                        }

                                    try
                                    {

                                          dataFile = new File(fileName);
                                          out = new FileWriter(dataFile);
                                          writeFile = new
BufferedWriter(out);


                                          for(int i = 0; i < numSWOP; i++)
                                          {
                                                System.out.println("Enter
the students name: ");

                                                stuName = input.next();
                                                System.out.println("Enter
search word or phrase: ");
                                                searchWOP = input.next();
```

```
                                          System.out.println("Enter
replacement word or phrase: ");
                                          replacementWOP =
input.next();


      searchWOP.setActionCommand("searchWOP");

      searchWOP.addActionListener(new ActionListener()
                                          {
                                                public void
actionPerformed(ActionEvent e)
                                                {
                                                      counter++;


                                                      if(counter == 5)
                                                      {
                                                            counter =
1;
                                                      }
                                                      else
                                                      {


      System.out.println(counter);
                                                      }
                                                }
                                          });


      writeFile.write(replacementWOP);
                                          writeFile.newLine();


                                    }
                                    writeFile.close();
```

```
                                        writeFile.close();
                                        out.close();
                                        System.out.println("Data written
to file! ");

                                  }catch (IOException e)
                                  {
                                        System.out.println("File could
not be created. ");
                                        System.err.println("IOException:
"+ e.getMessage());
                                  }

                                  */



      }
```

Image of final version Below:

```
package Mastery;


import java.io.BufferedReader;
import java.io.BufferedWriter;
import java.io.File;
import java.io.FileNotFoundException;
import java.io.FileReader;
import java.io.FileWriter;
import java.io.IOException;
import java.util.Scanner;

public class FindAndReplace
{

      public static void main(String[] args)
      {
            FileReader in;
            FileWriter out;

            BufferedReader readFile;
            BufferedWriter writeFile;
            Scanner input = new Scanner(System.in);
            String fileName;
            String searchWOP;
            String replacementWOP;
            File textFile;
            File newFile;
            String lineOfText;



            //create the file
            /*textFile = new
File("C:\\Users\\26031001\\git\\CS30Fall2023\\Chapter11\\Find&Replace.txt
");*/


            //Obtain the file name, the search word or phrase and the
replacement word or phrase from the user/Write data to file
            System.out.println("Enter the file name: ");
            fileName = input.nextLine();
            textFile = new File(fileName);
            System.out.println("Enter search word or phrase: ");//the
search word or phrase is "No"
            searchWOP = input.nextLine();

            System.out.println("Enter replacement word or phrase:
");//the replacement word or phrase is "Yes"
            replacementWOP = input.nextLine();
            //Read each line of text from the file, make replacement, and
write line to the new file
            try
            {




                  in = new FileReader(textFile);
                  readFile = new BufferedReader(in);
                  fileName = fileName.replace(".", "NEW."); //create a
  file name for the new file
                  newFile = new File(fileName);
```

```
                    newFile = new File(fileName);
                    out = new FileWriter(newFile);
                    writeFile = new BufferedWriter(out);

                    while((lineOfText = readFile.readLine()) != null)
                    {
                          lineOfText = lineOfText.replaceAll(searchWOP,
replacementWOP);
                          writeFile.write(lineOfText);
                          writeFile.newLine();

                    }//end of while loop

                    writeFile.close();
                    out.close();
                    System.out.println("Data written to file! ");
                    readFile.close();
                    in.close();

              }catch(FileNotFoundException e)
              {
                    System.out.println("File does not exist. ");
                    System.err.println("FileNotFoundException: "+
e.getMessage());
              }
              catch (IOException e)
              {
                    System.out.println("File could not be created. ");
                    System.err.println("IOException: "+ e.getMessage());
              }




        }

}
```