

CECS 220 Assignment #6

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Question 1 (11.1): This problem was very quick and easy. I created a class that extended the Exception class called `StringTooLongException` as required. Then in the main driver class I created a string List to store the inputted strings and used a while loop to continue accepting strings and adding them to the list until the user types "DONE". They are added to the list via a method called `addString()` which can throw the `StringTooLongException` if the string length is over 20 characters. To account for this I gave the `main()` method the ability to throw a `StringTooLongException`. When this happens the program is terminated with an error.

Question 2 (11.2): I copied and pasted my solution to the first problem and simply added a try-catch that runs when the user inputs a new string to store. If an exception (specifically the `StringTooLongException`) is caught it prints the error message given by the exception and then continues allowing the user to store strings without terminating the program.

Question 3 (11.5): For this problem I created a panel to actually render the text area along with the save button as well as a label that gives the file status that I thought would suit the problem well. To write to the file I used a `BufferedWriter` that gets created and ran inside the `ActionListener` that is called when the save button is pressed. The writer grabs the text from the text area and writes it back to the file via a `FileWriter` that is initiated when the file is first opened.

[screenshots attached below]

```
"C:\Program ...  
This program will allow you to store strings in a "vault".  
When you're finished adding strings, type "DONE" and the program will finish.  
  
Please enter the string you would like to store: this is a string that will break the program  
Exception in thread "main" problem_1.StringTooLongException: Your string is too long. Please limit it to less than 20 characters.  
    at problem_1.StringVault.addString(StringVault.java:49)  
    at problem_1.StringVault.main(StringVault.java:31) <5 internal calls>  
  
Process finished with exit code 1
```

```
"C:\Program ...  
This program will allow you to store strings in a "vault".  
When you're finished adding strings, type "DONE" and the program will finish.  
  
Please enter the string you would like to store: This is a string.  
String stored!  
  
Please enter the string you would like to store: Testing the vault.  
String stored!  
  
Please enter the string you would like to store: This string will throw an exception.  
Your string is too long. Please limit it to less than 20 characters.  
  
Please enter the string you would like to store: DONE  
  
Your strings have been stored and will be printed below:  
- This is a string.  
- Testing the vault.  
  
Process finished with exit code 0
```



