

Speed Reader – Project Definition

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The program I will be writing will be a Speed Reader. The idea behind the program is to reduce the time it takes to read a passage, article, chapter, etc. by removing the need to scan from word to word and line to line. It will do this by first asking a user to choose how fast she would like to read in words per minute and her desired font size. She will then be prompted to paste a copy of her text into the command prompt with new line characters removed. The body of text will then be split into a vector word by word, and then displayed in the SFML screen word by word. To control the speed of the text display I will use the windows sleep function to delay the displaying of the text images.

My header file will look somewhat similar to this:

```
/*Final Project: Speed Reader
Author: Lucas Peterson
SpeedRead class header file*/

#include <string>
#include <vector>

using namespace std;

class SpeedRead {
public:
    SpeedRead(); //Default Contructor
    void HowTo(); //Displays Program Directions
    int GetWordsPerMinute(); //Read out WPM
    void SetWordsPerMinute(int wpm); //Takes user choice of WPM
    int GetFontSize(); //Read out font size
    void SetFontSize(int s); //Takes user choice of font size
    int GetWordCount(); //Determines size of vector
    void StringIntoVector(string s); //Moves user pasted text into string vector
    void CreateImage(); //Creates Image from string vector
    void BeginReading(); //Begins displaying words on SFML screen
    void SetString(string s); //Takes in User body of text

    static const int MIN_SPEED = 200;
    static const int MAX_SPEED = 800;
    static const int MIN_SIZE = 10;
```

```
static const int MAX_SIZE = 24;

private:
    int wordsPerMinute;
    int fontSize;
    int wordCount;
    string bodyOfText;
    vector<string> words;

};
```

My main pseudo-code will look similar to this:

```
/*PSEUDO CODE
Declare need variables
Declare Speed Read Object
Read Out Directions
Take User Choice Options
Take User Body of Text
Split words into vector
Create SFML window
Create Text Image/Sprite
Display Text at User Desired Speed
*/
```

In terms of foreseen roadblocks that I will encounter, I have realized that the SFML code for this project may be difficult to complete and in realizing that have already reached out to Professor Camp and Professor Buland about this issue. If any other problems arise, I will continue to do so.