

**IDE Documentation**

Christopher Piccirillo

Pablo Rivas

Formal Languages + Computability

May 2<sup>nd</sup>, 2016

**Part 1:** How to set up

**Part 2:** How to use the GUI (with screenshots)

**Part 3:** Enjoy!

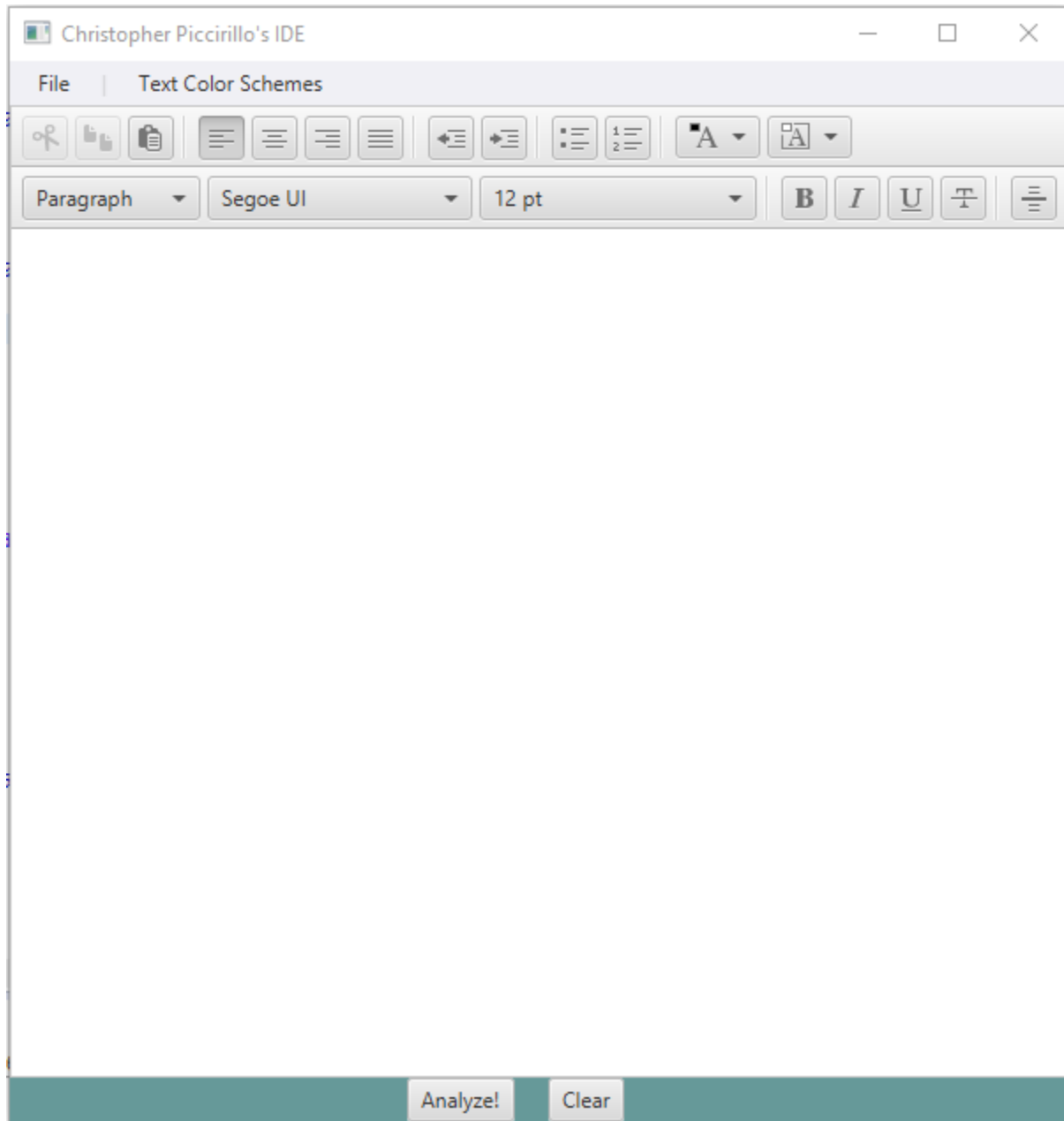
### **Part 1: How to set up (IN COMMAND PROMPT)**

- 1) Pull files from Github: Link below  
[https://github.com/ChristopherPiccirillo/Formal-Languages/tree/master/Final\\_Project/MileStone\\_2](https://github.com/ChristopherPiccirillo/Formal-Languages/tree/master/Final_Project/MileStone_2)
- 2) Open Command Prompt
- 3) Navigate to the folder the 3 java files are located (GUI, checkUserInput, Matrix)
- 4) Compile these files (javac GUI.java, javac checkUserInput.java, javac Matrix.java)
- 5) Run GUI.java, (java GUI)
- 6) This will open the IDE and full functionality will be available.
- 7) Enjoy using the five test programs provided and/or creating your own!

### **Part 1: How to set up (IN AN IDE)**

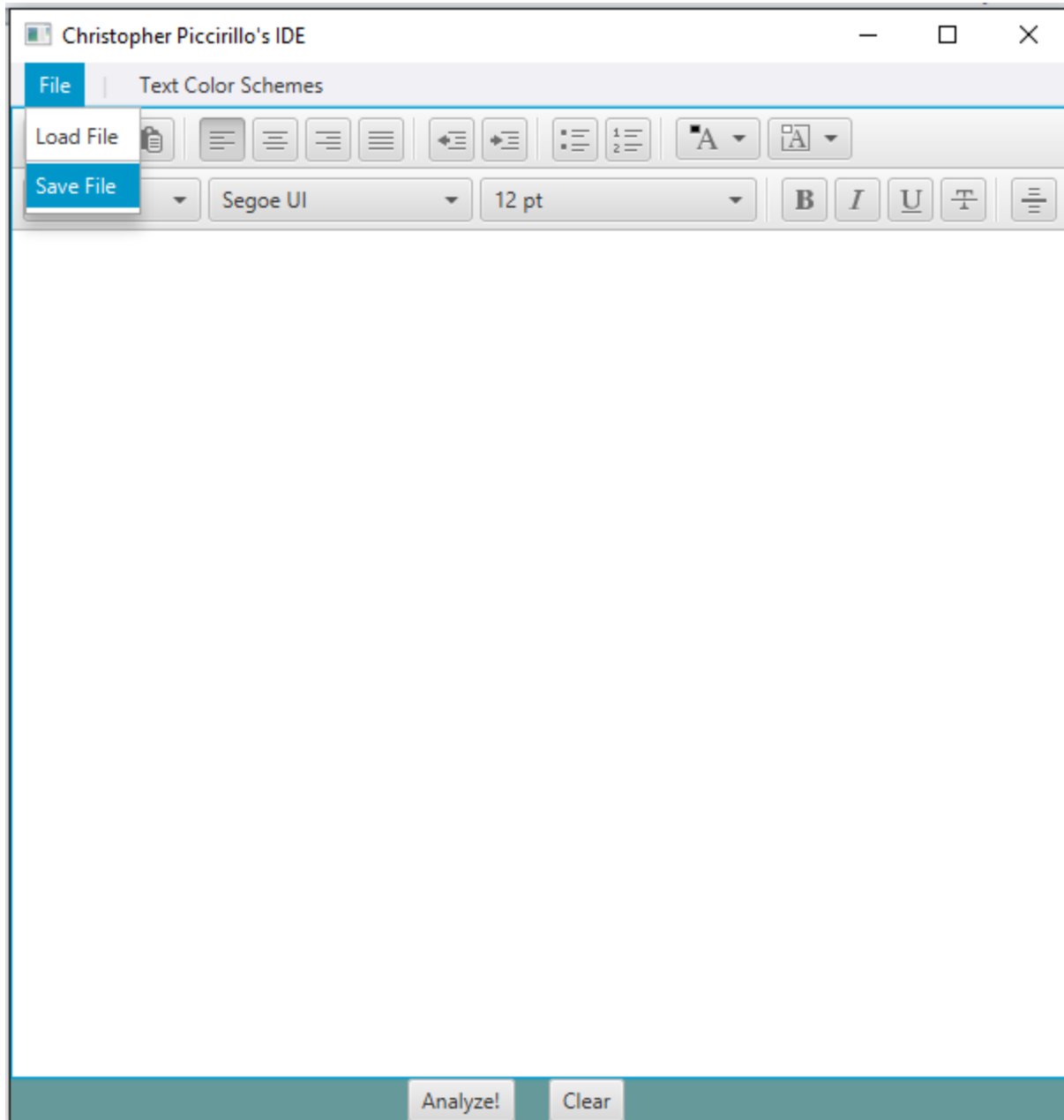
- 1) Pull files from Github: Link below  
[https://github.com/ChristopherPiccirillo/Formal-Languages/tree/master/Final\\_Project/MileStone\\_2](https://github.com/ChristopherPiccirillo/Formal-Languages/tree/master/Final_Project/MileStone_2)
- 2) Open the three java files in an IDE of your choice. (I used Eclipse)
- 3) Compile all files and run GUI.java
- 4) This will open the IDE and full functionality will be available.
- 5) Enjoy using the five test programs provided and/or creating your own!

## Part 2: GUI Overview



My IDE consists of four main buttons aside from the rich HTML editor's built in functionality.

### File Button:

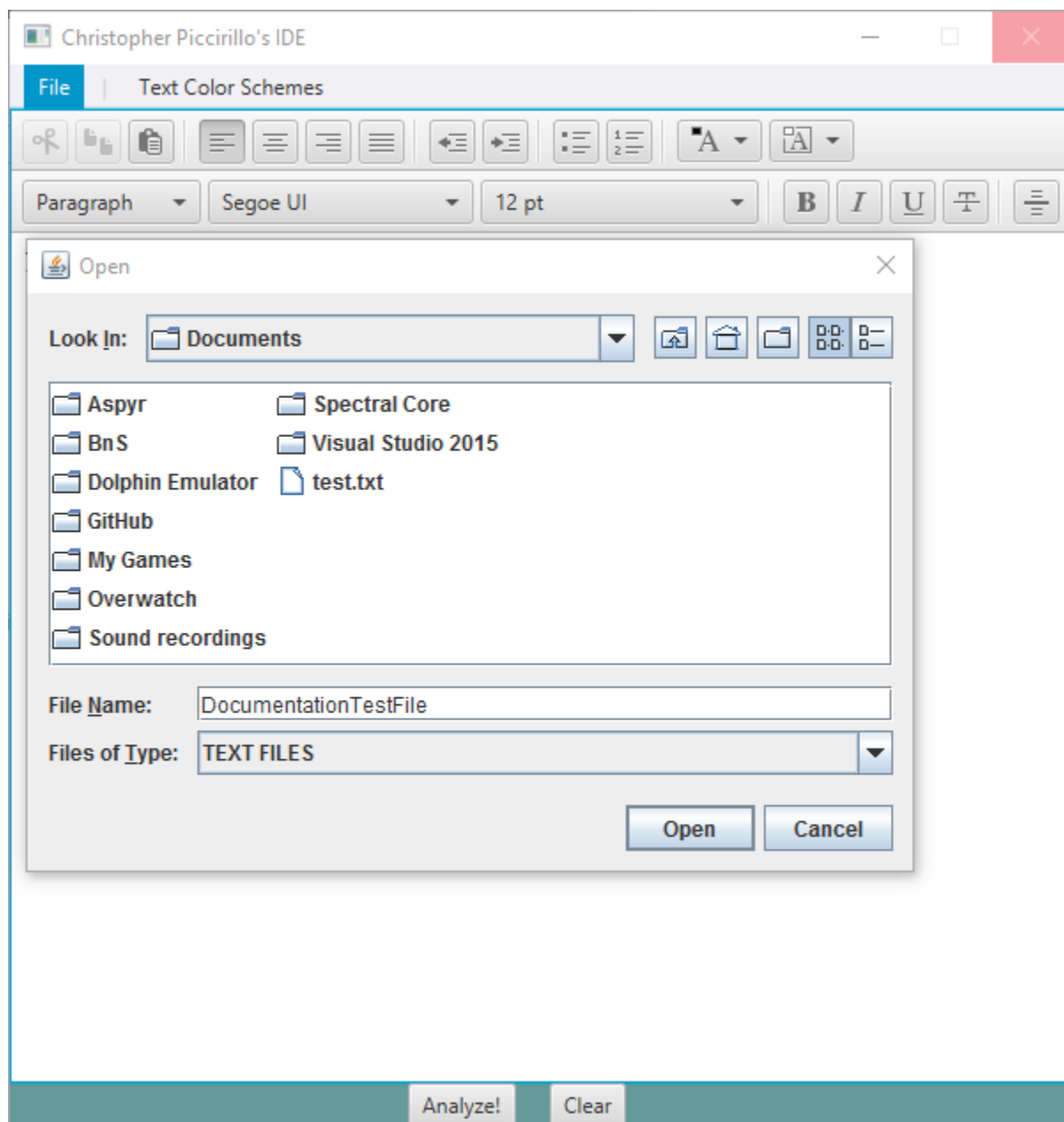


The File button allows a user to load a file from their PC with the Load File button.

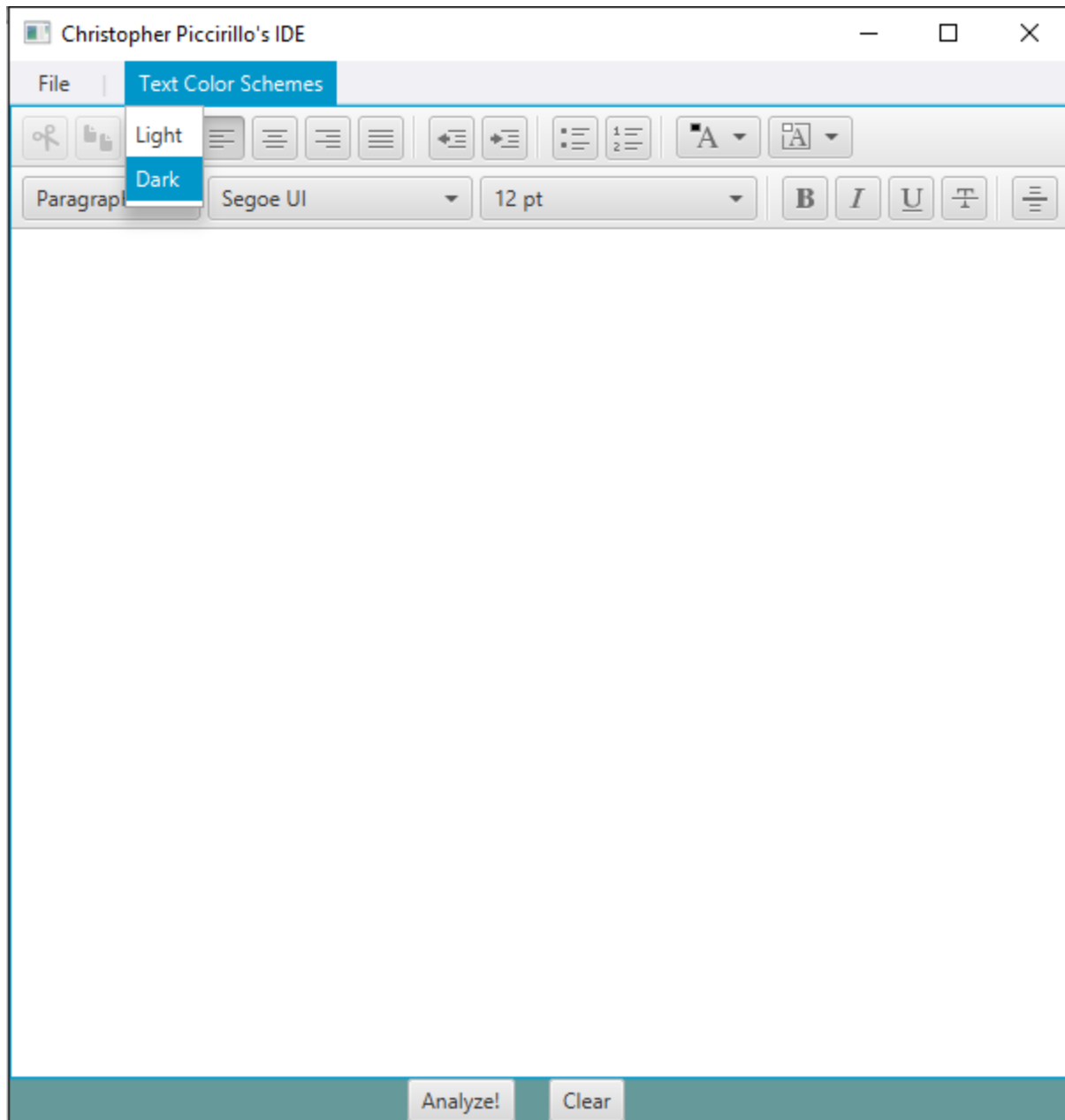
It also allows a user to save a file to their PC with the save file button.

Both use a similar interface shown on the next page.

## File Chooser:

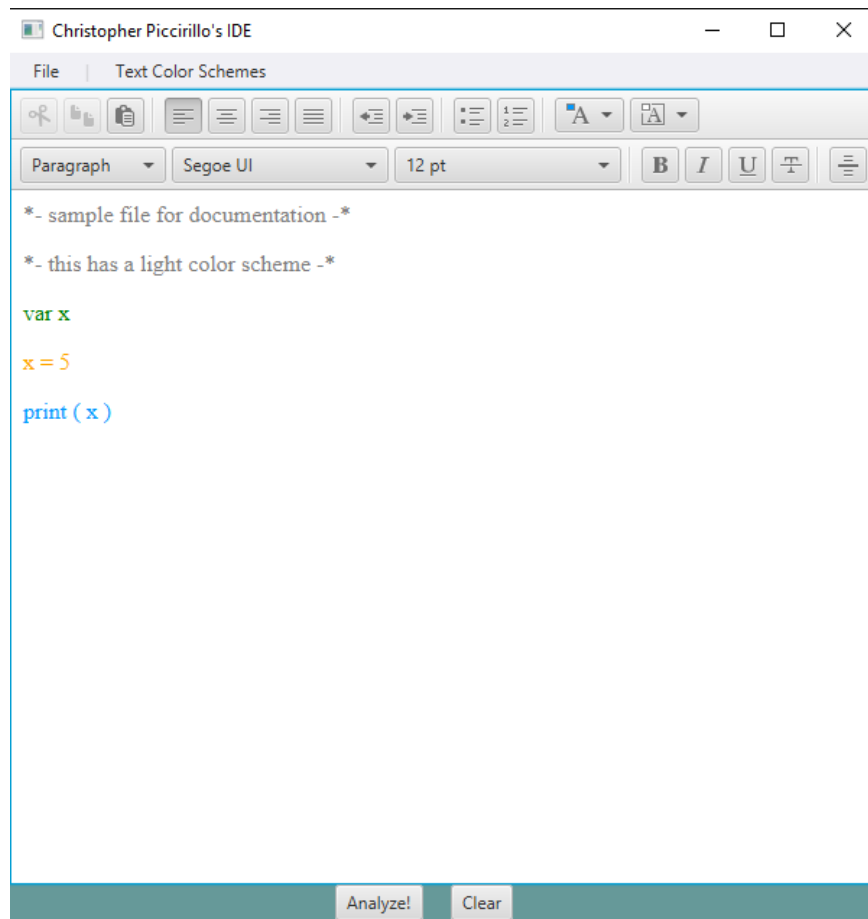


### Text Color Scheme Button:



My Text Color Schemes button allows a user to switch between a darker themed text and a lighter themed text. Both of which are shown on the next page.

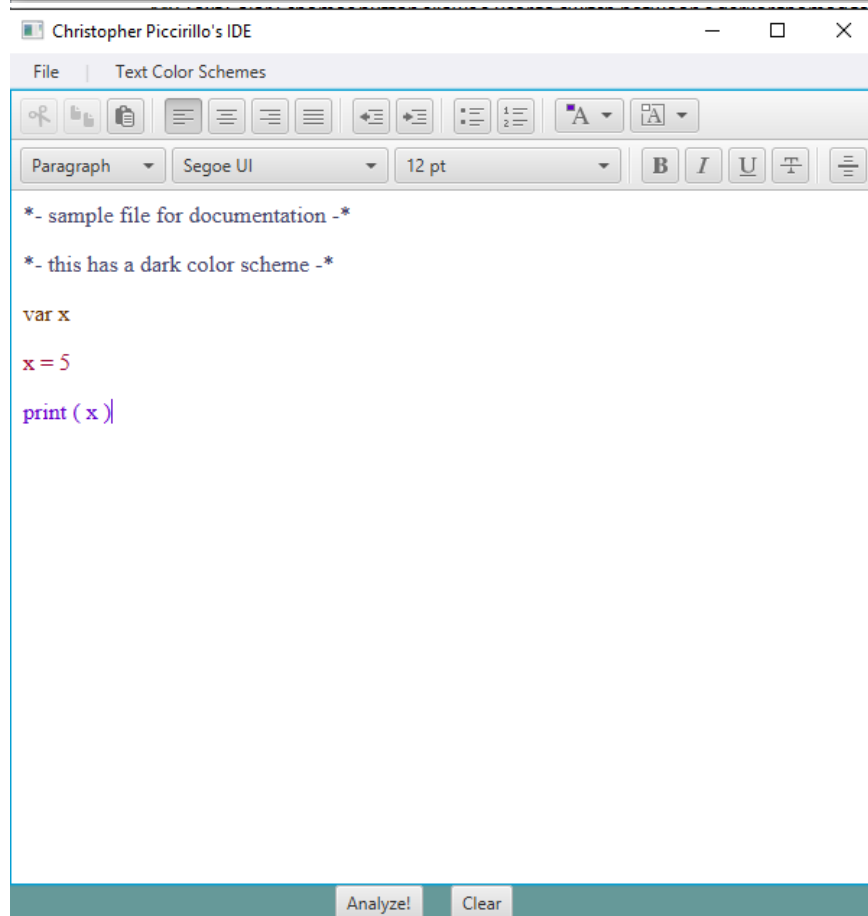
## Light/Dark Text Color Schemes:



The screenshot shows the Christopher Piccirillo's IDE interface. The title bar reads "Christopher Piccirillo's IDE". The menu bar includes "File" and "Text Color Schemes". The toolbar contains icons for file operations (cut, copy, paste, save, undo, redo), text alignment (left, center, right, justified), and text formatting (font color, background color, bold, italic, underline, strikethrough). The status bar shows "Paragraph", "Segoe UI", "12 pt", and buttons for bold, italic, underline, strikethrough, and text alignment. The main text area contains the following code:

```
*- sample file for documentation -*  
*- this has a light color scheme -*  
  
var x  
x = 5  
print ( x )
```

The code is displayed in a light color scheme where keywords are green, numbers are orange, and function names are blue. At the bottom of the window, there are "Analyze!" and "Clear" buttons.



The screenshot shows the Christopher Piccirillo's IDE interface. The title bar reads "Christopher Piccirillo's IDE". The menu bar includes "File" and "Text Color Schemes". The toolbar contains icons for file operations (cut, copy, paste, save, undo, redo), text alignment (left, center, right, justified), and text formatting (font color, background color, bold, italic, underline, strikethrough). The status bar shows "Paragraph", "Segoe UI", "12 pt", and buttons for bold, italic, underline, strikethrough, and text alignment. The main text area contains the following code:

```
*- sample file for documentation -*  
*- this has a dark color scheme -*  
  
var x  
x = 5  
print ( x )
```

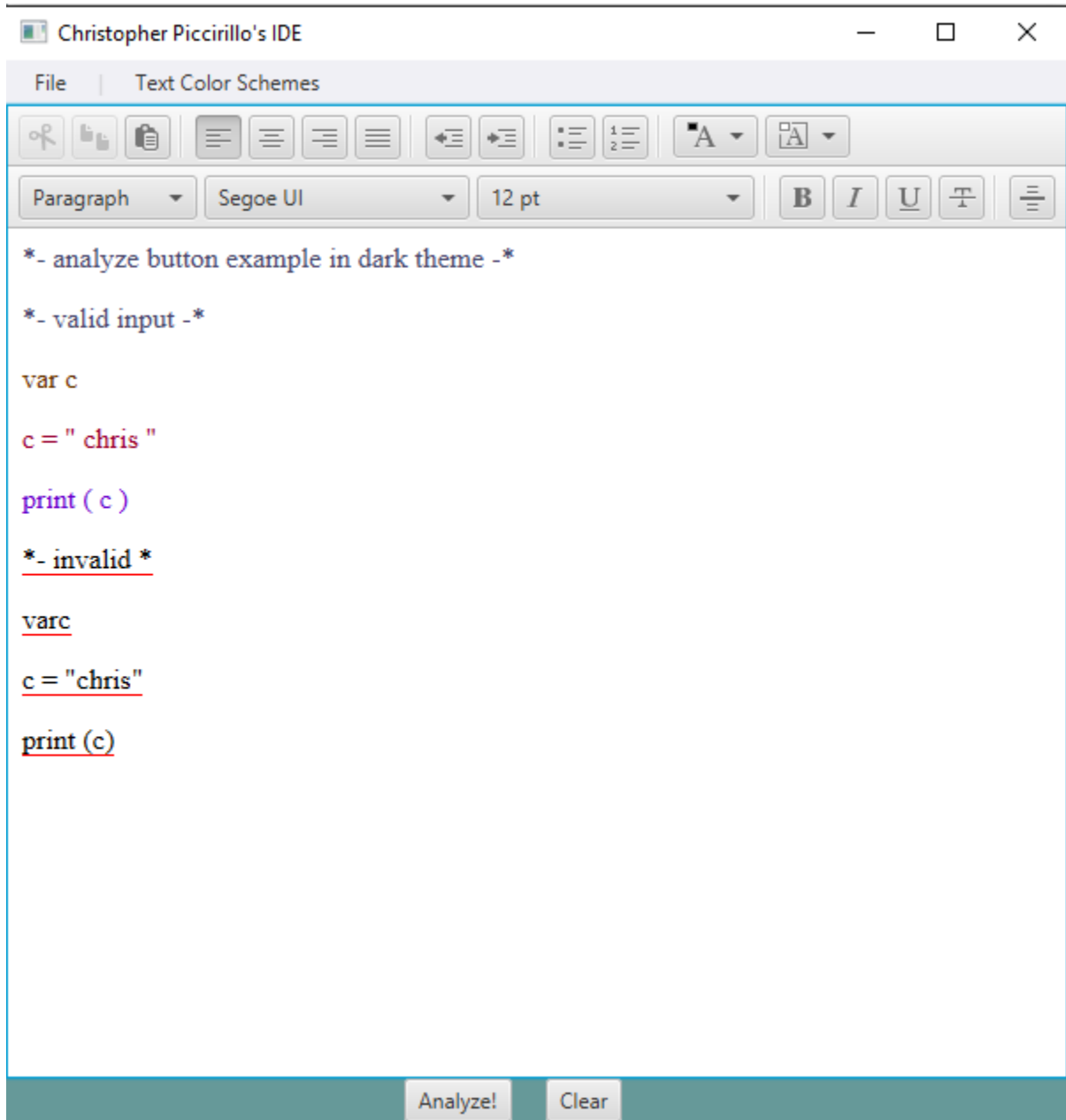
The code is displayed in a dark color scheme where keywords are brown, numbers are red, and function names are purple. At the bottom of the window, there are "Analyze!" and "Clear" buttons.



### Analyze Button:

The analyze button will compare the inputted text to our grammar using a very large DFA. If any of the text does not match our grammar it will be underlined red to alert the user of an error.

Example below:



**Clear Button:**

This button is very simple. Once pressed it will completely delete and clear the text area of our IDE.

### **Part 3:**

This concludes the documentation for this project. All of the code is properly formatted and documented. Any discrepancies should be cleared up in the demo provided.

Enjoy!