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This paper goes over a java styling program to make sure java code has a standard styling. This program can be used by any user to check if their code follows the standards. This paper also outlines how this program differs from others and how the program works. The paper also gives the user proper instructions on how to use the program and how to avoid certain errors.

The main motivation for for making a styling program in java is to improve the readability of code. With people learning how to code and not having proper styling techniques costs time and money. The added cost of time is because it will take longer to understand badly written code, while the money is the time spent. This paper will cover what the system does and how users interact with it. It will also contain a UML for each class and the physical requirements of the system resources. The paper will also review other similar products and what makes this one different. It will also contain a user manual which will guide the user how to operate the program and common errors that they can avoid. At the end this paper will look at the significance this program provides to the programming community.

This program takes in an input file from the user and checks the file for proper styling techniques. Currently the program only works with .java files. Once the user uses the correct console commands to start the program, the program will check if the user included the .java extension in naming the file. If the user did not include it the program will automatically include

it when searching for the file. The program will then check if there is a next line to check. The program will keep doing this until it reaches the end of the file. Each time it takes in input the program looks for tabs at each character location. If a tab is found the program automatically adds that to the total tab count. Next the program will use a function to check the total length of the line. If the line is greater than or equal to 100 characters the program will return '2' which means the line is too long. If the lines if greater than or equal to 80 the program will return '1' which means that the line is close to getting too long. If the line is just fine the program will return '0'.

Style
tabReader(String)
charCount(String)

This program has some basic system requirements. The system needs to have Java 8 so it can run the program. This program can run on linux, windows, and mac. This program needs the command line to be able to function. This program needs 10 MB of storage space which contains the file that will be run and the file that will be outputted. This program needs 1 GB of RAM so it will operate. The user needs to be able to use a keyboard so they can type in the file name.

There are many products which are similar to this one. One example is the online cloud9 IDE which has a style50 check. This check does not work with java and can only be used in this online IDE. The program also has an output file which is not included in the style50 check. This

program currently works with most programming languages and will be more user friendly than others.

The user must type in "java Style fileName" fileName is the file the user wants to be checked for style. The user does not have to include the ".java" extension because the program will automatically include it. If the user does include that extension the program will still accept the input. One common problem with the program that the user can encounter is not including the fileName. If the file name is not included in the program it end unexpectedly. Another problem is if the file does not exist the program will encounter a problem. The user can get around this by making sure the file exists in that directory.

The significance this project will have is making code more readable and having a standard. If the user uses this correctly it will increase the quality of code in the workplace. This program is made to be easy to use so a new programmer can use it to make sure their code is formatted correctly.