

Introduction

Definition of Terms

- Node - An individual pair of GoofyGlasses
- GoofyGlasses - A pair of glasses with RGB LEDs in them and a wireless receiver that are programmed to light up specific colors. Using this grid editor they can be placed in a grid and light up in specific patterns and can be put to music as well
- IDE - Integrated Development Environment, a tool used to write and develop a software program.
- GUI - Pronounced "gooey" the Graphical User Interface is the front end of the program that the user interacts with.
- WYSIWYG - pronounced "whizzy wig" this acronym stands for What You See Is What You Get. It is often associated with graphical tools that allow you to drag and drop objects in order to design a GUI, webpage, or other graphical output.

Helper Code References

Java JDK

Since we are writing this program in Java having the Java Development Kit (JDK) installed is extremely helpful. At the time of this document the current release was 8 update 121 and could be downloaded from Oracle at <http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html>

Swing

Swing is a set of libraries that can be imported into java programs in order to create a rich GUI experience without having to all the classes and methods for the GUI from scratch. While there is no specific download for the Java's swing package the following Javadoc is helpful in identifying the different classes/components that can be used. <https://docs.oracle.com/javase/8/docs/api/javax/swing/package-summary.html>

Eclipse

Eclipse is a Java based IDE that allows for easy code development. It helps keeps files organized and has some built in debugging capabilities. Eclipse is used widely in the community and thus offers many options for third party plugins to assist in development. More information along with downloads of the latest version of Eclipse can be found at <https://eclipse.org/>

WindowBuilder Pro

WindowBuilder Pro (<https://eclipse.org/windowbuilder/download.php>) is a plugin for Eclipse that makes GUI design quicker and easier than coding from scratch. The plugin adds a design tab to Eclipse's interface so you can do some WYSIWYG designing and then switch back to source and clean it up.