

Development Environment

IDE

Our team will be using JetBrains IntelliJ IDEA as our IDE. We will be using Javadoc to document all code. IntelliJ includes a built-in Javadoc viewer that can be used whenever the user hovers their mouse over a class or a method. We will be using this to view documentation as we write our code.

JUnit 5 will be used to test our code. IntelliJ includes integration with JUnit so we will be able to run JUnit tests. Results are also shown in IntelliJ.

IntelliJ also includes a GUI Designer allowing us to utilize Swing library components. Swing is a lightweight graphical user interface (GUI) toolkit that can be used to create desktop applications with Java.

Tools

Git will be used to manage all our code. All code will be stored online using Bitbucket.

We will be utilizing Apache Maven which is a popular build tool that helps manage dependencies, build, and package Java projects. Maven will be used to compile the project's Java code.

External Libraries

- The GUI library we will be using is Java Swing.

Using the above development environment, our team can create a Java desktop application using IntelliJ IDEA as the IDE, Swing as the GUI library, and JUnit for testing. Apache Maven can be used as the build tool, and Javadoc can be used to generate documentation for the code. This combination of tools and libraries should provide a robust and efficient development environment for our team to build a Java desktop application