

Preflight Checklist

1. Install the Java Development Kit (JDK)

Download:	Go to the official Oracle website or an open-source alternative like OpenJDK to download the latest version of the JDK.
Installation:	Run the installer and follow the on-screen instructions. Choose a suitable installation directory.
Verify Installation:	Open a terminal or command prompt and type <code>java -version</code> to check if Java was installed correctly. You should see the version of Java you installed.

2. Choose an Integrated Development Environment (IDE)

Selection:	Research and select an IDE based on your preference. IntelliJ IDEA or Eclipse are popular choices.
Download and Install:	Visit the official website of your chosen IDE, download the installer, and follow the installation process.
Familiarize Yourself:	Open the IDE and explore its interface. Look for tutorials or a guided tour if available.

3. Set up the JDK in your IDE

Configure JAVA_HOME:	Set the <code>JAVA_HOME</code> environment variable to the path where you installed the JDK.
Windows:	Search for Environment Variables in the Start menu and add a new System Variable named <code>JAVA_HOME</code> pointing to your JDK folder.
macOS/Linux:	Add <code>export JAVA_HOME=/path/to/jdk</code> to your <code>.bashrc</code> or <code>.zshrc</code> file.
IDE Configuration:	In your IDE's settings or preferences, find the section for Java or JDK and select the JDK you installed. This step ensures your IDE uses the correct JDK for compiling and running Java applications.

4. Install Git

Download:	Go to the Git website to download the Git installer for your operating system.
Installation:	Run the installer and follow the instructions, accepting the default options unless you have specific preferences.
Verify Installation:	Open a terminal or command prompt and type <code>git --version</code> to ensure Git was installed correctly.
GitHub Account:	Consider creating a GitHub account at http://github.com for online repository hosting and collaboration.

5. Install GitHub Desktop

Download:	Navigate to the GitHub Desktop website and download the application for your operating system.
Installation:	Open the downloaded file and follow the on-screen instructions to install GitHub Desktop.
Setup and Authentication:	After installation, open GitHub Desktop and log in with your GitHub account. If you don't have an account, you'll need to create one.
Learn Basic Features:	Familiarize yourself with the GitHub Desktop interface, including how to clone a repository, commit changes, and push commits to GitHub.

6. Install VS Code

Download:	Visit the Visual Studio Code website to download the installer for your operating system.
Installation:	Run the downloaded installer, following the setup instructions.
Additional Setup:	After installing, you might want to install the Java extension pack (including Language Support for Java(TM) by Red Hat, Debugger for Java, and others) from the VS Code marketplace to enhance Java development support.

7. Explore the IDE

Create a New Project:	Learn how to start a new Java project in your IDE. This usually involves selecting File > New Project and following a wizard.
Explore Project Structure:	Familiarize yourself with where source files, libraries, and configuration files are located within your project.
Learn Basic Operations:	Practice creating a new class, writing a simple "Hello, World!" program, compiling your code, and running the application. Also, look into how to debug code within the IDE.