

Programming Language Memo

To: Jim Lahey.

From: Jack Ryan.

Date: 9/9/18.

Subject: Programming Language for Super-hot Project.

Purpose

We propose to use Java as the programming language and IntelliJ IDEA as the IDE for this project. We believe these choices will best serve the needs of our client in an efficient manner and streamline our development process.

Justification

Java is a cross platform language, easily installed on any operating system with the user's package manager of choice (apt, brew, etc). It can be run on any machine with little to no changes in configuration. It features a robust standard library, which handles I/O and other core functionality. Java's package system allows us to easily bundle groups of classes in order to efficiently organize our code. Additionally, it features fully developed and maintained APIs for JSON processing, GUI creation, and unit testing.

IntelliJ IDEA is an industry standard choice of IDE for Java development. Amongst its many other features, it includes the ability to autocomplete and generate code, significantly lowering the amount of time spent searching Java documentation and writing boilerplate. Furthermore, it allows code refactoring, saving the user from having to find every instance of a variable when choosing to change it. It also contains duplication detection, which is extremely helpful for optimization. Finally, it quickly analyzes code as you type, alerting the user to runtime errors or potential improvements prior to code compilation.