

From: Alex Jo and Nate Lilienthal
To: Powersuit-wearing manager woman
Subject: Programming language choice for super-hot project

Dear Management Staff,

After discussing the requirements for the new "super-hot" project the company has decided to purse, we've come to the conclusion that Rust is the best programming language to fit our needs. Rust will meet our modularity needs sufficiently with its language concepts of Crates, Modules, Traits and Implementations. Crates are similar to the idea of libraries in other languages, and would allow packaging of code in a convenient way. Modules allow for logical grouping of functionality. Traits give an abstract way to define an interface, which will be statically checked. Rust also comes built in with a testing and documentation framework, which would allow us to write unit tests easily and without needing to integrate with an external testing suite.

One of the many advantages of Rust is that it is growing in popularity among the developer community. Along with the growing popularity are a growing number of open source libraries we could take advantage of. These libraries include ways of reading and writing any markup language imaginable, JSON, XML, as well as web interfaces like TCP sockets. We know this project has a GUI requirement, and Rust has a foreign function interface which can call into any C library. Between all the new community driven Rust frameworks, and all the C libraries that have been developed since C was created, we are sure we can find a library to fit our needs. This said, Rust is a new language, and as such many of the community libraries are not stable yet, some development time will be spent working with/on these libraries. This is a great way to grow the community of Rust further. In many ways languages are only as good as the communities around them, and in this way we are helping make Rust an even better language than it already is.

As you can see, Rust is a great language for this new "super-hot" project, and our company, and we're looking forward to getting started on design.

- Alex and Nate