

Project Description:

Design a website for scientists to share code for research purposes.

Predispositions

What we know

- Scientists often need to write programs for their research.
- Scientists aren't usually trained as programmers.
- There is not a code-sharing community specifically for scientists.
- Science problems often share common characteristics and steps.
- Despite sharing common characteristics and steps, science problems differ enough that a specialized program is often necessary to analyze any given one.
- The program will be made readily available to scientists at Oregon State University.
- Code can be hard and sometimes frustrating to understand, especially to non-programmers.
- Code being uploaded may contain errors.

What we don't know

- How do scientists currently find solutions to programming problems?
- Will scientists actually use a community created specifically for them, or would they rather use Google, etc.?
- Is there a certain field of science (e.g. physics, chemistry) that uses programming more than others?
- What sort of code could a scientist unfamiliar with the language understand on a broad level?

- How much modification would a user be expected to perform on a given block of code?
- How much may a user be expected to adapt to a programming language over time?
- How large and possibly complex are some of these programs?
- Do these users know how to compile the code they were provided?
- How successfully will users be able to piece together programs using parts of existing ones?
- How would a user attempt to find a block of code that they want?