Hotspotter

DYLAN WILLIAMS

SPENCER SMITH

NATHAN REINHARDT

Our Team

Dylan Williams: Quality Assurance Manager

Spencer Smith: Customer Proxy

Nathan Reinhardt: Scrum Master

Our Client

Dr. Igor Crk:
Southern Illinois University Edwardsville
Department of Computer Science
Edwardsville, IL 62026-1656

BA in Mathematics from Carthage College

Doctorates in Computer Science from University of Arizona

Domain and Business

Developers
◦ Tracking bug-fixing commits
◦ Testing code before pulling into project master

Project Managers
◦ Assigning troublesome tasks to more experienced developers

Open Source Contributors
◦ Looking to contribute code to most relevant portions of the codebase

Core functionality

Scans repositories finding bug hotspots using dynamic metric
- ◦ Run from remote server

Provide centralized database to store scan results and repository
- ◦ Automatic repository syncing
- ◦ Scan result history

Create visualization of repository with heat map
- ◦ Filter repository heat map based on author, file, etc.

Specific Requirements

No specific software requirements

Requirements levied on algorithm
- ◦ Visual and text data output
- ◦ Proof-of-concept analysis
- ◦ Well-commented source code

Client/Server Architecture

Risks

New technologies
- ◦ Design/Teaching sessions with examples

Agile Process
- ◦ Collaboration with retrospectives to assess what's working for us and what's not

Research Based Project
- ◦ Work very closely with client to hash out many unknown specifications
- ◦ Weekly meetings with pre-meeting email updates

Quality Management

Code review upon pull request
- Passes Tests
- Readability
- Sufficiently Commented

Staying on Target
- Follows Project Specification
- Client Feedback

Compare Performance to Similar Products
- Speed
- Accuracy
- Usability

Questions?