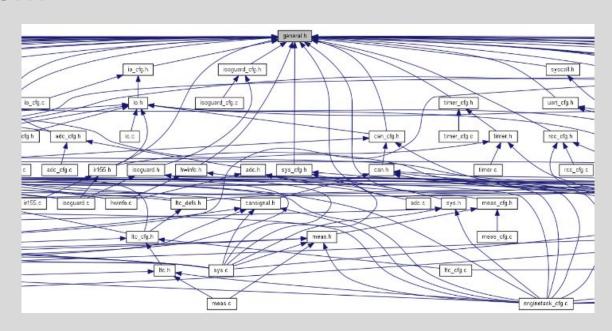
C Dependency Graph

Overview of the Product: The Problem

Illustrates dependencies in C code

Looks like spaghetti

This is the problem that we set out to fix/improve



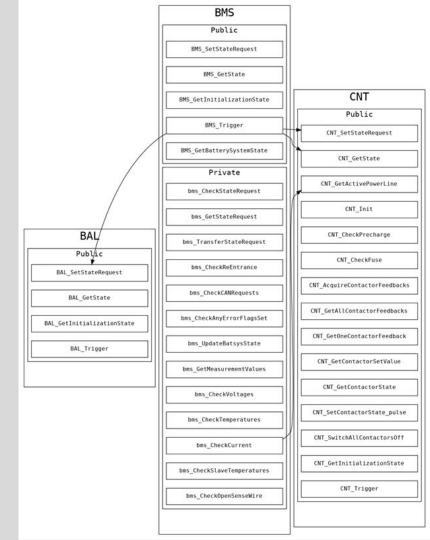


Overview of the Product: The Solution

Our objective was to "clean up" the graph

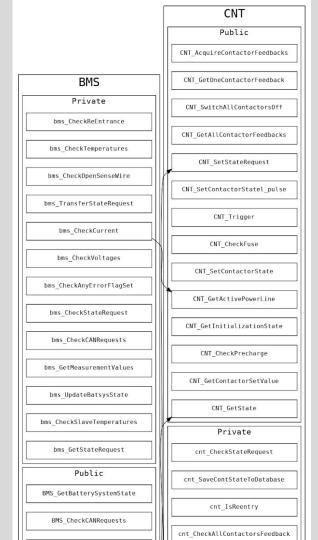
This is a concept of how our output should look

Graph should be readable and organized



Overview of the Product: The Result

Graph generated by our program

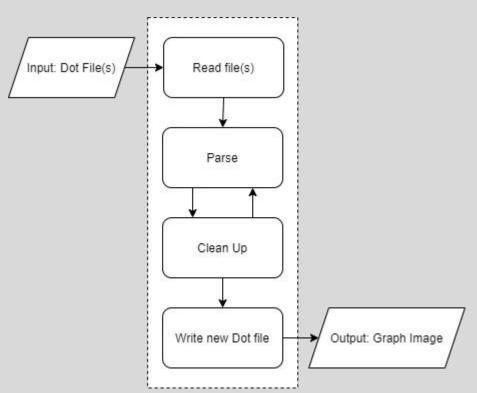


Overview of the Product: The Program

Our program takes the original graph's text files as input

We parse the files, change things about the graph, and rewrite the file

The project outputs the new graph



Overview of the Product: The Demonstration

Welcome to the C Dependency Graph Tool! Print the help menu Process a single file -s <file path with extension .dot> Process a directory -d <directory path> Set logging verbosity -v <0-3> Set logger output file -L <file path> Name program output -o <name> Filter expression → depgraph depgraph -s dot-files/adc_8h_ae0b9ae6e4ef2dbf771dcc0ea30901ae2_cgraph.dot

0 22

I | II | III | III

- depgraph depgraph -h

Samantha Shultz' Contribution

- Learning Dot language and other tools
- Reading in File(s) or a Directory
- Handling Private vs Public Functions
- Test Cases
- Documentation
- IEEE Conference Paper

Luis Mora's Contribution

- Learning Dot language and other tools
 - Doxygen
 - Gradle
- Coding
 - Design and implementation
- Test Cases
 - Develop initial test suite
- Documentation
 - o System Requirements Specification Document
 - System Design Document
- IEEE Conference Paper

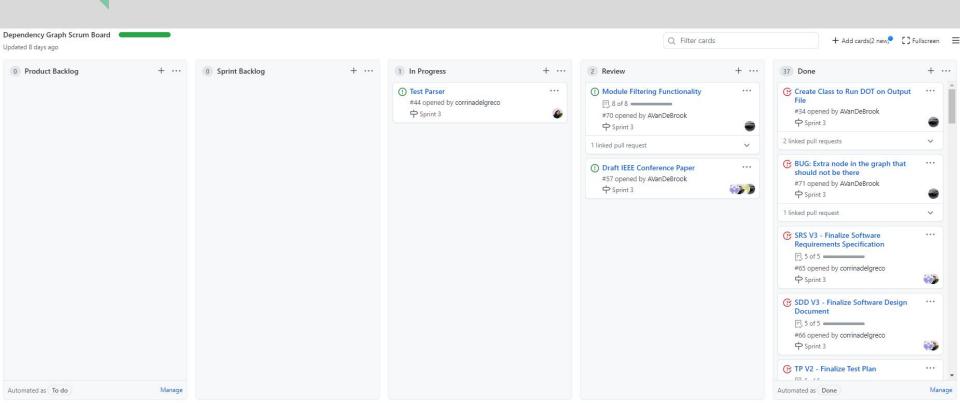
Corrina Del Greco's Contribution

- Scrum Master
- Design
 - Initial design of modules
- Code
 - Framework
 - Parser
 - Formatting, Javadocs, reviewing other's pull requests
- Testing
 - o JUnit
- Documentation
 - Wiki: Guides and design
 - Test Plan: Majority, test cases, tracing to SRS
 - SDD: Design, diagrams
 - SRS: design, revising requirements

Aaron Van De Brook's Contribution

- Set-up/manage Gradle (build system) and Git (version control)
- Major contributions to overall design
- Created first manually generated graph
- Created first version of the "Lexer" module
- Responsible for "Graph Writer" and "Image Rendering" modules
- Logical flow charts of most modules

Sprint Review & Retrospective: Updated Scrum Board



Sprint Review & Retrospective: Spring Term

- Create Graphical User Interface (GUI)
- More checks for bad input/user error
- Port to Python or Ruby
- Improve output graph
- Other possible project ideas

Thank you

C Dependency Graph