



In this analysis, source files were defined as files that contain the project’s actual program logic—the code developers change to add features, fix bugs, and improve the system. For the scottyab/rootbeer repository, the main programming languages are Java and Kotlin (Android code) and C/C++ (native code). Therefore, files with the extensions .java, .kt, .c, .cpp, and .h were considered source files.

A large amount of work has been done on this project. The scatter plot shows development activity across about 500 weeks, which means the project has been maintained for a long time. Many dots across many files indicate frequent code changes. The work is mainly done by a core group of developers, whose colors appear across many files and over long time periods. These developers are responsible for most of the changes and likely have strong knowledge of the system. Other contributors appear only a few times or only in early weeks; these are probably occasional contributors who submitted small fixes or short-term contributions.

Based on the patterns, earlier work focused on building the core system, middle periods show feature expansion, and recent work mainly involves maintenance, bug fixing, and stabilization.

<https://github.com/TzciSiv/Group-5>