

Executive Summary: RootBeer Project Status

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Original Repository: <https://github.com/scottyab/rootbeer>

Fork Repository: <https://github.com/HristiyanMelios/Group-2>

Overview

RootBeer is a security-focused Android library used to detect rooted devices. An analysis was conducted on this repository focused on individual contributions and the overall development of the project. Only source files (17 total) were considered for this analysis, which consisted of C++, C, Java, or Kotlin file by extension and are shown in a scatterplot figure.

Development Activity / Distribution

Activity in this repository spans over **400+ weeks**, with the majority occurring during the early and middle stages of the project. Recent activity has shifted to maintenance, suggesting that the project has transitioned into long-term support.

Development is highly concentrated around a **single primary contributor**, who accounts for most modifications. Other secondary contributors appear intermittently, mainly in the early stages of the project. The late project stages have been from the single contributor, making them a **key person** for this project and codebase. The most important file is **RootBeer.java**, which was modified 53 times throughout the project.

Figure 1 illustrates file modification activity over the course of the project, and highlights each author modification activity across the main source files of the codebase.

Methods

This analysis was conducted using **git commit** history and file-level modification data. **Commit timestamps**, authorship, and file change frequency were particularly useful in identifying development trends and contributor roles.

Figure 1: File modification activity over project lifetime

