## Executive Summary — Project: RootBeer Library

Date: 09/16/2025

Prepared by: Bryan Duran

Forked Repository: https://github.com/miko836/2025-F-GROUP2-RR-XR

## What's Working, What's Under Pressure

- Consistent Feature Maintenance: The library is being kept up to date with new Android OS requirements (e.g. page size changes, removal of SELinux flag behavior). That's good; shows responsiveness to platform evolution.
- Open Issues Volume: There are several open issues including "Write after free", "Support 16 KB page sizes", "Lib Not detecting when app is in DenyList of Magisk", etc. Some of these are security-sensitive or could impact correctness.
- **Gap in Recent Commits / Momentum (possible slow-down):** While version 0.1.1 is recent, I did *not* find a large burst of activity in the public commit history since then (from what I checked); contributions may be tapering.

## Who is Doing the Work

- Top Contributors (recent):
  - scottyab is the primary maintainer, author of many of the most recent high-impact commits.
  - ArtsemKurantsou and KavilDPal also appear in recent version changes.
- Possible Under-utilized / Idle Contributors:
  - Several contributors are listed historically but I found little to no recent commit activity from many. If we needed to scale up, some of these could be reactivated or replaced.

## **Tools & Methods Used in Analysis**

- Used git log --pretty=format: "%an|%ad" to extract author names + dates for each commit per file.
- Aggregated by week (using e.g. git log --date=short and converting dates to week numbers in Python/pandas) to see recent momentum.
- Cross-referenced GitHub Releases page and Issues page to identify features vs outstanding problems.