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To: Executive Director

GitHubLink: <https://github.com/LARAta10/Group-5.git>

Purpose of report

The main objective of this report is to give an update on the current status of the RootBeer project. I have put together a lot of important information/details since the project began and analysing that data would be giving us a lot of insight on how the project is doing.

Methods

To extract all the necessary data to complete this report, I mainly used python scripts that would use the GitHub API to get the metadata of the commits of the appropriate source files, which there are a total of 36, which are written in one of the 5 programming languages that have been used in the project (Java, Kotlin, C++, C, and CMake). Besides the python scripts I also used some Git commands that proved to be very helpful, like **git clone**, which allowed me to clone the repository to my local machine to be able to get a deeper analysis of it, I also used the **git checkout** command which was fundamental when I tried to navigate branches within the repository.

Findings and conclusions

- **Work Distribution:** After analysing how many commits have been made by all of the authors throughout the whole life of the project, Scott Alexander-Brown is the contributor that has made the most of the file commits, This doesn't necessarily mean that no one else is contributing but it is something to keep in mind. Also there are some files that are only maintained by one contributor, which could be a problem if that contributor is absent at some point of the project's future, so a good suggestion would be to make sure there are at least 2 contributors to each file.
- **Work Activity:** According to this analysis after week 300 there were no commits being done until week 480, this could be a consequence of most of the early life contributors being fired or moved to different projects, since only a couple of developers can be seen at week 480
- **File Stability:** One of the files had about 50 commits, which is a big percentage of the total amount. This could mean that the file breaks or needs adapting for every change that is made to the project, so it would be advisable to take a deeper look at it and evaluate its stability and improve it to avoid future problems.

Project Commits Authors and Timeline

