Team Charter

for

Team Decided

Members

Name	Mobile	Personal email	Work email
Joshua	{redacted}	{redacted}	{redacted}
Sean	{redacted}	{redacted}	{redacted}

Project Overview

To use an existing proven consensus algorithm, the Raft Consensus algorithm (from the Paper), to implement a fully featured library which would work as an almost drop-in style library to allow developers to write their projects with clustering/high availability as seamlessly as possible. This would allow multiple computers/servers to work together to ensure uptime of a service while smoothly handling node loss or broken network links. The project will be written as a C++ library to offer the broadest integrations possibilities, as those libraries can be referenced by almost any language. The library would be published as open source, under Apache2 license.

Although a working project of this would benefit more practical services, an easy demonstration of a working final product would be a simple console program. There would be multiple instances of the console program running, talking together, and it will demonstrate maintaining an activate replicated log against multiple node failures.

Team Rules & Expectations

Team Goal

- Specific - Raft Consensus library as described in project overview above
- Measurable - Achieve a mark of High Distinction for each member of the group
- Achievable - Is designed to be low risk, which will reliably able to be completed on time
- Relevant - Produce a useful public library for developers
- Time Limited - Complete each section of development in time with "Subject and Assessment Schedule"

Team Quality Aspirations

- Style guide - http://geosoft.no/development/cppstyle.html
- Unit tested - Reasonable code coverage, including all use cases
- Code review - https://smartbear.com/product/collaborator/overview/
- Diagramed/documented - https://www.visual-paradigm.com/download/community.jsp

Team Work Commitments

Instead of specific time requirements for members each week, each team member will simply complete their assigned tasks by given deadlines, and inform other members if they believe they will not be able to make their obligations ASAP.

Team Communications

Meeting time: Weekly on Wednesday, 8:00pm sharp
Meeting location/software: Discord, {redacted}
Share information: Google Drive, {redacted}
Meeting documentation: Will be available on Google Drive

Team Rules and Expectations

- All disputes to be resolved with a vote where a majority rules.
- All team members agree to follow majority rulings.
- All disputes which are put to formal vote must be documented.
- Team members must be given a minimum 6 hours of available time to respond to a formal vote.
- If after 6 hours no others have responded, they are seen to be in agreeance.
- When majority is not available disputes to be resolved by a best-of-three rock paper scissors
- Team members will check Discord as often as possible, enable push notifications, and respond with an answer or a message to tell other members they don't know.
- Poor team performance such as low quality of work, not attending meetings or not being available for long periods of time without notice will be resolved with a three strike policy. A strike requires a majority ruling.
- On the occurrence of a team member receiving three strikes, the issue will be reported to Mr Jim Tulip immediately.
- If any team member is having an issue that could affect their ability to meet deadlines, they will notify and also ask other team members for help as soon as possible.

Signatures

I, Joshua, indicate an understanding and agreement to the rules and expectations stated above. 02/03/2018

I, Sean, indicate an understanding and agreement to the rules and expectations stated above. 02/03/2018