Type: Practical Project

Topic: Accountable Byzantine Consensus

Specification:

The goal of the project is to implement an accountable consensus primitive based on [1].

There are no constraints on the programming language or libraries to be used, nor on the environment (local machine, docker, cloud free tiers, simulator).

Part of the project is to perform a dependability evaluation (both from a functionality and performance point of view).

Crash failures must be considered, whereas some Byzantine misbehaviours could be considered in the evaluation.

The final report should include:

- Description of the technologies used to develop the project
- Description of the implementation
- Description of the evaluation design and results collected for the dependability evaluation
- Comments on the obtained results and highlights of potential limitations
- Link to the source code repository
- Installation instructions for configuring and running the software

[1] Pierre Civit, Seth Gilbert, Vincent Gramoli, Rachid Guerraoui, Jovan Komatovic: As easy as ABC: Optimal (A)ccountable (B)yzantine (C)onsensus is easy! J. Parallel Distributed Comput. 181: 104743 (2023) https://doi.org/10.1016/j.jpdc.2023.104743