Type: Practical Project
Topic: Byzantine Reliable Broadcast

Specification:
Carry out a dependability evaluation (performance and functionality) of alternative solutions to the Byzantine Reliable Broadcast problem, comparing a solution assuming authenticated messages with others considering authenticated links.

Consider the following protocols in the evaluation:
- Authenticated Links - Double Echo (Bracha)
- Authenticated Messages - https://arxiv.org/pdf/2102.07240.pdf (page 7)
- Hash Based https://arxiv.org/abs/2007.14990
- Erasure code base https://arxiv.org/abs/2007.14990

There is no constraint on the coding language, software framework, the simulation environment and/or the concrete environment.

The final report should include:
- description of the four protocol with comparison
- detailed description of the architecture and implementation choices;
- description and analyses of the potential limitations;
- detailed description of the evaluation design and the collected results, in relation to the parameters under consideration;
- link to the repository with the source code;
- installation manual for the software configuration and execution.