



# Decentralising a Mobile Application

Decentralized and Distributed Systems lab

Bachelor Project

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# Outline

- Goals
- Description of the application
- General design
- Demo
- Conclusion

# Goals

- 1) Find an open source application to operate in a decentralized context.
- 2) Identify the parts of the app where data is stored into centralized systems
- 3) Find a way to store that data in Cothority instead.

# Description of the application

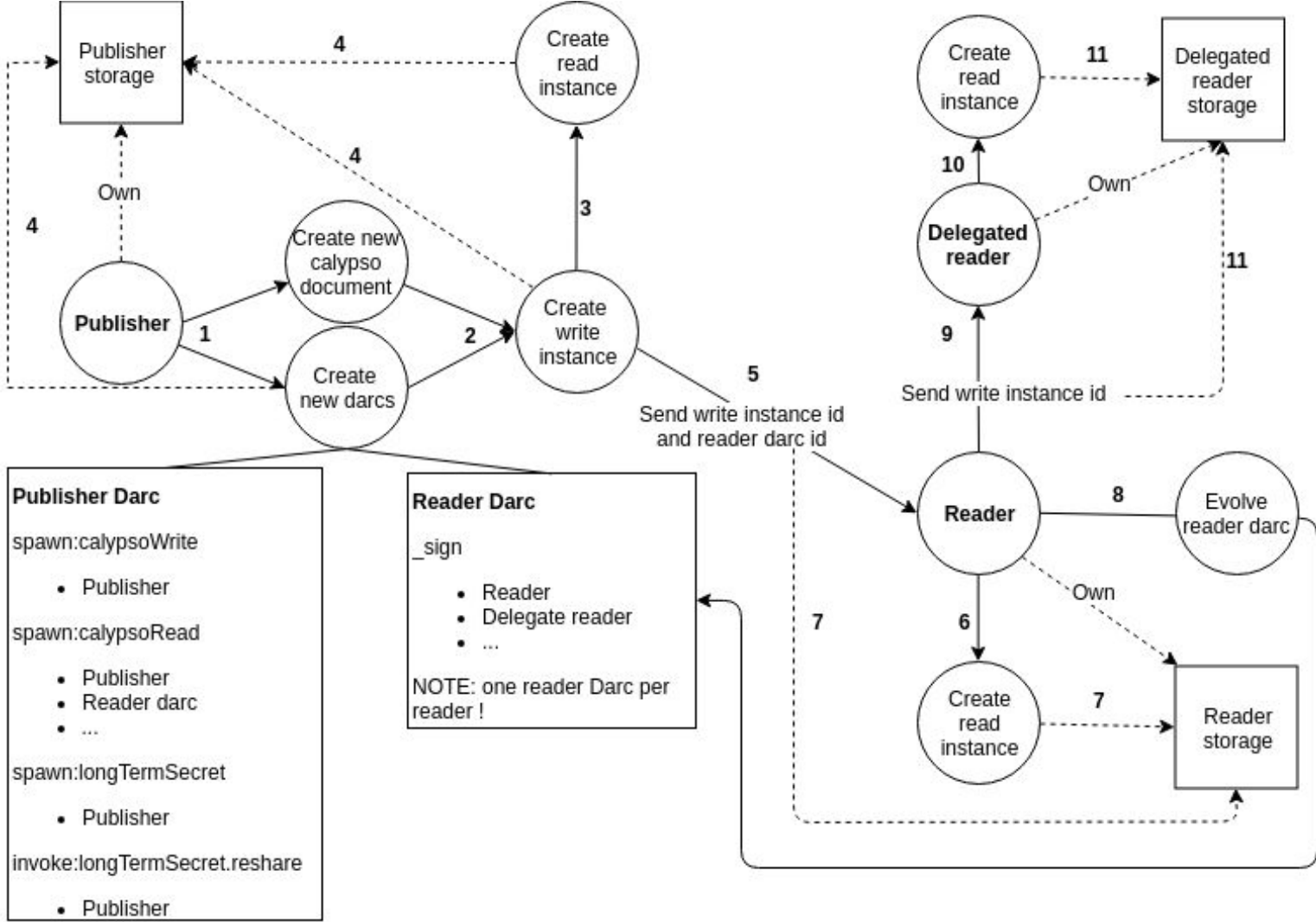
First idea: adapt an open source Dropbox like application (Seadroid)

Simplified idea: turn a note taking app into a multi-user app to share text documents (Memento)

Features :

1. Each user has one or many roles who define his rights
2. A publisher can create and share documents with other users
3. A reader can read documents shared with him and give read access to another user. This process is known as delegation.
4. A delegated reader can only read documents shared with him

# General design



Demo

# Conclusion

- It works but slowly...
- Problem: crypto functions generate tons of object that are never destroyed
- With a way to store any type of document -> Dropbox like application
- Future work: reduce network traffic by storing encrypted data on the phone