# Distributed Sorting

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### Logistics

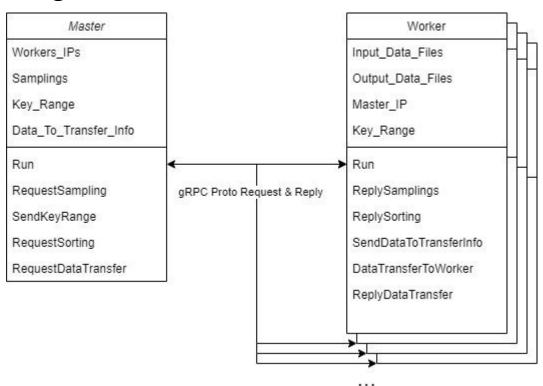
#### Physical meetings twice a week

- Goal of the week
- Parallel working (specific tasks)
- Progress evaluation
- Brainstorming

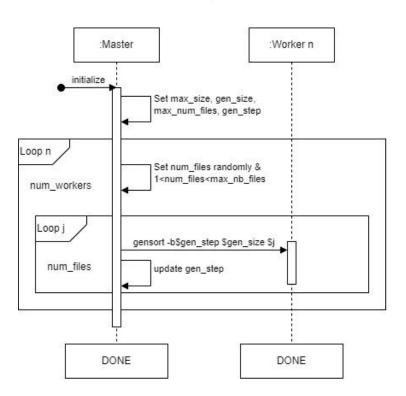
#### **Milestones**

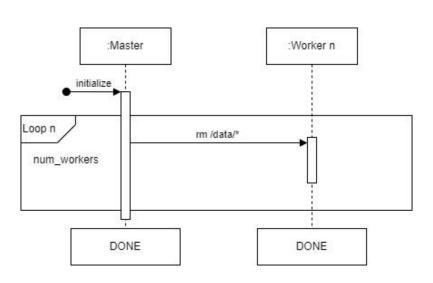
- Milestone #1 (Design):
  - Design Solution
  - Formation gRPC library
  - Generate input data
- Milestone #2 (Coding):
  - Scala class of Master & Worker using gRPC library
  - Sampling procedure
  - Sorting
- Milestone #3 (Transfert Protocol):
  - Partitioning
  - Shuffling
  - Merge
- Milestone #4 (Improvement):
  - Paralleling sorting inside each worker

## Overall Design



## Sequence Diagram - Data Management





#### **Details**

- Communication library : gRPC
- Programming environment : Scala & Bash
- Logging: Further investigation needed
- Input datasets Generation is DONE (Bash script)