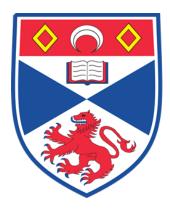
# University of St Andrews

# DISTRIBUTED SYSTEMS CS4103

# Ring-Based Distributed System

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# Goal

To demonstrate an understanding of leader election and mutual exclusion in distributed systems by developing a ring-based distributed social media application.

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#### 1 Initial Set-up

Java 8 was chosen for this project due to it's friendly socket API, and Maven [1] was used as the build tool. TDD was implemented with JUnit4 as the the test suite framework.

#### 1.1 Configuration

Since each node would be running on an isolated machine, the planned testing environment would involve using *ssh* to start the nodes remotely. Providing the configuration as command line arguments was considered simpler than other methods, and was implemented using the Apache Commons CLI library [2].

## 2 Leader/Coordinator Election

#### 3 Receive/Send Posts

#### References

- [1] Apache. Apache maven project. https://maven.apache.org/.
- [2] Apache Commons. Apache commons cli. https://commons.apache.org/proper/commons-cli/.