## **Umeå University**

Department of Computing Science

# Object-Oriented Programming Methodology 7.5 p 5DV133

### **OU4 Sensor Network**

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#### 1 Introduction

The assignment was described on the course homepage [2]. The main aim idea was to develop software that allows to perform experiments on sensor networks as described in Braginsky and Estrin [1]. The main topic of [1] is the use of *rumour routing* as an energy saving message transportation algorithm that for example be used in environment surveillance networks.

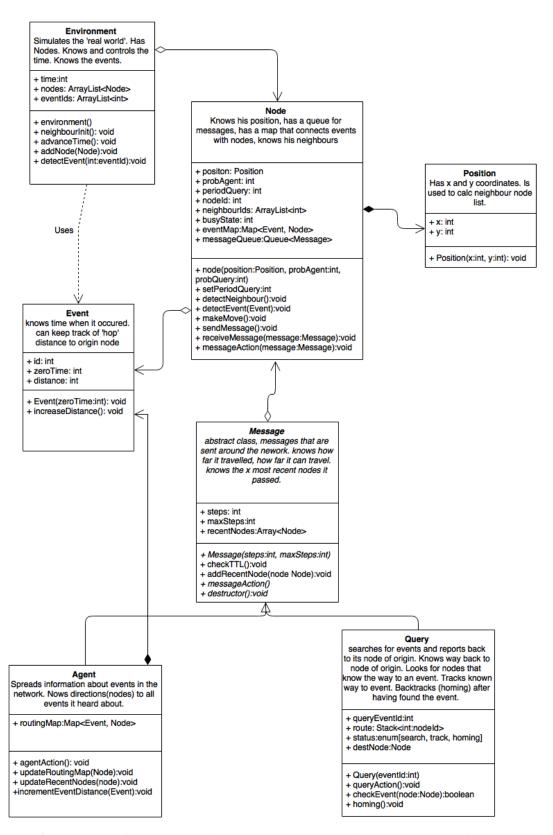
- 2 Compiling and Running of the Program
- 2.1 Javadoc
- 2.2 Specific Design Decisions
- 3 Description of Program Structure

Figure 1 shows the UML diagram of the chosen design.

- 4 Limitations and Future Development
- 5 Testing Framework
- **6 Individual Contributions**
- 6.1 Johan Eklund
- 6.2 Tommie Lindberg
- 6.3 Jakob Lundin
- 6.4 Lorenz Gerber

#### References

- [1] D. Braginsky and D. Estrin. Rumor routing algorithm for sensor networks. In *Proceedings of the 1st ACM international workshop on Wireless sensor networks and applications*, pages 22–31. ACM, 2002.
- [2] Umeå University, 5dv133 obligatorisk uppgift 3. http://www8.cs.umu.se/kurser/5DV133/VT16/uppgifter/ou3/, 2016. accessed: 2016-04-28.



**Figure 1:** *UML diagram for implementing a sensory network application that allows testing of the rumour routing algoritm.*