

## **Foundations of Artificial Intelligence and Knowledge Representation**

16/06/2020

### **Module 1: KR exercise**

Consider the following sentences that represent the rules people should follow in UK during the COVID 19 outbreak.

- stay at home as much as possible
- work from home if you can
- limit contact with other people
- keep your distance if you go out (2 metres apart where possible)
- do not leave home if you or anyone in your household has symptoms.
- wash your hands regularly

1) extend this knowledge with the notions of safe and unsafe (if you follow or not follow the above rules respectively), and encode the fact that unsafe people might be infected and if infected they might dead or transmit the virus to others that are not safe.

2) Chose a knowledge representation language and write a KB that represents the above knowledge.

3) Add to the knowledge base same individuals.

4) Encode a query to check if a person can transmit the virus to others.