General instructions
- Time assigned to the exam is **1.30 hours**
- Teachers will not answer any question about the exam
- You cannot leave the classroom during the exam, unless you have finished it
- Exams cannot be answered using a pencil

We expect very short answers. We expect the examples to be different from the ones covered in class or in the slides.

2 points Show an example of a rule-based system. Describe the task to be solved, the contents of the knowledge base, the initial contents and show two execution cycles. Suppose that you need to define a rule-based system that should count how many elements of a given type there are in the initial contents of the working memory. Define the knowledge base as well as its initial contents.

2 points In which type of tasks would you use Dijkstra instead of depth-first search? Provide an example. Briefly and formally describe the problem space.

2 points How do you define an HMM? Specify its components by using an example.

2 points Provide an example of a Bayesian Network. Define its components.

2 points Name three different actuators that are commonly used in robots and explain what can they be used for. Give an example of an alternative use of those actuators that is not related to robots.