Tutorial Artificial Intelligence, winter term 14/15 Information Systems and Machine Learning Lab (ISMLL) Ruth Janning, M.Sc., Carlotta Schatten, M.Eng.

Tutorial sheet 1

Due: Tuesday, 04.11.14, 10:00 a.m.

Exercise 1 Introduction (6 points)

a) Compare the chatterbots in http://www.turinghub.com/ and http://www.jabberwacky.com.
Pose them the same questions. Which is the most convincing? Why? Another example can be found in http://www.20q.net. When is the Bot successful in guessing the word? (6 points)

Exercise 2 Intelligent Agents (14 points)

- a) Describe the PEAS of the TIC-TAC-TOE game (4 points)
- b) Explain the environment properties of the taxi driver example you discussed in class. Why is the environment not observable, deterministic, episodic, static, discrete and single-agent? (3 points)
- c) What is the difference between a goal based agent and a learning agent? Compare their advantages and disadvantages.

(4 points)

d) What is the difference between designing an agent acting in a game or in the real world? (3 points)