

CS 4013: Homework #1

Due on February 14, 2018

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Problem 1

Characterize the environment for each of the following tasks, using the 9 properties listed. Justify each answer, ideally with one complete sentence.

1. **A smart home that autonomously controls the thermo-stat, humidifier, air-conditioner, lights, etc.**

- Partially observable. While it could be possible to make the system fully observable with enough sensors, realistically it will not be able to detect accurate readings for the entire home.
- Stochastic. There is randomness involved with changes in weather, humans affecting the environment by opening/closing doors, etc.
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