

Markov Property / Markov Decision Process (MDP)

- Markov Property implies that our agent needs only the current state to decide what action to take and not the history of all the states and actions they took before.

Observations / States

- Observations / States are the information our agent gets from the environment.

- State s : is a complete description of the state of the world (no hidden information)

ex: Chess

- Observation o : is a partial description of the state.

ex: Super Mario Bros. (only see part of level)

Action Space

- Set of all possible actions in an environment.

- Discrete space: Finite possible actions.

ex: Super Mario Bros. (left, right, jump)

- Continuous space: Infinite possible actions.

ex: Self-driving car (turn left 20° , 21° , 22° , 22.3° , tank, ...)

- Taking this information into consideration is crucial because it will have importance when choosing the RL algorithm.