

A QUICK OVERVIEW OF INTELLIGENT AGENTS

- An **intelligent agent** is anything that can be viewed as **perceiving** its environment and **acting** upon that environment.
- A **rational agent** is one that does the right thing.
 - We, the **independent observers** are the ones that decide on objective performance measures.
- What is rational at a given moment depends on four things:
 - The performance measure (rational \neq successful)
 - The **percept sequence** of the agent (rational \neq clairvoyant)
 - What the agent knows about the environment (rational \neq omniscient)
 - What are the actions the agent can perform

STRUCTURE OF INTELLIGENT AGENTS

- Percepts may update an **internal state** used in order to choose proper actions.
- Agent types:
 - simple reflex agents
 - reflex agents with state
 - goal-based agents
 - utility-based agents
- Environment types:

P ercepts
A ctions
G oals
E nvironment

	Chess	Image analysis	eBay	Taxi
Accessible				
Deterministic				
Episodic				
Static				
Discrete				

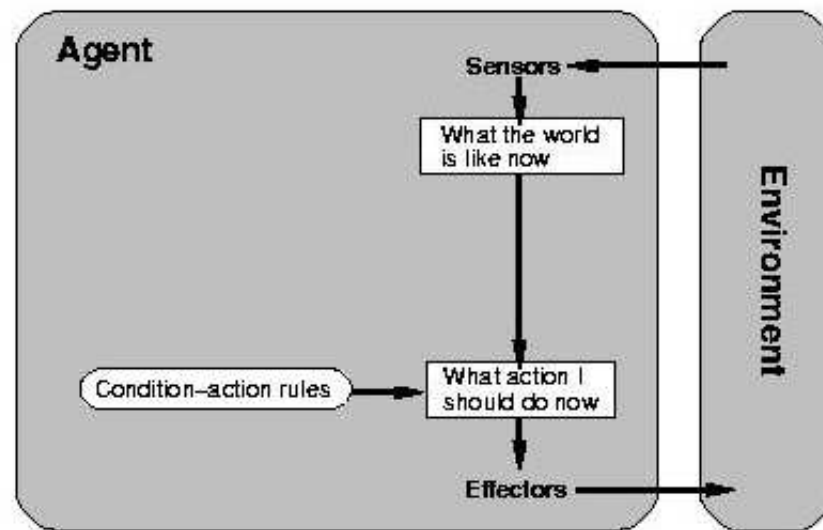
STRUCTURE OF INTELLIGENT AGENTS

P ercepts
A ctions
G oals
E nvironment

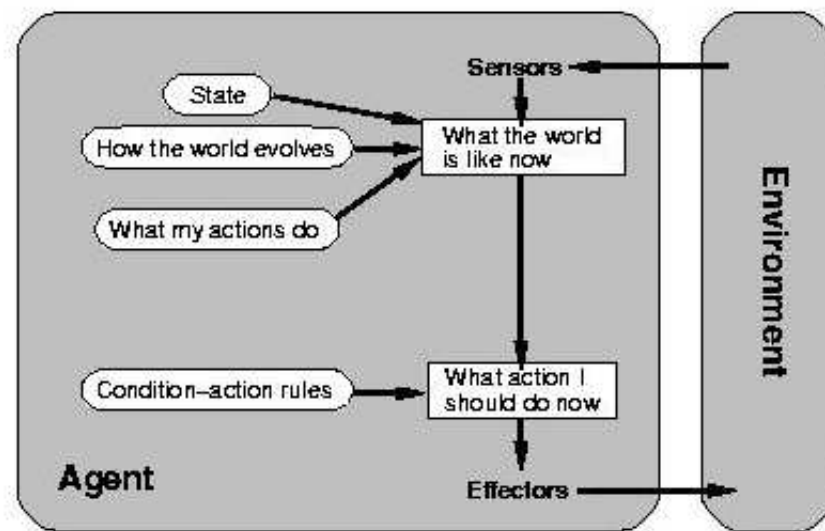
- Percepts may update an **internal state** used in order to choose proper actions.
- Agent types:
 - simple reflex agents
 - reflex agents with state
 - goal-based agents
 - utility-based agents
- Environment types:

	Chess	Image analysis	eBay	Taxi
Accessible	Yes	Yes	No	No
Deterministic	Yes	Yes	Partly	No
Episodic	No	Yes	No	No
Static	Yes	Semi	Semi	No
Discrete	Yes	No	Yes	No

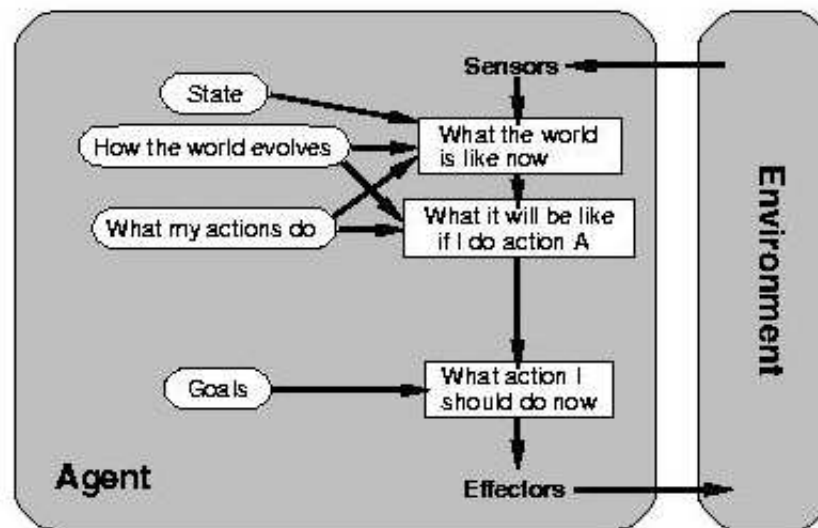
SIMPLE REFLEX AGENTS



REFLEX AGENTS WITH STATE



GOAL-BASED AGENTS



UTILITY-BASED AGENTS

