



- Agents act autonomously; each with its own information about the world and other agents
 - Outcome depends on outcome of all agents
 - Each agent has their own utility
- utility:- score; value an agent can get and measure from a state.

plan v. strategy

Strategy:- what action to follow, under any circumstance, in order to maximize utility

Fully Cooperative \longleftrightarrow Fully Competitive

Zero-Sum Games:

↳ the utility of the participating agents always adds to the same constant.

History

Fully observable.

1961 Samuel - Checkers

1997 Deep Blue - Chess

2016 AlphaGo - Go

- partially observable
Poker, Bridge

- Stochastic Games

- Video Games (API)

Backgammon.

DOTA2.
Starcraft.

In this class: (Chess)

- deterministic.
- turn taking.
- zero-sum.
- fully observable.

Chess	~ 35 choices	35^{100}
Go	~ 250 choices.	