

GOjen - Evolution of ANN Input Features

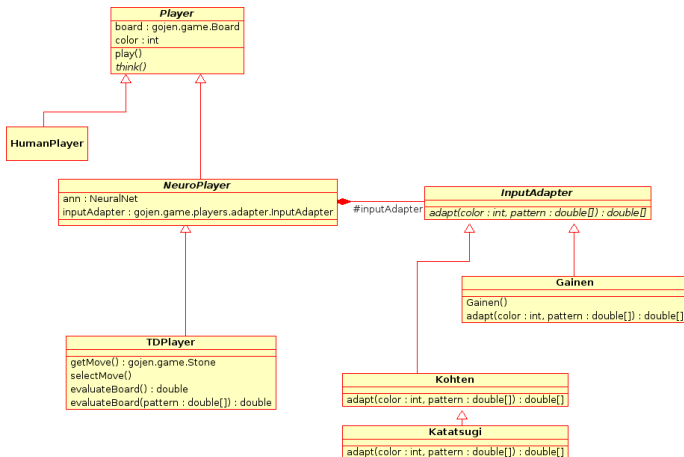
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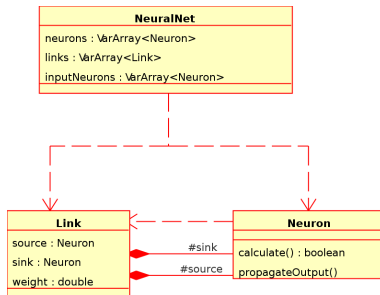
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Player, InputAdapter and ANN

Evolve input neurons

Player - InputAdapter





Evolving

- ▶ create initial population genomes (Bitstring)
- ▶ create phenotype according to genom
- ▶ play against other phenotypes/other players/original player
- ▶ evolve next generation (crossing, mutation, ..)

Our Implementation

- ▶ extend class NeuroPlayer (or subclass) or InputAdapter?
- ▶ implement deactivation of input features according to the genom
- ▶ how to ignore input features
 - ▶ NeuroPlayer: ANN.removeLink()
 - ▶ InputAdapter: set input feature to 0 (easy to implement but could cause problems)
- ▶ NeuroPlayer: keep reference to existing NeuroPlayer and forward all method calls (would work for all NeuroPlayers)
- ▶ evolution through existing evolution mechanism