

Lab: Goal Oriented Behaviours and SGI

Objective

The objective of this lab is to become familiar with the PlanetWars game code, in particular to understand bot and tactic logic.

Created Multiple Bots

```
class Rando(object):

    def update(self, gameinfo):
        if gameinfo.my_planets and gameinfo.not_my_planets:
            # select random target and destination
            dest = choice(list(gameinfo.not_my_planets.values()))
            src = choice(list(gameinfo.my_planets.values()))
            # launch new fleet if there's enough ships
            if src.num_ships > 10:
                gameinfo.planet_order(src, dest, int(src.num_ships * 0.75) )

class GOAT(object):

    def update(self, gameinfo):
        if gameinfo.my_planets and gameinfo.not_my_planets:
            src = max(gameinfo.my_planets.values(), key=lambda p: p.num_ships)
            # Find a target planet with the minimum number of ships.
            dest = min(gameinfo.not_my_planets.values(), key=lambda p: p.num_ships)
            if src.num_ships > 10:
                gameinfo.planet_order(src, dest, int(src.num_ships * 0.75) )
```