Task 7 Lab: Goal Oriented Behaviours & SGI

Summary:

Goal Oriented Behaviour (GOB) is a simple approach to creating game agents that can perform actions based on an overriding "goal" which gives their behaviour direction and purpose. However, it has limitations which need to be understood. Developers need to be aware of the limits of simple goal insistence (SGI) when used to resolve action selection using goal-oriented behaviour (GOB).

Create a simple goal insistence (SGI) model simulation of goal-oriented behaviour (GOB) that demonstrates the both the effectiveness and the limitations of the technique.

Step 1

- Use the basic code provided (gob_simple.py), which uses simple methods and dictionaries for data, and add the missing action selection code. Look for helpful ### comments and fill in the blanks.

You will need to deliver (show your tutor) the following items:

- Working code that simulates and **displays GOB using SGI**.
  (There is code provided, but you don't need to use it if you don't want to.)
- You must demonstrate a situation where SGI **works** appropriately

Step 2

- Copy your code from step 1 into a new file, in this file you must modify your code to demonstrate a situation where SGI **does not work** well.

Extensions:

- Create an object-oriented version of the code model and present the advantages/disadvantages this provides to game developers (or designers).
- Create a console-based turn-based role-playing game (simulation) that demonstrates two NPCs in combat with each other and using this simple resolution method to selection actions, and the outcomes.