

## **CS 511 AI 2 - Project 5**

**Alias : Snitch**

### **ReInforcement Learning**

I have implemented an agent which does learning over various timesteps and learns from it.

I am keeping track of previous movements with an enum called prevMove

Also, I am keeping track of previous result being a right move or a failure(wrong) move. Right move is the one where the agent gets positive reward and wrong move is the one where agent gets -100. I am keeping track of this using another enum called prev. It has three fields, RIGHT WRONG ONELESS

There is another one with states and i am categorizing them as maybeleft, maybe right, openleft,openright, listen

Based on this, I have written code and I am making sure that the agent does more right moves than the wrong moves.

On average, the right moves have been around 240000. Wrong moves have been 14500-15000.

I ran the project for 10000 trials for 100 timesteps

And, the below have been my observation..

AVERAGE SCORE = 23.6654

AVERAGE SCORE = 27.9931

