ID2209 – Distributed Artificial Intelligence and Intelligent Agents

Assignment 1 – GAMA & Agents Creativity Analysis

Group 17

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Description: For the creativity component we have decided to add a VIP section of guests to the festival. From our personal experience with festivals we have seen that there are always VIP entry tickets and the guests who buy the same enjoy some special privileges. In the case of our simulation the said privilege would be presence of a VIP Lounge where these guests on getting tired and hungry can go to replenish themselves. This enables them to have easy access and not stand in line at food and drink stores. In addition to this the lounge is a one stop shop for food and drinks and resting and they do not need to go anywhere else.

Implementation: The idea is still the same with the creation of new species being the vip guests and the vipLounge. In order to get the location of this lounge on feeling hungry and thirsty the guests still need to head towards the information centre to get the details. On heading to the lounge both their hunger and thirst attributes are reset to normal.

Below are snapshots of the implementations of the guests and the lounge:-

```
421  species vipGuest skills:[moving]
422  {
423      float thirst<- rnd(50)+50.0;
424      float hunger<- rnd(50)+50.0;
425      //int guestId<-
426      |
427      rgb color<- #chocolate;
428
429      building target<- nil;
430
431      aspect default
432      {
433          draw sphere(2) at: location color:color;
434      }
435
436      reflex thirstyHungry{
437          thirst<- thirst-rnd(hungerRate);
438          hunger<- hunger-rnd(hungerRate);
439
440          bool getFood<- false;
441
442          if(target=nil and (thirst < 25 or hunger < 25)){
443              string destinationMessage<- name;
444              //write destinationMessage;
445              if(thirst < 25 or hunger < 25)
446              {
447                  destinationMessage <- destinationMessage + " is thirsty and hungry,";
448              }
```
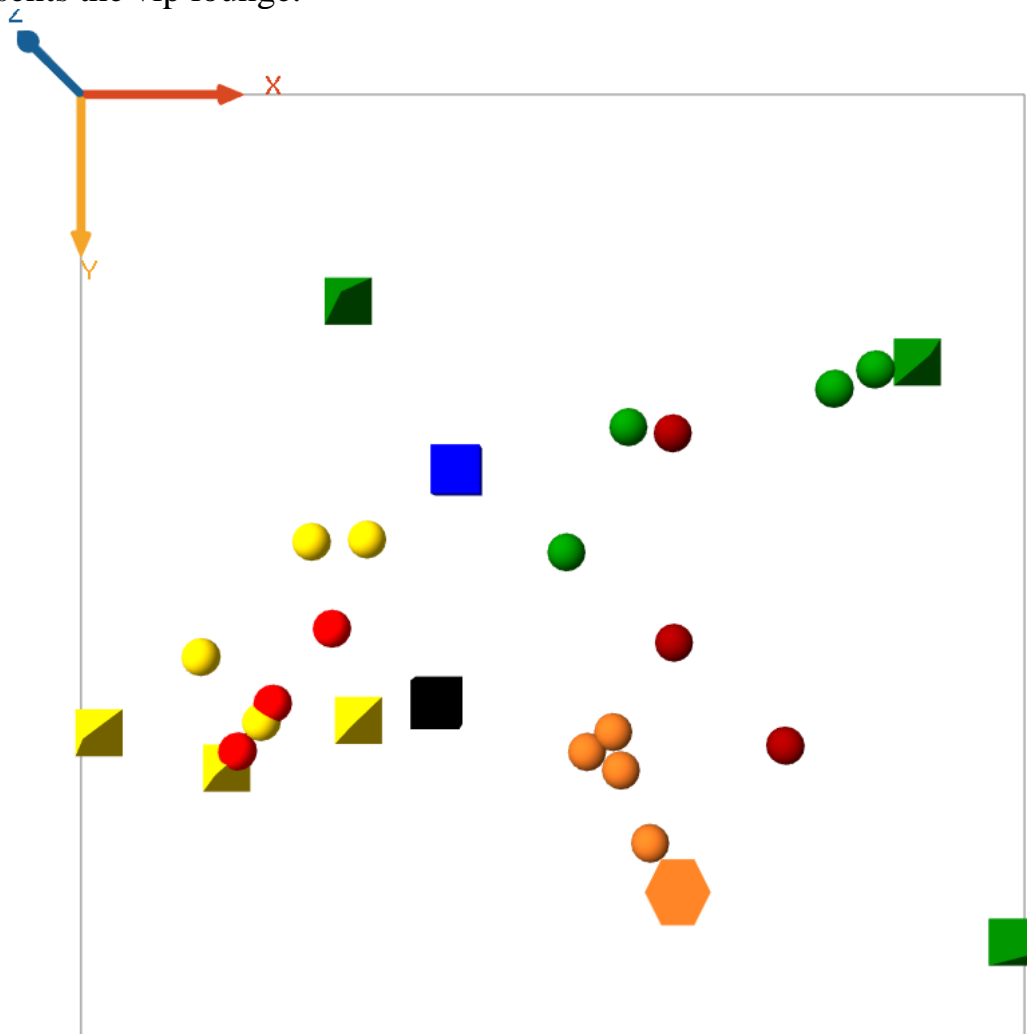
```
species vipLounge parent: building
{
    bool sellsFood <- true;
    bool sellsDrink<- true;


    aspect default
    {
        draw hexagon(7) at: location color: #chocolate;
    }
}
```

Result: The Expected behaviour is shown by the vip guests represented in orange spheres in the simulation diagram given below,the orange hexagon represents the vip lounge.

Why we think its creative: It is a pretty convenient way to free up some space in a festival in case of increase in guests. Also the nature of the lounge to serve both and drinks is a huge plus. In addition to this we can also give the condition that vip guests cannot be thrown out of the festival on any grounds by the cop.