DO YOU KNOW QUESTION SET 5

1. Name three properties of every actor

color, direction, location.

1. When an actor is constructed, what is its direction and color?

Direction: north color: blue

1. Why do you think that the Actor class was created as a class instead of an interface?

An actor can also do things. This is due to the actor having methods.

1. a) Can an actor put itself into a grid twice without removing itself?

No.

b) Can an actor remove itself from a grid twice?

No

c) Can an actor be placed into a grid, remove itself, and then put itself back?

Yes

1. How can an actor turn 90 degrees to the right?

setDirection(getDirection()+90);

DO YOU KNOW SET 6

1. Which statement(s) in the canMove method ensures that a bug does not try to move out of its grid?

if(!gr.isValid(next)

return false;

1. Which statement(s) in the canMove method determines that a bug will not walk into a rock?

Actor neighbor=gr.get(next);

return (neightbor==null)||(neighbor instanceof Flower);

1. Which methods of the grid interface are invoked by the canMove method and why?

isValid and get because they are used to see if a location is empty or has an actor

1. Which method of the location class invoked by the canMove method and why?

getAdjacentLocation. This is used to find its nearby adjacent position.

1. Which methods inherited from the Actor class are invoked by the canMove method?

getLocation, getDirection, getGrid

1. What happens in the move method when the location immediately in front of the bug is out of the grid?

the bug will be removed from the grid

1. Is the variable loc needed in the move method, or could it be avoided by calling getLocation() multiple times.

It is needed.

1. Why do you think the flowers that are dropped by a bug have the same color as the bug?

It is easier to track the bug’s path when the flowers are the same color.

1. When a bug removes itself from the grid, will it place a flower into its previous location?

Yes if removeSelfFromGrid is called upon in the move method.

1. Which statement(s) in the move method places the flower into the grid at the bug’s previous location?

Flower boo=new Flower(getColor());

boo.putSelfIntGrid(r,c);

1. If a bug needs to turn 180 degrees, how many times should it call the turn method?

4 times

GROUP ACTIVITY

1.

a) It will turn

b) it will turn

c) It will turn

d) It will remove the actor from grid and replace it.

e) It will turn

f) If the jumper can jump over other jumpers

2.

a) It should extend Actor

b) Bug

c)No.

d)Act

e)canJump

f) place jumper in locations:

On edge of grid

with rocks, flowers, or actors in between space for jumps

with rocks, flowers, or actors in the space where the jumper is jumping to.