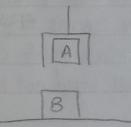


Emmanuel Martinez
 EGN 4060C
 Homework #2
 September 24, 2014

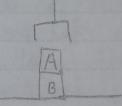
Initial State

hold(A)
 on(B,table)



After Execution State

hold(Nothing)
 on(A,B)
 on(B,table)



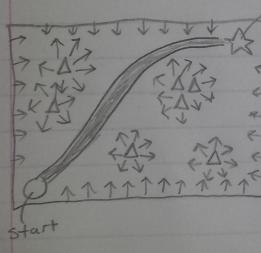
Operator	Add List	Delete List
Put operation	on(A,B) on(B,Table) hold(Nothing)	on(B,A) on(A,Table) hold(A) hold(B)

hold(wandering) hold(wandering)
 hold(B)

② 2 Sensors

① IR - Gives Distance & Direction to Battery Dock
 ② Sonar - Returns distance to obstacles

Goal



start

It depends if the robot was able to freely "wander" without having a current goal distance and direction. If the robot did have a wander ability, the robot would still advance away from walls or obstacles relative to the potential fields around walls and obstacles. Eventually, the robot can enter the range of IK for goal.

programmed

③ Yes it would provide a well laid out map of the lab but the difficulty of it would depend on if the objects in the lab were static or dynamic and how sophisticated the machine learning algorithms were. Another potential flaw than can cause some error can be the precision of the servos as our lab showed us that precision is key, else measurements can be thrown off. Overall, it can provide a well laid out map as "Shakey" has already proven.

④ FSA for an expanding Spiral Controller (#2 from Lab 2)

