

## Project#2

## ~ VACUUM CLEANER AGENT: ROOMBA ~

ROOMBA IS A SERIES OF AUTONOMOUS ROBOTIC VACUUM CLEANERS SOLD BY IROBOT.

Reference: https://en.wikipedia.org/wiki/Roomba

(100 pts.) Write a "Roomba" vacuum cleaner robot simulation runs in prolog environment. All features of VCR are up to you but you MUST design your VCR in standards of PEAS rules. It means that:

- A. You MUST have an Environment.
- B. You MUST calculate Performance Measure. Determine a cost for all moves.
- C. You MUST have at least two actuators (Move, Check\_Dirty\_or\_Clean, Clean, Pass, etc...).
- D. You MUST have at least two sensors (Location, Dirt).
- E. According to your design, when all rooms are cleaned VCR should stop and returns the Performance Measure plus "Finished!" message back.

At the beginning of running your code you should ask for dirt states of all rooms you have. For every step after beginning you should print out VCR's and room's states and next action.

GOOD LUCK!