

ABSTRACT

Cleaning house becomes a routine everyday activity for housewife, of one they are sweeping the floor, 63,4%, people have a reason why they missing sweeping houses because they were busy with another task. To clean dust or messy inside the house, 95.1%, housewives still using manual methods such as sweeping, but it cost a lot of time, not efficient, and drain energy instead of using a robotic technology. With using a robot technology will make an advantage for helping people to clean house. Cleanbot is an automatic robot for cleaning dust which can be independently working by itself and return to the starting point. To make Cleanbot working properly it will need mapping according what is needs, that's why Cleanbot using methods Maze and A-star algorithm. Maze methods are one of algorithm which studying robotic movement, while the A-star algorithm is used to finding the shortest path. According to the testing result, Cleanbot has success through all the cleaning routes, the storage process returns to the starting point, Cleanbot past 4 steps with 36 tiles, and the room size 6x6, also for 8 steps is 30 tiles in total with room size 6x5.

Keywords: cleanbot, metode *Maze*, robot, A*