CSE 316 Project Proposal

Abdur Rashid Tushar (1605070) 1605070@ugrad.cse.buet.ac.bd

Iqbal Hossain Raju (1605080) 1605080@ugrad.cse.buet.ac.bd

Nazmus Sakib (1605081) 1605081@ugrad.cse.buet.ac.bd Sakibul Islam (1605087) 1605087@ugrad.cse.buet.ac.bd

Dept. of CSE Bangladesh University of Engineering and Technology (BUET)

July 30, 2019

Project Name

Autonomous Sweeping Bot

• automatically sweep the whole room

- automatically sweep the whole room
- remove dust or small materials from the floor

- automatically sweep the whole room
- remove dust or small materials from the floor
- objects less or equal to 3 cm considered garbage and swept

- automatically sweep the whole room
- remove dust or small materials from the floor
- objects less or equal to 3 cm considered garbage and swept
- detect obstacles

- automatically sweep the whole room
- remove dust or small materials from the floor
- objects less or equal to 3 cm considered garbage and swept
- detect obstacles
- calculate total swept area

- automatically sweep the whole room
- remove dust or small materials from the floor
- objects less or equal to 3 cm considered garbage and swept
- detect obstacles
- calculate total swept area
- output the air quality of the room

• A single bot sweep the whole room removing dusts and gargbages and can also check the air quality of the room!

- A single bot sweep the whole room removing dusts and gargbages and can also check the air quality of the room!
- ease our works

- A single bot sweep the whole room removing dusts and gargbages and can also check the air quality of the room!
- ease our works
- faster

- A single bot sweep the whole room removing dusts and gargbages and can also check the air quality of the room!
- ease our works
- faster
- 4 group members!

- A single bot sweep the whole room removing dusts and gargbages and can also check the air quality of the room!
- ease our works
- faster
- 4 group members! Need a bigger project!

- Atmega32 > for processing
- ullet suction pump -> for removing dust from floors

- Atmega32 > for processing
- ullet suction pump -> for removing dust from floors
- ullet sweeping flipper -> for collecting the garbages

- Atmega32 > for processing
- suction pump -> for removing dust from floors
- ullet sweeping flipper -> for collecting the garbages
- ullet ultrasonic sensor -> for calculating room area and detect obstacles

- Atmega32 > for processing
- ullet suction pump -> for removing dust from floors
- ullet sweeping flipper -> for collecting the garbages
- ullet ultrasonic sensor -> for calculating room area and detect obstacles
- ullet dust sensor -> for calculating the air quality

- Atmega32 > for processing
- ullet suction pump -> for removing dust from floors
- ullet sweeping flipper -> for collecting the garbages
- ullet ultrasonic sensor -> for calculating room area and detect obstacles
- dust sensor − > for calculating the air quality
- DC motor − > for driving the bot
- Servo motor − > for precise positioning control

End

Thanks! < 3

6/6