CSE 3116 Microcontroller Lab

Project proposal and deliverable feedback form

Collaborators:

1.Sadnan Kibria Kawshik, AE-15,Grp-A

2.Md. Aminul Kader Bulbul, SH-17,Grp-A

3.SB Sojib, FH-37,Grp-B

Bumblebee(Self Driving Car)

This project is about automation of a car. With a given source and destination from a predefined road map, the car will be able to ride from source to destination by itself. The car will operate in two mood.

1. Self driving mood
2. Manual mood

In self driving mood it will ride itself through the road from source to destination. And in manual mood the driver will drive it through the road. Here as a driver we will drive it with a remote like a remote control car.

The main challenge will be implementing the self driving mood. Cause here the car needs to define it roads and avoid obstacle itself and also it needs to control it's speed. So some complex structure and coding may be required.

FEATURES

In Manual Mood:

1. Speed can be controlled
2. Direction can be changed
3. If a obstacle found car will give signal
4. Breaking system will be added

Self Driving Mood:

1. Car will control it's speed
2. Direction will be changed by itself
3. Obstacle will be avoided
4. Breaking will be done in necessary
5. Path will be choose by itself

Eventually the car will reach from source to destination by itself from following a given map.

FEASIBILITY

Our Budget is 5000 BDT

Required Items:

1. Car
2. Motor
3. Obstacle sensor
4. Breaking pad
5. IR communication
6. Microcontroller
7. Phone as a remote
8. Actuators

As per our knowledge everything is available and the total prize of all of the items should not exceed the Budget.

WORK PLAN

Phase 1:

The structure of the total car will be build and every required components will be added. And it will be ensured that every item is ready to work.

Phase 2:

We will be able to control the car with remote(Phone). And the basic functionality of the care will be running with remote(Phone).

Phase 3:

The car will be able to control it’s speed and change the direction. And it will able to avoid obstacle by changing direction. And the breaking system will be implemented.

Phase 4:

The final automation will be done here. Here the car will be able to ride from source to destination following a map.

Project Deliverable Feedback Form - Update 1

Project Title: Bumblebee (Self driving car)

Deliverable Name: …….

Group ID: …….

List of present member/s of list group:

1. Sadnan Kibria Kawshik, AE-15,Grp-A
2. Md. Aminul Kader Bulbul, SH-17,Grp-A
3. SB Sojib, FH-37,Grp-B

Work Summary:

Comment (Course Instructor):

Project Deliverable Feedback Form - - Update 2

Project Title: Bumblebee (Self driving car)

Deliverable Name: …….

Group ID: …….

List of present member/s of list group:

1. Sadnan Kibria Kawshik, AE-15,Grp-A
2. Md. Aminul Kader Bulbul, SH-17,Grp-A
3. SB Sojib, FH-37,Grp-B

Work Summary:

Comment (Course Instructor):

Project Deliverable Feedback Form - Update 3

Project Title: Bumblebee (Self driving car)

Deliverable Name: …….

Group ID: …….

List of present member/s of list group:

1. Sadnan Kibria Kawshik, AE-15,Grp-A
2. Md. Aminul Kader Bulbul, SH-17,Grp-A
3. SB Sojib, FH-37,Grp-B

Work Summary:

Comment (Course Instructor):

Project Deliverable Feedback Form - Update 4

Project Title: Bumblebee (Self driving car)

Deliverable Name: …….

Group ID: …….

List of present member/s of list group:

1. Sadnan Kibria Kawshik, AE-15,Grp-A
2. Md. Aminul Kader Bulbul, SH-17,Grp-A
3. SB Sojib, FH-37,Grp-B

Work Summary:

Comment (Course Instructor):

Project Deliverable Feedback Form - Final

Project Title: Bumblebee (Self driving car)

Deliverable Name: …….

Group ID: …….

List of present member/s of list group:

1. Sadnan Kibria Kawshik, AE-15,Grp-A
2. Md. Aminul Kader Bulbul, SH-17,Grp-A
3. SB Sojib, FH-37,Grp-B

Work Summary :

Comment (Course Instructor):

BUMBLEBEE