**PATH FINDING AND MAPPING SYSTEM**

**Abstract:**

This system is mainly used to find the customer needs of to find the Bus from current time onwards and measure the distance where it’s coming and how long it will reach here using GSM mobile communication in a flexible way.

This system is divided into two different modules,  
1) Path Finding for customer  
2) GSM Bus number Search engine

1. Path Finding for customer

This system is divided into three modules,  
1) GSM- Fbus protocols,  
2) Path mapping  
3) Control and Display unit

It will send all detail of our path mapping to all customers, The customer has to send the SMS to current place name, and  
Where you want to go. This system will detect and auto reply to distance of the place, bus number and angle of the place also. This communication will under the Fbus protocol using SMS protocols.

2. GSM Bus number Search engine

The customer sends the message to the customer care center. This message should contain the particular valid code.  
1) Bus stop Name (Source name)  
2) Bus Number /Destination Name

Customer care Kit checks the database from GSM System KIT and interconnected GSM BUS.If the particular bus is vailable then the Bus STOP will read the bus name Through RFID when it will reach the particular bus stop then it will send the below given details to the customer care.

PART I

1. Bus Name. (Destination Name)  
2. Time Arrival.

Finally the customer care find data from data base what it’s received from bus than its makes contact with the customer and delivers the SMS to Bus Number, what time the particular bus will reach there or not. The customer sends the message to the customer care center or kit. This message should contain the particular valid code through RS232 serial communication Using Fbus protocols, then to read all data from mobile and send into PC using RS232 communication via MAX232 IC. Then it’s stored into PC using DB. If no communication from bus then care will send Error message to travelers.

I/O Control System:

1) I/O port Communication  
2) RS232 Communication  
3) GSM Communication

**BLOCK DIAGRAM UNIT:**

MICROCONTROLLER

**LCD**

## KEYPAD-4X4

**PC**

###### **MOBILE**

**MOBILE CIRCUITS**