

LTTS  
GLOBAL  
ENGINEERING  
ACADEMY



*L&T Technology Services*

Version Number:  
Team Members :  
Team No:  
Module: Model Based System Engineering



## Document History

Ver.Rel. No.	Release Date	Prepared. By	Reviewed By	Approved By	Remarks/Revision Details
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## MOTOR SEARCH

### Introduction:

- Motor Search is a project that organizes and maintains motor information based on the demands of user. Everyone gets benefit from the system, which allows them to keep track of all of the motors. It allows both the administrator and the student to look for the motor they want.
- The Motor Search project is used to monitor and control information about motors. This project is written in C and focuses on fundamental activities such as addition of new motor, Adding the motor applications, specifying the speed of the motor, and price of the motor. Which helps user to get better understanding of motor. In this project we can maintain the records of motors.

### Defining System:

The "Motor Search" project provides us minimum information we need about the motor. We can create add new specification of motor and retrieve information about motor that are required. We may also search the motor with the help of its application as well as name, as well as keep a count of the motors. This project helps to create a system that can receive input and generate output automatically in a simple and timely manner. This also helps to store properly the motors in order to maintain their security.

## SWOT Analysis:

### **Strengths**

- Easily Accessible.
- User friendly
- Secure, Scalable & Reliable
- Innovative.

### **Weakness**

- Temporary storage of data.
- Can store 1-2 number of applications.
- Cost increases as features added in the code increase.
- lower growth in an innovative ideas.

### **4 W's and 1 H**

#### Who:

Motor search can be used by both students and adults who are looking for different types of motors.

#### What:

Motor search is a search engine that lets people store as well as find the required motor they need.

#### When:

People looking to store the information of motors and their specifications will find motor search extremely handy, which can be easily accessed.

#### Where:

This search engine can be used by students in colleges, and industry people which helps in storing of motor information.

How:

This is used to store the details of the motors, as well as to display motor information ,addition to that displaying the motor with the help of keyword and keeping a count of it.

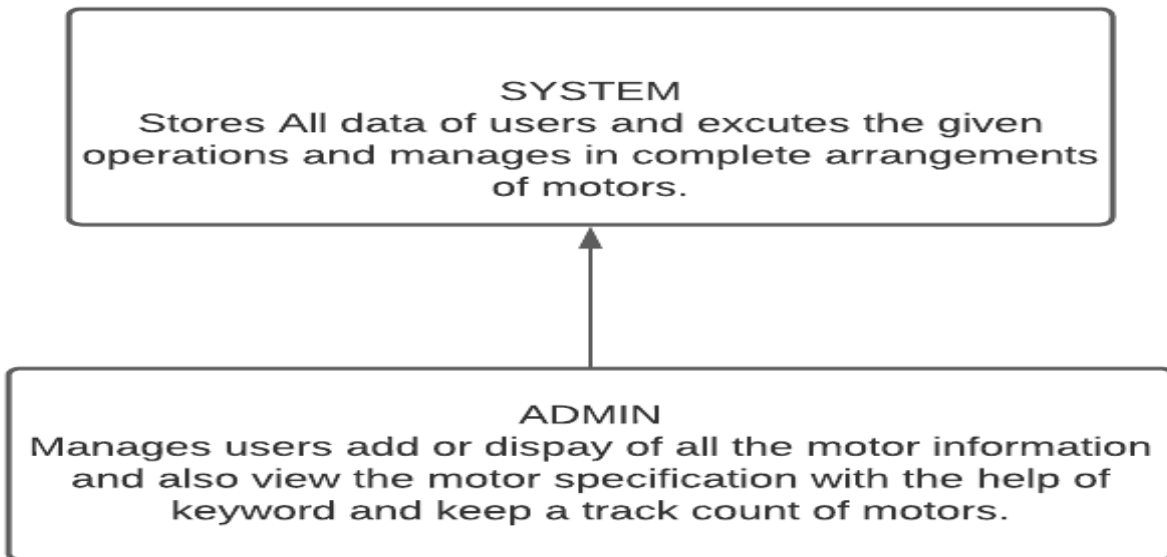
## High Level Requirements

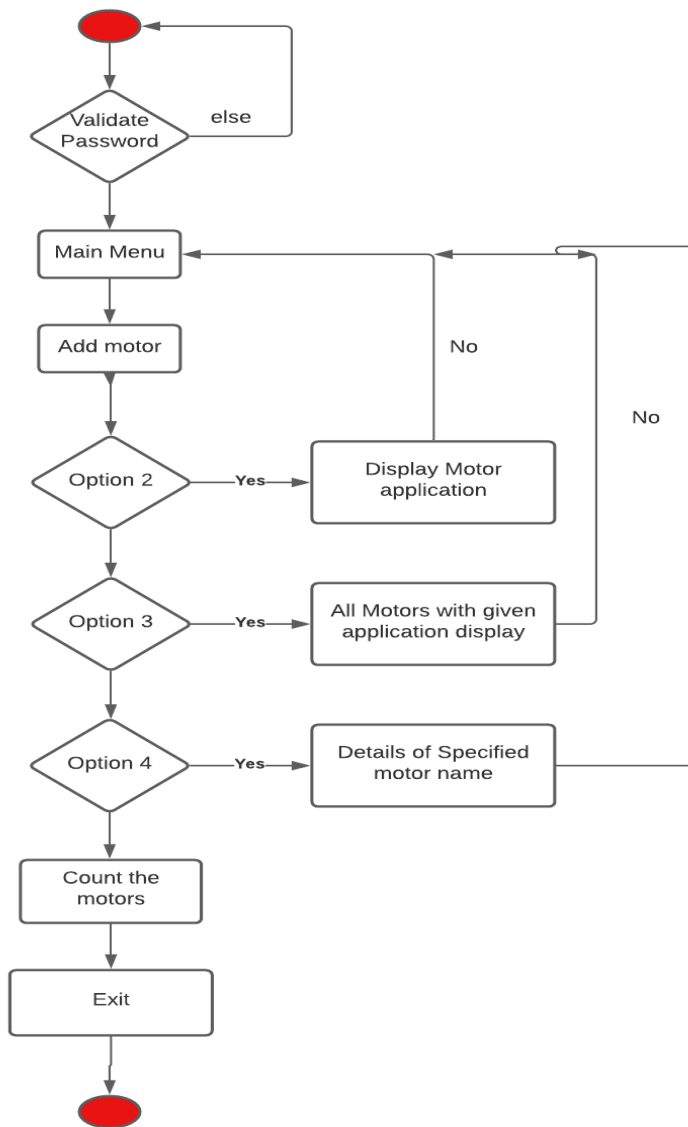
RID	Description	Status
HLR1	C LANGUAGE	Implemented
HLR2	OS Windows	Implemented
HLR3	OS Linux	Implemented
HLR4	RAM 8GB	Implemented

## Low Level Requirements

RID	Description	Status
LLR1	Add motor	Implemented
LLR2	Search for motors	Implemented
LLR3	Search motors with the help of motor name or application	Implemented
LLR4	Keep a count of motors	Implemented

High Level Use case Diagram :



Low Level Diagram(flowchart) :

## High level Test plan

Test id	Description	Expected output
HLR1	Add motors	CATEGORY,MOTORNAME,DISPLAYINFO,SEARCHBYAPPLICATION,SEARCHBYNAME,KEEPCOUNT,EXIT
HLR2	Display motor	CATEGORY,ID
HLR3	Search by application	CATEGORY,ID
HLR4	Search by motor name	CATEGORY,ID
HLR5	Keep count	CATEGORY,ID

## Low level Test Plan

Test id	Description	Expected output
LLR1	Add motors	CATEGORY,MOTORNAME,DISPLAYINFO,SEARCHBYAPPLICATION,SEARCHBYNAME,KEEPCOUNT,EXIT
LLR2	Display motor	CATEGORY,ID
LLR3	list_all_motors_app CATEGORY,ID	CATEGORY,ID
LLR4	List all motor_name CATEGORY,ID	CATEGORY,ID
LLR5	Keep count	CATEGORY,ID

## WORKING:

### USER LOGIN:

h:\Gitrepos\M1\_Motorsearch\_utility\3\_implementation\maincode.exe

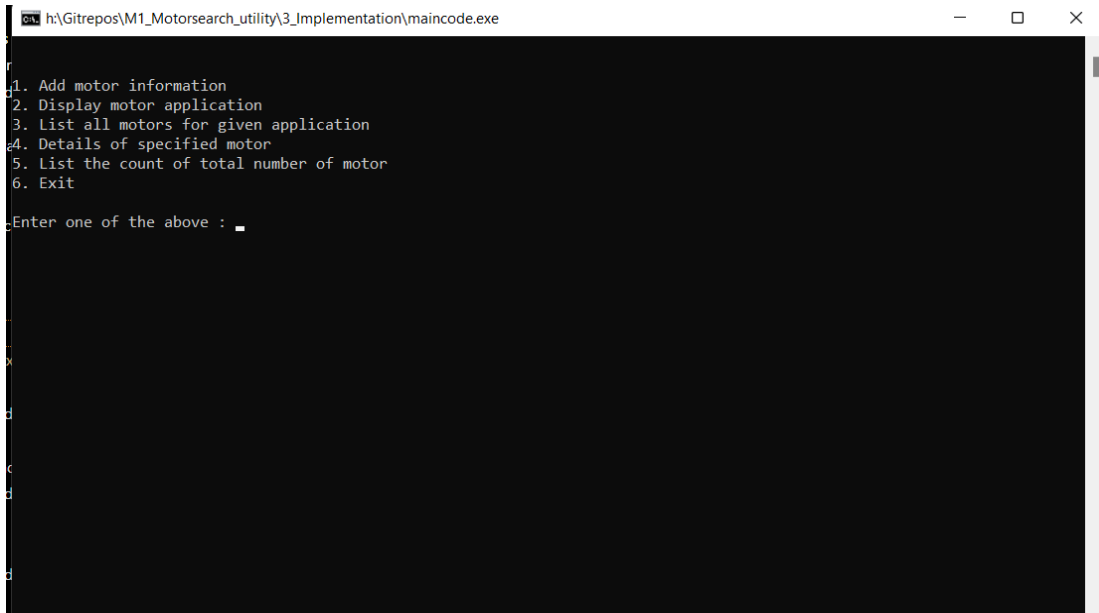
ENTER THE USERNAME AND PASSWORD

USERNAME: user

PASSWORD: pass

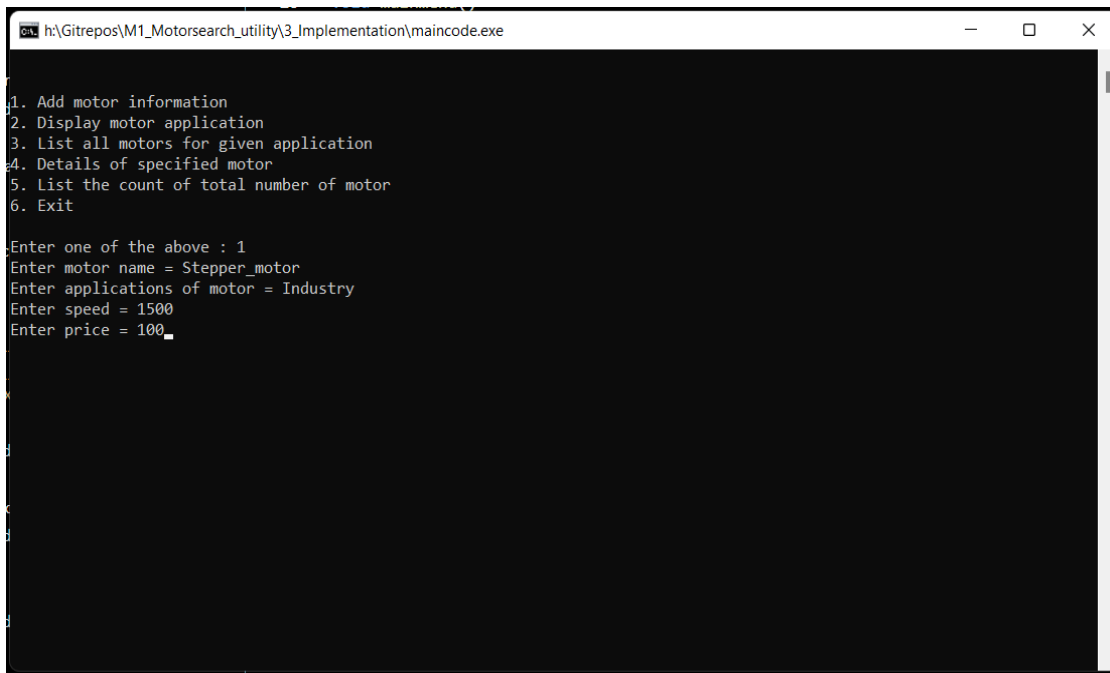


## MAIN MENU:



```
h:\Gitrepos\M1_Motorsearch_utility\3_Implementation\maincode.exe
1. Add motor information
2. Display motor application
3. List all motors for given application
4. Details of specified motor
5. List the count of total number of motor
6. Exit
Enter one of the above : _
```

## ADD MOTOR:



```
h:\Gitrepos\M1_Motorsearch_utility\3_Implementation\maincode.exe
1. Add motor information
2. Display motor application
3. List all motors for given application
4. Details of specified motor
5. List the count of total number of motor
6. Exit
Enter one of the above : 1
Enter motor name = Stepper_motor
Enter applications of motor = Industry
Enter speed = 1500
Enter price = 100_
```

## DISPLAY MOTOR INFORMATION:

```
h:\Gitrepos\M1_Motorsearch_utility\3_Implementation\maincode.exe
26 void mainmenu()
{
    1. Add motor information
    2. Display motor application
    3. List all motors for given application
    4. Details of specified motor
    5. List the count of total number of motor
    6. Exit

    Enter one of the above : 3
    Enter appln name : Industry
    Found !
    motor name = Stepper_motor      appln of the motor = Industry      speed = 1500      price = 100.000000

    Press any key for main menu.....
}
```

## LIST ALL MOTORS FOR GIVEN APPLICATION:

```
h:\Gitrepos\M1_Motorsearch_utility\3_Implementation\maincode.exe
26 void mainmenu()
{
    1. Add motor information
    2. Display motor application
    3. List all motors for given application
    4. Details of specified motor
    5. List the count of total number of motor
    6. Exit

    Enter one of the above : 3
    Enter appln name : Industry
    Found !
    motor name = Stepper_motor      appln of the motor = Industry      speed = 1500      price = 100.000000

    Press any key for main menu.....
}
```

### LIST ALL MOTORS FOR GIVEN NAME:

```
h:\Gitrepos\M1_Motorsearch_utility\3_Implementation\maincode.exe

1. Add motor information
2. Display motor application
3. List all motors for given application
4. Details of specified motor
5. List the count of total number of motor
6. Exit

Enter one of the above : 4
Enter motor name : Stepper_motor
Found !
motor name = Stepper_motor      appln of the motor = Industry      speed = 1500      price = 100.000000

Press any key for main menu.....
```

### COUNT:

```
h:\Gitrepos\M1_Motorsearch_utility\3_Implementation\maincode.exe

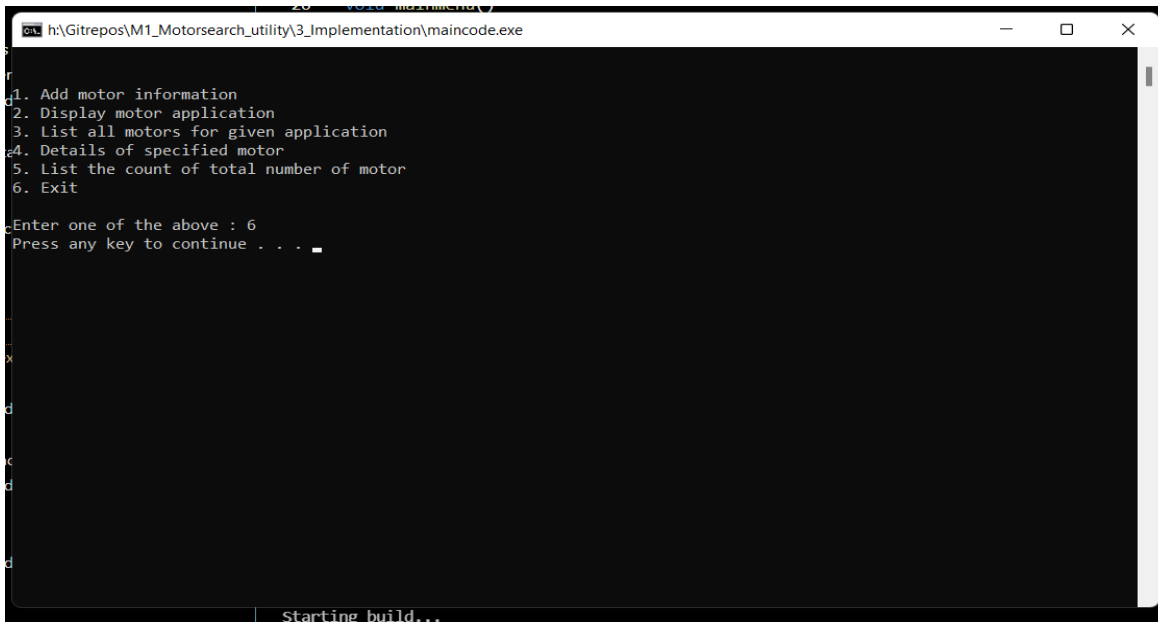
1. Add motor information
2. Display motor application
3. List all motors for given application
4. Details of specified motor
5. List the count of total number of motor
6. Exit

Enter one of the above : 5

No of total number of motors : 2

Press any key for main menu.....

Starting build
```

EXIT:

```
h:\Gitrepos\M1_Motorsearch_utility\3_Implementation\maincode.exe
1. Add motor information
2. Display motor application
3. List all motors for given application
4. Details of specified motor
5. List the count of total number of motor
6. Exit
Enter one of the above : 6
Press any key to continue . . .
```

Starting build...