MOVERS TRANSPORT SYSTEM

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PRESENTED TO: KENYA NATIONAL EXAMINATION COUNCIL

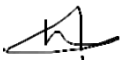
YEAR: 2021

DECLARATION

I hereby declare that this is my original work and has not been presented to any other institution. I solemnly affirm that this work has not been copied from any other source but my own creation.

NAME: BRIAN NDETO

INDEX NUMBER: 204200004204

SIGNATURE: 

SUPERVISOR NAME: MR. JOSEPH NDEDE

SIGNATURE:

DEDICATION

- I would like to dedicate this piece of work to the following people:
- My mum you have always been there for me each and every step of the way.
- My teachers who have guided me earnestly through this task.
- My friend Moses Oketch you taught me that hard work pays.

ACKNOWLEDGEMENT

I am most grateful and humbled to acknowledge the help I received from the following people:

- The almighty God for leading me through each hill and mountain.
- Mr Ndede who has of most help during formulating and designing of this system.
- The school for providing me with the necessary hardware and software requirements during the project.
- My friends' criticism that pushed me to better my best.

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INTRODUCTION

A mover is a transport company that gives transport for various agricultural goods either produce or farm inputs. The various produce it transports may include: cereals, livestock and perishable goods such as milk, eggs, fish and flowers, the farm inputs include; fertilisers, manure, herbicides, pesticides and seeds for planting in farms.

Large scale farmers are registered as individual members while small scale farmers have to join a group in order to have access to the company's services as a unit.

Their modes of transport include pickups, trailers, Lorries and refrigerated trucks and it charges all this according to the means of transport, load capacity and destination.

The company employs drivers and loaders where all are assigned specific vehicles. The drivers are responsible for the vehicles and ensuring goods reach their destinations safely. Drivers who commit offences are surcharged. That is if goods they are carrying more so perishable get spoilt on the way. A driver is surcharged and they receive a warning letter. If it exceeds three times a driver served with a warning letter and commits an offence is suspended from duty for one month. If suspended twice within six months then they are fired.

Each vehicle is assigned loaders according to its type. Vehicles are serviced and fuelled and expenses are re4corded. 20% of the total revenue is remitted as tax to the government.

CHAPTER ONE: SYSTEM ANALYSIS

i. Problem definition

Movers Transport Company is in need of a computerised information system that will replace their current manual one. The system should be able to offer fast and efficient services, store all the company's information and manage all the company's data.

ii. Existing system

- **Overview**

As per the concluded investigations it was found that the existing system is not only manual but also mechanical in all of its operations. The existing manual system is very discouraging and tiresome to manage since it needs a lot of paperwork and human labour to run. In spite of the problems coming with the manual system it also has its benefits for example it has been very easy for the workers to be able to adjust to all changes made to the system. There is a very urgent need for a solution to the existing problems in the system for efficiency

Advantages of the manual system

- The system is user-friendly hence not much training of the users is required in order to run the system.
- Since the system is mostly manual, little electric power is required in running the system thus saving on electricity costs and reducing power-related threats such as blackouts and electrocution.

Disadvantages of the manual system

- The current system is prone to human errors in computations thus causing undesirable conflicts with the youth group members and long-term loss of data and information which may also conflict with the normal running of the system.
- Plenty of papers and files stored in cabinets occupy much of office space which could be useful for other reasons.
- There are no back-up features to restore lost or damaged data.
- It is time consuming as data is processed manually.
- The manual system is susceptible to change of information
- Misplaced records are hard to locate and it is cumbersome to replace lost records.

- **System structure**

a. The manual system in place uses a lot of paperwork in most of its operations including:

i. They record and maintain all the farmers' and groups' orders in large record books.

ii. They use record books to record the vehicles and their registration numbers including all the tools and uniforms used by the loaders and drivers.

iii. They use a register book to record names of all their employees and workers including loaders.

b. The manual system involves a lot of calculations all of which are done manually by use of calculators.

c. Invoices to farmers, receipts and even payment slips to the workers are manual.

d. All this has brought about a need for a large filing system which is in turn very hard to access and also very tedious and which has taken a lot of space.

i. Proposed system

(i) Objectives of the proposed system

The proposed system will be fully computerized and will be able to carry out all its operations with the use of computers and other electronic devices like laptops and tablets.

The objectives of this proposed system include:

- To reduce and save money used in buying record books.
- To raise the profits by accurate and precise calculations thus preventing errors like in the old system.
- To generate much attractive and detailed payment receipts and invoices.
- To ease monitoring and management of operations and progress of the company.
- To reduce paperwork present in the existing system
- To ensure workers are paid on time and there are no errors in their salary.

(ii) Scope of the proposed system

The proposed system will be able to do the following:

- Maintain computerised records of all the members of the company.
- Maintain records of vehicles and their particular loaders and drivers.
- Maintain records of goods transported and orders for transport
- Maintain records of farmers who are in groups.
- Maintain records of offences committed by drivers.
- Maintain expenses records for each vehicle
- Compute the following:

- Payment for loaders and drivers
- Penalties surcharged on drivers
- Loading fee per vehicle trip
- Expenses for each vehicle
- Tax payable
- Total payable
- Total company expenses

- Total revenue for company
- Overall profit
- Generate various reports

(iii) Benefits of proposed system

- New system will reduce the cost of running the organisation tremendously by saving money used in buying of record books.
- New system will save the company more money because it will need less people to work with it.
- New system will enable the company gain more competence for the market today.
- New system will save space because it will replace all the filing cabinets.

(iv) Feasibility Study

This is a study undertaken on various aspects of the proposed system to understand whether it is viable and if when implemented will go on to achieve its objectives. The following feasibility studies were carried out on the proposed system.

- **Technical feasibility**

This was carried out to evaluate the current technology; all the hardware and software equipment required. The personnel were also evaluated and it was found that they are in need of training. It was also concluded that there was need for new computers and network equipment.

- **Social feasibility**

This deals with how the new system is received by its immediate environment which includes the workers. It was carried out to check whether the immediate environment i.e. banks and members of the company are flexible with the changes and agree with it which they did.

- **Schedule feasibility**

This was to evaluate whether the time put aside for the implementation and maintenance of proposed system was adequate. As per the studies, the estimated time for the system to be set up is 7 months, functioning properly and fully.

- **Economic feasibility**

This was carried out to find out whether the proposed system was going to bring profits after starting its operations and deducting costs like labour, power and electronics. The results of the study are shown in the tables below.

HARDWARE AND SOFTWARE	MANUAL SYSTEM	NEW COMPUTERISED STSTEM

COMPUTERS	40,000	600,000
SPEAKERS	3,000	12,000
PRINTERS	0	15,000
SOFTWARE	O	15,000
SUB TOTALS	Ksh.43,000.00	Ksh.642,000.00

Table 1 : Hardware components of the system

The table above was made after a research conducted on the hardware and software to show whether it would be possible to work with fewer needs compared to the manual system. It was concluded that the manual system would have an advantage over the new system. In fact it would save a lot more money.

OFFICE EQUIPMENT	MANUAL SYSTEM	NEW COMPUTERISED SYSTEM
FURNITURE	500,000	40,000
STATIONERY	320,000	3,000
SUB TOTALS	Ksh.820,000.00	Ksh.43,000.00

Table 2 : To compare the old system and the new one.

The table above was made after a research conducted on the offices and office equipment to show whether it would be possible to work with even lesser office equipment compared to the manual system. It was concluded that the new computerised system would have an advantage over the old manual system. In fact it would save a lot more money.

PERSONNEL SALARIES	MANUAL SYSTEM	NEW COMPUTERISED SYSTEM
CLERKS	20,000	10,000
ACCOUNTANTS	10,000	0
OTHERS	180,000	30,000
SUB TOTALS	Ksh.210,000.00	Ksh.40,000.00

Table 3:Personnel of the company

	MANUAL SYSTEM	NEW SYSTEM
HARDWARE AND SOFTWARE	Ksh.43,000.00	Ksh.642,000.00
OFFICE EQUIPMENT	Ksh.820,000.00	Ksh.43,000.00
SALARIES	Ksh.210,000.00	Ksh.40,000.00
TOTALS	Ksh.1,073,000.00	Ksh.725,000.00

Table 4: Final totals

With the results above the study shows that the new system has a high degree of proven cost benefit to MOVERS TRANSPORT COMPANY.

Legal feasibility

This was carried out to determine whether the systems activities will bring about conflict in the society. It was established that the new system works fully under the laws of the country and no conflict is anticipated.

CHAPTER TWO: SYSTEM DESIGN

a. **System flowchart**

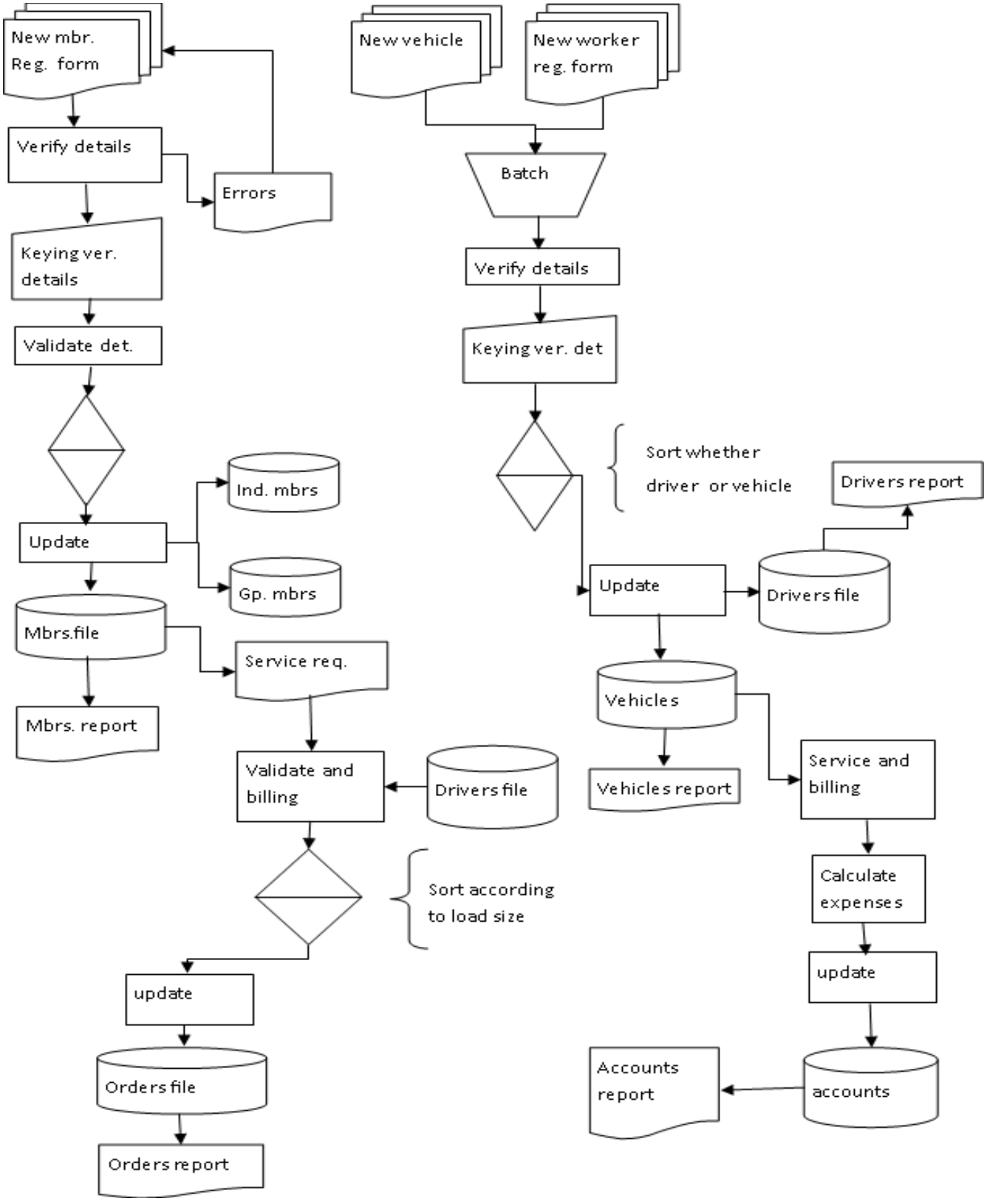


Figure 1: System flowchart

b. Tables designs

Members' Table

This table is used to input members' data.

FIELD NAME	DATA TYPE	DESCRIPTION
Member_code(PK)	Text	
F_name	Text	
L_name	Text	
TEL_NO	Text	
Town	Text	
Member_type	Text	Gender of member
Acc_no	Text	Members bank account number
Farm_produce	Text	Nature of produce
National_Id_no	Text	National identification number
Gender	Text	Gender of member
Group_ID	Text	Group identification number if any

Table 5: Member's Table

Drivers Table

This table is a design of the drivers table.

FIELD NAME	DATA TYPE	DESCRIPTION
Driver_No(PK)	Text	Driver ID number
F_name	Text	Driver first name
L_name	Text	Drivers last name
Tel_No	Text	Drivers telephone or cellphone number
Nat_Id	Text	National identification number
Vehicle	Text	Vehicle assigned to driver
Acc_no	Text	Drivers bank account number
Address	Text	Address for place of residence
Gender	Text	Gender of driver
Town	Text	Place of residence of driver

Table 6: Drivers Table

Loaders Table

This table is a design of the loaders table.

FIELD NAME	DATA TYPE	DESCRIPTION
Loaders_no(PK)	Text	Loaders ID number
F_Name	Text	Loaders first name
L_Name	Text	Loaders last name
Nat_Id	Text	National identification number
Address	Text	Address for place of residence
Tel_No	Text	Loaders telephone or cellphone number
Acc_no	Text	Loaders bank account number
Gender	Text	Gender of loader
Town	Text	Place of residence of loader

Table 7: **Loaders Table**

Groups Table

This is a design of the Groups Table

FIELDNAME	DATATYPE	DESCRIPTION
Group_ID(PK)	Text	Registration ID number
Goup_Name	Text	
location	Text	
Farm_Produce	Text	
Members_code	Text	

Table 8: Groups Table

Transport service

The table below is a design of the Transport service table.

FIELDNAME	**DATATYPE**	**DESCRIPTION**
Order _no(PK)	Text	Order ID number
Good_Id	Text	ID number of good
Date	Date/Time	Date of order
Cost	Currency	Charges for transport
Order_capacity	Text	capacity of order
Vehicle_no	Text	Vehicle registration number

Table 9: Transport services table.

Vehicles Table

This is a design of the vehicles table.

FIELDNAME	DATATYPE	DESCRIPTION
Reg_No(PK)	Text	Registration number of vehicle
Veh_type	Text	type of vehicle
Load capacity	Number	Capacity of vehicle
Cost_Per_Km	Number	Cost of one trip
Colour	Text	colour of vehicle
Driver_pay	Currency	Payment to driver per trip
Loader_pay	Currency	Payment to loader per trip
Driver_no	Text	driver of vehicle
loader_no	Text	loader of vehicle

Table 10: vehicles Table

Offence Table

This table design below is for the offences

FIELDNAME	DATATYPE	DESCRIPTION
Offence_Id(PK)	Text	Offence ID number
Offence	Text	Offence type

Table 11: offence table

Punishments table

This table design below is for the Punishments table

FIELDNAME	DATATYPE	DESCRIPTION
Offence_Id(PK)	Text	Service Charges
Driver_No(FK)	Text	driver of vehicle
Punishment_Id	Text	Punishment ID number
Punishment	Text	Punishment type
Date_effected	Date/Time	Date of Punishment effecting

Table 12: Punishments Offence

Goods Table

This table design below is for the Goods

FIELDNAME	DATATYPE	DESCRIPTION
Good_Id(PK)	Text	Goods ID number
Good	Text	Good type

Table 13: Goods Table

Orders table

This table design below is for the orders table

FIELDNAME	DATATYPE	DESCRIPTION
Order_no(PK)	Text	Order ID number
Vehicle_Reg	Text	Vehicle registration number
Good_Id	Text	Goods ID number
Load_Capacity	Number	Capacity of load
Member_No(FK)	Text	Member ID number
Condition	Text	How the goods arrive
Date_	Date/Time	Date of Order

Table 14: Orders table

Services Table

This table design below is for the Services Table

FIELDNAME	DATATYPE	DESCRIPTION
Service_No (PK)	Text	Service ID number
Service	Text	Service type
Charges	Currency	Amount charged

Table 15: Services Table

Expense Table

This is a design of the expense table

FIELDNAME	DATATYPE	DESCRIPTION
Reg_No	Text	Registration ID number
Service_No(FK)	Text	Service ID number
Service_Charges	Currency	Charges for Service

Table 16: expense table

The above tables will be used to store information of the system.

c. Input Screen Design

Members' Form

The Figure below is a design of the members' entry form.

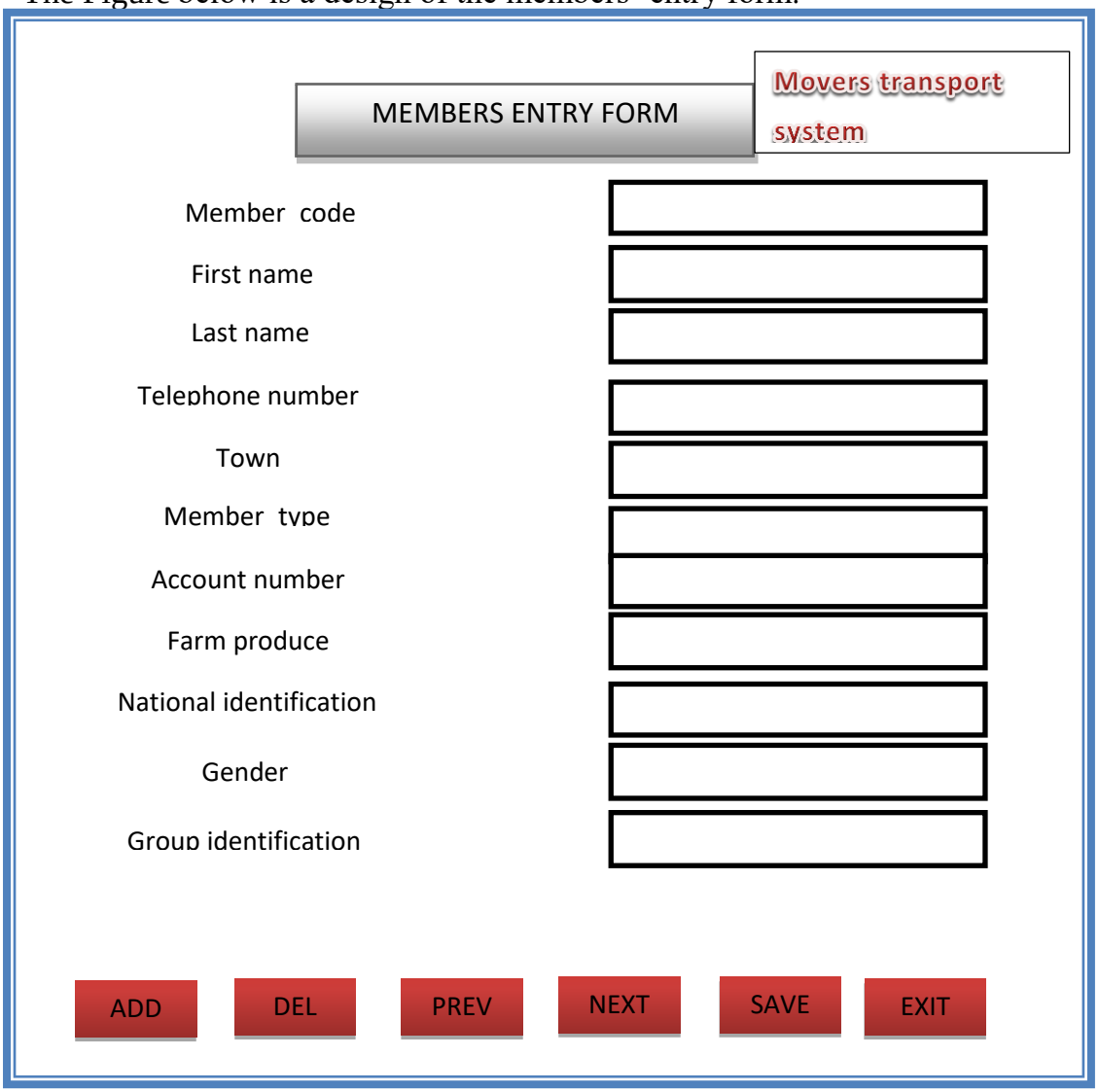


Figure 2 Members' Form

Drivers Entry Form

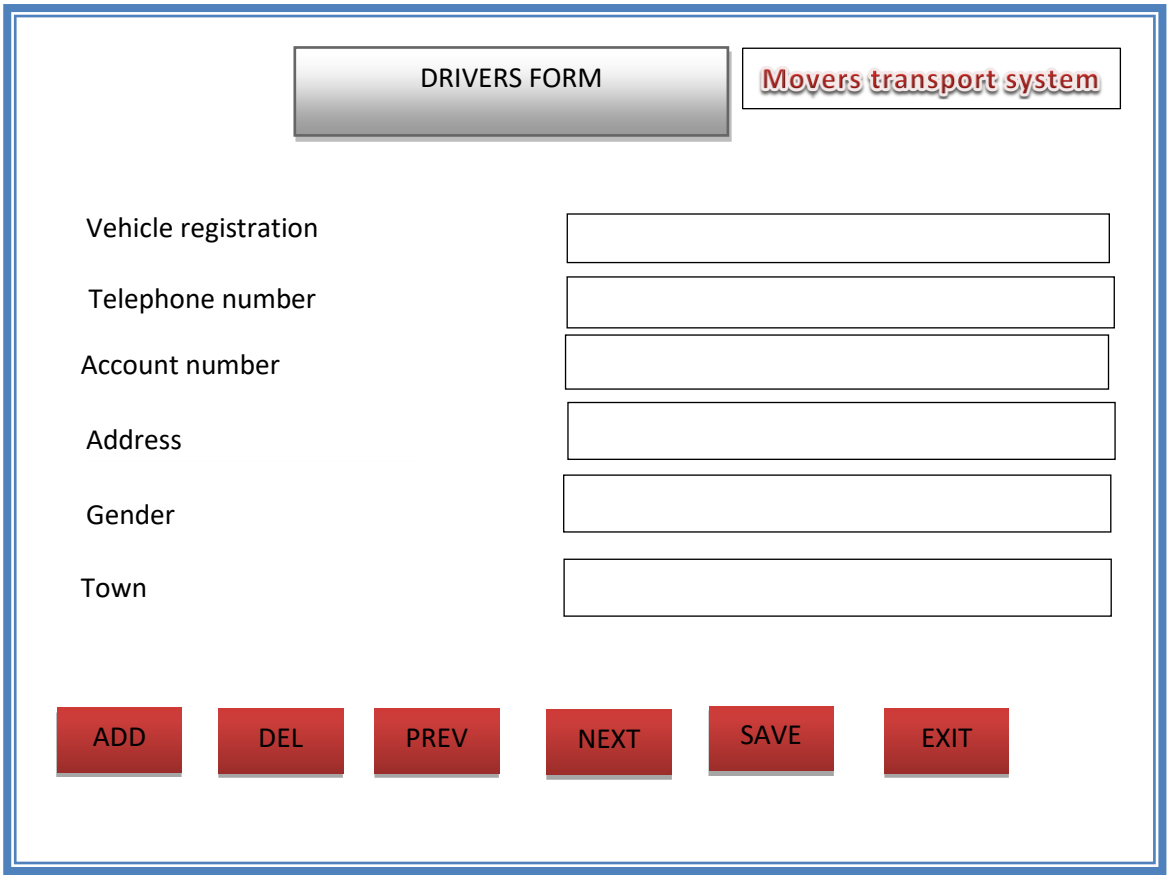


Figure 3: Drivers' entry form

Loaders Entry Form

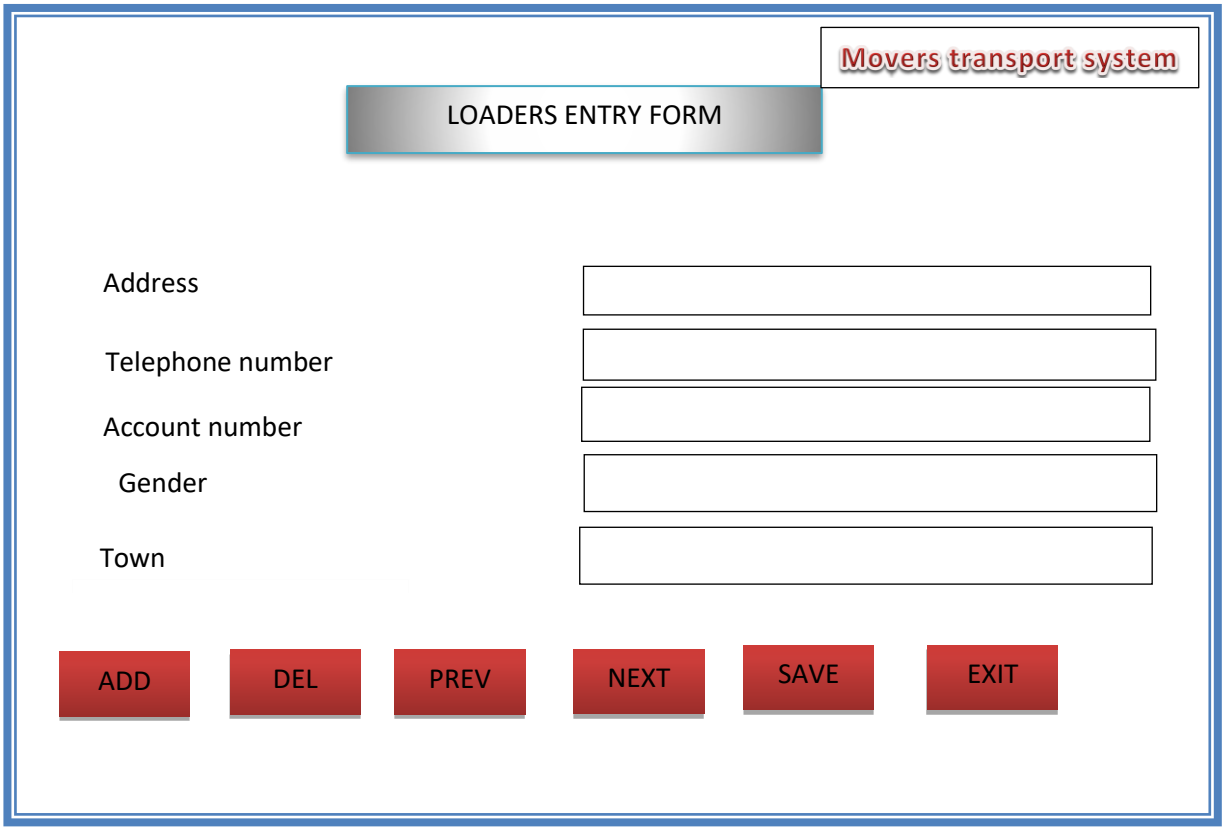


Figure 4: Loaders Entry form

Groups Form

This is a design for the Groups Entry Form.

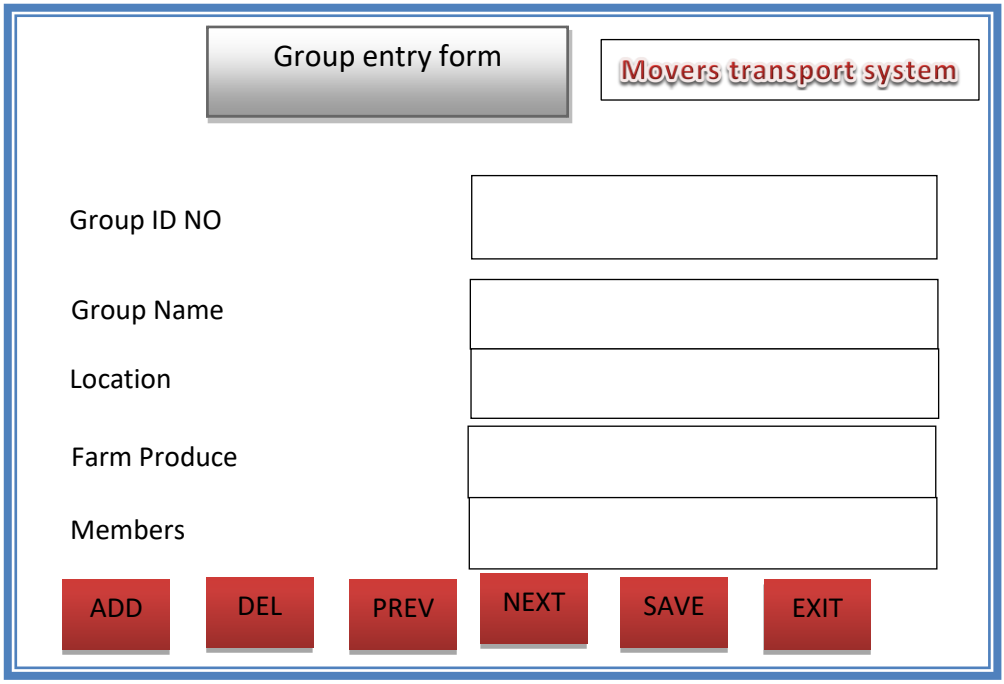


Figure 6**:** Groups Entry Form

Vehicles Entry Form

This is a form design for the vehicles entry form

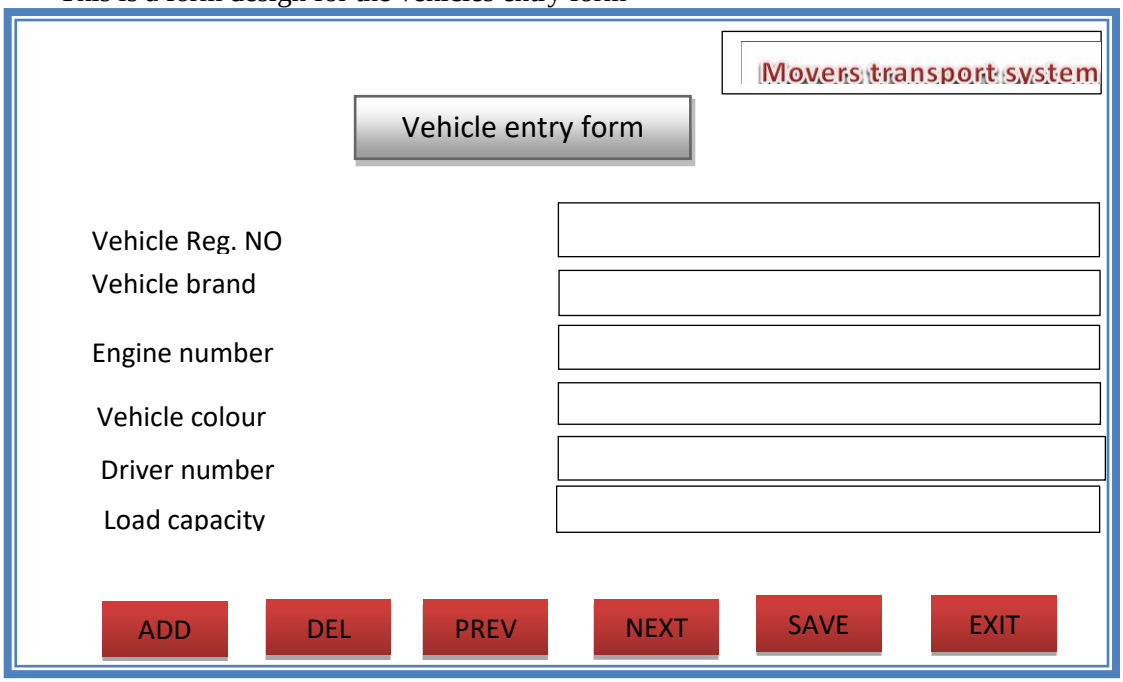


Figure 7: Vehicle entry form

Punishments Form

This is a form design for the punishment entries

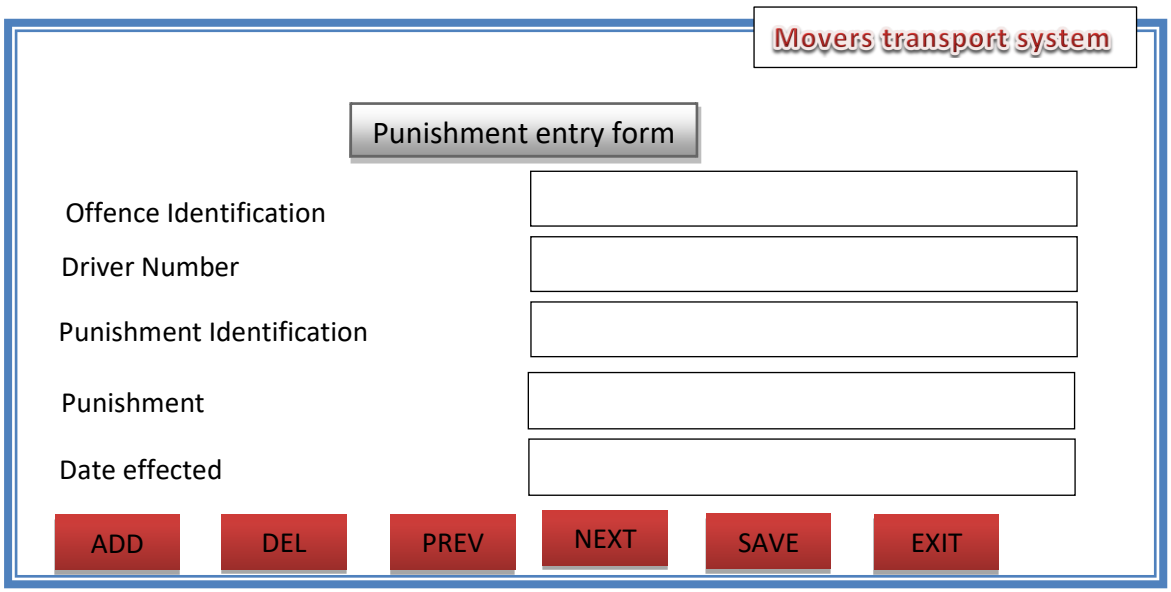


Figure 8: Punishments Form

Order Entry Form

This is a form design for the order entry form.

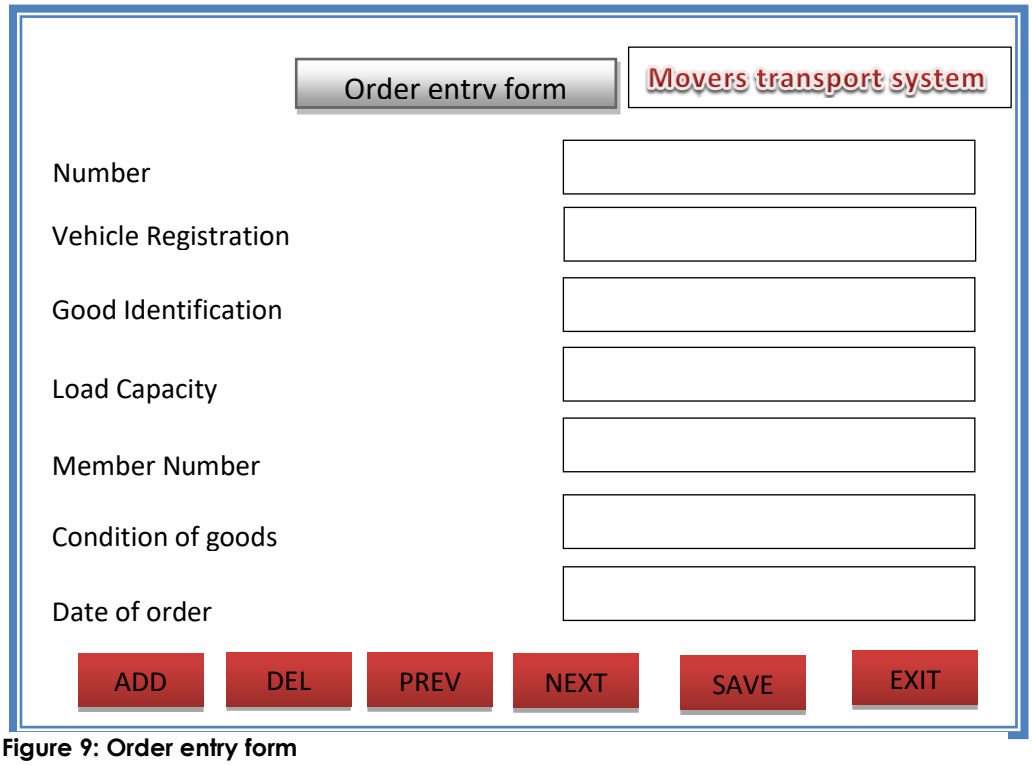


Figure 9: Order entry form

d. Output Screen Design

Members' Report

The figure below is a design of the members Report.

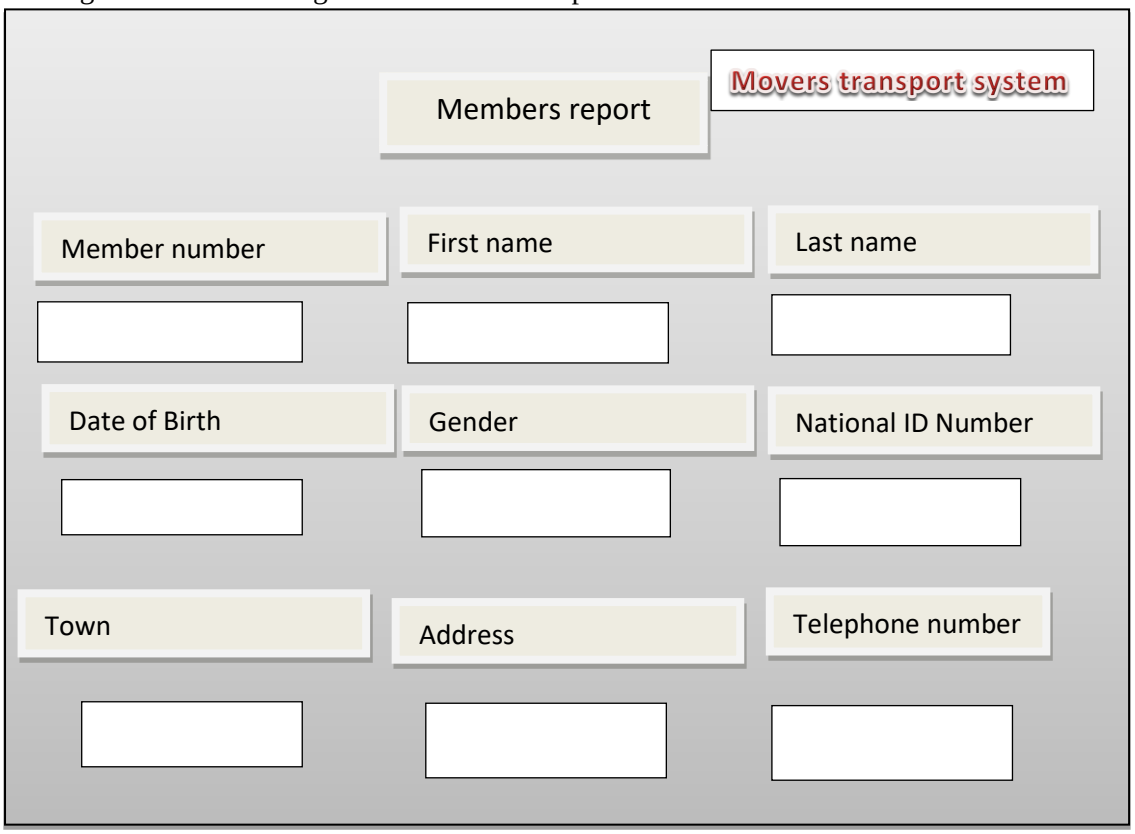


Figure 10: Members' Report

Drivers' Report

The figure below is a design of the drivers' report

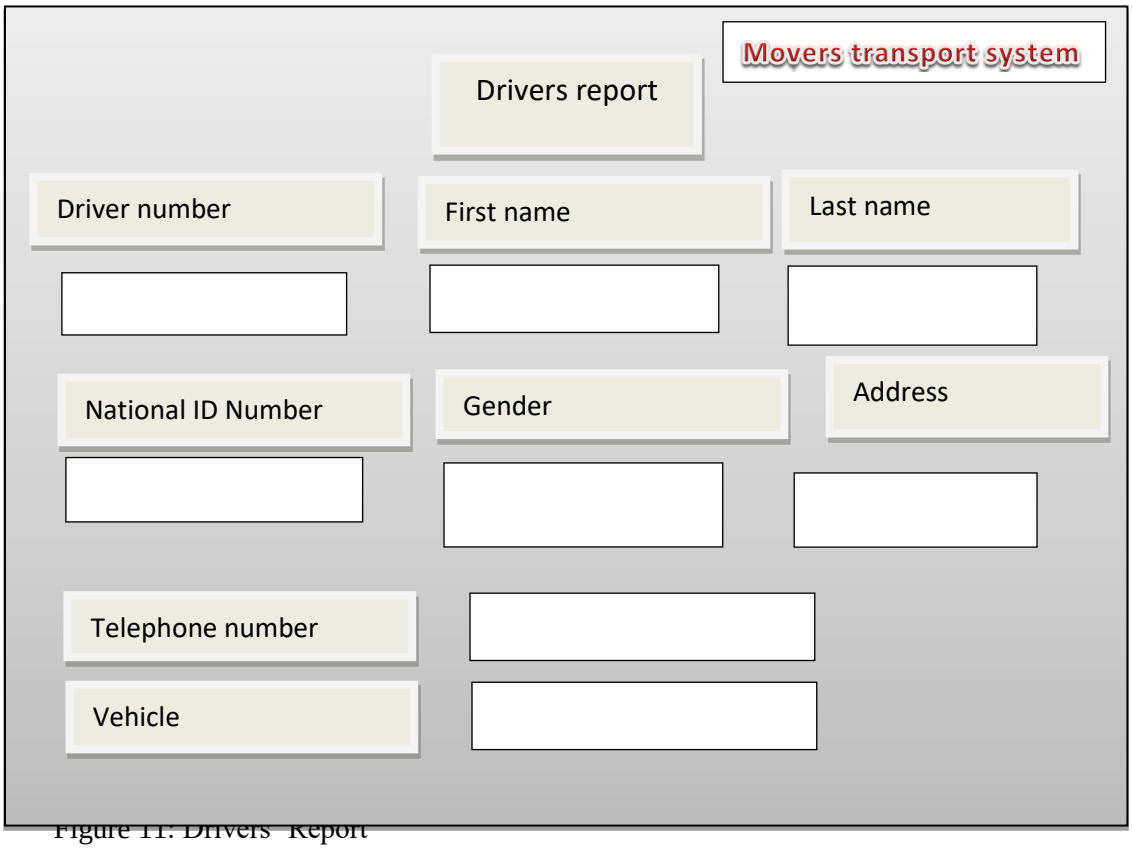


Figure 11: Drivers' Report

Loaders' Report

The figure below is a design of the Loaders' Report.

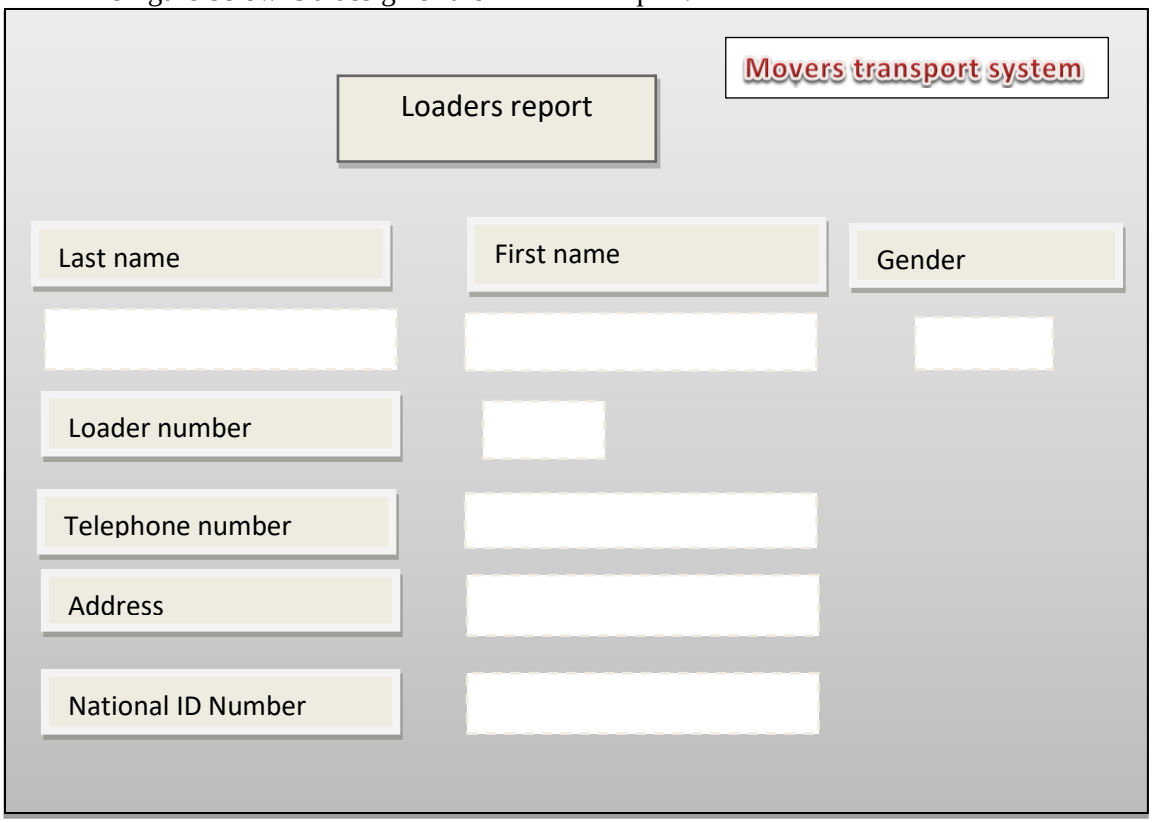


Figure 12: Loaders' Report

Vehicles' Report

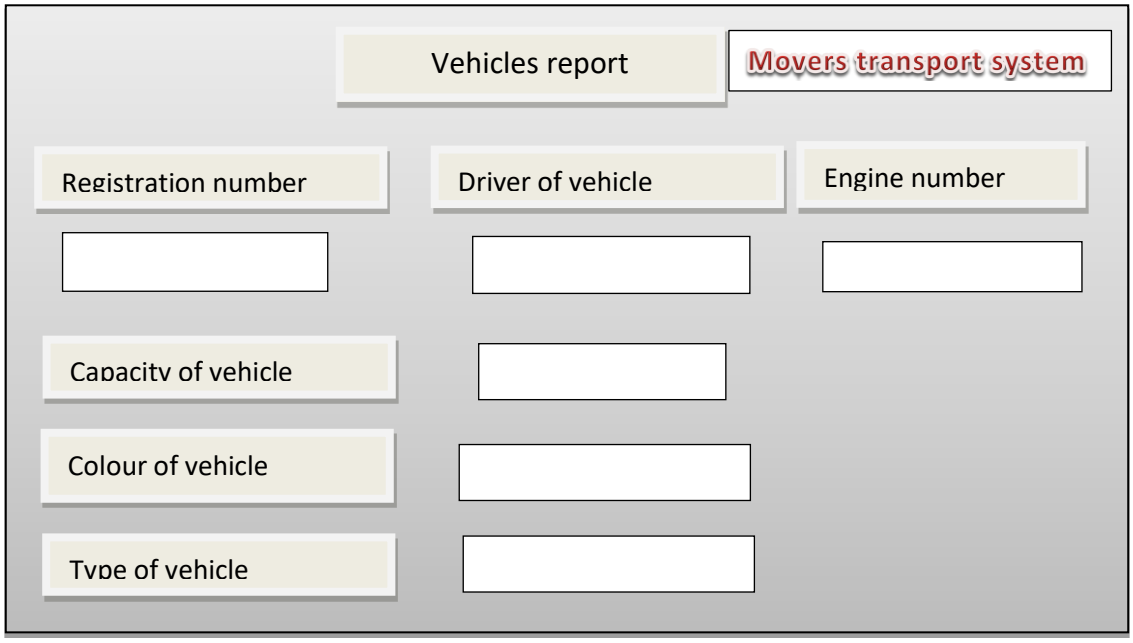


Figure 13: Vehicles' Report

Orders' Report

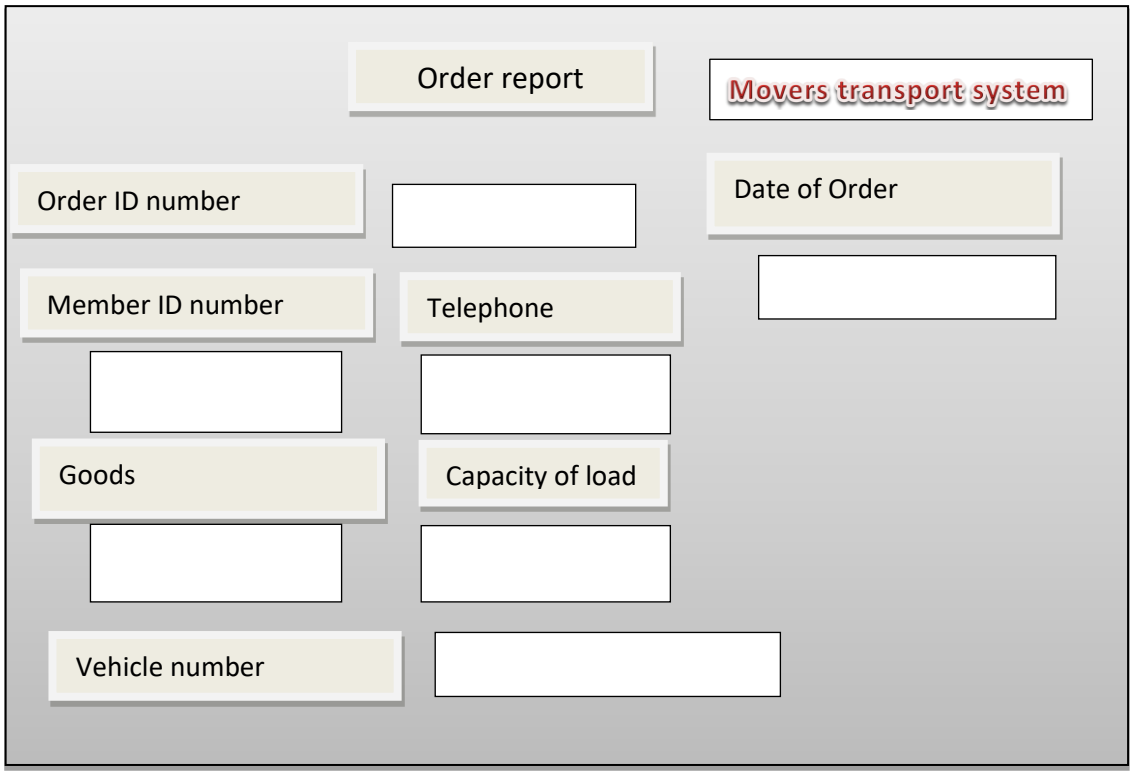


Figure 14 Orders' Report

Punishments' Report

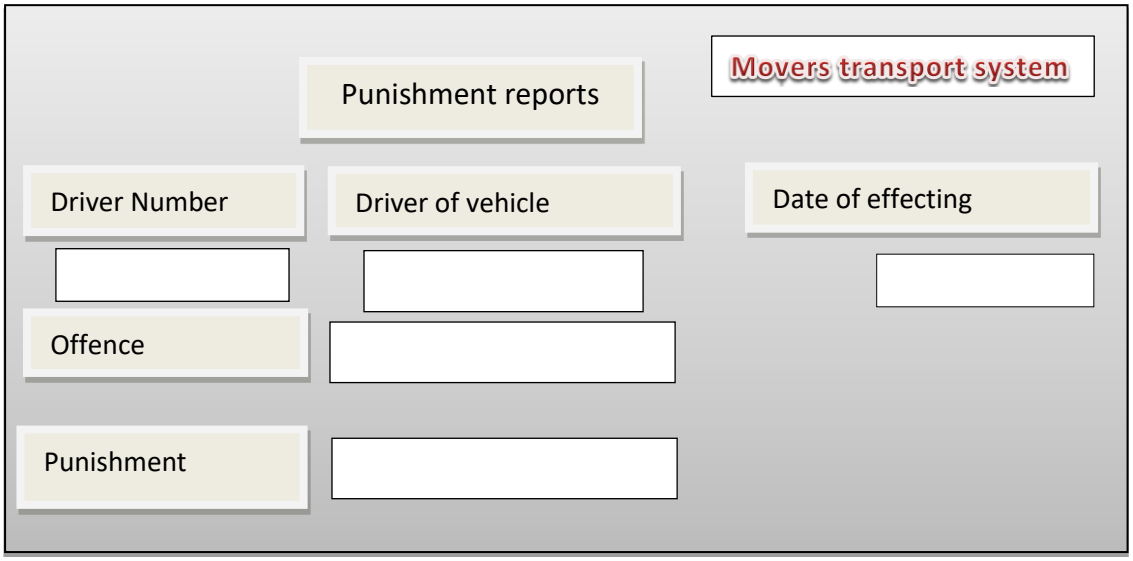


Figure15: Punishments' Report

Services' Report

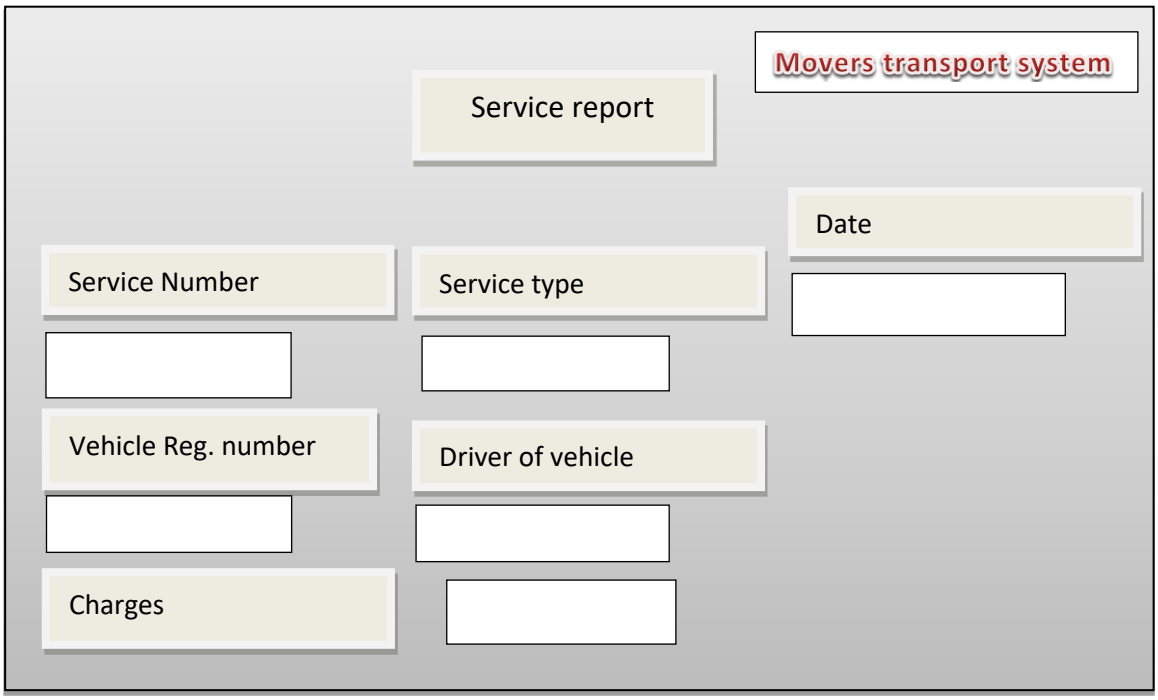


Figure16: Services' Report

CHAPTER THREE: SYSTEM CONSTRUCTION

Table designs

Members table

This table contains

Members_Table

Field Name	Data Type
Member_code	Text
F_name	Text
L_name	Text
TEL_NO	Text
Town	Text
Member_type	Text
Acc_no	Text
Farm_produce	Text
National_Id_no	Text
Gender	Text
Group_ID	Text

Figure 17.members table

Drivers table

Drivers_Table

Field Name	Data Type
Driver_No	Text
F_name	Text
L_name	Text
Nat_Id	Text
Veh_reg	Text
Tel_No	Text
Acc_no	Text
Adress	Text
Gender	Text
Town	Text
Payment	Currency

Figure 18.drivers table

Loaders table

Loaders_Table

Field Name	Data Type
loaders_no	Text
F_Name	Text
L_Name	Text
Nat_Id	Text
Adress	Text
Tel_no	Text
Acc_no	Text
Gender	Text
Town	Text

Figure 19.loaders table

Groups table

Group_Table

Field Name	Data Type
Group_ID	Text
Goup_Name	Text
location	Text
Farm_Produce	Text
Members	Text

Figure 20.groups table

Orders table

Orders_Table

Field Name	Data Type
Order_No	Text
load_capacity	Number
Member_No	Text
vehicle_Type	Text
Date_	Date/Time
Charges	Currency
Delivered	Yes/No

Figure 21.orders table

Goods transported table

Goods_Transported_Table

Field Name	Data Type
Order_no	Text
Vehicle_Reg	Text
Good_Id	Text
Load_Capacity	Number
Member_No	Text
No_Of_Trips	Number
Distance	Number
Loader_no	Text
No_loadersss	Text
driver_no	Text
Payments	Currency

Figure 22.goods transported table

Vehicles table

Vehicles_Table

Field Name	Data Type
Reg_No	Text
Veh_type	Text
colour	Text
Load capacity	Number
No_of_loaders	Number
Driver_no	Text

Figure 23.vehicles table

Transport charges

Transport charges

Field Name	Data Type
Tansport_means	Text
load_capacity	Text
cost_in_ksh_per_km	Currency
No_of_loaders	Number
Loader_pay	Currency
Driver_pay	Currency

Figure 24.transport charges

Expenses table

Expenses_Table

Field Name	Data Type
Reg_No	Text
Service	Text
Charges	Currency

Figure 25.expenses table

Goods table

Goods_Table

Field Name	Data Type
Good_Id	Text
Good	Text

Figure 26.goods table

Services table

Service_Table

Field Name	Data Type
Service_No	Text
Service	Text
Charges	Currency

Figure 27.service table

Offences table

Offences_Table

Field Name	Data Type
Ofence_Id	Text
Offence	Text
Charges	Currency

Figure 28.offences table

Punishments table

Punishments_Table

Field Name	Data Type
Offence_Id	Text
Driver_No	Text
amount_surcharged	Currency
Date_effected	Date/Time
No_Of_times	Number

Figure 29.punishment table

Grouping variables into tables

Members table

Members_Table

Member_cc	F_name	L_name	TEL_NO	Town	Member_ty	Acc_no	Farm_prodı	National_Id	Gender	Group_ID
MTS001	Brian	Ndeto	0723657844	Nambale	Group	11234456	Eggs	23456789	M	MTG001
MTS002	Dennis	Koloo	0746842678	Lodwar	Group	123456723	Flowers	67543245	M	MTG002
MTS003	Faith	Mutua	0733565475	Kach	Group	13486547854	Eggs	23456789	F	MTG005
MTS004	Jane	Kasyoki	0723636678	Laikipia	Group	43545768	Cereals	25656774	F	MTG004
MTS005	Nael	Oketch	0759855465	Kisumu	Group	785859895	Cereals	58598995	M	MTG005
MTS006	Felix	Kiilu	0712345678	Joska	Group	234567899	Flowers	12345678	M	MTG004
MTS007	Albert	Koloolo	0723456789	Turkana	Group	8963478963	Wheat	96434788	M	MTG002

Drivers table

Drivers_Table

Driver_No	F_name	L_name	Nat_Id	Veh_reg	Tel_No	Acc_no	Adress	Gender	Town
DRV001	Maluku	Mapesa	1234534	KBX199D	0723567891	123456745	P.O.Box 1234	M	Nairobi
DRV002	Henry	Okulet	3534546545	KDA901A	0672472474	15532256333	P.O.Box 9565	M	Kisumu
DRV003	Oloisudori	Samuel	565665654	KDA903A	0714357246	498765454	P.O.Box 3435	M	Emali
DRV004	Gigi	Dehi	6455554	KDA904A	0725984545	795656235	P.O.Box 5555	F	Juja
DRV005	Priest	Budes	2445455	KDC122L	0724824186	584789898	P.O.Box 7888	M	Kakamega
DRV006	John	Njonjo	5345556	KDC123L	0726321458	589485654	P.O.Box 6778	M	Juja
DRV007	Onesmus	Okash	6565656	KCW133A	0715863025	56546546	P.O.Box 2345	M	Kakamega
DRV008	Joseph	Amuyunzus	4567578	KDA902A	0798426369	5695635862	P.O.Box 11123	M	Nairobi
DRV009	Daniiel	Israel	65756767	KDD134L	0795245632	95865895	P.O.Box 5667	M	Mombasa
DRV010	Bosco	Mutua	67767566	KCW765K	0713258115	598635569	P.O.Box 3546	M	Nairobi
DRV011	Moses	Awimbo	3456788990		0723693436	246786787778	P.O.BOX 878;	M	Kisumu

Loaders table

Loaders_Table

loaders_no	F_Name	L_Name	Nat_Id	Adress	Tel_no	Acc_no	Gender	Town
LDR001	James	Olwambo	56545846	P.O.Box 234	0723456789	9517595275	M	Nairobi
LDR002	John	Kipngetich	45465565	P.O.Box4355	0798765433	4263652565	M	Mombasa
LDR003	Andrew	Kioko	56545545	P.O.Box4543	0798763456	35586245 86	M	Juja
LDR004	Mike	Sombe	56546565	P.O.Box4534	0745434554	5989956955	M	Nairobi
LDR005	Kate	Mwikali	65445679	P.O.Box5435	0746435452	3659965589	F	Kakamega
LDR006	Lavender	Loretuu	89887944	P.O.Box67236	0767743531	5696594555	F	Mombasa
LDR007	Moses	Omangu	45478498	P.O.Box7544	0786465675	5626956232	M	Nairobi
LDR008	David	Kasyoki	45545487	P.O.Box677	0774658655	5465264655	M	Kakamega
LDR009	Jones	Edu	84654584	P.O.Box65788	0797464435	3232531246	M	Mombasa
LDR010	Rachael	Achieng	54845798	P.O.Box222	0723436789	1062492222	F	Nairobi

Vehicles table

Vehicles_Table

Reg_No	Veh_type	colour	Load capacity	No_of_loaders	Driver_no
KBX199D	Pick-up	White	1	2	DRV001
KCW133A	Pick-up	Brown	1	2	DRV007
KCW765K	Refrigerated truck	White	3	4	DRV010
KDA901A	Trailer	Yellow	10	10	DRV002
KDA902A	Trailer	White	10	10	DRV008
KDA903A	Trailer	White	10	10	DRV003
KDA904	Lorry	Blue	7	6	DRV004
KDC122L	Lorry	White	7	6	DRV005
KDC123L	Lorry	White	7	6	DRV006
KDD134L	Refrigerated truck	Orange	3	4	DRV009

Relationships

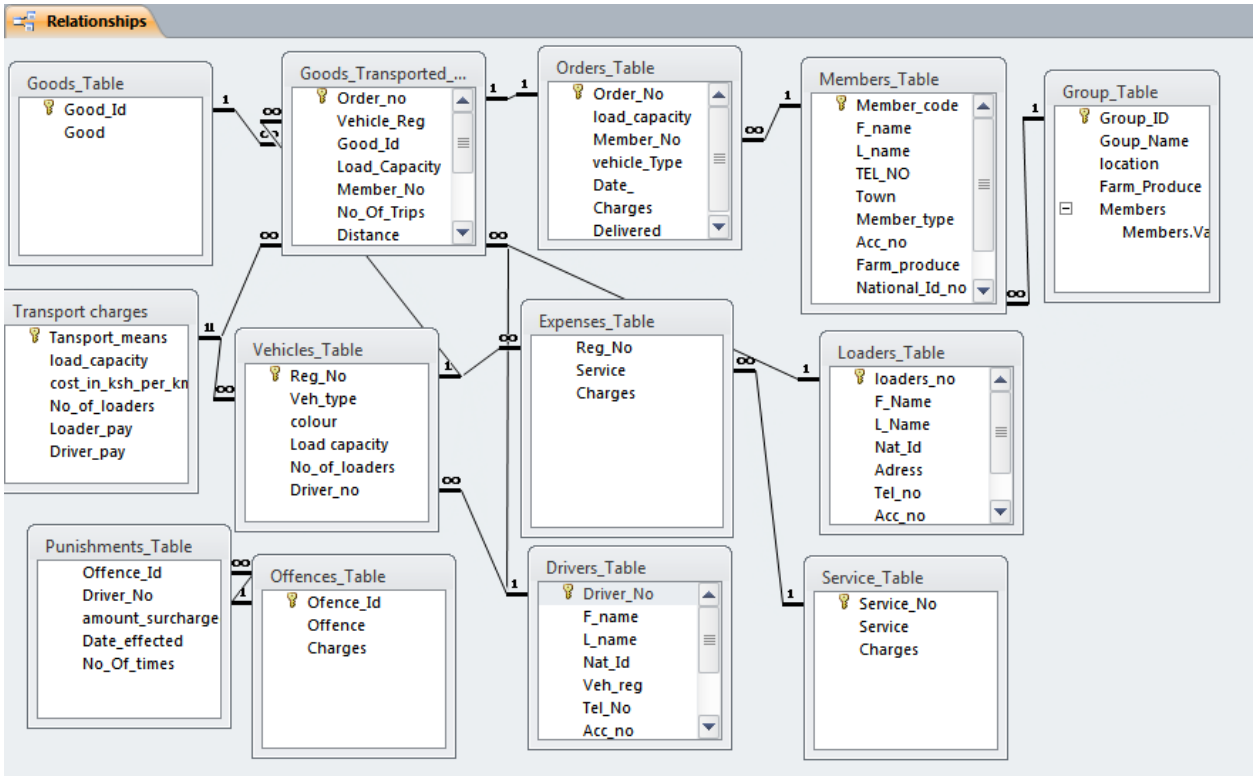


Figure 30.Relationships

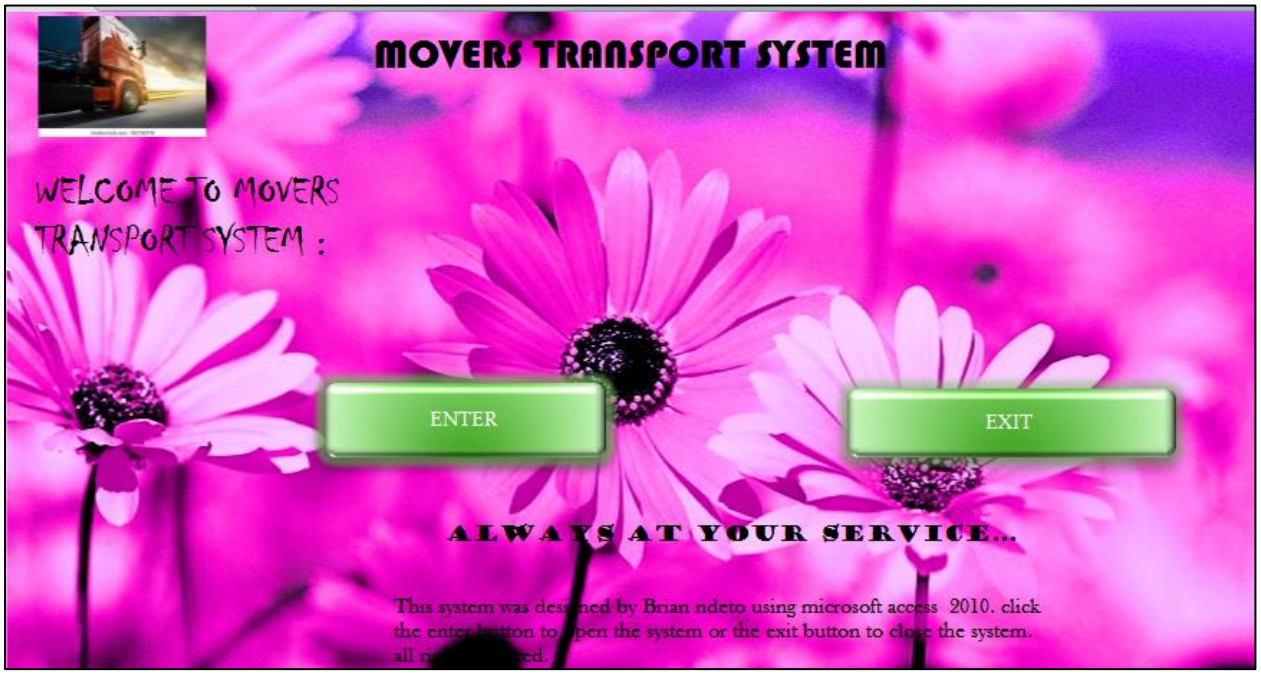
Input screens

To enable entry of data there was need to create some forms to make it easy to enter data and manipulate it as per the user needs.

The following are the forms that were used in the design of the system:

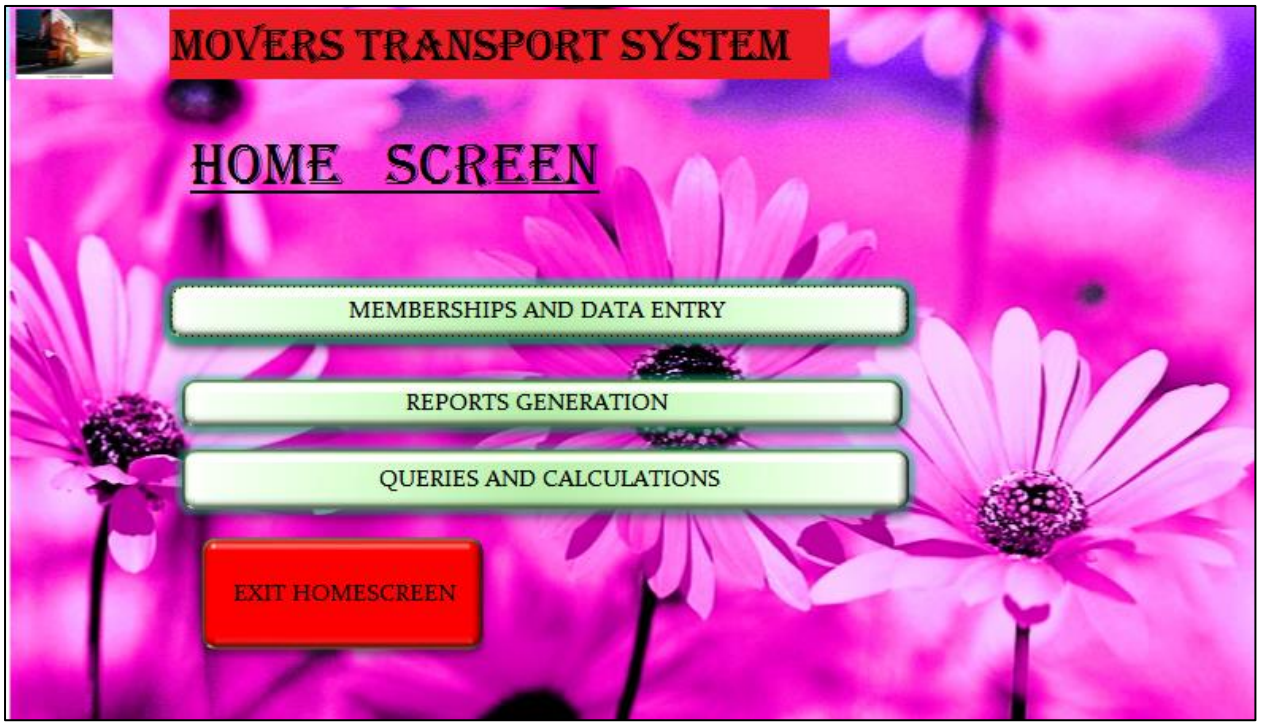
1) Splash screen form
2) Home screen form
3) Movers Member Details Form
4) vehicle forms
5) drivers and loaders forms
6) orders forms

1) splash screen



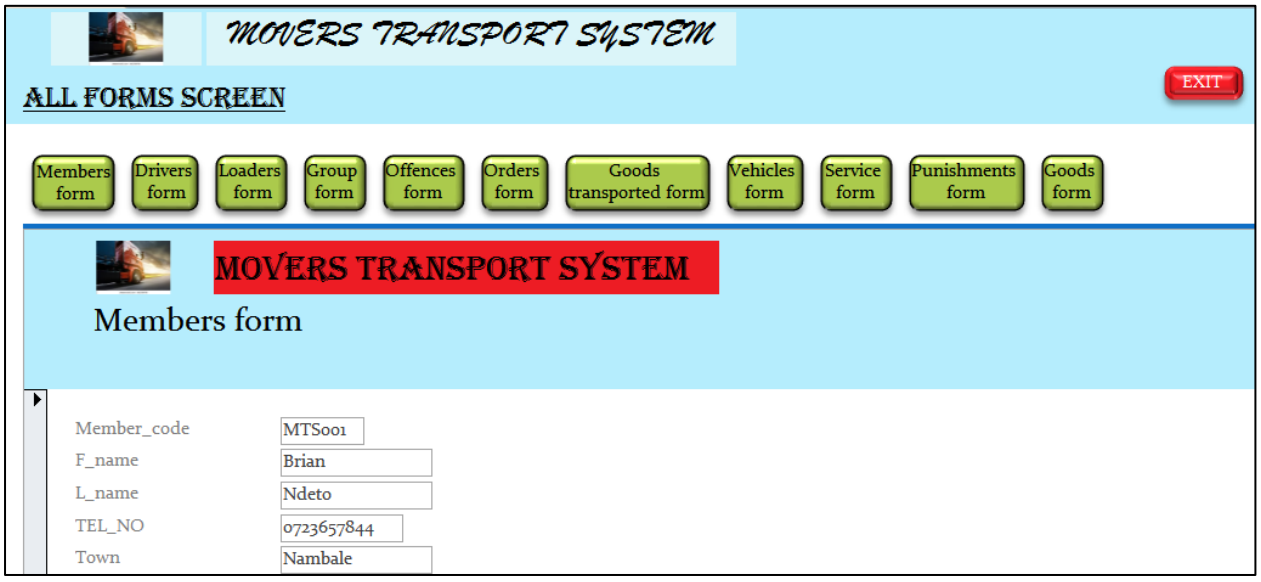
This is the screen that welcomes the user to use the system.

2) Home screen



3) All forms

This is a navigation form used to go through various forms .



- **Movers system member details form**

This form is used to input new members details.

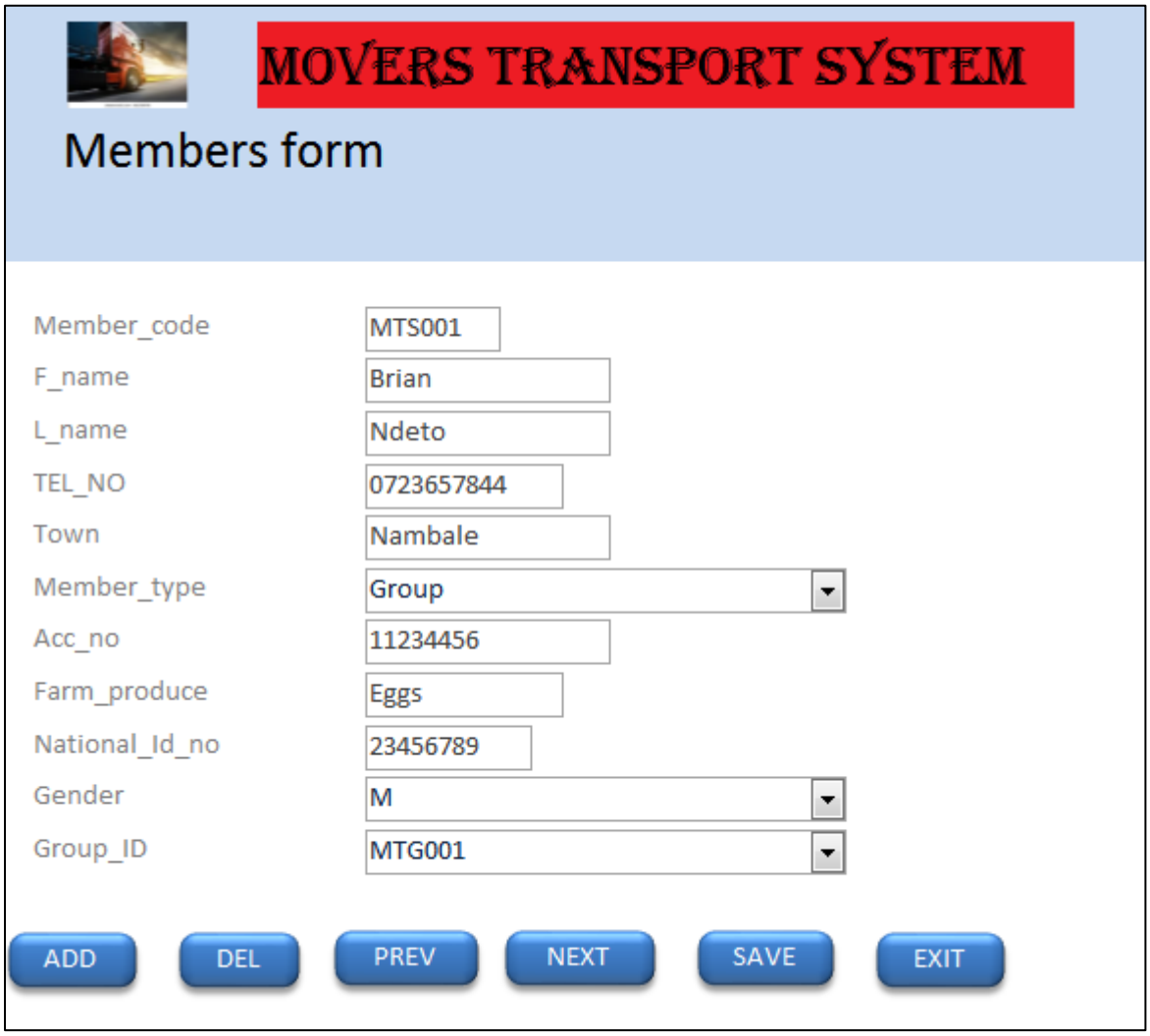


Figure 31; members form

Drivers form

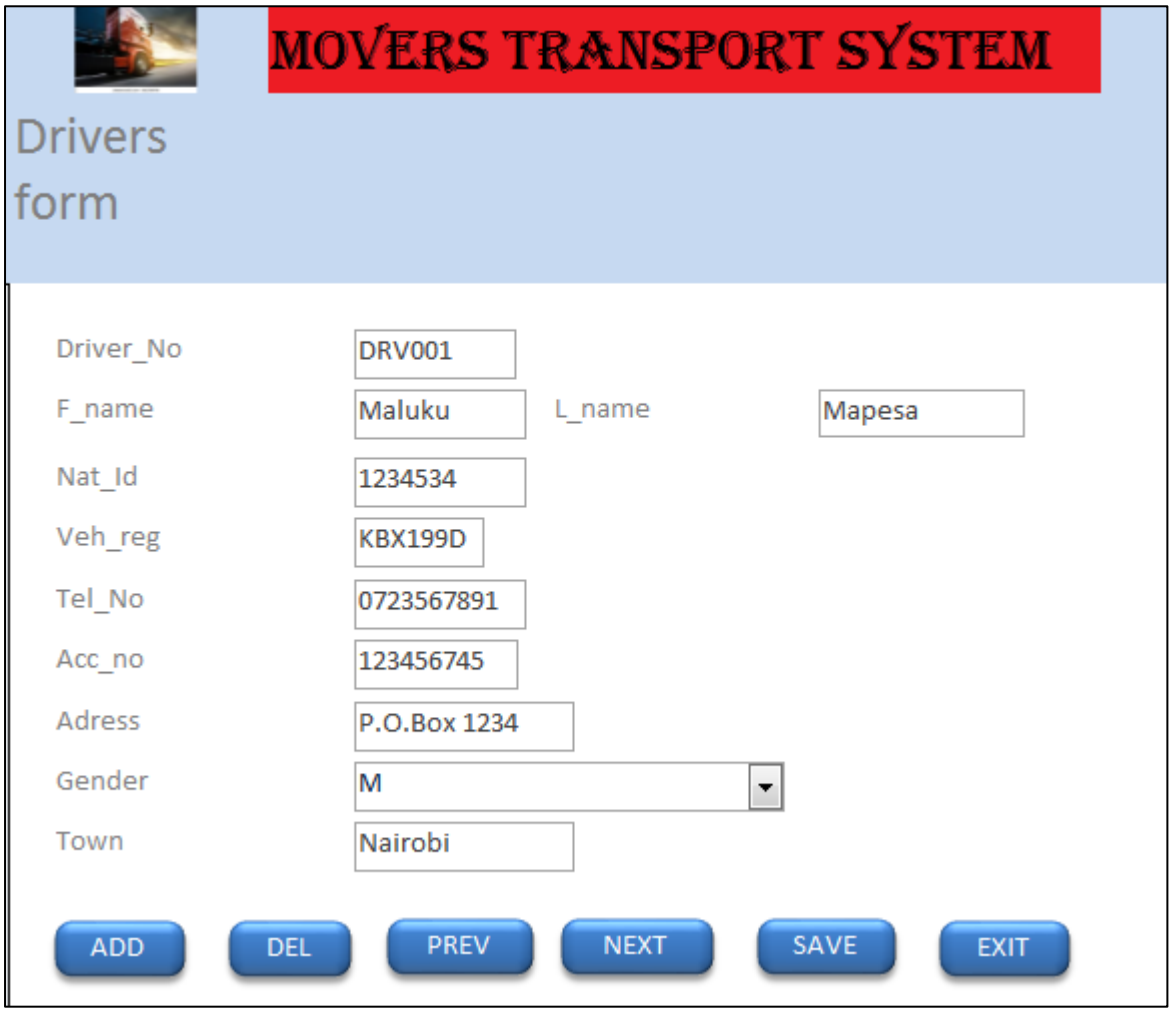


Figure 32; drivers form

Vehicle form

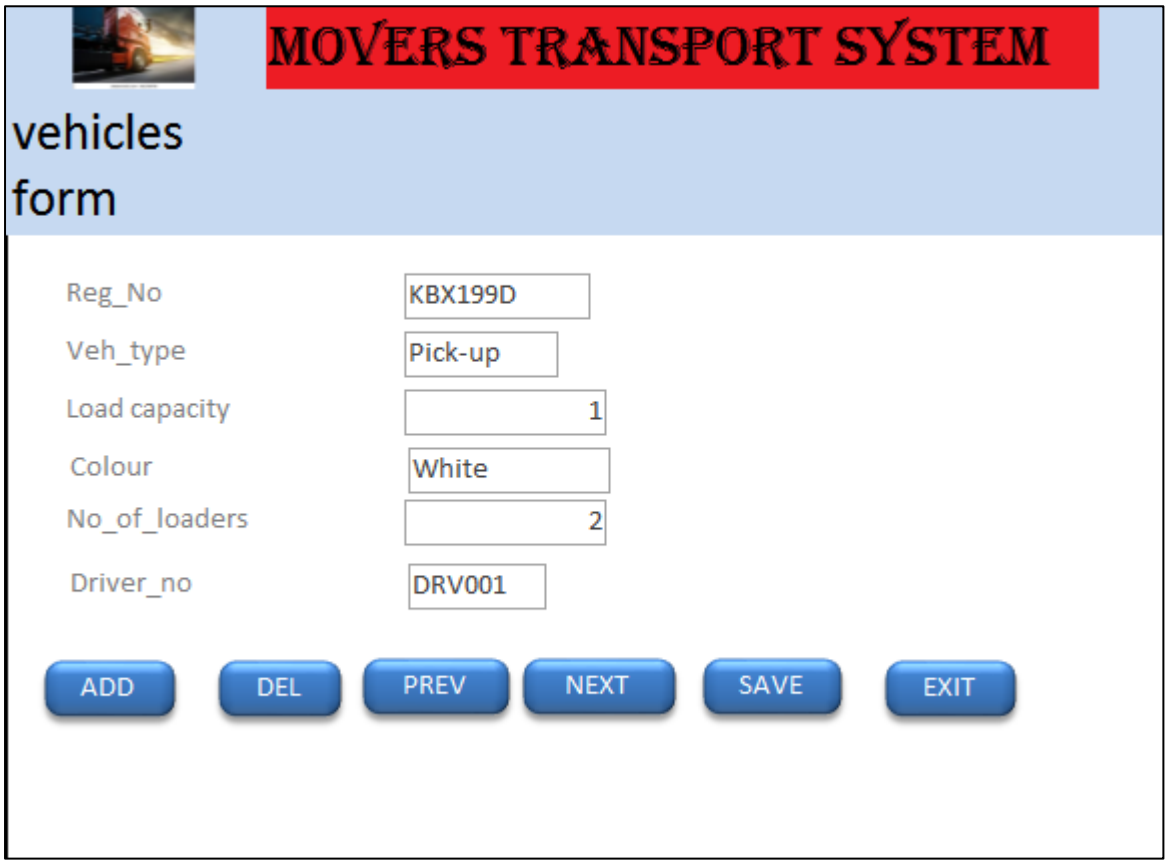


Figure 33; vehicles form

Loaders table

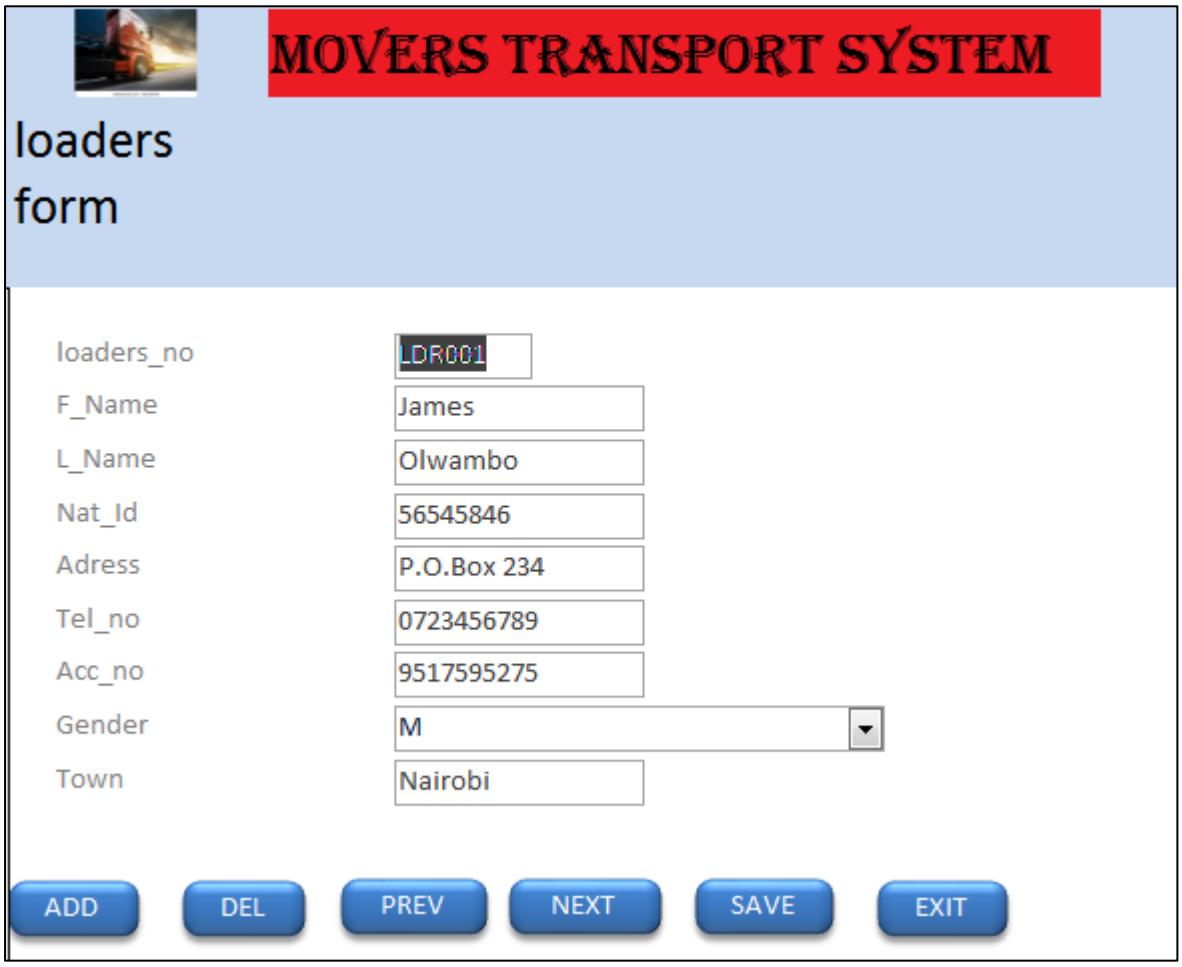


Figure 34; loaders form

Orders form

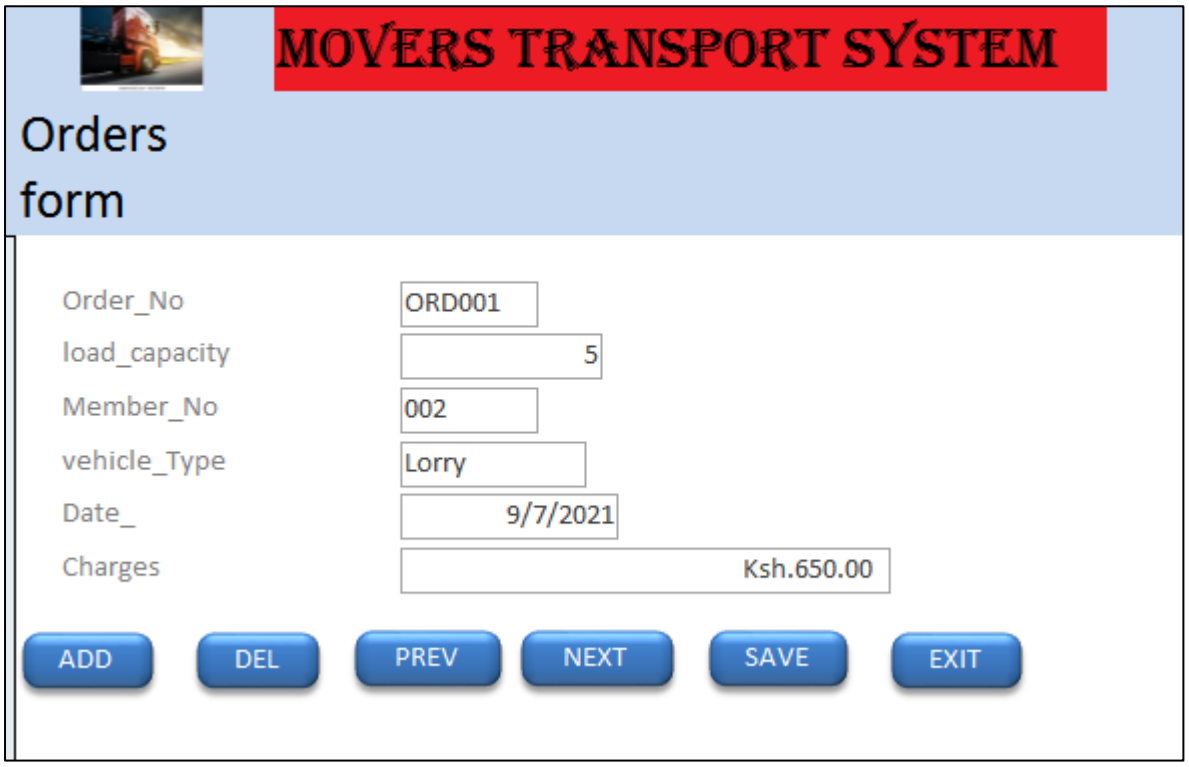


Figure 35; orders form

Data manipulation

The following objects were used to manipulate the data to get the desired outputs:

- Queries
- Procedures
- Functions
- Modules
- Combinations

Below are examples of the queries that were used to perform the systems objectives:

The following form was used to access them:

Driver's payment

The named query was used to calculate the payments for the drivers of the company

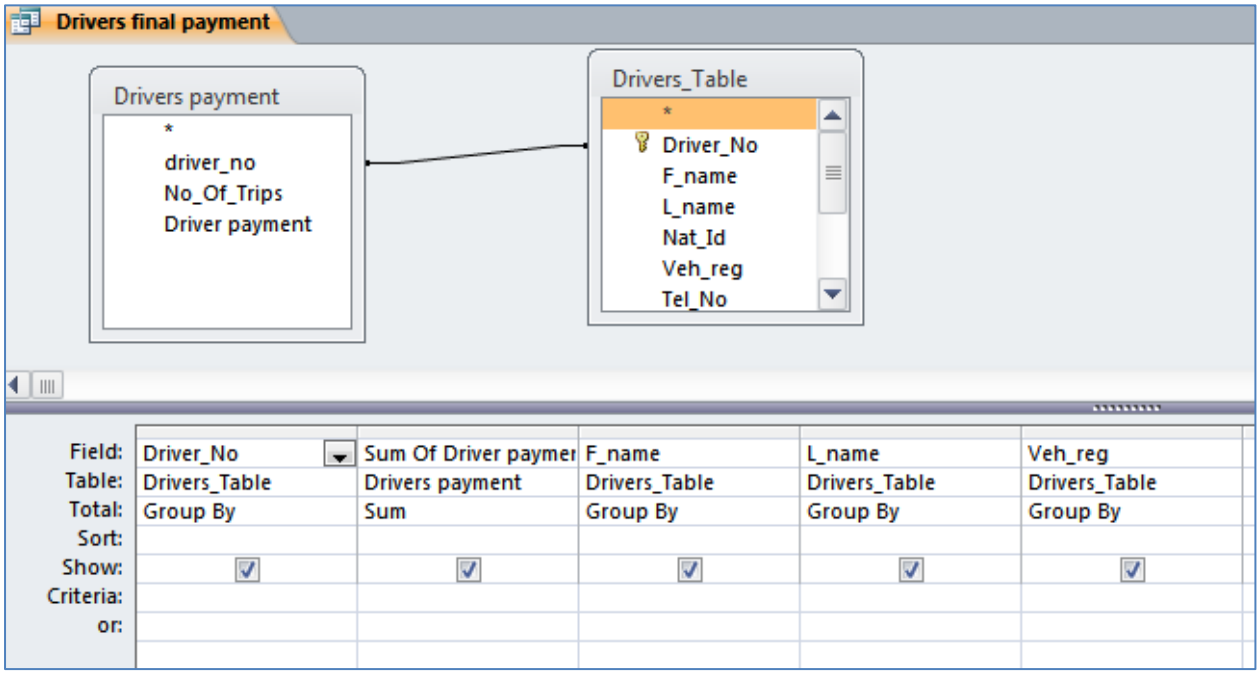


Figure 36: drivers payment query

- **loaders payments**

The query below was used to find the payments given to the loaders.

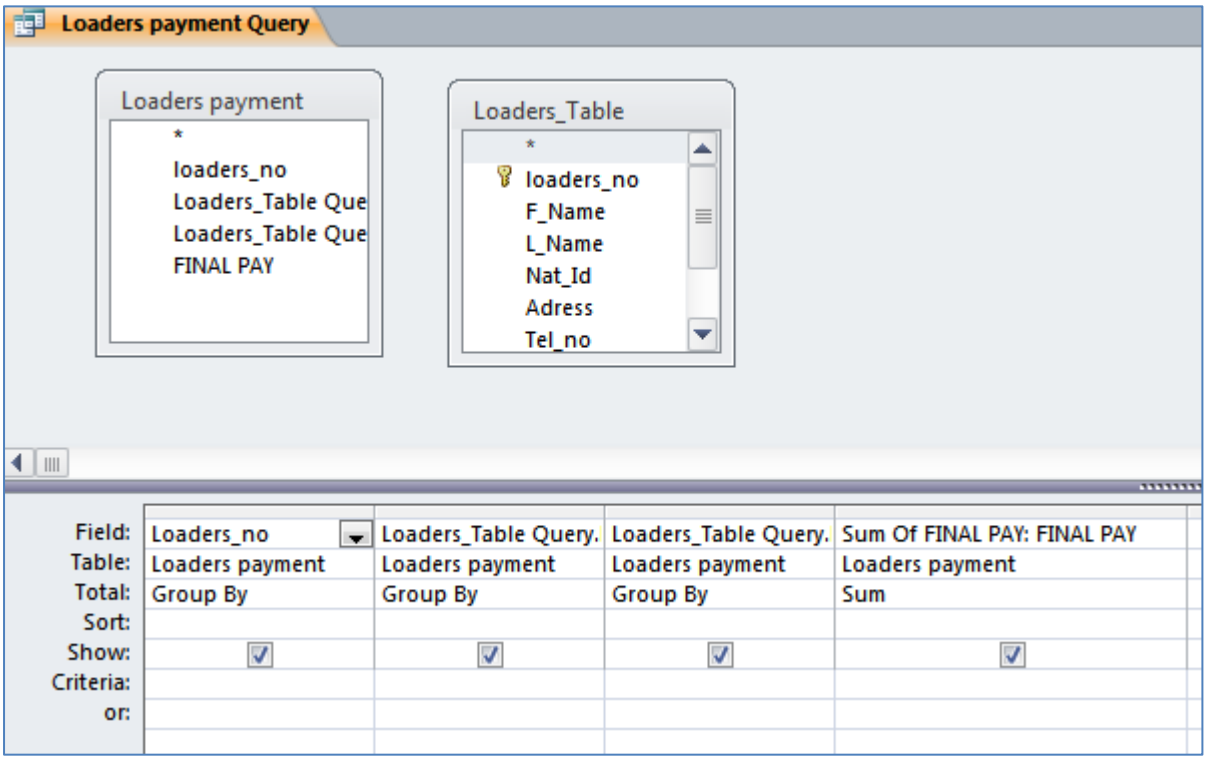


Figure 37: loaders payments query

- **penalties surcharged**

The following query is used to calculate the penalties surcharged on the drivers.

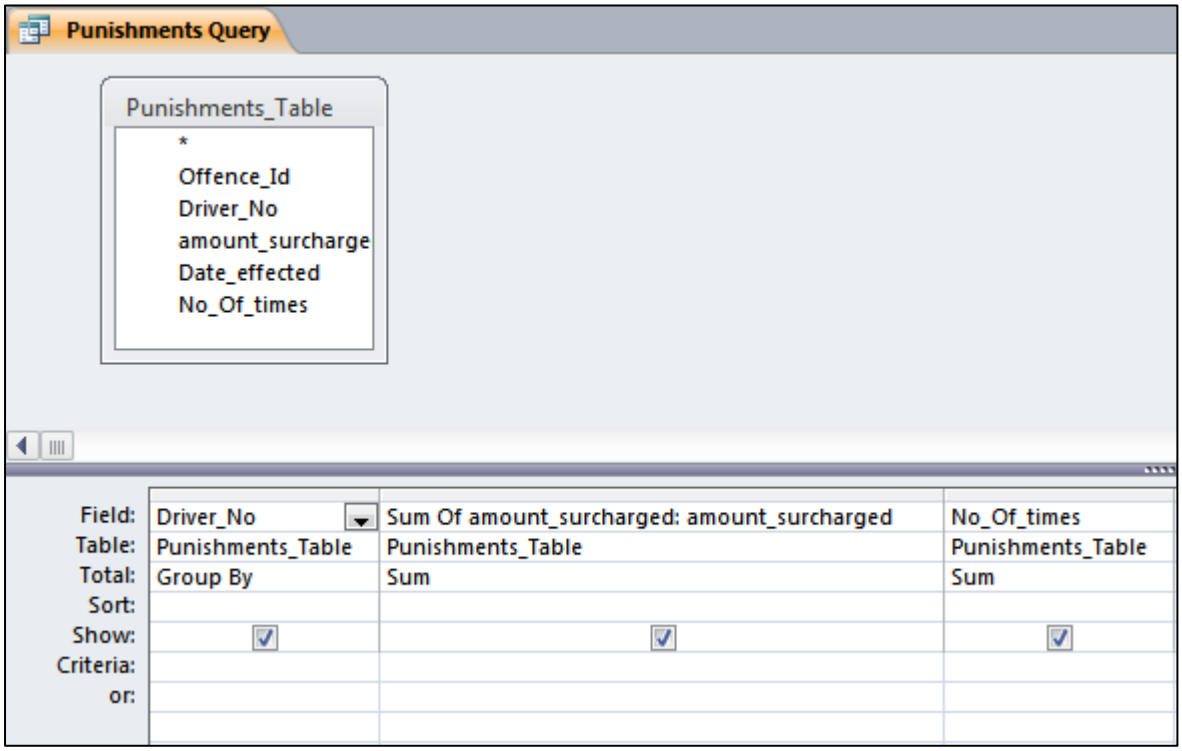


Figure 38: punishments query

- **expenses per vehicle**

The query below was used to calculate the expenses for each vehicle.

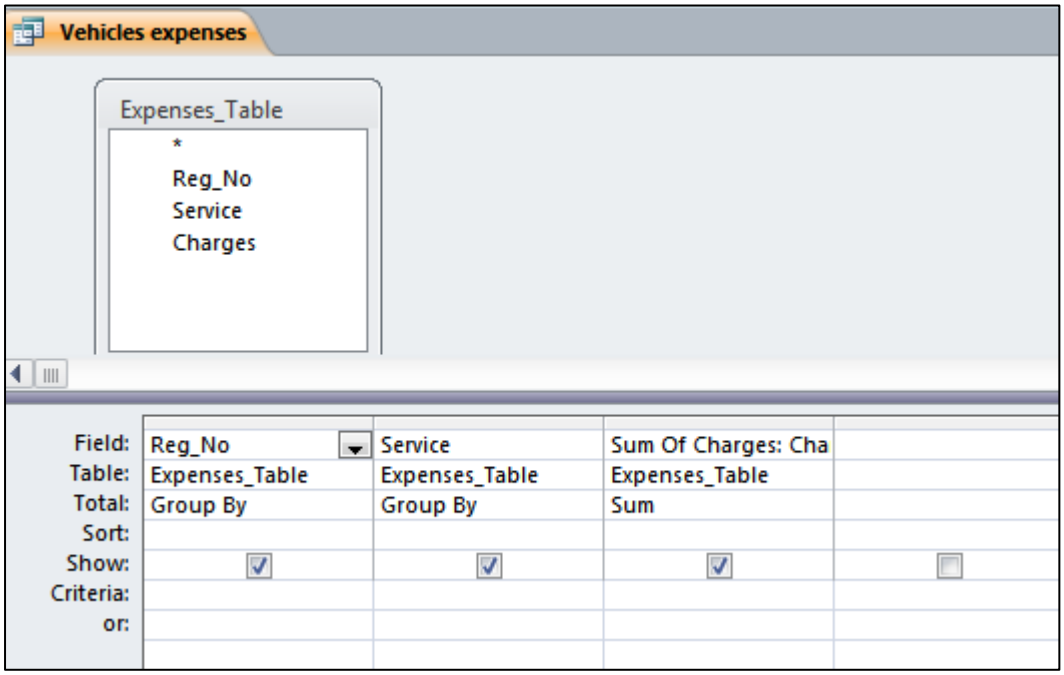


Figure 39: vehicle expenses

- **tax payable**

The query below was used to calculate the total taxes.

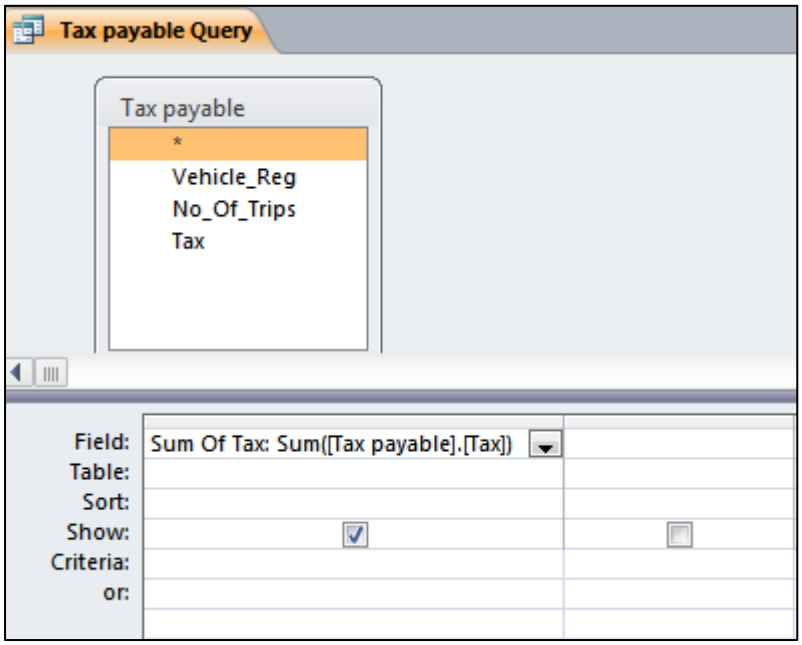


Figure 40: tax payable

Total company expenses

The query below was used to calculate the total company expenses.

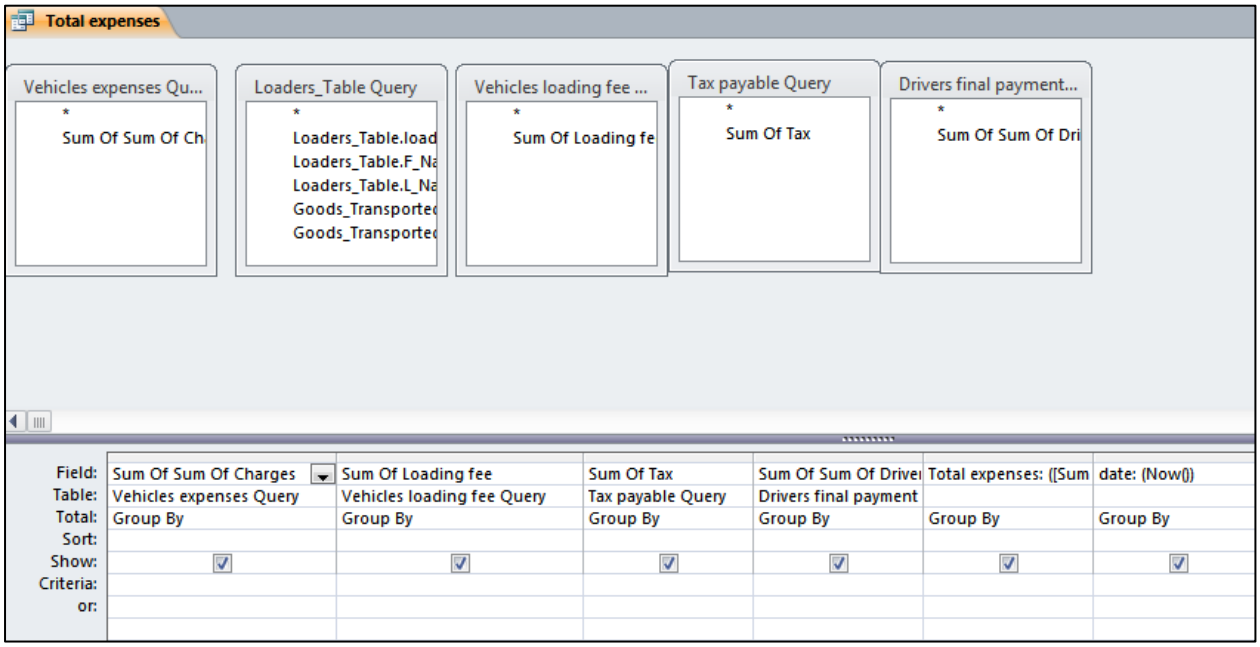


Figure 41: company expenses

Total revenue for company

The query below was used to calculate the total revenue for the company.

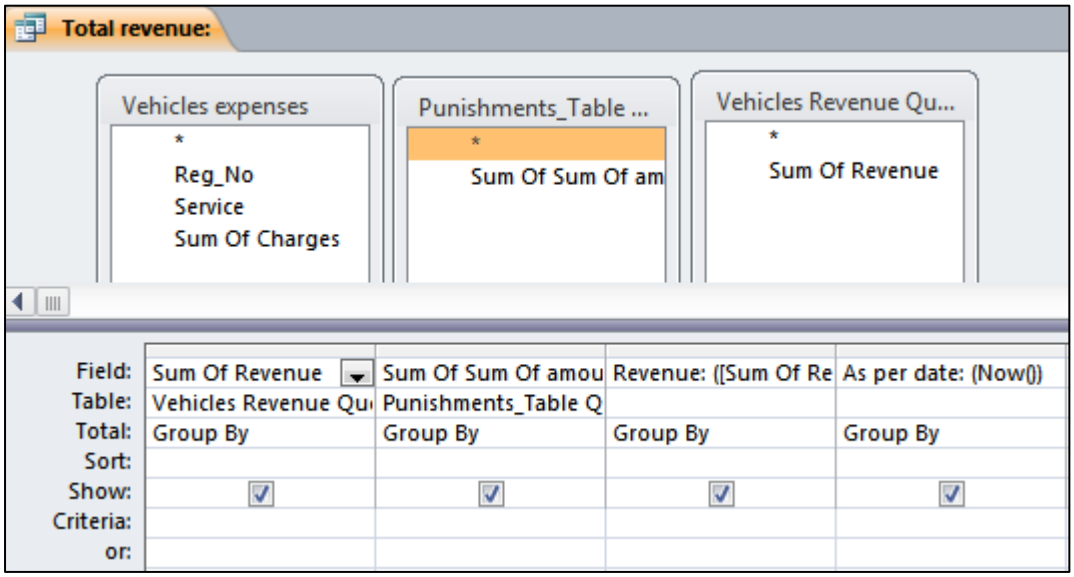


Figure 42: company revenue

Overall company profit

The query below was used to calculate the overall company profit.

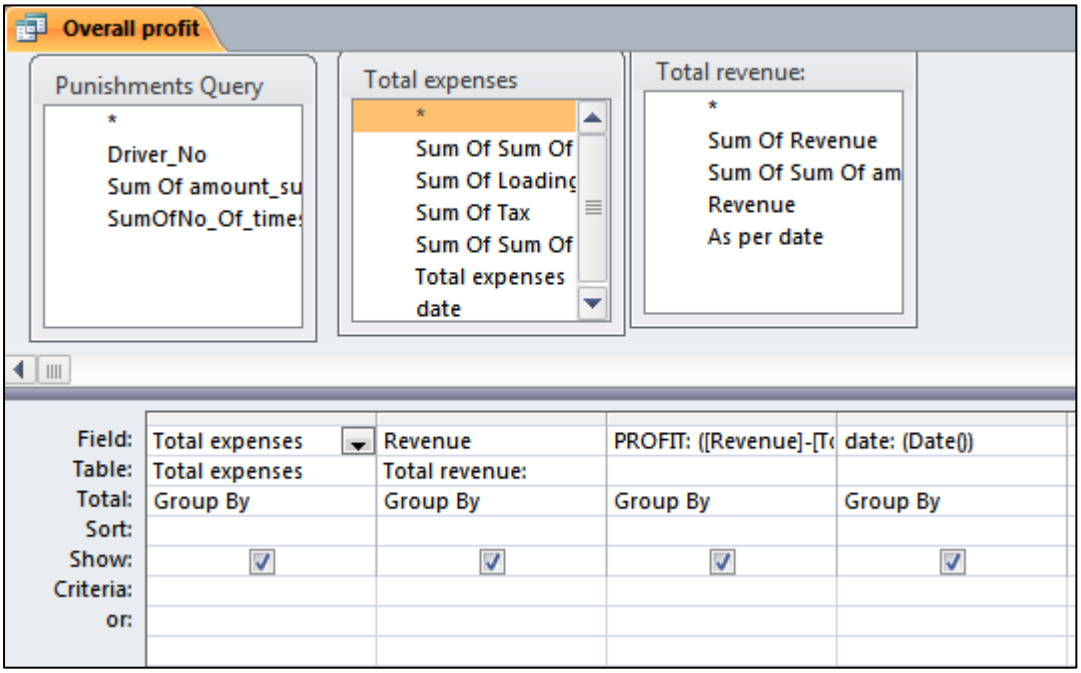


Figure 43: company profit

Output screens

Output of MOVERS TRANSPORT SYSTEM was delivered by use of reports and forms that could be accessed through one form below:

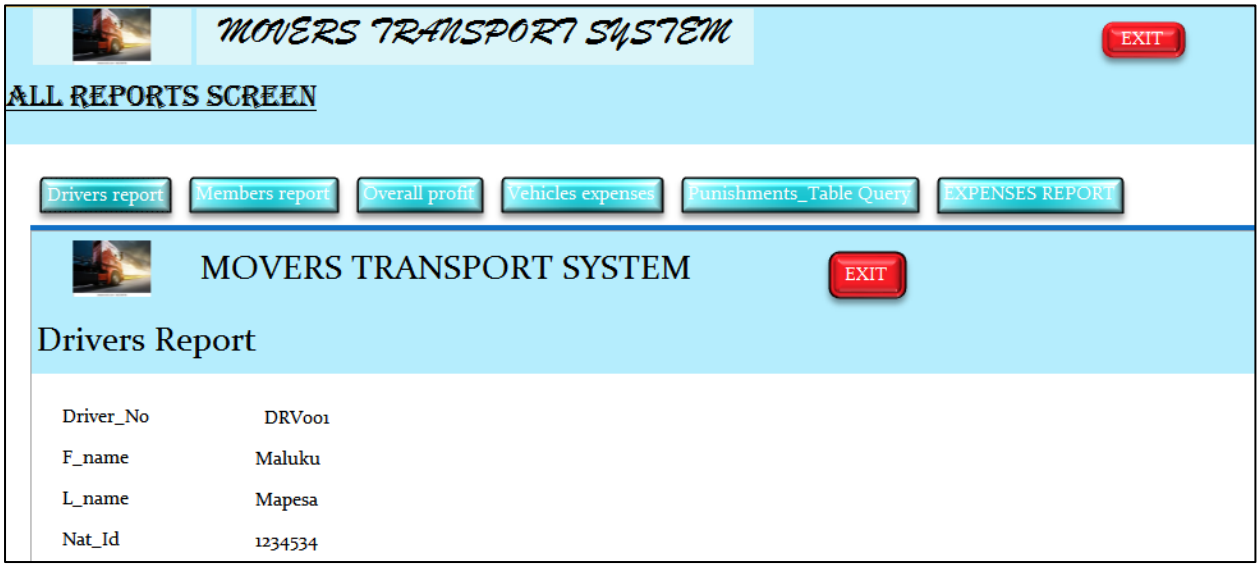


Figure 44; all forms

The following are examples of reports that were used;

Members report

This report was used to present the information of various members of the company.

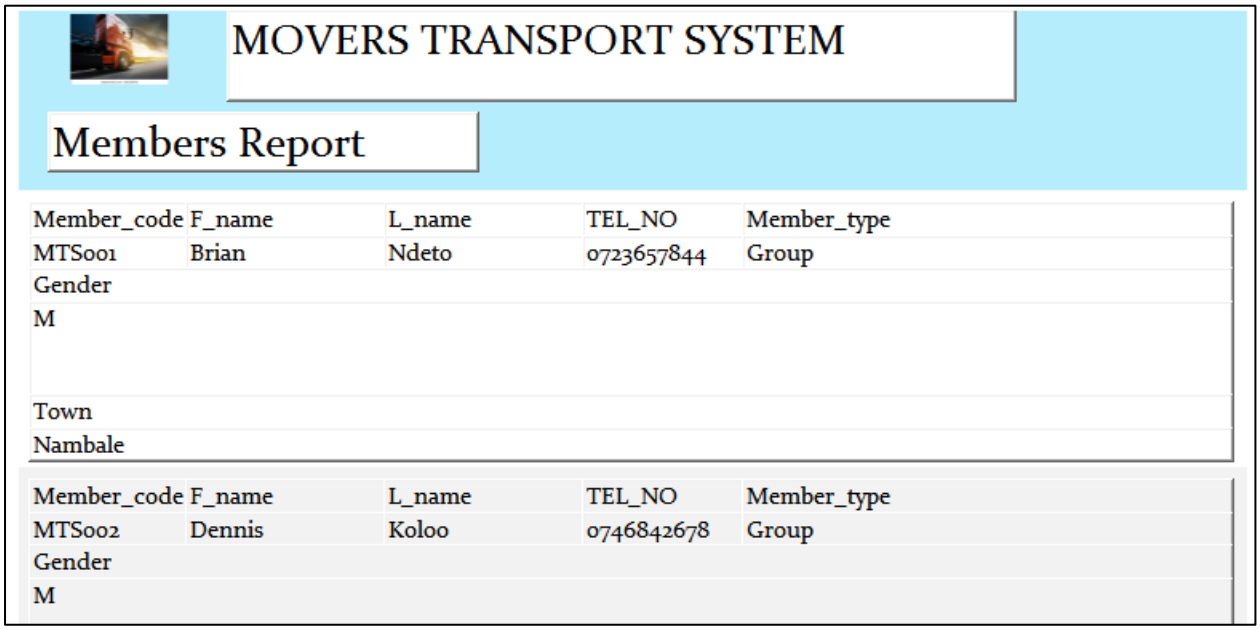


Figure 45; members report

Drivers report

This report was used to present the information of various Drivers of the company.

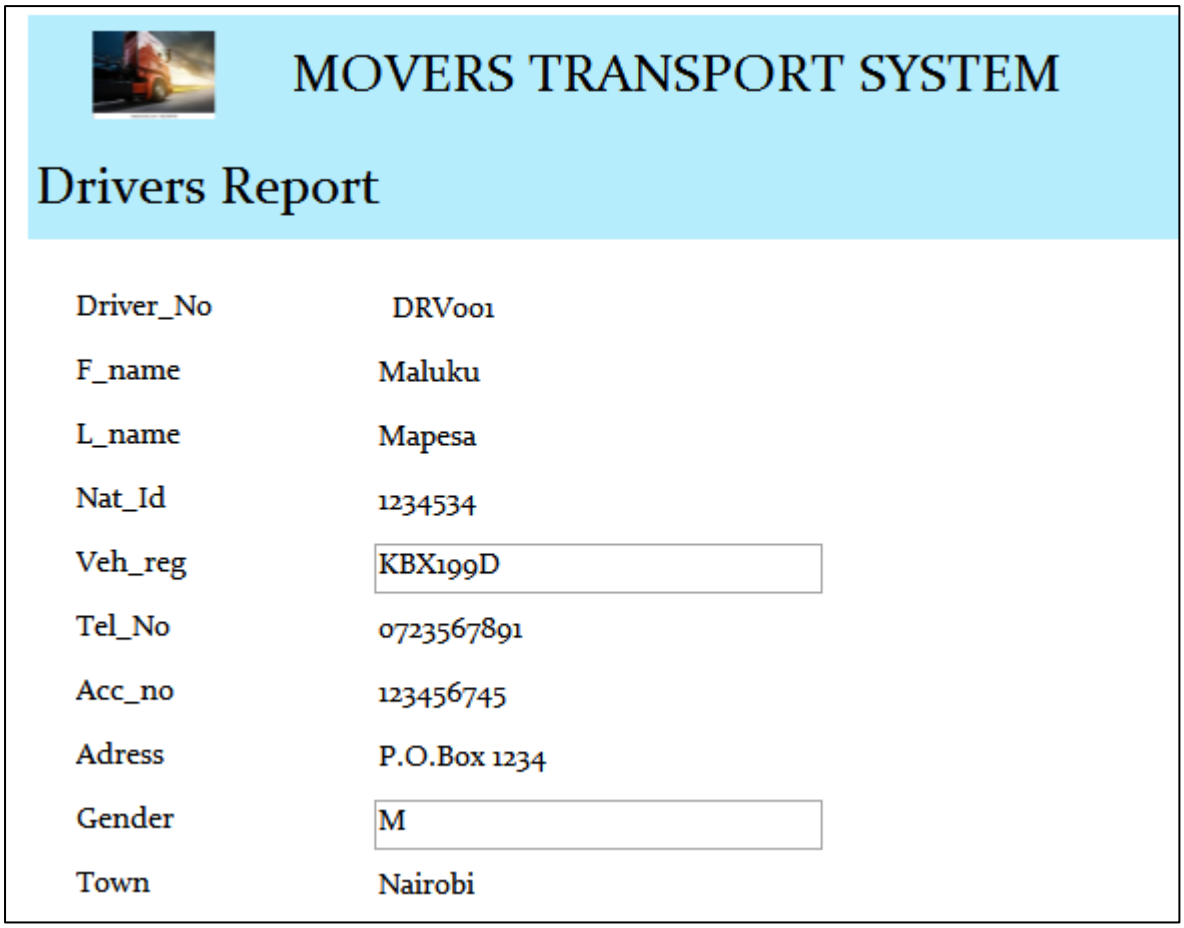


Figure 46; drivers report

Overall profit

This report was used to present the information of Overall profit of the company.

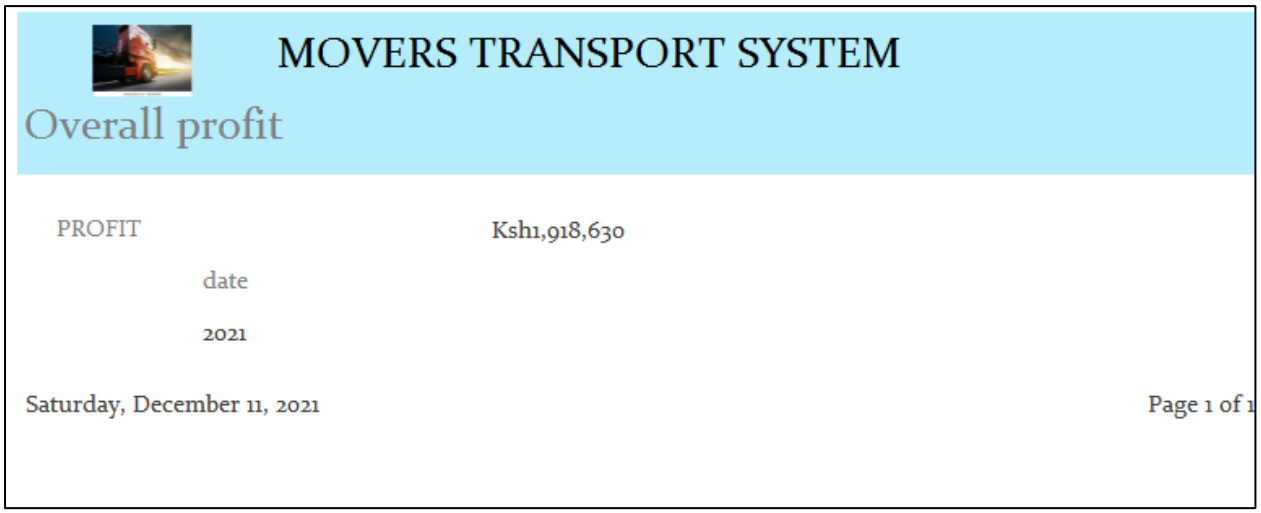


Figure 47; overall profit

Punishments report

This report was used to present the information of punishments to drivers of the company.

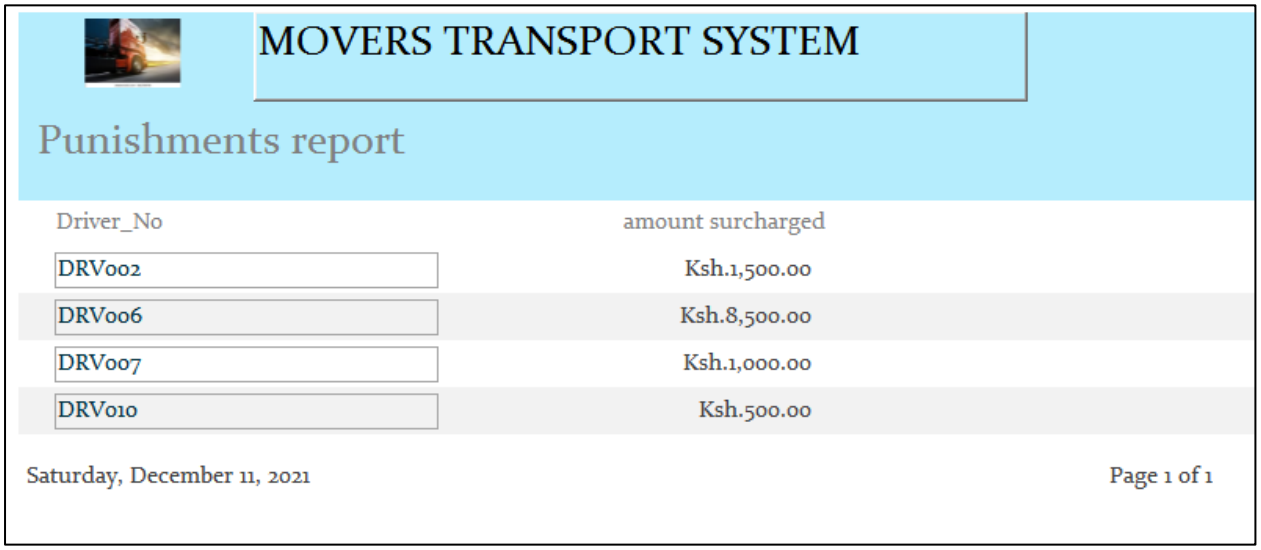
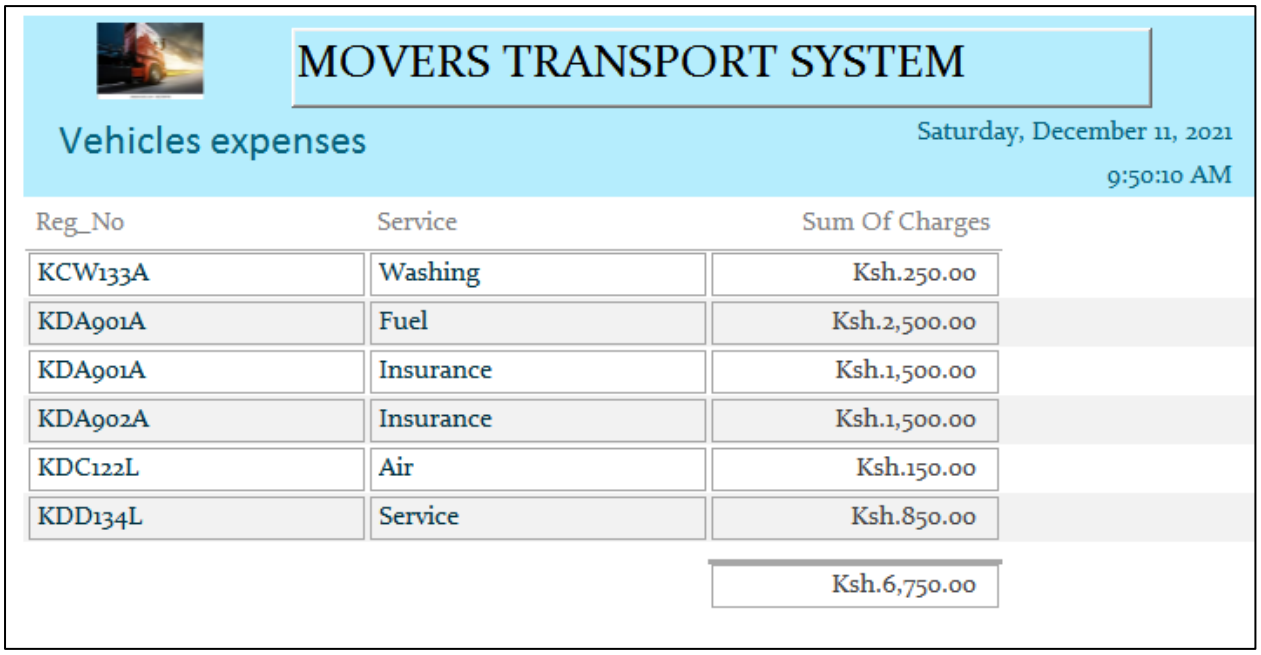


Figure 48; punishments report

Vehicle expenses

This report was used to present the information of Vehicle expenses of the company.



MOVERS TRANSPORT SYSTEM

Vehicles expenses

Saturday, December 11, 2021
9:50:10 AM

Reg_No	Service	Sum Of Charges
KCW133A	Washing	Ksh.250.00
KDA901A	Fuel	Ksh.2,500.00
KDA901A	Insurance	Ksh.1,500.00
KDA902A	Insurance	Ksh.1,500.00
KDC122L	Air	Ksh.150.00
KDD134L	Service	Ksh.850.00
		Ksh.6,750.00

Figure 49; vehicles expenses report

SYSTEM TESTING AND DEMONSTRATION

- **Objectives Of The Testing**

The objective of the testing of the system is:

- To ensure that the system is user-friendly.
- To make the system flexible and easily modified.
- To debug all the errors in the system construction.
- Ensure that the output generated is relevant and accurate.
- To minimise redundancy in statements.

- **Data Testing Approaches**

The following were the methods used in the testing of the system:

- **By Dry Running**

The researcher manually went through the system, noting down on paper the few areas that needed to be corrected together with the errors found. Upon finishing I entered the code into the system.

- **By Use Of Compilers**

However, when I coded the system, there were some errors still highlighted. This was very surprising considering that I had already exhausted the present errors. Using Visual Basic compilers I was able to identify syntax and lexical errors.

- **Use Of Test Data**

Despite having already carried out two error detection methods, the system would still hang and at times even halt completely. This was caused by invalid data entered into the system. I carried

- **Use Of Actual Data**

The researcher obtained data from Movers Transport Management and entered it into the system. The results given by the system were in accordance with the expected results therefore proving the system accurate.

CHAPTER FOUR: USER MANUAL

This user manual is directed towards giving a guide to the users on how to apply the system without any complications. It gives the user various information they need on running the system, this info includes;

- how to install the system
- how to use the system
- the required software and hardware components

(a). Installation process and requirement

i. Hardware requirement

- At least 2 GB RAM
- Over 1.80 GHz processor speed
- At least 40 GB Hard disk capacity
- Printer
- A DVD drive that is compatible

ii. Software requirement

- Microsoft Visual Basic 6.0
- An operating system of either Windows XP, Vista, Windows 7/8
- Database Management System of Microsoft 2007 onwards.

iii. Others

- Ensure the format on the computer is in accordance with those in the system. The following forms are to be checked on:
- Date format
- Currency format
- Ensure the date and time of the computer system is as per the current date and time.

To install the system:

The following are the steps that should be followed by an administrator to successfully install the system on any computer that needs to use it.

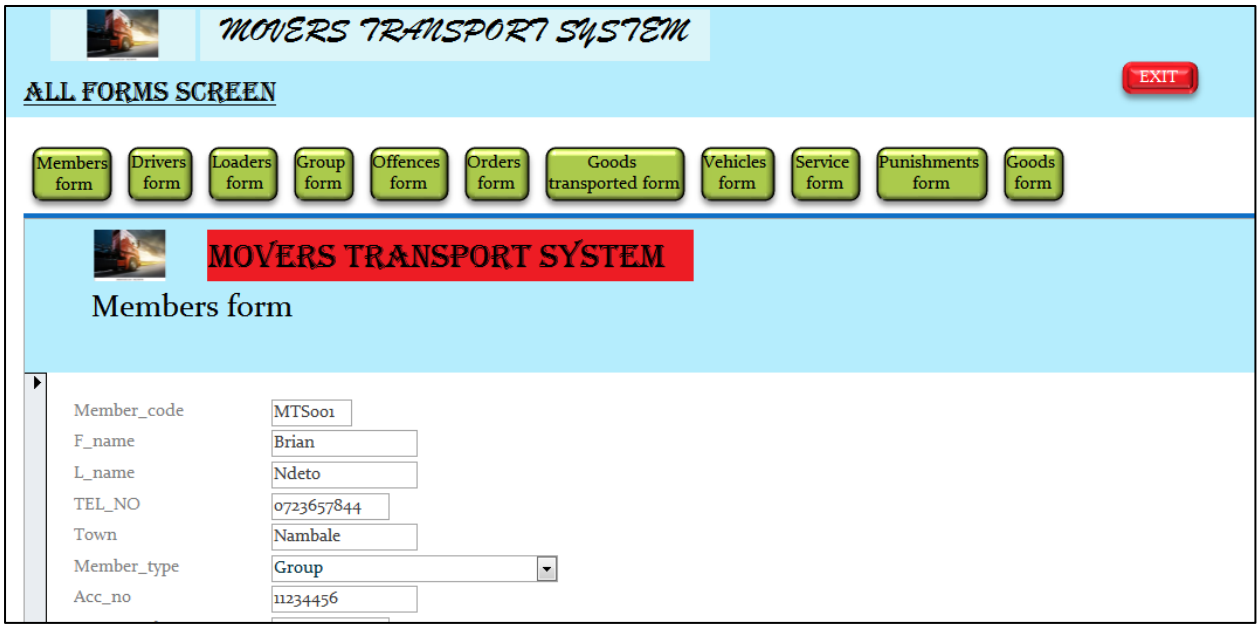
Steps

- Switch on the computer.
- Ensure that it has the appropriate operating system before any installation trials.
- Insert the CD or DVD containing the access document into a working CD or DVD drive.
- Locate the "**MOVERS TRANSPORT SYSTEM**" document on the CD or DVD storage.
- Copy it and paste it on the desktop.

(b). Navigation guide

The main screen displays buttons which are links to navigate through the whole document. There is an option to view data on the system based on main entities: *Memberships and data entry, reports generations, queries and calculations.*

➢ The option to view all *Memberships and data entry* opens the ***all data entry forms submenu*** and the following screen appears:



Choose the form required. The following are input forms available:

(a). Member registration entry:

The following form is used for member registration entry.
To access it clicking ***members form*** button on the ***all forms submenu.***

(b). Drivers entry:

The following form is used for new driver's entry

To open click ***Drivers form*** button on the ***all forms submenu.***

The other forms are also used for data entry on their various entities.

➢ The option to view all , *reports generations* opens the ***all report submenu*** and the following screen appears:

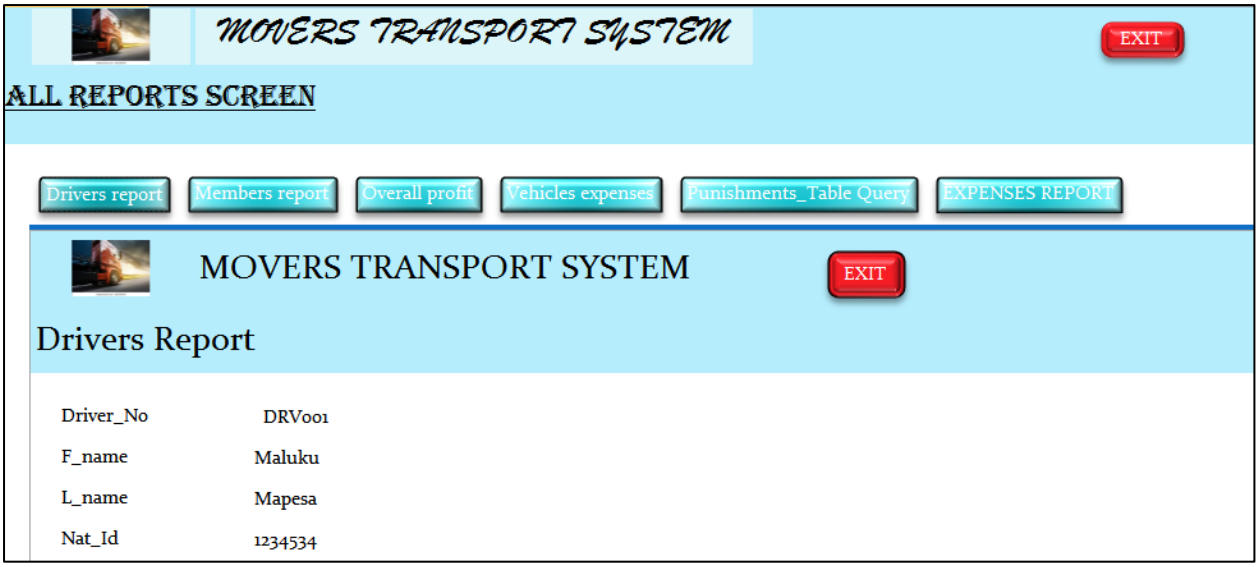


Figure: All reports

The option to view all, *queries and calculations* opens the ***all queries submenu*** and the following screen appears:

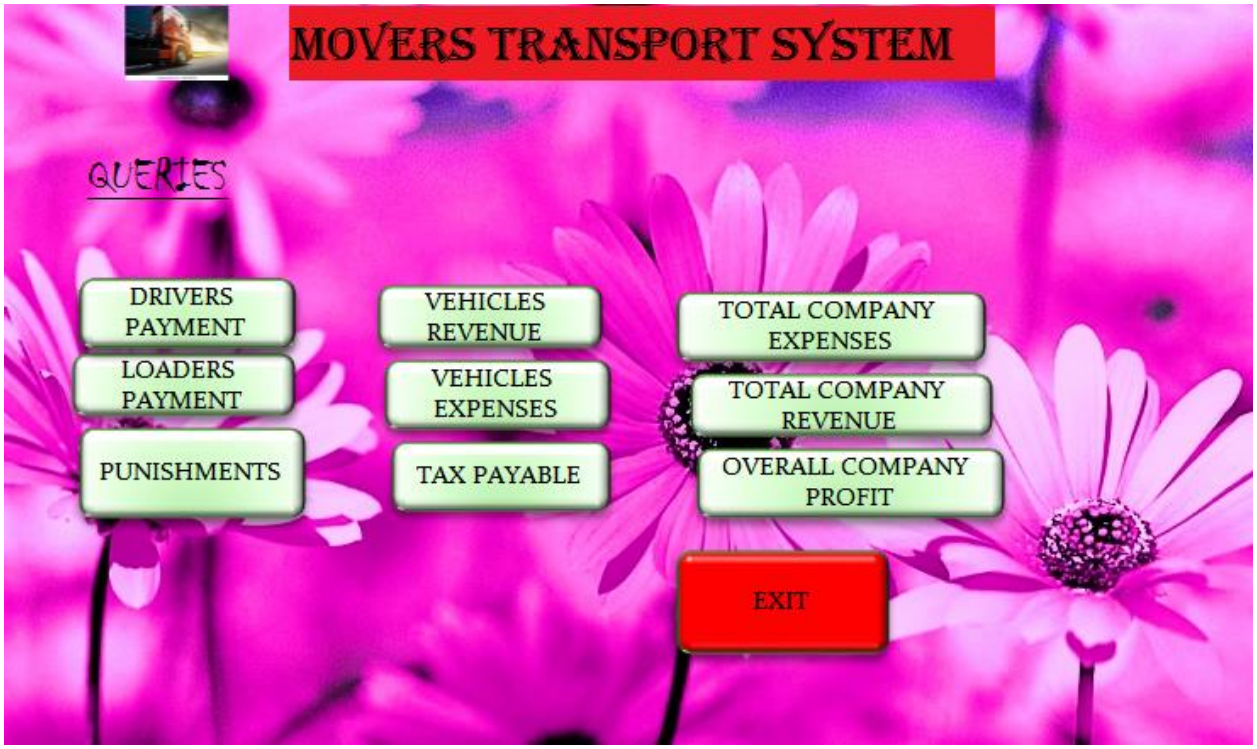


Figure: All queries (form view)

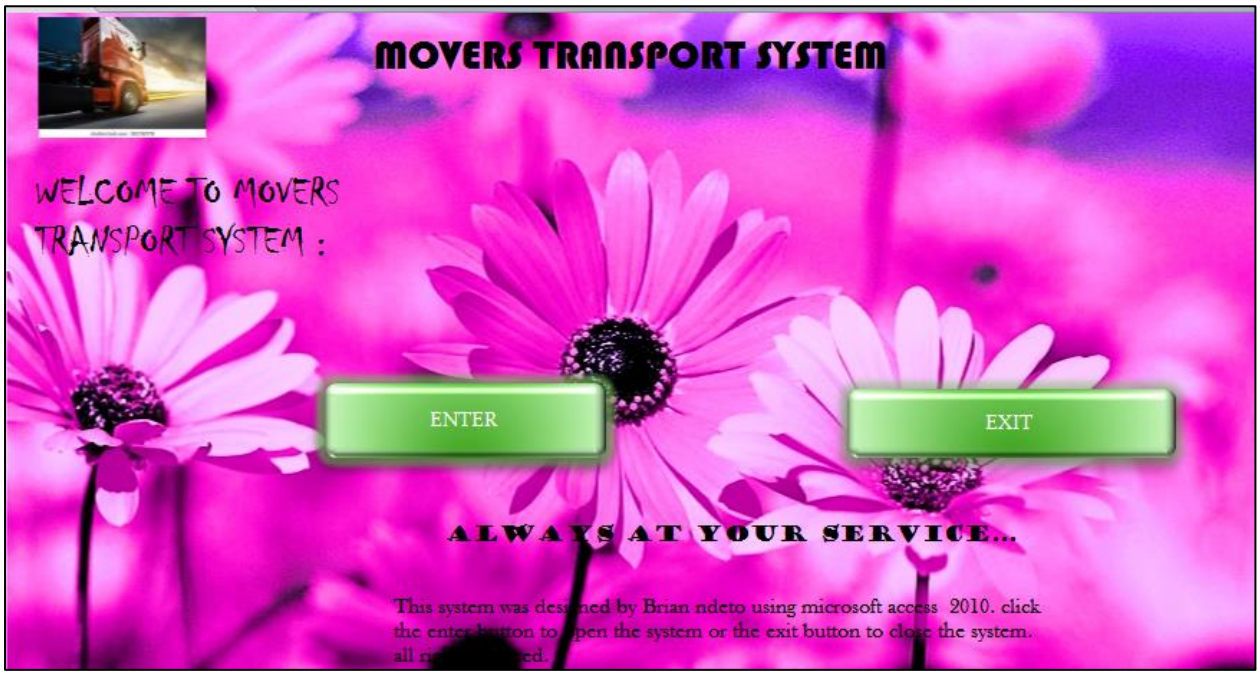
If you wish to exit the system; Save all the changes made to the records, close the other applications which are required for system to run, close all forms and reports open in the system. Click the "exit home screen" button on the Main Screen; this will take you back to the splash screen from where you can exit by clicking "exit".

(c). Loading process

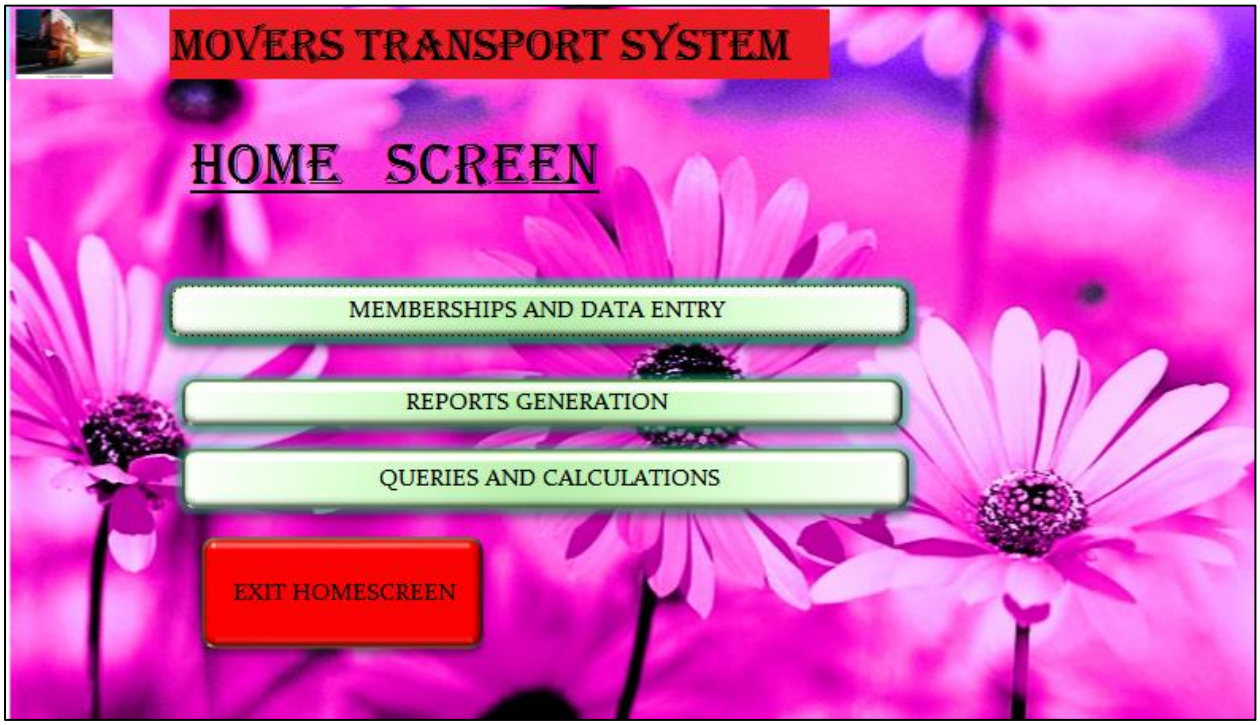
i. Switch on the computer.

ii. Once the computer is on, open the access document **MOVERS TRANSPORT SYSTEM** by double clicking on its icon.

iii. On opening the system, the splash screen shown below appears:



Upon appearance, you are required to click either the enter button to open the system or completely close the system. If you open the system the main screen appears



(d). Procedure for generating outputs

Outputs are generated in the form of reports. The user can generate any reports according to data calculated in queries or even the one in tables. In order to navigate through the various generated reports there are buttons provided. The user has the ability to print the data stored in the forms. One should have a printer installed to do so.

MOVERS SYSTEM SECURITY

The computerised system has the following control measures to ensure data security:

- Use of passwords which prevent unauthorised access into the system.
- Setting of user privileges, modification levels and restrictions to ensure that data is only entered in an official way.
- Keeping of records on all the users who ran the system, the time, and also the activities they carried out.
- Presence of different users and administrators to the system.
- The software is copyrighted and cannot be duplicated.
- The system is not accessible to clients and strangers.

For security, the user of the computer is supposed to carry out the following:

- Scan the computer first for viruses before running the system.
- Locking the computer room containing the system when not in use.
- Obtaining a UPS for the computer to regulate the power in.
- Logging off the system after use.
- Changing the password at frequent intervals.
- Safeguarding of the components of the computer

System changeover

Changeover from the old system to the new system can be done through the following measures:

Parallel Changeover

This changeover strategy involves using the new and old system at the same time. After some time, which the company finds suitable, the old system is then dropped.

Phased Changeover

Is changing into the new system step by step but testing at the same time. Once one stage is found acceptable, it is implemented and the next is tested then implemented.

Direct Changeover

This involves stopping the use of the old system immediately and starting of the new system in operation**.**

Pilot Changeover

This is whereby the system is adopted by some branches and if the branches prove productive, it is adopted until all branches change to the computerised system.

Error handling

The system handles errors in the following ways:

- It doesn't accept data of invalid data types.
- It gives corrections to users on how to avoid errors.
- When an error occurs, the system gives an error message and writes it in a log file for debugging.
- The system is protected from runtime errors.
- The system provides help to the operator to troubleshoot the system.

The following is an example of an error message displayed when one enters data that is not suitable in a particular field:


Microsoft Access
The value you entered isn't valid for this field.
For example, you may have entered text in a numeric field or a number that is larger than the FieldSize setting permits.
OK

CHAPTER FOUR: MISCELLANEOUS

CONCLUSION

It has been a quite long and involving journey developing this system and I hope that it goes a long way to improve operations for the organisation. I believe that this system will improve the current status of the MOVERS TRANSPORT COMPANY. This will be possible due to the fact that the new system is computerised and it gives the user superior features unlike the manual system. This system will make MOVERS a top notch organisation for it will improve the services it offers. It will also improve relationships between the workers and the system. Now the personnel of MOVERS have a reason to be all smiles.

RECOMMENDATION

The following are the recommendations for the system to be its best:

- The latest efficient technology should be employed for installation and working of the system.
- The computer should have up-to-date antivirus software to protect the system against corruption by viruses.
- Stringent security measures should be put in place to secure the system.
- Any necessary modifications (but with consent of the system developer) can be made to suit the organisation's demands or even work online using Internet.
- Advanced security measures can be employed to protect stored data from malicious people. Such measures are like fingerprint reading and use of CCTV cameras.
- Modifying of the system so that staff can work from all parts of the country.
- Increasing of the memory and data handling capacity so that the database can hold more information.
- Modifying of the user-interface to make the best screen appearance.

BIBLIOGRAPHY

The following were the sources for my information on how I could improve the system and make it the best:

- Longhorn Computer Studies Form Three, by ***S. Mburu*** and ***G. Chemwa; Longhorn Publishers***
- Longhorn Computer Studies Form Four by ***S. Mburu*** and ***G. Chemwa; Longhorn Publishers***
- Microsoft Office Help feature.
- Various internet sites from various web sites.

APPENDICES

1. *Appendix 2:* Flowchart symbols

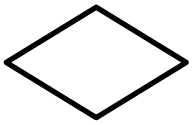
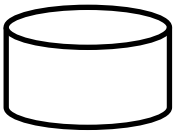
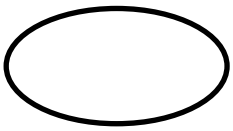
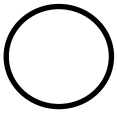
Symbol	Name	Meaning
	Arrow	Direction of logic flow
	Rectangle	Process
	Decision box	Selection of options
	Parallelogram	Input
	Magnetic disk	Updates and accesses a file in a magnetic disk
	Document	Opens a document or generates a report
	Oval	It indicates the beginning or end of the flowchart.
	On page connector	Connects tasks on flowchart

Table 10: Flowchart symbols

2. Appendix 2: **Abbreviations**

Kshs: Kenyan shillings
ID: Identification
No: Number
DVD: Digital Versatile Disk
CD: Compact Disk
GB: Gigabytes
GHz: Gigahertz

3. Appendix 3: system coding

```
Option Compare Database

Private Sub Command17_Click ()

On Error Go To Err_Command17_Click

 DoCmd.GoToRecord, acNext.

Exit_Command17_Click:


 Exit Sub


Err_Command17_Click:

MsgBox Err.Description

 Resume Exit_Command17_Click


End Sub

Private Sub Command18_Click()

On Error GoTo Err_Command18_Click

 DoCmd.GoToRecord , , acPrevious

Exit_Command18_Click:


Exit Sub
```

```
Err_Command18_Click:
    MsgBox Err.Description
    Resume Exit_Command18_Click

End Sub
Private Sub Command19_Click()
On Error GoTo Err_Command19_Click


    DoCmd.GoToRecord , , acLast

Exit_Command19_Click:
    Exit Sub

Err_Command19_Click:
    MsgBox Err.Description
    Resume Exit_Command19_Click

End Sub
Private Sub Command20_Click()
On Error GoTo Err_Command20_Click


    DoCmd.GoToRecord , , acFirst

Exit_Command20_Click:
```

```
    Exit Sub

Err_Command20_Click:
    MsgBox Err.Description
    Resume Exit_Command20_Click

End Sub
```