

MOVERS TRANSPORT SYSTEM



PROJECT NAME:

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DECLARATION

I declare that I am the sole creator of this wonderful project under the supervision of my teacher Mr. Humphrey Otiende and the blessings of the Almighty God.

I ascertain that this is my work and it is original.

DEDICATION

I hereby dedicate this project work to

ACKNOWLEDGEMENT

I acknowledge the following people who made it possible for me to develop this project work:

- (i) My parent for providing me with financial aid
- (ii) The school administration for providing me with the equipment i.e., computers to use in my project work
- (iii) My teacher Mr. Humphrey Otiende For equipping me with the necessary educational skills I needed in order to undertake this project work

TABLE OF CONTENTS

Contents

| | |
|---|-----|
| MOVERS TRANSPORT SYSTEM | i |
| DECLARATION | ii |
| DEDICATION | iii |
| ACKNOWLEDGEMENT | iv |
| TABLE OF CONTENTS..... | v |
| List of figures..... | vii |
| List of tables | ix |
| Abbreviations | x |
| INTRODUCTION | 1 |
| CHAPTER 1: ANALYSIS | 2 |
| Problem definition. | 2 |
| THE EXISTING SYSTEM. | 2 |
| Overview of the existing system. | 2 |
| The structure of the system..... | 3 |
| Advantages of the system..... | 4 |
| Disadvantages of the system. | 4 |
| THE PROPOSED SYSTEM..... | 5 |
| Scope of the system..... | 5 |
| Benefits of the new system. | 5 |
| Shortcomings of the new system..... | 6 |
| FEASIBILITY OF THE PROPOSED SYSTEM..... | 7 |
| Schedule Feasibility..... | 7 |
| Legal Feasibility. | 8 |
| Operational Feasibility. | 8 |
| Technical feasibility..... | 8 |
| Economic Feasibility..... | 8 |
| System Justification. | 10 |
| INVESTIGATION AND FACT FINDING..... | 10 |
| REQUIREMENT SPECIFICATION..... | 11 |
| Table specification. | 11 |

| | |
|--|----|
| Form specification..... | 13 |
| Process specification..... | 16 |
| Hardware and software specification..... | 16 |
| Hardware specification..... | 16 |
| Software specification..... | 16 |
| Output specification..... | 18 |
| CHAPTER 2: SYSTEM DESIGN..... | 22 |
| Table design..... | 22 |
| Input screen design..... | 26 |
| Output design..... | 32 |
| Entity relationship diagrams..... | 37 |
| System flowchart design..... | 38 |
| CHAPTER THREE: USER MANUAL..... | 40 |
| A. Installation process and requirement..... | 40 |
| Hardware requirement..... | 40 |
| Software requirement..... | 40 |
| To install the system:..... | 40 |
| Loading process..... | 41 |
| Navigation guide..... | 42 |
| Error Handling..... | 57 |
| CHAPTER FOUR: MISCELLANEOUS..... | 59 |
| Conclusion..... | 59 |
| Recommendation..... | 59 |
| Bibliography..... | 59 |
| Appendices..... | 60 |
| Appendix 1: Problem (Question Paper)..... | 60 |
| FLOWCHART SYMBOLS..... | 63 |

List of figures

| | |
|--|----|
| Figure 1: System structure | 3 |
| Figure 2: Farm produce entry form | 26 |
| Figure 3: Farm inputs entry form | 26 |
| Figure 4: Large scale farmers details form | 27 |
| Figure 5: Small scale farmers groups form | 27 |
| Figure 6: Small scale farmers details form | 28 |
| Figure 7: Employee details form | 28 |
| Figure 8: Vehicles details form | 29 |
| Figure 9: Drivers details form | 29 |
| Figure 10: Loaders details form | 30 |
| Figure 11: Drivers' payment form | 30 |
| Figure 12: Orders entry form | 31 |
| Figure 13: Drivers 'details report | 32 |
| Figure 14: Drivers' payment report | 32 |
| Figure 15: drivers' offenses report | 32 |
| Figure 16: loaders' details report | 32 |
| Figure 17: Loaders' payment report | 33 |
| Figure 18: vehicles details report | 33 |
| Figure 19: Vehicle expenses report | 33 |
| Figure 20: Other expenses reports | 33 |
| Figure 21: Other salaries report | 34 |
| Figure 22: monthly tax paid | 34 |
| Figure 23: Yearly tax | 34 |
| Figure 24: Total monthly expenses report | 34 |
| Figure 25: Total yearly expenses report | 35 |
| Figure 26: monthly transport income report | 35 |
| Figure 27: Yearly transport income report | 35 |
| Figure 28: Other incomes reports | 35 |
| Figure 29: Monthly revenue report | 35 |
| Figure 30: Yearly revenue report | 36 |
| Figure 31: Monthly company profit report | 36 |
| Figure 32: yearly company profit report | 36 |
| Figure 33: Company's resources report | 36 |
| Figure 34: Company's members report | 36 |
| Figure 35: Entity relationship diagram | 37 |
| Figure 36: System flowchart | 38 |
| Figure 37: system flowchart | 39 |
| Figure 53: Splash screen photo | 41 |
| Figure 54: Main menu photo | 42 |
| Figure 55: Form for driver's details | 42 |
| Figure 56: Form for drivers' Offenses | 43 |
| Figure 57: LSF-details form | 43 |
| Figure 58: LSF-orders form | 44 |

| | |
|---|----|
| Figure 59:Loaders details form | 44 |
| Figure 60:Other employees details form | 45 |
| Figure 61:Other expenses form | 45 |
| Figure 62:Form for other incomes | 46 |
| Figure 63:Form for SSF-groups | 46 |
| Figure 64:Form for SSF-details | 47 |
| Figure 65:Form for SSFG-orders..... | 47 |
| Figure 66:Form for Vehicle details | 48 |
| Figure 67:Report for drivers' details | 49 |
| Figure 68:Report for Drivers' offenses | 49 |
| Figure 69:Report for large scale farmers | 50 |
| Figure 70:Report for loaders information..... | 50 |
| Figure 71;Report for LSF-orders..... | 51 |
| Figure 72:Report for other employee details | 51 |
| Figure 73:Report for other expenses | 52 |
| Figure 74:Report for other incomes | 52 |
| Figure 75:Report for SSF details..... | 53 |
| Figure 76:Report for SSF orders | 53 |
| Figure 77:Report showing tax paid | 54 |
| Figure 78;Report for total company expenses | 54 |
| Figure 79:Total revenue report..... | 55 |
| Figure 80:Vehicle information report | 55 |
| Figure 81:Profit of the company report..... | 56 |
| Figure 82:Number of farmers' error | 57 |
| Figure 83:SSF-data entry error..... | 57 |
| Figure 84:Distance travelled error | 58 |
| Figure 85:No loaders error..... | 58 |

List of tables

| | |
|---|----|
| Table 1: Schedule feasibility table | 8 |
| Table 2: economic feasibility table | 9 |
| Table 3:Large scale farmers' table | 22 |
| Table 4:small scale farmers groups table | 22 |
| Table 5:Small scale farmers details table..... | 23 |
| Table 6:Farm produce details table | 23 |
| Table 7:Farm inputs details table..... | 23 |
| Table 8:Employee details table | 24 |
| Table 9:Drivers details table | 24 |
| Table 10:loaders details table | 24 |
| Table 11:Drivers' payment table..... | 25 |
| Table 12:Orders table | 25 |
| Table 13:Details for each vehicle table | 61 |
| Table 14:Table for payment of loader and driver | 61 |
| Table 15;System flowchart symbols table | 63 |

Abbreviations

- ❖ LS-Large scale
- ❖ SS-Small scale
- ❖ Ksh-Kenyan shilling
- ❖ GHZ-Gigahertz
- ❖ CD-compact disk
- ❖ GB-gigabytes
- ❖ DVD-digital versatile disk

INTRODUCTION

Movers is a company that deals with the transportation of various agricultural goods for farmers between farms and retail outlets. The company was started on July 2004 by two businessmen, Mr. Fedart Opollo and Mrs. Linde Wanjala, to help farmers to transport their produce and since then it has grown into a reputable establishment. The company's headquarters are found in Kitale Town in Transzoia County. The company works with various large scale and small-scale farmers. The small-scale farmers have organized themselves into small groups called 'chamas'. The company works with a network of drivers and loaders who are responsible for the transportation. Due to the increasing competition from the upcoming companies and some internal problems that arose due to entropy of the old system, the management of the Movers company has decided to develop a computerize system which they hope will not only improve the operation within the company but will also enable the company to grow. The management hopes that the new system will reduce some of the costs of running activities in the company and increase the company's profits.

CHAPTER 1: ANALYSIS

Problem definition.

The existing manual system in the Movers company has many shortcomings which are bringing about undue costs to the company and lowering its profits. The growth of the company in the recent years has led to inefficiency in the running of activities in the company. There have been cases of delayed products delivery, some of the produce gets destroyed before reaching its destination among other problems.

The task at hand is to develop a computerized database system for the company that will be able to improve its internal efficiency and hopefully the company's profits.

THE EXISTING SYSTEM.

Overview of the existing system.

Many processes in the Movers Company are done manually by the employees. All of these tasks carried out are recorded on the record books and stored in the file room of the company. The company works with large scale farmers who are registered individually and small-scale farmers who have registered themselves as Chamas. The company owns several vehicles including pick-ups, Trailers, Lorries and Refrigerated trucks with which it uses to transport the various farmers' goods.

In the current system, farmers come to the headquarters to register themselves. Their records are taken by the appropriate employees of the company. In order to make orders for the transport vehicles, farmers who are far write postal letters while those near have to come to the center to make the order. The payments are done on spot. The drivers and loaders are called out at random to drive vehicles and there is no specific routine for servicing and managing the vehicles. The drivers and loaders are paid in a day's work. All the transactions are done manually.

The process of writing, accessing and updating records is done by employees and the reports are also compiled by the employees. This process is cumbersome and gives inconsistent results. At the end of each year, the company gives a 20% of the total revenue as tax to the government. The company's profits are also done then.

The structure of the system.

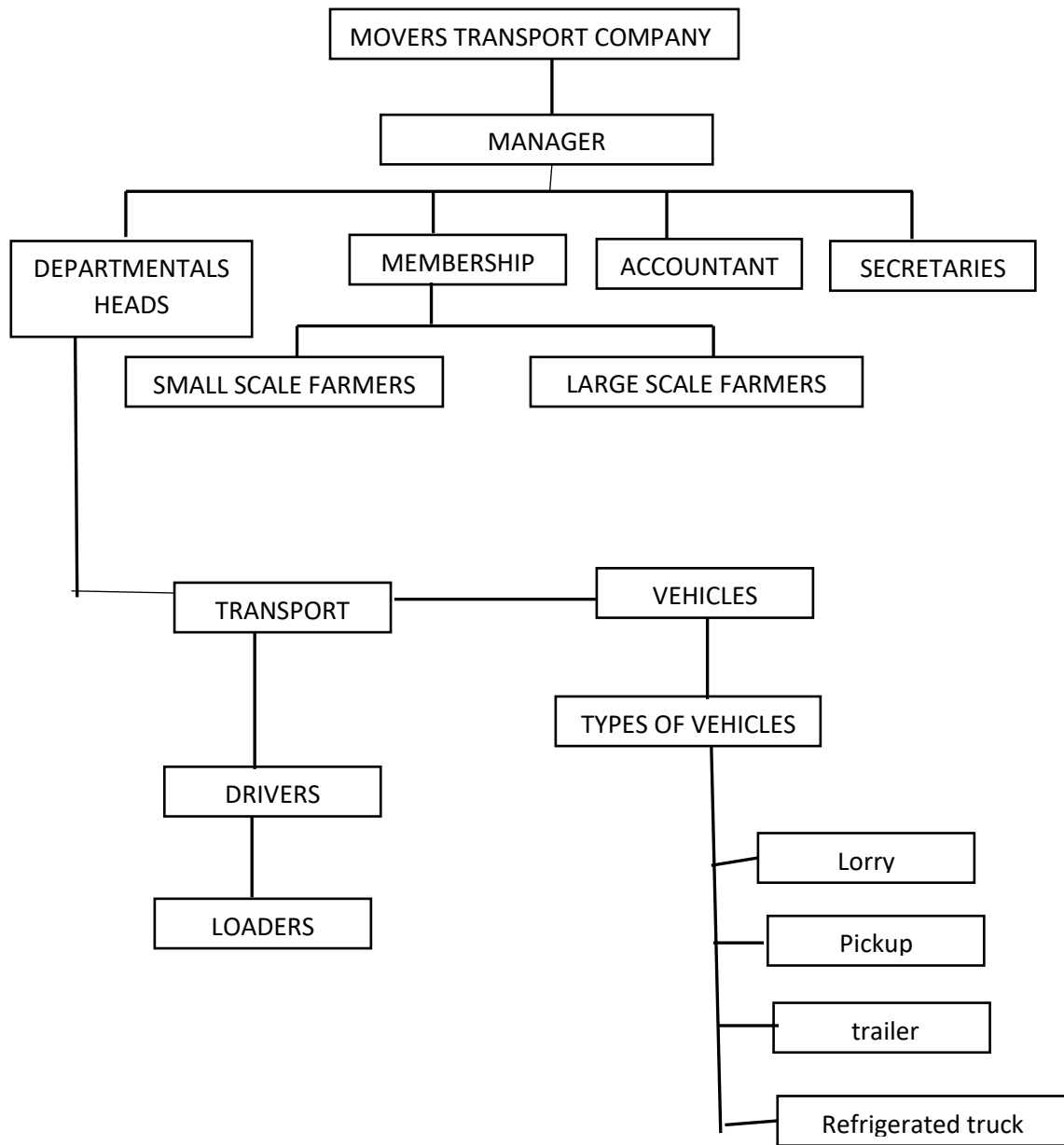


Figure 1: System structure

Advantages of the system.

- The company has created many jobs to the locals and even the unskilled personnel are able to work efficiently because there are no complex processes in the company.
- There is a good rapport between employees in the company because they actively interact.
- The company's processes are cost effective to run because it does not require skilled personnel and the work can be done with little supervision.

Disadvantages of the system.

- There is excess labor in the company and some of it is not well utilized leading to job duplication in the company.
- The records kept in the company i.e.: Farmers, Drivers, Loaders, vehicles and products records are redundant leading to difficulty in compiling expenses reports at the end of each month and year.
- Some records are lost because the filing system is not convenient.
- Some workers have delayed payment and some orders are unattended to leading to dissatisfaction from both parties.
- The management cannot handle their expansive business appropriately because the various activities in the company are hard to track accordingly.
- It is difficult to deal with errand drivers because records of their offenses are not well kept and some drivers pay their way out of the offense.
- The customer care service is not efficient because the farmers complain do not reach the headquarters on time. Most of the complains are not well followed up.

Due to the disadvantages of this manual system, the management has found it necessary to develop a computerized system to replace it.

THE PROPOSED SYSTEM.

The new computerized system is going to be developed in order to address the shortcomings of the manual system. The new system is anticipated to improve the company's services and hence the company's profits.

The objectives of the new system are as follows:

- I. To improve service delivery to farmers
- II. To improve internal decision making in the organization by making the record keeping process fast and accurate.
- III. To improve employee and vehicle management.
- IV. To ensure proper record keeping in all departments.
- V. To improve summary making process in the company
- VI. To ensure that there are quicker and more reliable transaction processes.

Scope of the system.

The expected system is expected to cover the following areas:

Maintaining records of members, vehicles, loaders, drivers, goods transported, orders, offenses and expenses for each vehicle. The system is also expected to generate various reports, Calculate the company's revenue and overall profits.

Although the computerized system is expected to cover the areas stated above, it is not expected to monitor the employees' work.

Benefits of the new system.

The proposed system will have the following benefits

- All the records in the company will be kept electronically hence it will be accurate, easy and saves space.
- The new system will support real-time processing hence orders will be well handled and booking of vehicles will be possible.
- Employees will be assigned specific tasks hence there will be no job duplication thus the company will reduce its running costs.
- Orders and payments will be done online thus ensuring safe exchange of money and transactions.
- The data can be easily backed up in the cloud. The data security is well ensured because files can be locked using access level passwords to prevent unauthorized access.
- There will be increased profits in the company because of the efficiency of the new system.

Shortcomings of the new system.

Some of the problems that the new system may face include:

- The initial cost of setting up and running the new system is very high and will reduce the company's profits.
- Some workers will be retrenched since computers will take over their jobs.
- The company will incur extra costs because of the need to employ skilled personnel.

FEASIBILITY OF THE PROPOSED SYSTEM.

This is the analysis that takes into consideration all the factors involved in developing the new system and establishing whether or not undertaking the project is beneficial to the company.

Schedule Feasibility.

The distribution of the system construction process in the 7 months that I have been allocated is as shown in the table below:

| TASK | MONTH | WEEK | ACTIVITY |
|--|-----------|------|--|
| MILESTONE 1 | | | |
| INITIAL STUDY | July | 2-4 | <ul style="list-style-type: none">❖ Title page set up❖ Making preliminary pages❖ Introduction |
| ANALYSIS | August | 1-4 | <ul style="list-style-type: none">❖ Problem definition❖ The existing system analysis❖ Analysis of the proposed system. |
| SYSTEM DESIGN | September | 1-4 | <ul style="list-style-type: none">❖ System Flowchart design.❖ Making fields and data types.❖ Input design.❖ Output design. |
| MILESTONE 2 | | | |
| SYSTEM CONSTRUCTION | October | 2-4 | <ul style="list-style-type: none">❖ Creating tables and their relationships.❖ Making input screens.❖ Data Manipulation❖ Output screens. |
| DEMONSTRATION AND DEVELOPING USER MANUAL | November | 1-4 | <ul style="list-style-type: none">❖ Testing the system.❖ Navigation and data maintenance❖ Input validation. |

| | | | |
|---------------------------------------|----------|-----|---|
| | | | ❖ Making reports. |
| MISCELLANEOUS AND DOCUMENTATION | December | 1-3 | ❖ Conclusion. ❖ Writing a full detailed documentation. |

Table 1: Schedule feasibility table

Legal Feasibility.

Developing the system will be under the Nation's and county's laws. All the necessary permits are easy to acquire. The system does not violate any stated laws hence it is worth pursuing.

Operational Feasibility.

All the employees of the company were shown the new system and most of them were happy with it. They gave the new system a high rating of 9/10 points.

The farmers who were informed of this new system found it satisfactorily good because it solved most of the problems that they faced owing to the previous manual system.

The management has also agreed to go forward with the new system because they know that with it the company will run much smoother and the profits will increase significantly.

Technical feasibility.

The Equipment needed for developing the new system is readily available in the market. A good system analyst and programmer is also there, me. The company will get 4 more programmers to assist me in developing the new system. The staff group has enough skills to learn how to use the new system.

Economic Feasibility.

This has been done to establish the cost and benefits of running the new system in comparison with the existing manual system. The study finds out whether or not the implementation of the new system is sustainable in the long run. The table below shows the economic feasibility of the two systems:

| YEAR 1 | | |
|-----------------|---------------|---------------------|
| AREA | MANUAL SYSTEM | COMPUTERISED SYSTEM |
| (i) Staff/Labor | 432000 | 400000 |
| (ii) Stationery | 80000 | 50000 |

| | | |
|------------------------------|---------------|---------------------|
| (iii) Electronic accessories | 110000 | 280000 |
| (iv) Electricity cost | 65000 | 130000 |
| (v) Other management costs | 33000 | 85000 |
| TOTAL COST | 720000 | 945000 |
| YEAR 2 | | |
| AREA | MANUAL SYSTEM | COMPUTERISED SYSTEM |
| (i) Staff/Labor | 420000 | 330000 |
| (ii) Stationery | 65000 | 45000 |
| (iii) Electronic accessories | 90000 | 80000 |
| (iv) Electricity cost | 60000 | 140000 |
| (v) Other management costs | 25000 | 43000 |
| TOTAL COST | 660000 | 638000 |
| YEAR 3 | | |
| AREA | MANUAL SYSTEM | COMPUTERISED SYSTEM |
| a) Staff/Labor | 429000 | 200000 |
| b) Stationery | 70000 | 38000 |
| c) Electronic accessories | 80000 | 65000 |
| d) Electricity cost | 70000 | 120000 |
| e) Other management costs | 29000 | 22000 |
| TOTAL COST | 678000 | 445000 |

Table 2: economic feasibility table

Total cost in Three years; -

- Manual system-expensive
- Computerized system-cheaper

The computerized system will be more profitable in the long run.

System Justification.

Developing the new system is possible because all the items needed are available. Pursuing the new system will be costly at first but as it has been seen it will be beneficial in the long run. The new system will contribute positively to the growth of the company as its costs will be less compared to the profits it will bring up in the future. The project is therefore worth pursuing.

INVESTIGATION AND FACT FINDING

The management has seen the benefits that the new system will bring to the company and have decided to go forward with the project. The next task is to find out the user requirements through the collection of facts. In order to do this, I carried out my investigation using the following methods:

➤ Interviews

I conducted various interviews which involved the farmers, various workers at the company and the management. The interviews mainly involved their opinion on the current system and what they feel about the proposed system.

– Observation

I was able to observe the day to day running of activities in the company. I was able to see the various processes that were undertaken in the company and learn some of the problems that the employees and farmers faced.

– Questionnaires

Due to secrecy and fear of some employees to reveal crucial information about the company, I decided to construct some questionnaires and distribute them randomly to the workers, farmers and management members. This enabled me to get some classified information concerning the company.

– Participation.

For a whole three days, I accompanied a worker, farmer and a manager throughout their days so that I could see their daily activities. This gave me a clear feeling of the way the current system works and how I should improve it in the new computerized system.

– Studying documents.

I visited the company's file room and saw how the various files were written and stored also got a chance to look at the various reports generated in the company.

Conclusion.

Although the manual system has been working in the company, many of the workers and employees are not happy with it because it is slow and inefficient, in contrary, the embers are happy with the new computerized system because it will make their work easier and the company's activities will run more smoothly.

REQUIREMENT SPECIFICATION.

Table specification.

(a) Farm produce table.

- Type
- Amount
- Perishable

(b) Farm input details table.

- Type
- Quantity
- Price
- Availability

(c) Large scale farmers details.

- Names, age, gender
- ID number
- Location
- Product
- Telephone No

(d) Small scale farmers' groups table.

- Group ID
- No. of farmers
- Name of representative
- ID No. of leader
- Location
- Products.

(e) Small scale farmers details table.

- Names of farmer, age, gender

- Group ID
- ID number
- Location
- Produce
- Telephone No.

(f) Employees details table

- Names
- Employee ID
- ID Number
- Telephone Number

(g) Vehicles details table

- Vehicle type
- Product transported
- Load capacity
- Driver's name
- Servicing cost
- Fuel Amount used
- Cost per Km

(h) Drivers Details Table

- Names, age, gender
- Driver's ID
- Vehicle driven
- ID Number
- Tel Number
- Offenses committed
- Number of trips

(i) Loaders Details.

- Names, age, gender
- ID Number

- Tel Number
- Vehicle
- Amount Paid.

(j) Orders table.

- Name
- Group
- Vehicle
- Product
- Location
- Distance
- cost

(k) Drivers' payment table

- Name
- ID Number
- Vehicle
- No. of trips
- Offences

Form specification

Farm produce Form

- Type
- Amount
- Perishable

Farm input details Form.

- Type
- Quantity
- Price

- Availability

Large scale farmers details.

- Names, age, gender
- ID number
- Location
- Product
- Telephone No

Small scale farmers' groups Form.

- Name of group
- No. of farmers
- Name of representative
- ID No. of leader
- Location
- Products.

Small scale farmers details Form.

- Names of farmer, age gender
- ID number
- Location
- Produce
- Telephone No.

Employees details Form

- Names, age, gender
- ID Number
- Telephone Number

Vehicles details Form

- Vehicle type
- Product transported
- Load capacity
- Driver's name

- Servicing cost
- Fuel Amount used
- Cost per Km

Drivers Details Form

- Names
- Vehicle driven
- ID Number
- Tel Number
- Offenses committed
- Number of trips

Loaders Details Form

- Names
- ID Number
- Tel Number
- Vehicle
- Amount Paid.

Orders Details Form

- Name
- Group
- Vehicle
- Product
- Location
- Distance
- Cost

Drivers' payment Form.

- Name
- ID Number
- Vehicle

- No. of trips
- Offences

Process specification.

- 1) Compute each of the following:
 - a) Computing the payment for a loader and a driver
 - b) Calculating the penalties surcharged on drivers
 - c) Finding the amount of loading fee per vehicle per trip
 - d) Computing expenses for each vehicle
 - e) Calculate the revenue per vehicle per trip
 - f) Calculating the tax payable by the company
 - g) Computing the total company expenses
 - h) Calculating the total revenue for the company
 - i) Finding the overall profit of the company.

Hardware and software specification

Hardware specification.

- A. Processor speed: 3.20GHz
- B. Processor type: Pentium (R) Dual-Core
- C. RAM size: 16.0 GB
- D. Hard disk memory space: 500 GB
- E. Input devices: Pointing devices (PS/2mouse)
 Keying in devices (Keyboard)
- F. Output devices: monitors (High resolution, Touch screen)
 Printers (Laser printer)
- G. Storage devices: flash disks, CDs for backup processes

Software specification.

- Operating system: Graphical User Interface Windows 10

- Application software: Microsoft Suite 2019 with:
 - ✓ Microsoft word 2019
 - ✓ Microsoft access 2019
 - ✓ Microsoft publisher 2019
- System software: Microsoft windows

Output specification.

The following are the output screens:

(a) Drivers Payment Report.

- First name
- Last Name
- ID Number
- Vehicle
- Amount Per Trip
- Number of trips
- Offenses
- Surcharges
- Total Salary
- Grand Total

(b) Loaders Payment Report

- First name
- Last Name
- ID Number
- Vehicle
- No. of vehicles loading
- Total Salary
- Grand Total

(c) Vehicle expenses Report

- Type of vehicle
- Vehicle ID
- Fueling Cost
- Servicing And Repairing Cost
- Insurance Cost
- No Of Times serviced
- Total Maintenance Cost

- Grand Total

(d) Other Salaries Reports

- First Name
- Last Name
- ID Number
- Amount Paid
- Grand Total

(e) Other Expenses Report

- Buying New vehicles
- Emergencies
- Office maintenance
- Calling bill
- Electric bill
- Water bill
- Total

(f) Tax payable report

- Year
- Month
- Revenue
- Tax

(g) Total expenses report

- Year
- Month
- Drivers' salary
- Loader's salary
- Vehicle maintenance
- Other salaries
- Other company expenses

- Tax paid
- Total company expenditure

(h) Transportation income report

- Vehicle type
- Vehicle ID
- Load capacity
- Cost per Km
- Number of Trips
- Distance Travelled
- Total amount paid

(i) Other Income generators report

- Selling of old vehicles
- Others
- Total

(j) Total Revenue generated report

- Year
- Month
- Transport Charges
- Other Incomes
- Grand Total

(k) Company's profit report

- Year
- Total Revenue
- Total Expenditure
- Profit

(l) Company's Resources report

- Category
- Category ID
- Number

(m) Farmers Report

- Farmer Category
- Category ID
- Number of Farmers

CHAPTER 2: SYSTEM DESIGN.

Table design.

(i) Large scale farmers table.

| Field Name | Data type |
|------------------|-----------|
| First Name | text |
| Last name | Text |
| Age | Text |
| Gender | text |
| ID number | Text |
| Location | Text |
| Product | text |
| Telephone number | text |

Table 3:Large scale farmers' table

(ii) Small scale farmers groups table

| Field Name | Data type |
|----------------|-----------|
| Name of Group | Text |
| No. of farmers | Number |
| Name of leader | text |
| Tel. of Leader | text |
| Location | Text |
| Products | text |

Table 4:small scale farmers groups table

(iii) Small scale farmers details table

| Field Name | Data type |
|------------|-----------|
| First Name | Text |
| Last Name | Text |
| Age Gender | Text |

| | |
|-----------|------|
| Id Number | Text |
| Location | Text |
| Produce | Text |
| Tel No. | text |

Table 5:Small scale farmers details table

(iv) Farm produce details table

| Field Name | Data type |
|--------------|-----------|
| Type | Text |
| Amount | Number |
| Perishable | Yes/No |
| Availability | text |

Table 6:Farm produce details table

(v) Farm input details table

| Field Name | Data type |
|--------------|-----------|
| Type | Text |
| Quantity | Number |
| Price | Currency |
| Availability | text |

Table 7:Farm inputs details table

(vi) Employees details table

| Field Name | Data type |
|------------|-----------|
| First Name | Text |
| Last Name | Text |
| Age | Text |
| Gender | Text |

| | |
|-------------|------|
| ID Number | Text |
| Tel. number | Text |
| Category | Text |

Table 8:Employee details table

(vii) Drivers details Table

| Field Name | Data type |
|-------------|-----------|
| First Name | Text |
| Last Name | Text |
| Age | Text |
| Gender | Text |
| ID Number | Text |
| Tel. number | Text |
| Vehicle | Text |
| Offenses | Number |

Table 9:Drivers details table

(viii) Loaders details table

| Field Name | Data type |
|-----------------|-----------|
| First Name | Text |
| Last Name | Text |
| Age | Text |
| Gender | Text |
| ID Number | Text |
| Tel. number | Text |
| Vehicle loading | Text |
| Amount paid | Currency |

Table 10:loaders details table

(ix) Drivers' payment table

| Field Name | Data type |
|--------------|-----------|
| Name | Text |
| ID Number | Text |
| Vehicle | Text |
| No. of trips | Number |
| Offenses | Number |

Table 11: Drivers' payment table

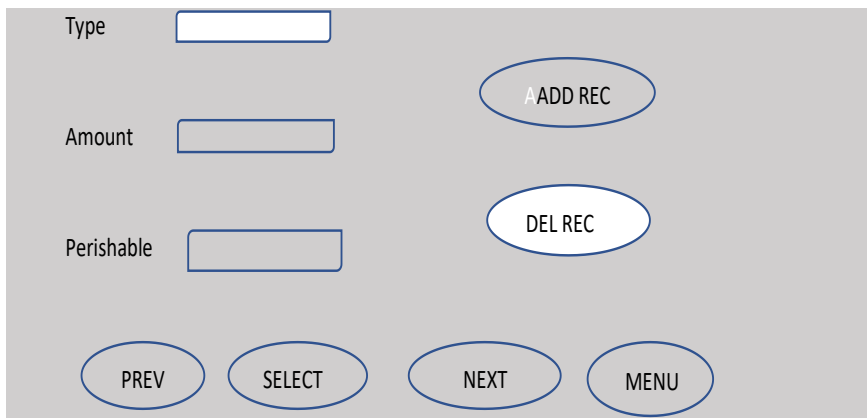
(x) Orders table

| Field Name | Data type |
|-----------------|-----------|
| Category | Text |
| First Name | Text |
| Last Name | Text |
| Vehicle | Text |
| Location | Text |
| Distance | Number |
| Type of product | Text |
| Total cost | Currency |
| Order date | Date/Time |
| Payment Date | Date/Time |

Table 12: Orders table

Input screen design

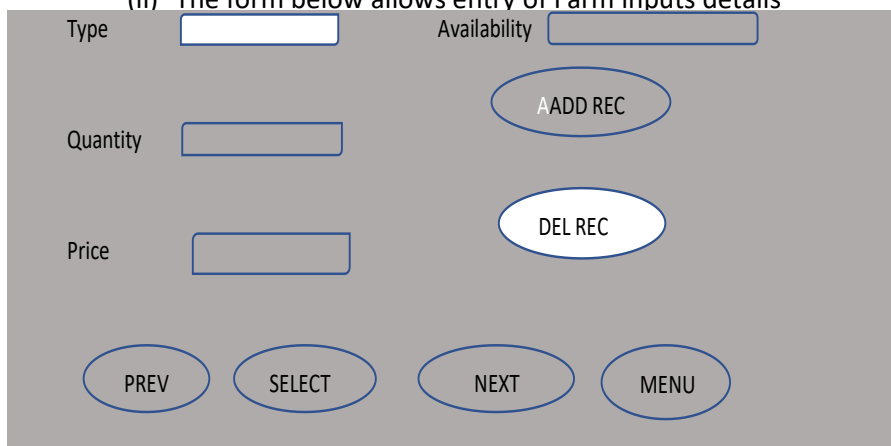
(i) The form below allows entry of farm produce details.



A screenshot of a software interface for entering farm produce details. The interface has a light gray background. On the left side, there are three labels: 'Type', 'Amount', and 'Perishable', each followed by a white rectangular input field. To the right of these fields, there are two oval buttons: 'AADD REC' and 'DEL REC'. At the bottom of the screen, there are four oval buttons arranged horizontally: 'PREV', 'SELECT', 'NEXT', and 'MENU'.

Figure 2: Farm produce entry form

(ii) The form below allows entry of Farm inputs details



A screenshot of a software interface for entering farm inputs details. The interface has a light gray background. On the left side, there are three labels: 'Type', 'Quantity', and 'Price', each followed by a white rectangular input field. To the right of these fields, there are two oval buttons: 'AADD REC' and 'DEL REC'. At the top right, there is an additional label 'Availability' followed by a white rectangular input field. At the bottom of the screen, there are four oval buttons arranged horizontally: 'PREV', 'SELECT', 'NEXT', and 'MENU'.

Figure 3: Farm inputs entry form

(iv) Large scale farmers details form.

| | | | |
|-------------------------------------|----------------------|--|----------------------|
| FirstName | <input type="text"/> | Location | <input type="text"/> |
| Last Name | <input type="text"/> | Product | <input type="text"/> |
| Gender | <input type="text"/> | Telephone No. | <input type="text"/> |
| D.O.B | <input type="text"/> | <input type="button" value="ADD REC"/> | |
| ID Number | <input type="text"/> | <input type="button" value="DEL REC"/> | |
| <input type="button" value="PREV"/> | | <input type="button" value="SELECT"/> | |
| <input type="button" value="NEXT"/> | | <input type="button" value="MENU"/> | |

Figure 4:Large scale farmers details form

(v) Small Scale farmers groups form

| | | | |
|-------------------------------------|----------------------|--|----------------------|
| Group Name | <input type="text"/> | Location | <input type="text"/> |
| No. of Farmers | <input type="text"/> | Product | <input type="text"/> |
| Name of Rep. | <input type="text"/> | Telephone No. | <input type="text"/> |
| D.O.B | <input type="text"/> | <input type="button" value="ADD REC"/> | |
| ID Number of Rep | <input type="text"/> | <input type="button" value="DEL REC"/> | |
| <input type="button" value="PREV"/> | | <input type="button" value="SELECT"/> | |
| <input type="button" value="NEXT"/> | | <input type="button" value="MENU"/> | |

Figure 5:Small scale farmers groups form

(vi) Small Scale farmers details form

| | | | |
|-------------------------------------|---------------------------------------|-------------------------------------|---|
| FirstName | <input type="text"/> | Location | <input type="text"/> |
| Last Name | <input type="text"/> | Product | <input type="text"/> |
| Gender | <input type="text"/> | Telephone No. | <input type="text"/> |
| Group Name | <input type="text"/> | | |
| D.O.B | <input type="text"/> | | <input type="button" value="AADD REC"/> |
| ID Number | <input type="text"/> | | <input type="button" value="DEL REC"/> |
| <input type="button" value="PREV"/> | <input type="button" value="SELECT"/> | <input type="button" value="NEXT"/> | <input type="button" value="MENU"/> |

Figure 6:Small scale farmers details form

(vii) Employee details Form

| | | | |
|-------------------------------------|---------------------------------------|-------------------------------------|---|
| FirstName | <input type="text"/> | ID Number | <input type="text"/> |
| Last Name | <input type="text"/> | Category | <input type="text"/> |
| Gender | <input type="text"/> | Telephone No. | <input type="text"/> |
| D.O.B | <input type="text"/> | | <input type="button" value="AADD REC"/> |
| | | | <input type="button" value="DEL REC"/> |
| <input type="button" value="PREV"/> | <input type="button" value="SELECT"/> | <input type="button" value="NEXT"/> | <input type="button" value="MENU"/> |

Figure 7:Employee details form

(viii) Vehicles' Details entry form

| | | | |
|-------------------------------------|----------------------|--|-------------------------------------|
| Vehicle type | <input type="text"/> | Servicing Cost | <input type="text"/> |
| Products | <input type="text"/> | Cost of fuel | <input type="text"/> |
| Load Capacity | <input type="text"/> | Cost per Km | <input type="text"/> |
| Driver's Name | <input type="text"/> | <input type="button" value="ADD REC"/> | |
| | | <input type="button" value="DEL REC"/> | |
| <input type="button" value="PREV"/> | | <input type="button" value="SELECT"/> | <input type="button" value="NEXT"/> |
| | | <input type="button" value="MENU"/> | |

Figure 8: Vehicles details form

(ix) Drivers' details entry Form

| | | | |
|-------------------------------------|----------------------|--|-------------------------------------|
| FirstName | <input type="text"/> | Offenses Committed | <input type="text"/> |
| Last Name | <input type="text"/> | No. of Trips | <input type="text"/> |
| Gender | <input type="text"/> | Telephone No. | <input type="text"/> |
| D.O.B | <input type="text"/> | <input type="button" value="ADD REC"/> | |
| ID Number | <input type="text"/> | <input type="button" value="DEL REC"/> | |
| <input type="button" value="PREV"/> | | <input type="button" value="SELECT"/> | <input type="button" value="NEXT"/> |
| | | <input type="button" value="MENU"/> | |

Figure 9: Drivers details form

(x) Loaders Details Form

| | | | |
|---------------------------------------|----------------------|---|----------------------|
| FirstName | <input type="text"/> | Vehicle | <input type="text"/> |
| Last Name | <input type="text"/> | Amount paid | <input type="text"/> |
| Gender | <input type="text"/> | Telephone No. | <input type="text"/> |
| D.O.B | <input type="text"/> | <input type="button" value="AADD REC"/> | |
| ID Number | <input type="text"/> | <input type="button" value="DEL REC"/> | |
| <input type="button" value="PREV"/> | | <input type="button" value="MENU"/> | |
| <input type="button" value="SELECT"/> | | <input type="button" value="NEXT"/> | |

Figure 10:Loaders details form

(xi) Drivers Payment Form

| | | | |
|---|----------------------|--|----------------------|
| FirstName | <input type="text"/> | Vehicle | <input type="text"/> |
| Last Name | <input type="text"/> | No. Of Trips | <input type="text"/> |
| ID Number | <input type="text"/> | Offenses | <input type="text"/> |
| <input type="button" value="AADD REC"/> | | <input type="button" value="DEL REC"/> | |
| <input type="button" value="PREV"/> | | <input type="button" value="MENU"/> | |
| <input type="button" value="SELECT"/> | | <input type="button" value="NEXT"/> | |

Figure 11:Drivers' payment form

(xii) Orders Entry Form.

| | | | |
|-------------------------------------|----------------------|--|----------------------|
| FirstName | <input type="text"/> | Location | <input type="text"/> |
| Last Name | <input type="text"/> | Distance | <input type="text"/> |
| Category | <input type="text"/> | Cost. | <input type="text"/> |
| Product | <input type="text"/> | <input type="button" value="ADD REC"/> | |
| ID Number | <input type="text"/> | <input type="button" value="DEL REC"/> | |
| <input type="button" value="PREV"/> | | <input type="button" value="SELECT"/> | |
| <input type="button" value="NEXT"/> | | <input type="button" value="MENU"/> | |

Figure 12: Orders entry form

Output design

Driver's Details Report

| MOVERS TRANSPORT SYSTEM | | | | |
|-------------------------|-----------|-----------|---------|--|
| First Name | Last Name | ID Number | Vehicle | |
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |

Figure 13: Drivers 'details report

Driver's Payment Report

| MOVERS TRANSPORT SYSTEM | | | | | | |
|-------------------------|-----------|---------|-----------------|-----------------|--------------|--|
| First Name | ID Number | Vehicle | Amount Per Trip | Number of trips | Total Salary | |
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| Grand totals | | | | | | |

Figure 14: Drivers' payment report

Driver's Offenses Report.

| MOVERS TRANSPORT SYSTEM | | | | |
|-------------------------|-----------|----------|------------------|-----------------|
| First Name | ID Number | Offenses | Times Surcharged | Times suspended |
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |

Figure 15: drivers' offenses report

Loaders details Report

| MOVERS TRANSPORT SYSTEM | | | | |
|-------------------------|-----------|-----------|---------|--|
| First Name | Last Name | ID Number | Vehicle | |
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |

Figure 16: loaders' details report

Loader's payment report

| MOVERS TRANSPORT SYSTEM | | | | |
|-------------------------|-----------|---------|----------------------------|--------------|
| First Name | ID Number | Vehicle | Number of vehicles loading | Total Salary |
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| Grand totals | | | | |

Figure 17: Loaders' payment report

Vehicle Details Report

| MOVERS TRANSPORT SYSTEM | | | |
|-------------------------|------------|---------------|---------------|
| Vehicle type | Reg Number | Driver's Name | Loader's Name |
| 1 | | | |
| 2 | | | |
| 3 | | | |

Figure 18: vehicles details report

Vehicle Expenses Report

| MOVERS TRANSPORT SYSTEM | | | | | |
|-------------------------|------------|--------------|-------------------------|----------------------|------------|
| Vehicle Type | Reg Number | Fueling cost | Service and repair cost | No of times serviced | Total cost |
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |
| 5 | | | | | |
| Grand Totals | | | | | |

Figure 19: Vehicle expenses report

Other expenses Report

| MOVERS TRANSPORT SYSTEM | | | | | |
|-------------------------|-------------|--------------------|---------------|---------------|------------|
| Buying Vehicles | Emergencies | Office maintenance | Calling bills | Electric bill | Water bill |
| Totals | | | | | |
| Grand Totals | | | | | |

Figure 20: Other expenses reports

Other salaries report

| MOVERS TRANSPORT SYSTEM | | | | |
|-------------------------|------------|-----------|-----------|-------------|
| | First name | Last Name | ID Number | Salary |
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| | | | | Grand Total |

Figure 21: Other salaries report

Monthly tax paid report

| Month | | |
|---------------|-------------------|-----|
| Total Revenue | Total expenditure | Tax |
| | | |
| | | |
| Grand Totals | | |

Figure 22: monthly tax paid

Total yearly tax report

| Year | |
|--------------|-----|
| Month | Tax |
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| Grand totals | |

Figure 23: Yearly tax

Total Monthly expenses report

| Month | | | | | |
|-----------------|-----------------|--------------------------|----------------|----------------|----------|
| Drivers' salary | Loaders' salary | Vehicle maintenance cost | Other salaries | Other expenses | Tax paid |
| | | | | | |
| | | | | | |
| Grand Totals | | | | | |

Figure 24: Total monthly expenses report

Total yearly expenses report

| Year | |
|--------------|-------------|
| Month | Expenditure |
| 1 | |
| 2 | |
| 3 | |
| Grand totals | |

Figure 25: Total yearly expenses report

Monthly transport income report

| Month | Vehicle type | Vehicle ID | load capacity | Cost Per km | Distance travelled | No of trips |
|--------------|--------------|------------|---------------|-------------|--------------------|-------------|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| Grand totals | | | | | | |

Figure 26: monthly transport income report

Yearly transportation income report

| Year | |
|-------|--------------|
| Month | Total Income |
| | |
| | |
| | Grand total |

Figure 27: Yearly transport income report

Other income report

| Month | |
|-------------|-------------|
| Income area | Total |
| | |
| | |
| | Grand total |

Figure 28: Other incomes reports

Monthly Revenue report

| MONTH | |
|-----------------------|---------------|
| TRANSPORTATION INCOME | Other incomes |
| | |
| | |
| | GRAND TOTAL |

Figure 29: Monthly revenue report

Yearly Revenue Report

| | Year |
|-------------|---------|
| Month | Revenue |
| 1 | |
| 2 | |
| 3 | |
| Grand total | |

Figure 30:Yearly revenue report

Monthly company's profit report

| MONTH | | |
|---------------|-------------------|--------|
| TOTAL REVENUE | Total Expenditure | Profit |
| | | |
| | | |
| | | |
| | GRAND TOTAL | |

Figure 31;Monthly company profit report

Yearly company's profit report

| Year | | | | |
|------|-------|---------------|-------------------|--------|
| | Month | Total revenue | Total expenditure | Profit |
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| | | | Grand totals | |

Figure 32:yearly company profit report

Company's Resources report

| Category | Category ID | Number |
|----------|-------------|--------|
| | | |
| | | |
| | | |
| | | |

Figure 33:Company's resources report

Company's members report

| CATEGORY | CATEGORY ID | NUMBER |
|----------|-------------|--------|
| | | |
| | | |
| | | |

Figure 34:Company's members report

Entity relationship diagrams

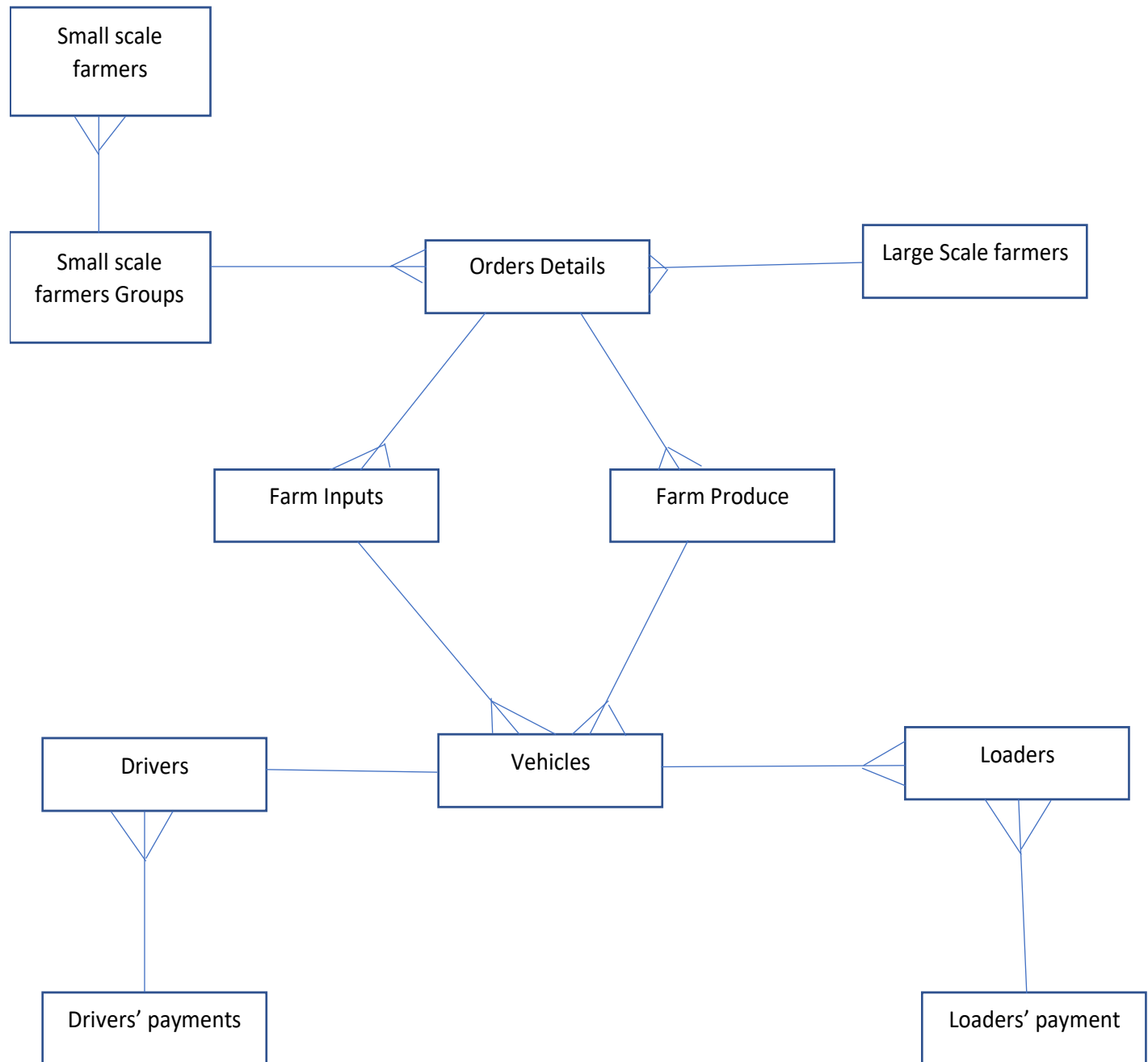


Figure 35:Entity relationship diagram

System flowchart design

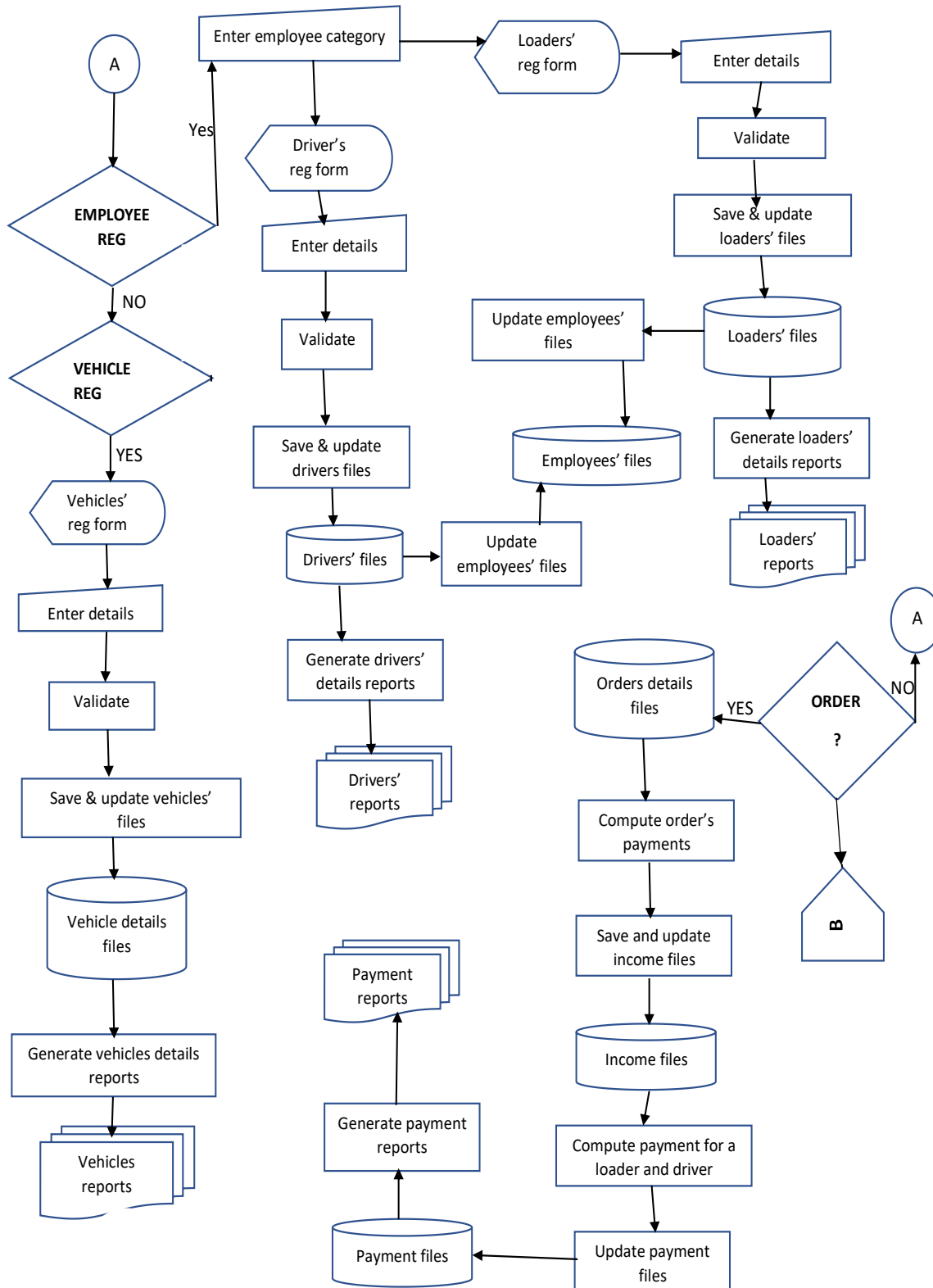


Figure 36: System flowchart

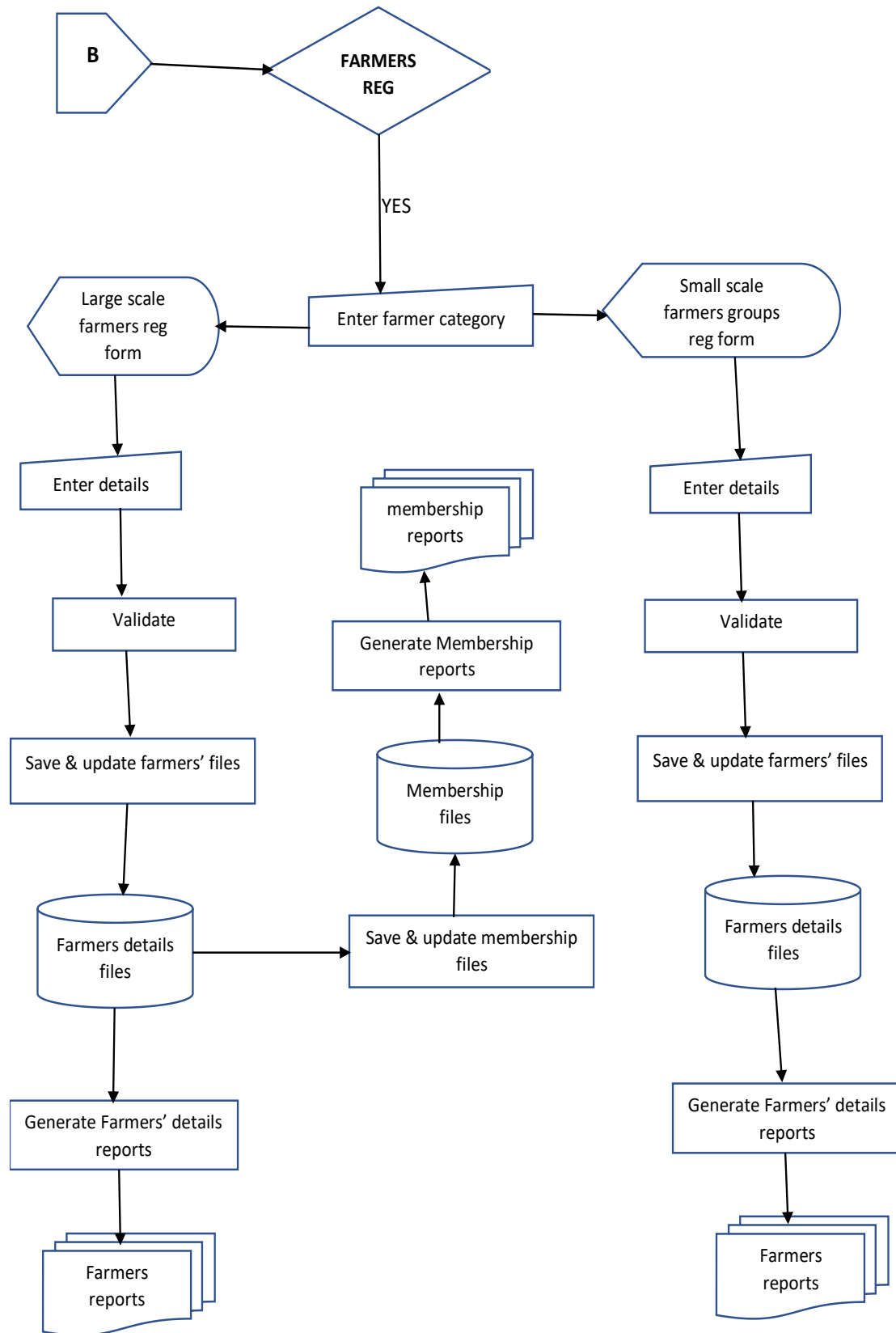


Figure 37:system flowchart

CHAPTER THREE: USER MANUAL

A. Installation process and requirement

Hardware requirement

- Processor speed: 3.20GHz
- Processor type: Pentium (R) Dual-Core
- RAM size: At least 16.0 GB
- Hard disk memory space: At least 500 GB
- Input devices: Pointing devices (PS/2mouse)

Keying in devices (Keyboard)

- Output devices: monitors (High resolution, Touch screen)

Printers (Laser printer)

- Storage devices: flash disks, CDs

Software requirement

- Application software: Microsoft Suite 2019 with:

- ✓ Microsoft word 2019
- ✓ Microsoft access 2019
- ✓ Microsoft publisher 2019

- System software: Microsoft window7/8/10/11

To install the system:

- i. Switch on the computer.
- ii. Put the CD or DVD containing the access document into a working CD or DVD drive.
- iii. Locate the Movers Transport System access document on the CD or DVD storage.
- iv. Copy it and paste it on the desktop.

Loading process

- i. Switch on the computer.
- ii. Once the computer is on, on the desktop, open the access document ***Movers transport system*** by double clicking on its icon.
- iii. On opening the system, the splash screen shown below appears:



Figure 38: Splash screen photo

- iv. Upon appearing of this screen, you will have to wait for approximately 3 seconds before you see the main menu which appears as follows;

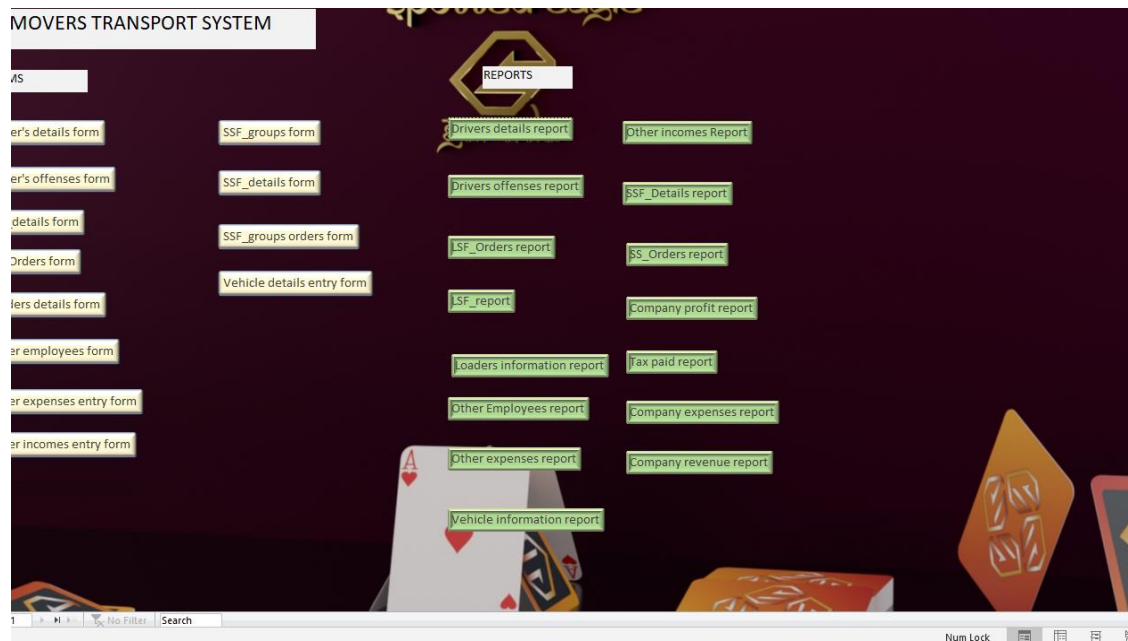


Figure 39:Main menu photo

Navigation guide

- The main menu displays buttons which are used to carry out different functions in the system. Choose the form required by pressing the appropriate buttons.

The following are the forms available in the system:

(i) Driver's details form

This form lets you register a new driver into the system.

Figure 40:Form for driver's details

a) Driver's offenses form

This form lets you record all the offenses committed by a driver during his working time. The details of the offenses are entered here.

The screenshot shows a web application window titled "Drivers Offenses Form". The form contains the following fields and buttons:

- Driver's ID:** A dropdown menu with "0001" selected. To its right is an "Add Record" button.
- Fname:** A text input field containing "Brian". To its right is a "Save Record" button.
- Vehicle:** A text input field containing "Pickup". To its right is a "Print Record" button.
- Date of offense:** A text input field containing "12/13/2014".
- Number of offenses:** A text input field containing "1".
- Offense type:** A text input field containing "Overspeeding" and "Overloading". To its right is a "Print Form" button.
- Charge per offense:** A text input field containing "Ksh2,000.00".
- Navigation buttons:** "Next Record", "Prev Record", and "Find Record" are located at the bottom left.
- Control buttons:** "Close Form", "Main Menu", and "Quit App" are located at the bottom right.

Figure 41:Form for drivers' Offenses

b) Large scale farmers details form

Large scale farmers are registered into the system using this form.

The screenshot shows a web application window titled "Large scale farmers details Form". The form contains the following fields and buttons:

- Farmer ID:** A dropdown menu with "0001" selected. To its right is an "Add Record" button.
- ID Number:** A text input field containing "20315689".
- FName:** A text input field containing "James".
- Lname:** A text input field containing "Inyanje".
- Group:** A text input field containing "Large Scale". To its right is a "Save Record" button.
- Age:** A text input field containing "42". To its right is a "Print Record" button.
- Gender:** A text input field containing "Male".
- Location:** A text input field containing "Mwali".
- Product:** A text input field containing "Flowers". To its right is a "Print Form" button.
- Telephone no:** A text input field containing "0790112113". To its right is a "Close Form" button.
- Navigation buttons:** "Next Record", "Prev Record", and "Find Record" are located at the bottom left.
- Control buttons:** "Main Menu" and "Quit App" are located at the bottom right.

Figure 42:LSF-details form

c) Large scale farmers orders form

All the orders placed by large scale farmers are done using this form.

Large scale farmers orders form

Order Code

Farmer ID: L001

Products: Cereals

Vehicle ID: V001

Amount(kg): 300

Distance(km): 55

Order Date: 5/19/2018

Buttons: Add Record, Save Record, Print Record, Print Form, Close Form, Main Menu, Quit App, Next Record, Prev Record, Find Record

Figure 43:LSF-orders form

d) Loaders details form

Details of loaders are recorded into the system using this form.

Loaders' details form

Loader ID: L001

FName: Mweti

LName: Kiooko

Age: 21

Gender: male

Vehicle ID:

Vehicle type: Pickup

Tel Number: 0732404280

No of loading sessions: 29

Loaders pay per session: Ksh200.00

Buttons: Add Record, Save Record, Print Record, Print Form, Close Form, Main Menu, Quit App, Next Record, Prev Record, Find Record

Figure 44:Loaders details form

e) Other employees' details form.

Other employees in the company are registered using this form.

Other employees Details Form

| | | |
|--------------|-------------|--------------|
| Employee ID | ET001 | |
| FName | Chris | Add Record |
| LName | Chebellion | Save Record |
| ID number | 26428094 | Print Record |
| Age | 32 | |
| Gender | Male | Print Form |
| Total salary | \$36,000.00 | Close Form |

Next Record Prev Record Find Record Main Menu Quit App

Figure 45:Other employees details form

f) Other expenses form

All other expenses that are incurred in the company are recorded using this form.

Other expenses form

| | | |
|---------------------|-------------|--------------|
| N_Month | April | Add Record |
| Buying new vehicles | Ksh0.00 | Save Record |
| Emergencies | Ksh5,698.00 | Print Record |
| office maintenance | Ksh5,845.00 | |
| calling bill | Ksh650.00 | Print Form |
| Electricity bill | Ksh1,563.00 | Close Form |
| Water bill | Ksh5,635.00 | Main Menu |

Next Record Prev Record Find Record Quit App

Figure 46:Other expenses form

g) Other incomes entry form

All the other incomes generated into the company using other means are recorded using this form.

Other incomes entry form

Income Code: K001

N-month: April

Selling old vehicles: \$1,565,931.00

Buttons: Add Record, Save Record, Print Record, Print Form, Close Form, Main Menu, Quit App, Next Record, Prev Record, Find Record

Figure 47: Form for other incomes

h) Small scale groups form

All the groups of small-scale farmers are registered using this form.

Small scale Farmers Groups form

Group ID: G001

Name of Group: Kifaru

Number of farmers: 5

Name of leader: Joseph

Group: small scale

Tel of leader: 0737425049

Location: Kwanza

Products: Cereals

Buttons: Add Record, Save Record, Print Record, Print Form, Close Form, Main Menu, Quit App, Next Record, Prev Record, Find Record

Figure 48: Form for SSF-groups

i) Small scale farmers details form

The details of the small-scale farmers who are in groups are recorded using this form.

Small Scale Farmers details form

| | | |
|------------|------------|--------------|
| Farmer ID | SS01 | Add Record |
| ID Number | 10123453 | Save Record |
| Fname | Catherine | Print Record |
| LName | Mathoka | |
| Group ID | G005 | |
| Age | 48 | |
| Gender | Female | |
| Location | Bidii | |
| Produce | Flowers | Print Form |
| Tel Number | 0795467881 | Close Form |

Next Record Prev Record Find Record Main Menu Quit App

Figure 49:Form for SSF-details

j) Small scale group orders form

All the orders placed by the small-scale farmers groups are done using this form.

Small Scale Groups Orders form

| | | |
|------------|-------------|--------------|
| Order Code | 1 | Add Record |
| Group ID | G001 | Save Record |
| Products | Fertilizers | Print Record |
| Amount(kg) | 36 | |
| Vehicle ID | V011 | |
| Distance | 64 | |
| Order Date | 2/10/2019 | Print Form |

Next Record Prev Record Find Record Close Form Main Menu Quit App

Figure 50:Form for SSFG-orders

k) Vehicle details entry form

The various vehicles used by the company are registered using this form.

Vehicle Details entry form

| | | | |
|---------------------|--------------|-------------------------|--------------|
| Vehicle ID | V001 | service and repair cost | Ksh29,600.00 |
| Vehicle Type | Pickup | Next Record | Add Record |
| Product transported | Cereals | Prev Record | Save Record |
| Load capacity | 1 | Find Record | Print Record |
| Driver ID | D001 | | |
| Loader ID | L001 | Print Form | |
| Number of loaders | 2 | Close Form | |
| Driver's Name | Brian | Main Menu | |
| Cost per km | Ksh200.00 | Quit App | |
| payment per loader | Ksh200.00 | | |
| Number of drivers | 1 | | |
| Cost per driver | Ksh2,000.00 | | |
| fuel cost | Ksh25,600.00 | | |
| Insurane cost | Ksh13,300.00 | | |

Figure 51:Form for Vehicle details

- The system generates reports as the output.

On the main menu are the various buttons that are used to display the various reports generated by the system. The reports that will be seen are as follows:

a. Driver's details report

The summary for the number of drivers per vehicle and their total salaries will be seen as shown below

| Drivers' details report | | | | | | | | | |
|-------------------------|-------------|----------|-----------|-----|--------|-----------|------------|--------------------|-----------------------|
| Vehicle | Driver's ID | Fname | Lname | Age | Gender | ID Number | Tel number | Number of Offenses | Total Driver's salary |
| Lorry | | | | | | | | | |
| | D018 | Owen | Tiusi | 36 | Male | 21654212 | 0712458741 | 1 | Ksh9,000.00 |
| | D011 | Oliver | Njuti | 53 | Male | 35692125 | 0732369852 | 0 | Ksh15,000.00 |
| | D002 | Jacob | Musili | 34 | Male | 24161591 | 0719246045 | 0 | Ksh15,000.00 |
| | D009 | Benjamin | Rieko | 41 | Male | 52352525 | 0774125865 | 1 | Ksh6,000.00 |
| | D008 | James | Meeka | 26 | Male | 52552333 | 0712578694 | 1 | Ksh18,000.00 |
| | D010 | Elijah | Msambwa | 89 | Male | 12469412 | 0752634128 | 0 | Ksh9,000.00 |
| | | | | | | | | | 72000 |
| Pickup | | | | | | | | | |
| | D001 | Brian | Masinde | 28 | Male | 26354201 | 0713141516 | 1 | Ksh18,000.00 |
| | D021 | Jigi | Mwanjigu | 32 | Female | 58691111 | 0745456321 | 3 | Ksh12,000.00 |
| | D006 | Noah | Kaoti | 32 | Male | 32464645 | 0713454525 | 8 | Ksh4,000.00 |
| | D005 | Len | kiprotich | 36 | Male | 16385232 | 0785215469 | 4 | Ksh14,000.00 |
| | D007 | Williams | Nzioki | 48 | Male | 32563233 | 0796314984 | 2 | Ksh6,000.00 |
| | | | | | | | | | 54000 |
| Refrigerated truck | | | | | | | | | |
| | D017 | Jayden | Omololo | 24 | Male | 31215454 | 0789065032 | 2 | Ksh5,000.00 |
| | D015 | Michael | Owino | 19 | Male | 39876164 | 0713245697 | 2 | Ksh35,000.00 |
| | D020 | Chris | Wamalwa | 30 | Male | 23321452 | 0789562312 | 0 | Ksh25,000.00 |
| | D003 | Mary | Wanjiru | 25 | Female | 52134570 | 0720945101 | 2 | Ksh40,000.00 |
| | D004 | Mary | Wanjiru | 25 | Female | 52134570 | 0720945101 | 2 | Ksh20,000.00 |
| | | | | | | | | | 125000 |
| Trailer | | | | | | | | | |
| | D012 | Lucas | Mwerate | 35 | Male | 02124653 | 0712987474 | 0 | Ksh32,000.00 |

Figure 52: Report for drivers' details

b. Driver's offenses report

The summary for the offenses committed by each driver is seen as shown below

| Drivers Offenses report | | | | | | | |
|-------------------------------|-------------|---------|--------------------|-----------------|--------------------|--------------------|--------------|
| Offense type | Driver's ID | Fname | Vehicle | Date of offense | Number of offenses | Charge per offense | Surcharge |
| Drunk driving | | | | | | | |
| | D004 | Oscar | Trailer | 6/15/2020 | 3 | Ksh1,500.00 | Ksh4,500.00 |
| Overloading | | | | | | | |
| | D002 | Jacob | Lorry | 9/16/2020 | 2 | Ksh2,200.00 | Ksh4,400.00 |
| | D019 | Isaac | Trailer | 11/16/2018 | 3 | Ksh2,200.00 | Ksh6,600.00 |
| Overspeeding | | | | | | | |
| Overloading | | | | | | | |
| | D001 | Brian | Pickup | 12/13/2014 | 1 | Ksh2,000.00 | Ksh2,000.00 |
| Perishable goods got spoilt | | | | | | | |
| refrigerated goods got spoilt | | | | | | | |
| | D003 | Mary | Refrigerated truck | 7/3/2021 | 2 | Ksh3,500.00 | Ksh7,000.00 |
| | D015 | Michael | Refrigerated truck | 5/16/2020 | 4 | Ksh3,500.00 | Ksh14,000.00 |

Monday, November 29, 2021

Page 1 of 1

Figure 53: Report for Drivers' offenses

c. Large scale farmers report

The summary on large scale farmers will be generated as shown below

| Large scale farmers Report | | | | | | | | | |
|----------------------------|-----------|-----------|--------|----------|-------------|-----|--------|-----------|--------------|
| Location | Farmer ID | ID Number | FName | LName | Group | Age | Gender | Product | Telephone no |
| Bidii | L006 | 25898512 | Rajuh | Rastogi | Large Scale | 50 | Male | Livestock | 0748507079 |
| | L003 | 30556472 | Samuel | Wanyonyi | Large Scale | 54 | Male | Cereals | 0717655432 |
| Katio | L004 | 36142524 | Orpha | Nyaboke | Large Scale | 38 | Female | Eggs | 0754698740 |
| | L009 | 98985289 | Kingi | Amason | Large Scale | 56 | Male | Flowers | 0745654552 |
| Kwanza | L007 | 52151250 | Ken | Lusaka | Large Scale | 59 | Male | Fish | 0745141470 |
| | L010 | 25743737 | Hamato | Yoshi | Large Scale | 40 | Male | Livestock | 0789521440 |
| Meso | L002 | 25589663 | Ted | Andaje | Large Scale | 47 | Male | Milk | 0766707680 |
| | L005 | 98752312 | Grace | Wanjiru | Large Scale | 65 | Female | Cereals | 0745726465 |
| Mwali | L001 | 20315689 | James | Inyanje | Large Scale | 42 | Male | Flowers | 0790112113 |
| | L008 | 12021031 | Eunice | Yaya | Large Scale | 41 | Female | Cereals | 0717888038 |

Monday, November 29, 2021 Page 1 of 1

Figure 54: Report for large scale farmers

d. Loaders' information report

The summary on the loader's information is as shown below

| Loaders' information report | | | | | | | | | |
|-----------------------------|-----------|-----------|----------|-----|--------|------------|---------------|-------------------------|------------------|
| Vehicle type | Loader ID | FName | LName | Age | Gender | Tel Number | No of loading | Loaders pay per session | Total loader pay |
| Lorry | L016 | Jedida | Mondindi | 41 | Male | 0712464569 | 16 | Ksh500.00 | Ksh8,000.00 |
| | L007 | Peter | Mailu | 21 | Male | 0793158469 | 25 | Ksh300.00 | Ksh7,500.00 |
| | L002 | Philori | Mwilu | 18 | Female | 0718052110 | 23 | Ksh300.00 | Ksh6,900.00 |
| | L012 | Alphonse | Oyunga | 48 | Male | 0731623631 | 12 | Ksh200.00 | Ksh2,400.00 |
| | L005 | Richard | Kilusu | 32 | Male | 0745467778 | 17 | Ksh450.00 | Ksh7,650.00 |
| | L019 | Vikio | Kirika | 29 | Male | 0745129632 | 21 | Ksh500.00 | Ksh10,500.00 |
| | | | | | | | | | 42950 |
| Pickup | L008 | Moses | Kioko | 42 | Male | 0764829551 | 14 | Ksh300.00 | Ksh4,200.00 |
| | L011 | Evans | Onderi | 56 | Male | 0736978451 | 35 | Ksh200.00 | Ksh7,000.00 |
| | L015 | Faikel | Maina | 26 | Male | 0712356946 | 34 | Ksh300.00 | Ksh10,200.00 |
| | L021 | Silvester | Olmasai | 19 | Male | 0714524623 | 20 | Ksh500.00 | Ksh10,000.00 |
| | L001 | Mweti | Kioko | 21 | male | 0732404280 | 29 | Ksh200.00 | Ksh5,800.00 |
| | | | | | | | | | 37200 |
| Refrigerated truck | L014 | Fuoti | Mkali | 29 | Male | 0752526464 | 21 | Ksh300.00 | Ksh6,300.00 |
| | L009 | Daniel | Mutua | 36 | Male | 0754128852 | 19 | Ksh500.00 | Ksh9,500.00 |
| | L003 | Alpha | Dawo | 25 | Male | 0748121632 | 18 | Ksh450.00 | Ksh8,100.00 |
| | L017 | Jamu | Moguro | 34 | Male | 0713415455 | 9 | Ksh450.00 | Ksh4,050.00 |
| | | | | | | | | | 27950 |

Figure 55: Report for loaders information

e. LS-farmers orders report

The summary for the orders done by large scale farmers is as shown below

| LS_Farmers Orders Report | | | | | | | |
|--------------------------|------------|------------|----------|--------------|-------------|---------------|-------------------------|
| Vehicle ID | Order Code | Farmer ID | Products | Distance(km) | Order Date | Cost per km | Total large scale order |
| V001 | | | | | | | |
| 24 | L003 | Fertilizer | 77 | 2/9/2019 | Ksh200.00 | Ksh15,400.00 | |
| 9 | L001 | Cereals | 55 | 6/3/2019 | Ksh200.00 | Ksh11,000.00 | |
| 12 | L009 | Cereals | 45 | 2/10/2019 | Ksh200.00 | Ksh9,000.00 | |
| 1 | L001 | Cereals | 55 | 5/19/2018 | Ksh200.00 | Ksh11,000.00 | |
| 27 | L006 | Herbicides | 15 | 4/3/2019 | Ksh200.00 | Ksh3,000.00 | |
| V002 | | | | | | | |
| 18 | L006 | Cereals | 25 | 4/1/2019 | Ksh650.00 | Ksh16,250.00 | |
| V003 | | | | | | | |
| 8 | L002 | Milk | 68 | 4/3/2019 | Ksh1,500.00 | Ksh102,000.00 | |
| 23 | L002 | Cereals | 47 | 1/10/2019 | Ksh1,500.00 | Ksh70,500.00 | |
| 19 | L007 | Milk | 12 | 4/2/2019 | Ksh1,500.00 | Ksh18,000.00 | |
| V004 | | | | | | | |
| 7 | L008 | Cereals | 29 | 4/1/2019 | Ksh1,000.00 | Ksh29,000.00 | |
| V006 | | | | | | | |
| 4 | L010 | Manure | 87 | 1/10/2019 | Ksh1,000.00 | Ksh87,000.00 | |
| V007 | | | | | | | |
| 15 | L003 | Manure | 56 | 3/13/2019 | Ksh650.00 | Ksh36,400.00 | |
| V009 | | | | | | | |
| 20 | L008 | Cereals | 49 | 5/12/2019 | Ksh1,500.00 | Ksh73,500.00 | |
| 16 | L004 | Herbicides | 35 | 3/15/2019 | Ksh1,500.00 | Ksh52,500.00 | |
| V010 | | | | | | | |
| 21 | L009 | Fertilizer | 18 | 5/12/2019 | Ksh1,000.00 | Ksh18,000.00 | |
| 2 | L005 | Fertilizer | 77 | 1/3/2019 | Ksh1,000.00 | Ksh77,000.00 | |
| 10 | L010 | Fertilizer | 77 | 10/3/2019 | Ksh1,000.00 | Ksh77,000.00 | |
| 25 | L004 | Livestock | 27 | 3/29/2019 | Ksh1,000.00 | Ksh27,000.00 | |

Figure 56;Report for LSF-orders

f. Other employees' details report

The summary for the other employees' details is as shown below

| Other employees Details Report | | | | | | |
|--------------------------------|-------------|-----------|------------|-----------|-----|--------------|
| Gender | Employee ID | FName | LName | ID number | Age | Total salary |
| Female | ET009 | Mia | Khalifa | 34576443 | 30 | \$29,560.00 |
| | ET006 | Emma | Amelia | 24555564 | 26 | \$35,000.00 |
| | ET005 | Liam | Nyaboke | 32416545 | 21 | \$33,000.00 |
| | ET004 | Faith | Kerubo | 31864589 | 44 | \$40,000.00 |
| | ET003 | Lyn | Dada | 81828384 | 35 | \$29,000.00 |
| | | | | | | \$166,560.00 |
| Male | ET010 | Alexender | Arnold | 34656986 | 32 | \$34,800.00 |
| | ET008 | Lucas | Wainaina | 34546458 | 30 | \$42,000.00 |
| | ET007 | Benjamin | Watako | 13543463 | 27 | \$29,500.00 |
| | ET002 | Victor | Kirui | 16487072 | 40 | \$27,000.00 |
| | ET001 | Chris | Chebellion | 26428094 | 32 | \$36,000.00 |
| | | | | | | \$169,300.00 |
| | | | | | | \$335,860.00 |

Monday, November 29, 2021

Page 1 of 1

Figure 57:Report for other employee details

g. Other expenses report

The summary for other company expenses will be displayed as shown

| Other expenses Report | | | | | | | |
|---------------------------|---------------------|-------------|--------------------|--------------|------------------|-------------|----------------------|
| N_Month | Buying new vehicles | Emergencies | office maintenance | calling bill | Electricity bill | Water bill | Total other expenses |
| April | Ksh0.00 | Ksh5,698.00 | Ksh5,845.00 | Ksh650.00 | Ksh1,563.00 | Ksh5,635.00 | Ksh19,391.00 |
| February | Ksh0.00 | Ksh2,569.00 | Ksh6,312.00 | Ksh892.00 | Ksh8,922.00 | Ksh6,426.00 | Ksh25,121.00 |
| January | Ksh0.00 | Ksh5,412.00 | Ksh2,489.00 | Ksh800.00 | Ksh6,325.00 | Ksh4,652.00 | Ksh19,678.00 |
| June | Ksh245,748.00 | Ksh4,562.00 | Ksh4,596.00 | Ksh930.00 | Ksh6,324.00 | Ksh9,462.00 | Ksh271,622.00 |
| March | Ksh0.00 | Ksh3,235.00 | Ksh3,645.00 | Ksh760.00 | Ksh4,005.00 | Ksh4,896.00 | Ksh16,541.00 |
| May | Ksh0.00 | Ksh3,125.00 | Ksh2,526.00 | Ksh580.00 | Ksh5,048.00 | Ksh5,896.00 | Ksh17,175.00 |
| July | Ksh0.00 | Ksh3,100.00 | Ksh2,356.00 | Ksh1,200.00 | Ksh9,320.00 | Ksh5,500.00 | Ksh21,476.00 |
| August | Ksh0.00 | Ksh7,632.00 | Ksh3,652.00 | Ksh850.00 | Ksh7,600.00 | Ksh4,566.00 | Ksh24,300.00 |
| September | Ksh0.00 | Ksh7,523.00 | Ksh3,125.00 | Ksh965.00 | Ksh8,000.00 | Ksh4,358.00 | Ksh23,971.00 |
| October | Ksh0.00 | Ksh6,452.00 | Ksh3,120.00 | Ksh230.00 | Ksh7,823.00 | Ksh9,500.00 | Ksh27,125.00 |
| November | Ksh562,356.00 | Ksh2,350.00 | Ksh2,256.00 | Ksh980.00 | Ksh5,600.00 | Ksh6,985.00 | Ksh580,527.00 |
| December | Ksh623,210.00 | Ksh5,521.00 | Ksh2,589.00 | Ksh700.00 | Ksh6,300.00 | Ksh3,426.00 | Ksh641,746.00 |
| | | | | | | | 1688673 |
| Monday, November 29, 2021 | | | | | | | |
| | | | | | | | Page 1 of 1 |

Figure 58:Report for other expenses

h. Other incomes report

The summary for the other incomes will be displayed as shown

| Other incomes report | | |
|---------------------------|-------------|----------------------|
| N-month | Income Code | Selling old vehicles |
| April | K001 | \$1,565,931.00 |
| August | K002 | \$369,852.00 |
| July | K003 | \$256,000.00 |
| November | K004 | \$569,400.00 |
| October | K005 | \$783,200.00 |
| Monday, November 29, 2021 | | |
| | | Page 1 of 1 |

Figure 59:Report for other incomes

i. Small scale farmers details report.

The summary of the small-scale farmers will be as shown below;

| Small Scale Farmers details report | | | | | | | | | |
|------------------------------------|-----------|-----------|---------|---------|-----|--------|----------|-----------|------------|
| Group ID | Farmer ID | ID Number | FName | LName | Age | Gender | Location | Produce | Tel Number |
| G001 | SS33 | 86901001 | Robert | Kimani | 34 | Male | Kwanza | Cereals | 0719352160 |
| | SS25 | 65147896 | Ebenea | Taleta | 23 | Male | Kwanza | Cereals | 0743614447 |
| | SS24 | 56945656 | Maeve | Swalihi | 50 | Female | Kwanza | Cereals | 0712591313 |
| | SS18 | 32185314 | Linde | Nairu | 33 | Female | Kwanza | Cereals | 0744234299 |
| | SS16 | 26504285 | Joseph | Amuyu | 21 | Male | Kwanza | Cereals | 0737425049 |
| 5 | | | | | | | | | |
| G002 | SS20 | 33656590 | Cynthia | Kiilu | 39 | Female | Meso | Livestock | 0785963298 |
| | SS29 | 78521489 | Edwin | Kipyeno | 33 | Male | Meso | Livestock | 0745468921 |
| | SS03 | 12454963 | Charles | Darwin | 24 | Male | Meso | Livestock | 0712585841 |
| | SS21 | 36362455 | Mark | Maenge | 41 | Male | Meso | Livestock | 0725256391 |
| | SS32 | 86566222 | Phoebe | Hunede | 36 | Female | Meso | Livestock | 0745121245 |
| | SS17 | 30194760 | Reagan | Ochieng | 28 | Male | Meso | Livestock | 0728946042 |
| | SS26 | 65676971 | Jodge | Mato | 26 | Male | Meso | Livestock | 0781924060 |
| 7 | | | | | | | | | |
| G003 | SS13 | 25656596 | Aiden | Omlki | 18 | Female | Katio | Eggs | 0745874154 |
| | SS28 | 77996614 | Mason | Mwangi | 32 | Male | Katio | Eggs | 0741412563 |
| | SS27 | 66154298 | Susan | Kihika | 19 | Female | Katio | Eggs | 0756753021 |
| | SS31 | 81157290 | Rose | Cherop | 42 | Female | Katio | Eggs | 0735410220 |
| | SS14 | 25689898 | Henry | Kitaa | 40 | Male | Katio | Eggs | 0789896323 |
| | SS15 | 25885852 | Levi | Luniu | 26 | Male | Katio | Eggs | 0745211254 |
| 6 | | | | | | | | | |

Figure 60:Report for SSF details

j. SS-farmers orders report

The summary of the orders done by the small-scale farmers will be displayed as follows

| SS-Farmers Orders Report | | | | | | |
|--------------------------|------------|------------|----------|------------|-------------|------------------------------|
| Group ID | Order Code | Vehicle ID | Distance | Order Date | Cost per km | Total small scale Order cost |
| G001 | 21 | V010 | 89 | 2/10/2019 | Ksh1,000.00 | Ksh89,000.00 |
| | 12 | V001 | 68 | 1/5/2019 | Ksh200.00 | Ksh13,600.00 |
| | 25 | V016 | 55 | 3/15/2019 | Ksh650.00 | Ksh35,750.00 |
| | 7 | V021 | 34 | 4/1/2019 | Ksh200.00 | Ksh6,800.00 |
| | 1 | V011 | 64 | 2/10/2019 | Ksh200.00 | Ksh12,800.00 |
| G002 | 2 | V001 | 38 | 2/19/2019 | Ksh200.00 | Ksh7,600.00 |
| | 26 | V007 | 52 | 3/20/2019 | Ksh650.00 | Ksh33,800.00 |
| | 13 | V010 | 55 | 1/10/2019 | Ksh1,000.00 | Ksh55,000.00 |
| | 8 | V019 | 45 | 4/2/2019 | Ksh650.00 | Ksh29,250.00 |
| | 22 | V020 | 25 | 2/19/2019 | Ksh1,000.00 | Ksh25,000.00 |
| | 17 | V014 | 85 | 4/3/2019 | Ksh1,500.00 | Ksh127,500.00 |
| G003 | 23 | V001 | 12 | 2/19/2019 | Ksh200.00 | Ksh2,400.00 |
| | 3 | V005 | 94 | 2/19/2019 | Ksh650.00 | Ksh61,100.00 |
| | 6 | V012 | 21 | 3/20/2019 | Ksh650.00 | Ksh13,650.00 |
| | 14 | V013 | 77 | 2/9/2019 | Ksh1,000.00 | Ksh77,000.00 |
| G004 | 11 | V017 | 48 | 5/15/2019 | Ksh1,500.00 | Ksh72,000.00 |
| | 4 | V009 | 15 | 3/13/2019 | Ksh1,500.00 | Ksh22,500.00 |
| | 10 | V014 | 39 | 5/12/2019 | Ksh1,500.00 | Ksh58,500.00 |
| | 19 | V003 | 56 | 10/3/2019 | Ksh1,500.00 | Ksh84,000.00 |
| | 20 | V001 | 35 | 3/15/2019 | Ksh200.00 | Ksh7,000.00 |
| | 24 | V011 | 49 | 3/13/2019 | Ksh200.00 | Ksh9,800.00 |
| | 15 | V006 | 60 | 3/29/2019 | Ksh1,000.00 | Ksh60,000.00 |

Figure 61:Report for SSF orders

k. Tax paid report

The summary of the tax paid by the company to the government will be displayed as shown below

| Tax paid Report | |
|---------------------------|-----------------|
| Company Revenue | Tax paid |
| Ksh5,884,833.00 | Ksh1,176,966.60 |
| Monday, November 29, 2021 | |
| Page 1 of 1 | |

Figure 62:Report showing tax paid

l. Total company expenses report

The summary for the total expenses done by the company will be as follows;

| Total company expenses report | |
|-------------------------------|-----------------|
| SumOfTotal Driver's salary | Ksh459,000.00 |
| SumOfTotal loader pay | Ksh166,700.00 |
| SumOfTotal salary | Ksh335,860.00 |
| SumOfTotal other expense | Ksh1,688,673.00 |
| SumOfTotal vehicle expen | Ksh1,705,700.00 |
| SumOfTax paid | Ksh1,176,966.60 |
| Company expenses | Ksh5,532,899.60 |
| Monday, November 29, 2021 | |
| Page 1 of 1 | |

Figure 63;Report for total company expenses

m. Total company revenue report

The summary of the total revenue that the company gets is shown as follows;

| Total company revenue report | | | | |
|-----------------------------------|---------------------------|-----------------------------------|-----------------------|-----------------|
| SumOfTotal large scale order cost | SumOfSelling old vehicles | SumOfTotal small scale Order cost | Sum Of Surcharge ment | Company revenue |
| Ksh1,175,400.00 | Ksh3,544,383.0 | Ksh1,126,550.00 | Ksh38,500.00 | Ksh5,884,833.00 |
| Monday, November 29, 2021 | | | | Page 1 of 1 |

Figure 64: Total revenue report

(a) Vehicle information report

The summary of the vehicles that the company owns and their various details is as shown below:

vehicle Information report

vehicle Information report

| Vehicle Type | Vehicle ID | Product transported | Load capacity | Driver ID | Loader ID | Number of loaders | Driver's Name | Cost per km | fuel cost | Insurane cost | service and repair cost | Total vehicle expense |
|--------------------|------------|---------------------|---------------|-----------|-----------|-------------------|---------------|-------------|--------------|---------------|-------------------------|-----------------------|
| Lorry | | | | | | | | | | | | |
| | V012 | Farm inputs | 7 | D012 | L012 | 6 | Lucas | Ksh650.00 | Ksh32,800.00 | Ksh15,000.00 | Ksh25,400.00 | Ksh76,200.00 |
| | V002 | Livestock | 7 | D002 | L002 | 6 | Jacob | Ksh650.00 | Ksh32,800.00 | Ksh15,000.00 | Ksh25,400.00 | Ksh76,200.00 |
| | V019 | Livestock | 7 | D019 | L019 | 6 | Isaac | Ksh650.00 | Ksh32,800.00 | Ksh15,000.00 | Ksh25,400.00 | Ksh76,200.00 |
| | V005 | Livestock | 7 | D005 | L005 | 6 | Len | Ksh650.00 | Ksh32,800.00 | Ksh15,000.00 | Ksh25,400.00 | Ksh76,200.00 |
| | V007 | Farm inputs | 7 | D007 | L007 | 6 | Williams | Ksh650.00 | Ksh32,800.00 | Ksh15,000.00 | Ksh25,400.00 | Ksh76,200.00 |
| | V016 | Livestock | 7 | D016 | L016 | 6 | Jackson | Ksh650.00 | Ksh32,800.00 | Ksh15,000.00 | Ksh25,400.00 | Ksh76,200.00 |
| | 6 | | | | | | | | | | | |
| Pickup | | | | | | | | | | | | |
| | V008 | Farm inputs | 1 | D008 | L008 | 2 | James | Ksh200.00 | Ksh25,600.00 | Ksh13,300.00 | Ksh29,600.00 | Ksh70,500.00 |
| | V001 | Cereals | 1 | D001 | L001 | 2 | Brian | Ksh200.00 | Ksh25,600.00 | Ksh13,300.00 | Ksh29,600.00 | Ksh70,500.00 |
| | V011 | Livestock | 1 | D011 | L011 | 2 | Oliver | Ksh200.00 | Ksh25,600.00 | Ksh13,300.00 | Ksh29,600.00 | Ksh70,500.00 |
| | V021 | Cereals | 1 | D021 | L021 | 2 | Jigi | Ksh200.00 | Ksh25,600.00 | Ksh13,300.00 | Ksh29,600.00 | Ksh70,500.00 |
| | V015 | cereals | 1 | D015 | L015 | 2 | Michael | Ksh200.00 | Ksh25,600.00 | Ksh13,300.00 | Ksh29,600.00 | Ksh70,500.00 |
| | 5 | | | | | | | | | | | |
| Refrigerated truck | | | | | | | | | | | | |
| | V014 | Perishable goods | 3 | D014 | L014 | 4 | Taylor | Ksh1,500.00 | Ksh19,000.00 | Ksh18,000.00 | Ksh32,000.00 | Ksh74,000.00 |
| | V009 | Perishable goods | 3 | D009 | L009 | 4 | Benjamin | Ksh1,500.00 | Ksh19,000.00 | Ksh18,000.00 | Ksh32,000.00 | Ksh74,000.00 |
| | V017 | Perishable goods | 3 | D017 | L017 | 4 | Jayden | Ksh1,500.00 | Ksh19,000.00 | Ksh18,000.00 | Ksh32,000.00 | Ksh74,000.00 |
| | V003 | Perishable goods | 3 | D003 | L003 | 4 | Mary | Ksh1,500.00 | Ksh19,000.00 | Ksh18,000.00 | Ksh32,000.00 | Ksh74,000.00 |
| | 4 | | | | | | | | | | | |

Figure 65: Vehicle information report

(b) Profit of the company report

The summary of the profit that the company gets will be as shown below

| | |
|---------------------------|-----------------|
| Profit of company report | |
| Profit of company report | |
| Company Revenue | Ksh5,884,833.00 |
| Company expenses | Ksh5,532,899.60 |
| Profit | Ksh351,933.40 |
| Monday, December 13, 2021 | Page 1 of 1 |

Figure 66:Profit of the company report

Error Handling

Although I have done my best to ensure that this system runs smoothly, there might be minor errors that one may encounter while using this system. The system is designed to display errors in case of data violation of the set validation rules. Here I am going to tackle these problems and how best to solve them.

a. Number of farmers violation

This error message will be displayed when the number of farmers who are in a new group are less than 5.

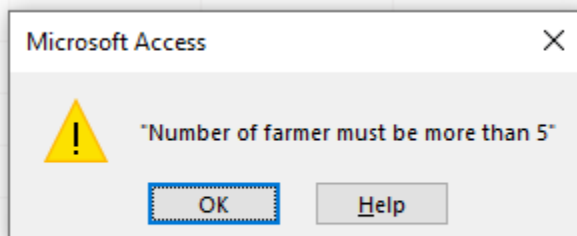


Figure 67: Number of farmers' error

This error can be corrected by ensuring that each group has at least five farmers.

b. Small Scale farmers Entry error

This error will occur when a small scale farmer registers himself\herself in the large scale farmers details form. The error is as follows;

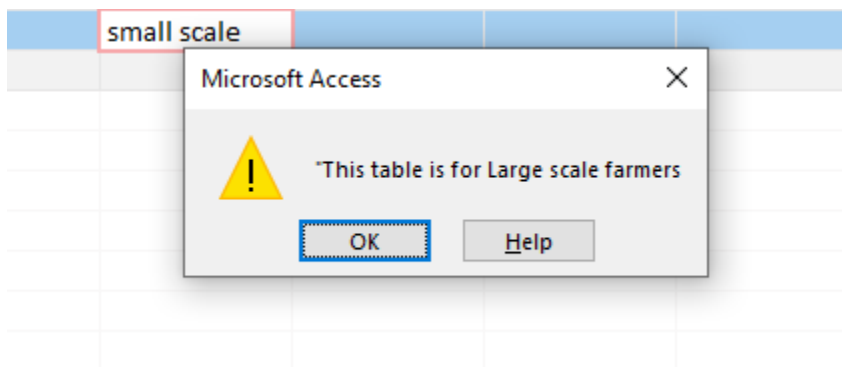


Figure 68: SSF-data entry error

The error can be corrected by using the correct form.

Distance travelled error

- This error occurs when the distance travelled that is entered is 0 or negative. This should be corrected by putting the correct positive number of kilometres.

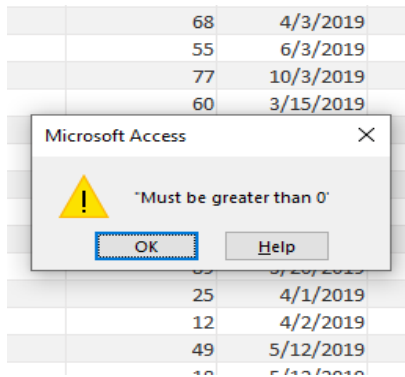


Figure 69:Distance travelled error

No loaders error.

- This error occurs when no loaders have been assigned to a vehicle. It should be corrected by assigning the vehicle the correct number of loaders.

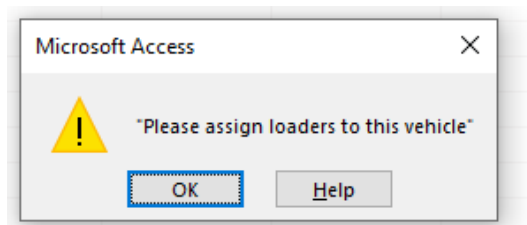


Figure 70:No loaders error

CHAPTER FOUR: MISCELLANEOUS

Conclusion

The journey that I have taken in Making this system for the **Movers Transport Company** has been very educating. I have developed this system with utmost care and I hope that it is going to bring a lot of efficiency in the company and more profits.

Recommendation

The following are the recommendations for the system:

- In order to ensure that this system runs optimally, the latest operating systems should be used coupled with the hardware specifications provided above.
- In order to prevent data loss from the system through malware attacks or illegal access by spyware, the latest antivirus should be installed on the computers.
- Stringent security measures like burglar proofing and user access passwords should be installed to ensure that the integrity of the data is maintained.
- Any necessary modifications (but with consent of the system developer) can be made to suit the organization's demands.
- The system should have offsite storage for backup purposes

Bibliography

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**

A+ Revision KCSE Computer Studies Question and Answers by **H. Otiende**, **J. Ndede**, **L. Rono**

Appendices

Appendix 1: Problem (Question Paper)

451/3

COMPUTER STUDIES

PAPER 3

(Project)

July 2021 to January 2022

7 months

THE KENYA NATIONAL EXAMINATIONS COUNCIL

Kenya Certificate of Secondary Education

Computer Studies

Paper 3 (Project)

7 months

Instructions to candidates

- (a) Candidates are expected to use a Database Management System when developing their projects.
- (b) A soft copy of the system and documentation must be stored in a removable storage medium (CD-R/CD-RW/DVD-R/DVD-RW).
- (c) Candidate's name and index number should appear on the cover page of the documentation and on the storage medium.
- (d) Each candidate should hand in a hard copy and a soft copy of the project documentation.
- (e) Candidates should answer the questions in English.

This paper consists of 3 printed pages. Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing. © 2021 The Kenya National Examinations Council Turn over 921116 921116

MOVERS TRANSPORT SYSTEM

Movers is a company that provides transportation for various agricultural goods for farmers between farms and retail outlets. The company transports produce such as cereals, livestock and perishable goods like milk, eggs, fish and flowers. The company also transports farm inputs such as fertilizers, manure, herbicides, pesticides and seeds for planting to the farms.

Large scale farmers register individually as members of the company whereas small scale farmers are required to form groups in order to qualify for membership. A group has a minimum of five farmers and is recognized by a group name, location, nature of farm produce and details of individual farmers. The group can then order for transport as a unit.

The company owns pick-ups, trailers, lorries and refrigerated trucks. The charges for transported goods are based on the means of transport, load capacity and destination as shown in Table 1.

Table 1: Transport charges based on vehicles, load capacity and destination Transport means Load capacity in tones Cost in KSh per km

Table 13:Details for each vehicle table

Pick-up

Lorry

Trailer

Refrigerated truck

The company employs drivers and loaders where each driver is assigned a specific vehicle. Drivers are responsible for the vehicles and ensuring that goods reach their destination in good condition. A driver who commits an offence such as over speeding, overloading, driving while drunk or causes perishable goods to get spoilt due to misconduct is surcharged. A driver is served with a warning letter if surcharged three times in a month. A driver who has been served with a warning letter and commits an offence is suspended from duty for one month. If a driver is suspended twice within a period of six months, his/her services are terminated.

Each vehicle is allocated loaders whenever it is assigned a task. The number of loaders for a vehicle is based on its type as shown in

Table 2: Number of loaders and payments to drivers and loaders based on type of vehicle

| Type of vehicle | Number of loaders | Amount paid to loader per vehicle (in KSh) | Amount paid to driver per vehicle (in KSh) |
|--------------------|-------------------|--|--|
| Pick-up | 2 | 200 | 2000 |
| Lorry | 6 | 300 | 3000 |
| Trailer | 10 | 500 | 8000 |
| Refrigerated truck | 4 | 450 | 5000 |

Table 14:Table for payment of loader and driver

Vehicles are serviced and fueled before each trip and the expenses incurred are recorded.

The company remits 20% of the total revenue as tax to the government.

Develop a well-documented computerized database system for the company that will:

1. Maintain records of membership
2. Maintain records of vehicles

3. Maintain records of loaders and drivers
4. Maintain records of goods transported
5. Maintain records of farmers who are in groups
6. Maintain records of orders for transport
7. Maintain records of offences committed by drivers
8. Maintain records of expenses for each vehicle
9. Compute each of the following:
 - (i) Payment for a loader and a driver;
 - (ii) Penalties surcharged on drivers;
 - (iii) Loading fee per vehicle per trip;
 - (iv) Revenue per vehicle per trip;
 - (v) Expenses for each vehicle;
 - (vi) Tax payable;
 - (vii) Total company expenses;
 - (viii) Total revenue for the company;
 - (ix) Overall company profit.
10. Generate various reports.

FLOWCHART SYMBOLS



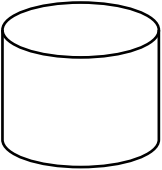


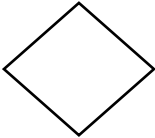
| SYMBOL | NAME | MEANING |
|---|---------------|--|
|  | Arrow | Show the logical flow of data |
|  | Document | Opens document/generate report |
|  | Storage Disk | Updates and access a file in a magnetic disk |
|  | Parallelogram | Input/output |
|  | Rectangle | Process |
|  | Decision Box | Selection of options |

Table 15;System flowchart symbols table