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**Computerization
Of
Akhter computers
Pakistan PVT(Ltd)
Islamabad.**



**By
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Submitted to

Computer center ,Quaid-e-Azam University, Islamabad
As requirement for the partial fulfillment of PGD in
Computer Sciences.

DEDICATED TO

MY RESPECTED **FATHER**

MY LOVING **MOTHER**

MY LOVING BROTHERS, SENIORS
&
WHO LOVE ME

MFN = 6522



ABSTRACT

The Department of Computer Center Quaid-I-Azam University Islamabad assigned a project on Data Base of Workshop of AKHTER COMPUTERS Pakistan. This Data Base is Mainly developed in Oracle 7 and Developer 2000. It mainly contains

10 tables which are created in SQL level with different attributes, 8 forms are developed in developer 2000, 10 different types of queries and 5 different reports are developed in developer2000 With options of printing and mailing. Further explanation of project can viewed at last chapter of User's guide. The report on this project contains information about AKHTER COMPUTERS, Requirements Analysis, System design, System Development, System Testing, System Implementation & evaluation and guidance for the users of this Databases.

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ISLAMABAD

FINAL APPROVEL OF PROJECT

This is to certify that we have read the Project submitted by Mr. Waheed Aslam and it is our judgment that this report is of sufficient standard to warrant to its acceptance by the Quaid-I-Azam University for the Degree of Post Graduate Diploma in Computer Science.

COMMITTEE

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(Director Computer Center)

EXTERNAL EXAMINAR.

Project Brief

Supervised By	<u>Mr. Abdul-Subhan</u>
Offered By	Department of Computer Center.
Organization	Akhter Computers Pakistan Pvt(Ltd).
Date Of Start	July 2002.
Date Of Completion	September 2002.
Source Tools	Oracle 7 Developer 2002.
Operating System used	Windows 98 Second Edition
System Used	Pentium II, 400 Mhz

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The User's Guide.

CHAPTER # 1

INTRODUCTION

1.1 Organization Overview

AKHTER entered the computer field by establishing AKHTER Computer Group in United Kingdom in mid-1979 with the objective of providing solutions to the problems that organizations face in acquiring greater efficiency and effectiveness due to increased calculations, data processing and competition also.

In the United Kingdom within a few years we became one of the front line computer groups. And with the grace of almighty Allah we emerged as leading manufacturers of Micro-Computer equipment. In order to cater for rapidly growing demand of computers in Pakistan the "AKHTER COMPUTERS PAKISTAN", was setup in late 1985 in Rawalpindi and Later, in 1987, it was shifted to the Federal Capital near Parliament House.

It was the total commitment to our objectives that within a very short period, by the grace of Allah, we became one of the leading computer organizations in Pakistan also.

1.2 Project Overview

The Project is basically about Database Application. The recommended solution is economically and technically feasible as it is not so costly and the technical staff, material and resources are also available.

1.2.1 Current System

The current system is being operated manually and there are a lot of problem for the employees to maintain the record of organization. Employee and administrators have to enter all the information manually for the system. It may leads to errors. The

Workshop of Akhter Computers works poorly in the manual handing of records.

1.2.2 Proposed System

The proposed system is supposed to handle all these tasks automatically. Employee has the flexibility to maintain the record of the Akhter Computers. And they can also have queries about Customers, Employees, Products, and Repairing of Systems etc.

Not the whole operation is being automated. There will be a managerial interface that will be used for updating: Customers records information, adding products, and maintain their information of record of Charges coming from Customers. After studying the existing system and its problem, the advance facilities and customers requirement, it is better to make the system user friendly. It is better to develop the system through which the organization can keep the record in an easy and understanding way.

1.3 Problem Definition

The AKHTER COMPUTERS Pakistan Pvt (Ltd) provide the services like sale AKHTER'S branded systems to their Customers, Provide after sale service, Repairing of Systems.

So it is very important that they can keep the record of their Organization. There is a manual system, which has many complexities including time Factor, Labor, and data updating problem.

To overcome these problems, a system is required that can work in effective manner. This system is a kind of database application, which would be capable of handling different record of Entering System, Customers Information, Workshop Billing system, Engineer Records.

The Project will focus on following aspects:

1: Records of Repaired System

2: Customers Information.

3: Workshop's Billing System

4: Engineers Record.

5: Replacement of Parts.

1.4 Scope

1.4.1 Functions.

System will answer the user queries about different aspects of Akhter Computers. Complain officer can check out the records of all customers, detail of charges from Customers, detail of nature of complaints, are the Systems with or without warranty, are the complains done at in or out doors.

He can easily edit maintain the records, add/remove the records. Display the reports of daily work don.

1.4.2 Performance

Query response time should be interactive. For any requirement, system should define redundancy to speed up the queries by required way.

Data entry should be easy. Editing should be easy. There should be a user-friendly interface.

1.5 Objective

- The problem mentioned in the section 1 has led to the need for a database application.
- To develop dynamic interactive software for Akhter Computers. Who wants their customers and engineers to facilitate with best service.
- To develop user friendly environment and the system will be easy to use by providing appropriate help.
- To develop a system so that modification, deletion and insertion rights will be given to only an authorized person, which is an administrator.

CHAPTER # 2

EQUIREMENT ANALYSIS

2.1 Introduction to Requirement Analysis

This involves understanding the problem, establishing the services, which the system should provide the constraints under which it meet the operations.

It is the process of translating the ideas about the system to be development, in the minds of the clients and the actual users, in to more formal way. It is a communication between customers and software development team. Without preparing the requirement specification the process of developing software with all of its functionality looks quite impossible.

There are four principle stages in the requirement engineering process.

- Feasibility Study.
- Requirements Analysis.
- Requirements Definition.
- Requirements specification.

2.2 Feasibility Study

Initial Studies:

The study will decide if the proposed system will be cost-effective from a business point of view and if it can be developed in the given budgetary and time constraints.

1. Economic Feasibility.
2. Technical Feasibility.
3. Operational Feasibility.

1.Economic Feasibility.

Economic justification includes cost-benefit analysis. The costs involved in the system are.

➤ Procurement Costs

- The specified technology is available as well as accessible easily.
- The tools used are not difficult to install.

➤ Start-up Costs

- The technologies that I am going to use have no started up cost.
- It is an individual project so there are no costs involved like searching and hiring the personal.

➤ Project Related Costs

- The technologies that I am going to use are in common use and are always available for the work so there is not so much purchase costs involved.

- No huge cost involved in training.
- No huge cost involved for data collection and preparing documentation.

➤ **Ongoing Costs**

- The maintenance costs involved are bearable and they don't try to reduce the benefits.

2. Technical Feasibility

Here we study whether the technology needed for the system to be developed is available. It also describes whether the existing system can be upgraded to use new technology and whether the organization has the experts to use it.

Database Management System:	Oracle 7.
Operating System:	Windows 98se.
Documentation Tools:	MS Word 2000.
Programming Tools:	Developer 2000.

The technologies that I have just described are available to me at my workplace and its integration within the organizational environment is of no problem as these are the most common tools used there by the developers.

3.Operational Feasibility

The system to be developed will satisfy all the objectives, covering all the scope mentioned earlier maintaining accuracy, performance, efficiency, privacy etc.

2.3 Requirements Analysis

In order to get a better understanding of the requirements, a prototype was developed.

2.4 Requirements Definition

All the requirements gathered during requirements definition stage were narrated for the first approval.

2.5 Requirement Specification

Out of various alternatives, Structured Language is used to write down functional requirements. Structured Language, which is a restricted form of natural language, uses templates to specify requirements.

2.6 Functional Requirements

1-User or Customer Requirements:

The system will be able to handle the Database of Workshop of Akhter computers.

Registered users will be able to retrieve this database using the unique identification. After the login the user will be able to view his data, he can edit his data; can make changes in his data.

Customer should be able to place order for the purchasing.

2-Retrieval of Information from DB:

The system must have effective and fast retrievals of the required information from the Database.

3-Display the Product Lists:

System must have the capability to display dynamic list of the products on the basis of queries. Product, Lists will be dynamically displayed from database. Nothing will be static.

5- Administrator Requirements:

Application will provide Graphical User Interface (GUI) to the Database Administrator (DBA) for view and updating of records from database. The system requires the input of above information and also requires well-designed and summery reports along with short queries, which involves many functions including:

View Report

Provide the facility for administrator to view the monitoring result in form of report. For the easy viewing of this report.

Generate Report

Provide the facility for generating report of monitoring result, according to administrator specifications.

Save Information

Provide the functionality of saving above information in Database.

Customer's Information

Show the list of all the Customers.

The Administrator manages the database and the System and view the entire customer's details as well as facilities that the organization is providing to their customers. The Administrators, who manage the database, has specific requirements of his own Administrators should be able to manage the application to view the summary reports about the customer's orders details.

Administrator should be able to change the status of the existing Engineers.

Administrators should be able to view all the lists of the customers and maintaining (Adding, Deleting, Modifying, Saving, Retrieving) the services and the plans, the organization is currently providing.

6- Managing Director (MD) Requirements:

Facility will be provided to him to view the sale report. MD can view the final reports of the system. Report generation will take following steps:

Get data from the data store.
Calculate the information based on the data.
Generate the reports periodically.
Generate the system statistics report.

7- User Interface Requirements:

This specifies the characteristics of the human computer interface. If the human operator is to interact with the system through a display, then screen layouts, menus, forms etc. will be specified here. Other factors has consistency, following will be user interface.

Reduction of the amount of user inputs because it can slow the system.

Giving easy access to main menu, to stop the user from failing lost.

Consists naming of menu option.
Simplification of the structure.

Re-assuring user with visual clues such as by the title of screen.

Provide the ability to undo any choice easily.

2.7 Non-Functional Requirements

Speed

The system must complete all the queries and all other data transfer process within a second. And define redundancy to speed up the queries.

Security

Only the authorized personal should be able to access the database for their defined usage.

Usability

All the options should be provided in click able form to avoided wasting time in writing commands.

Efficiency

The proposed system should much more efficient and helpful to check the information.

Reliability

The system should reliable enough that it provides the correct result as expected.

Flexibility

System should provide enough flexibility to use different software.

Backup Facility

System should be capable of backing up and restoring information (if the system crashes etc.)

Maintainability

Developed system should be maintainable. That is it should allow the changes to be made. Code should be documented properly.

List of Categories

Display the list of categories, when customers want a list of categories. This list should build from table stores in database.

Refer Images To The Operating System

Referring all images to the operating system instead of storing them in database.

Future Enhancements

There should be extensible support for future enhancements in the database.

CHAPTER # 3

SYSTEM DESIGN

3.1 Introduction To System Design

Design is a decision-making activity. Design work as a base for the proceeding activities in the development cycle. The robustness and efficiency of software depends on its design. And a good design leads to efficient software. System Design is the phase where quality is fostered in software development. Hence good development work depends upon good quality of design. Design changes customer's requirement into representation of software. Software or system is unable without a good design and fails when changes are made into it. This chapter deals with the input/output design and physical database design phase. Inputs outputs are key parts of any system design. They are the interface between the user and database. User-interface should be well enough to be understandable by the user

Viewed from a purely functional point of view, most of the Computer systems will perform the following three main tasks.

Presentation Logic.

Business Logic.

Data Service.

Presentation Logic

The presentation phase comprises the entire user interface. Not only does this phase allow the users to interact with the application, input data, and view the results of requests, it manages the manipulation and formatting of data once it arrives at the client.

Business Logic

Business logic, which is the rule that govern application processing, connects the user at one end with the data at the other. The functions that these rules govern closely mimic everyday business tasks, and can be a single task, or a series of tasks.

Data service logic

It handles the storage and retrieval of data while maintaining integrity of data.

3.2 Architecture Design

The primary objective of architectural design is to develop a modular program structure and represent the control relationship between them.

3.3 Conceptual Database Design

Tells the user exactly

What the system will do.

Describe the functions of the systems.

The system will work in the following areas.

Data Validation checks.

The system is defined by its boundaries, entities, attributes, and relationships. Conceptual design describes each of these system aspects by answering the following.

3.3.1 Inputs:

The input to the system comes from administration of the Akhter Computers.

3.3.2 Outputs

The outputs are also coming from the magnetic disk displaying in different forms.

What will happen to the Data in the system?

Prescribe format will be used for inputs and outputs. Accuracy of the data is dependent upon connection, speed, distortion, gateway; device type flow of data depends upon the number of user accessing the Database.

3.4 Database Design

Database Design is a creative process of transforming:
Problems into Solutions

The description of a Solution

Intelligent database design is perhaps the most critical element of an optional solution with respect to performance. In fact, poor design is usually the culprit for poorly performing solutions.

Design of the database should satisfy the user.

3.5 Physical Database Design

The data in the SQL database is stored in tables that contain field, data type and value. The tables used in this database are following.

1. Parts.

2. Equipments.

3. Customer.

4. Detail.

5. Custo.

6. Engineer.

7. Customers.

8. Work order.

9. Work part.

10. Payment.

1-Parts

Fields	Data Type	Length
Part_ID	Number	3
Part_Name	Character	50
Description	Character	60

Primary Key: Part_ID.

Description: This table is providing information of parts in which we deals.

2-Equipment

Fields	Data Type	Length
Equipment_ID	Number	3
Equipment_Name	Character	20

Primary Key: Equipment_ID.

Description: Provide the information about Equipments.

3-Customer

Fields	Data Type	Length
Serail_No	Number	4
Invoice_No	Character	30
Customers_Name	Character	30
Address	Character	150
Company_Name	Character	50
Department	Character	30
Phone	Character	20
Deleivery_Date	Date	
Equipment_ID	Number	3

Primary Key: Serial_No.

Foreign Key: Equipment_ID.

Description: In this table we can enter and view the Customers that take new system.

4-Detail

Fields	Data Type	Length
S_No	Number	3
Serial_No	Number	4
Parts_ID	Number	3
Quantity	Number	4
Item_Size	Character	30
Status	Character	30
Make_Model	Character	40

5-Custo

Fields	Data Type	Length
Customers_ID	Number	5
Customers_Name	Character	30
Company_Name	Character	30
Department	Character	30
Billing_Address	Character	150
City	Character	20

Primary Key: Customers_ID.

Description: In this table information about Customers that are brings their systems for repairing.

6-Engineer

Fields	Data Type	Length
Engineer_ID	Number	6
Engineers_Name	Character	30
Telephone	Character	20
Mobile	Character	20
Date_Joining	Date	
Date_Leaved	Date	

Primary Key: Engineer_ID.

Description: This table provides the information about Engineers.

7-Customers

Fields	Data Type	Length
Serial_No	Number	6
Customers_ID	Number	5
Equipment_ID	Number	3

Primary Key: Serial_No.

Foreign Keys: Customers_ID, Equipment_ID.

Description: In this Table I store the information of Customers. This is master table.

8-Workorder

Fields	Data Type	Length
Workorder_ID	Number	6
Serial_No	Number	6
Date_Received	Date	
Equipment_ID	Number	3
Make_Model	Character	50
Serial_Number	Character	80
Problem_Description	Character	150
Date_Finished	Date	
Condition	Character	20
Warranty	Character	10
Status	Character	20
Work done	Character	50
InHouse	Character	1 (Y/N)
Visit_Charges	Number	5,2
Discount	Number	5,2
Others	Number	5,2

Fields	Data Type	Length
Problem_Found	Character	150
Total	Number	5,2
Received_By	Character	50
Engineer_ID	Number	6

9-Workpart

Fields	Data Type	Length
Workpart_ID	Number	5
Workorder_ID	Number	6
Part_ID	Number	3
Quantity	Number	4
Unit_Price	Number	5,2

Primary Key: Workpart_ID.

Foreign keys: Workorder_ID and Part_ID.

Description: This table is providing the information of parts replacement in the Customer's systems.

10-Payment

Fields	Data Type	Length
Payment_ID	Number	6
Workorder_ID	Number	6
Payment_Amount	Number	5
Date_Received	Date	

3.6 Query

Query displays the records of two files at same times. For example if there is any transaction in the customer file then at the same time there will be updating in order file and will be displayed in customers file.

Similarly, whenever there will be new products in Workshop then there will be updation in product file and similar updation will be done displayed at same time on the screen. The same case will be done in other queries.

3.7 Reports

There are different reports about the developed software of AKHTER COMPUTERS Pvt (Ltd.) database. For example alphabetical list of parts the report about the total parts according to their names in alphabetical order.

These reports can be displayed on the screen and can be printed or can be mailed, according to the requirement any type of output may be taken out. Different reports in this database is as follows.

- List of Parts.

- List of Equipments.

- List of Engineers Name and Contact numbers.

- List of customers coming for repairing of their systems.

- List of Customers Which they belong to Islamabad.

- Engineers and Equipments Cross Table Report.

CHAPTER # 4

SYSTEM DEVELOPMENT

4.1 Introduction To System Development

The development phase of the project starts after the design. During this phase a design in the form of shapes and texts is converted into working software. The software is developed in such a way so that it can meet the requirements and specification of the users. The implementation phase of any system is concerned with the tools used in the development work and the components used to implement the system. This chapter explains all the steps taken for the development of the software.

4.2 Application Architecture

This system is implemented as a Database application. Application in the form of database Management system. Oracle 7 and Developer 2000 has selected as Database.

Microsoft Windows 98se is used as operating system. It provides the facility to run this software is easily available to us.

4.3 Database Selection

Oracle 7 and Developer 2000 is the very popular database, which is provided by Oracle Company.

It is fully multi threaded using kernel threads. This means it can easily use multiple CPUs if available. It works on many different platforms. It supports many different column types integers 1,2,3,4, and 8 bytes long, bit, date time, varchar, text, char, currency. It is a privilege system that is very flexible and secure, and allows host-based verification.

4.4 Programming Language Selection

One of the most different tasks in selecting a language, after the system requirements are known, is to determine whether particular software fits into the requirements. Among the criteria that are applied during an evaluation of language are:

1. General applications are.
2. Algorithmic and computational complexity.
3. Environment in which software will execute.
4. Performance consideration.
5. Data structure complexity.
6. Knowledge of software development.
7. Availability of good computer.

CHAPTER # 5

SYSTEM TESTING

5.1 Introduction To System Testing

After the system implementation, the next step is to execute the software system to determine whether it conforms to its specifications and executes successfully in its intended environment. This chapter explains the testing process applied to the proposed system and the outcomes of this process.

Software Testing

Testing is the exposure of a system to trail input to see whether it produces correct output.

Alternative definition of testing is the following:

The process of exercising or evaluating a system or system component by manual or automated means to verify that it satisfies specified requirements or to identify differences between expected and actual results.

The goal of testing is to increase confidence that the software meets its specification, that is, it is error-free. Testing is the process of neither finding errors nor correcting errors. Testing can never guarantee this for non-trivial problems; however, it can increase the chances of finding trivial problems more accurately and more efficiently.

Validation

This process involved showing the system to the user and checking whether it fulfills expectations.

Verification

This process involves testing the system according to the requirement specifications.

5.2 Types of Testing

Following are major types of the testing.

Black Box Testing

Testing that makes no assumption of the internal construction of the application (the box) and only tests the externally visible behavior. Black box testing focuses on the functional requirements of the software.

Control Flow Testing

Testing of the flow of control through the application. The number of different paths or branches through the application determines coverage.

Data Flow Testing

Testing is oriented at the flow of data. Coverage is determined by the number of different data paths or branches that have been performed by the application under test.

Exception Testing

White box type testing that exercises the exception handling behavior of the application.

Functional Testing

Testing of the externally visible functional behavior of the application.

Coverage is determined by comparison with the specification of the application. Preferred term to black box testing, as practically speaking functional testing often assumes some knowledge of the construction of the application.

Integration Testing

Integration testing is performed to establish whether the components interact with each other according to the specification. Comes after Unit Testing.

White Box Testing

Testing that assumes a detailed knowledge of the internal workings of the application (the Box) and depends upon that knowledge.

5.3 Testing Methodology Used

I have used the black box testing methodology to test this software. As describe earlier black box testing is a testing that makes no assumption of the internal construction of the application (the Box) and only tests the externally visible behavior. Black box testing is based on the requirements of the application. Before we proceed further I would like to give a brief overview of the how black box testing works.

Black box testing attempts to derive sets of inputs that will fully exercise all the functional requirements of a system. This type of testing attempts to find errors in the following categories:

- Incorrect or missing functions.
- Interface errors.
- Errors in data structure or external database access.
- Performance errors.
- Initialization and termination errors.

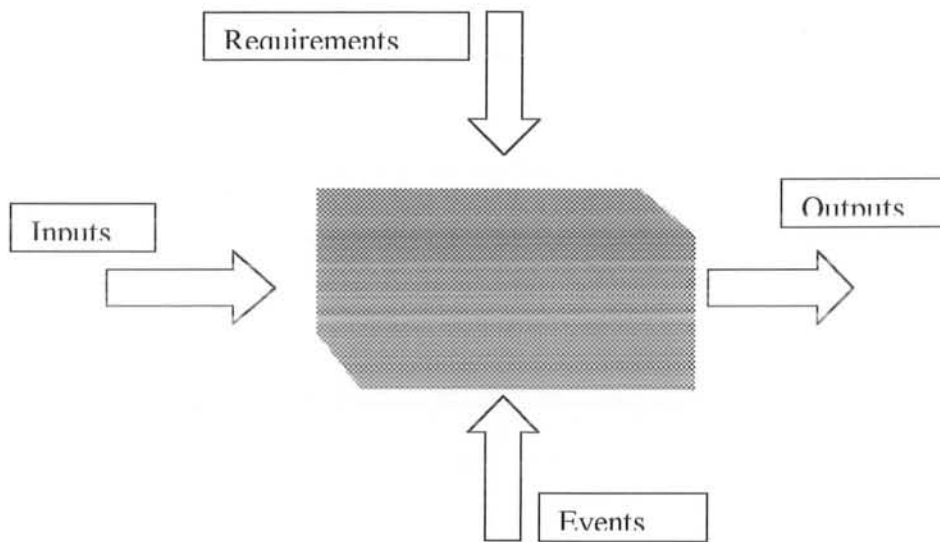


Fig: Black Box Testing

Black Box Testing Design

Tests are designed to answer the following questions:

- How is the function's validity tested?
- What classes of input will make good test input values?
- How are the boundaries of a data class isolated?
- What data rates and data volume can the system tolerate?
- What effect will specific combinations of data have on system operation?

5.4 Testing Performed

Following is the list and description of testing performed to the system.

- Unit Testing.
- Integration Testing.
- Validation Testing.
- Regression Testing.

Unit Testing

Unit testing is to test each individual component of the system independently from other component. All components were tested individually with driver programs. Even each function was tested individually.

Integration Testing

In integration testing all modules are integration into one and check the behavior of the system.

Validation Testing

Validation testing phase comes after all the components are integrated together. Validation testing is performed to check user visible input to get recognizable output of the system. It is performed to find if the software conforms to the system requirements.

Regression Testing

Regression testing is performed after an error has been removed from the system to confirm that the removal of errors has created other errors.

Regression testing is performed after each testing actively. Some new errors are found and removed from the system. So that system is working is working well.

5.5 System Evaluation

- System evaluation involved checking that the desired objectives of the system have been meeting or not.
- The proposed system offers the following merits:
- Administrator can generate the reported about sale as well as view the customer's record.
- New accounts of customers and employee can be created.

Chapter 5 System Testing

- Customers can view their previous record.
- Reports are generated successfully and Managing Director can view them.

CHAPTER # 6

SYSTEM EVALUATION.

6.1 System Implementation & Evaluation

Implementation

A design description of an object is promoted to an implementation description that shows implementation details for each operation implied by a message that is passed to an object. Implementation details include information about the object's private part, that is, internal details about the structures that describe the object's attributes and procedural details that describe Operations.

An implementation description is composed of the following information:

A specification of object's name and references to class. A specification of private data structures with indication of data items and types. A procedural description of each operation or alternatively, pointers to such procedural descriptions.

6.2 Tool Selection

Tools selection needs the complete knowledge of candidate tools and language at abstract level, i.e. what features the specified tool provides. It also includes for what purpose the software is going to be developed. The decision should be wise enough to avoid difficulties in the later stage of development.

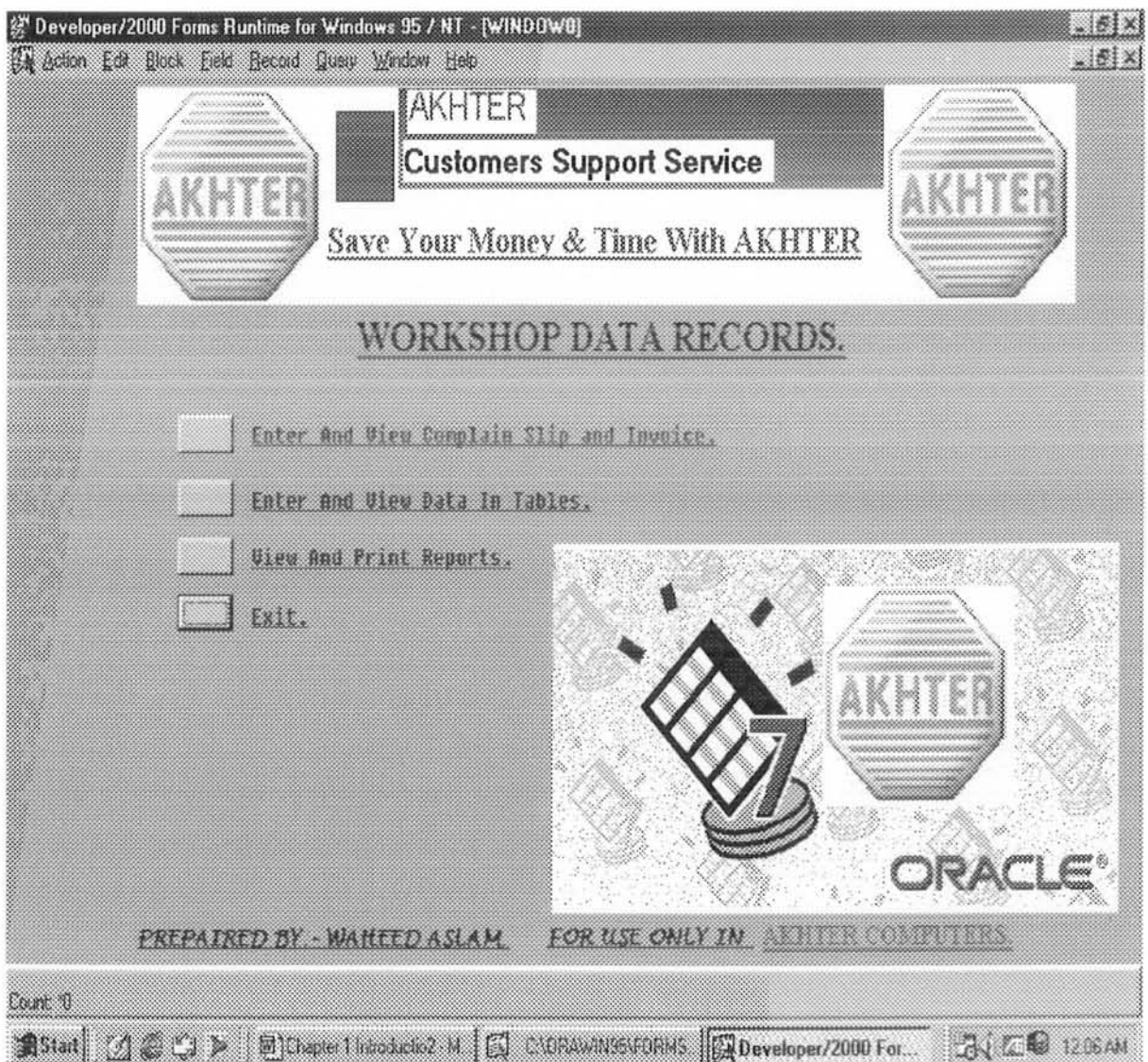
6.3 Database Selection

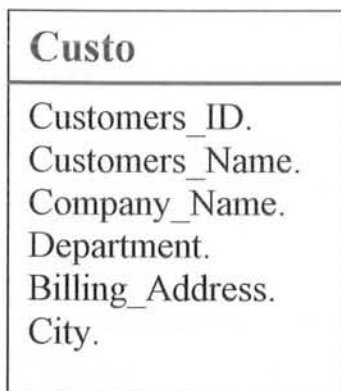
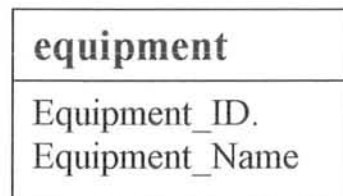
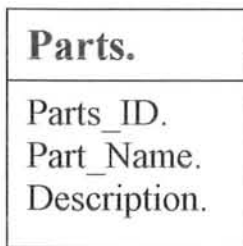
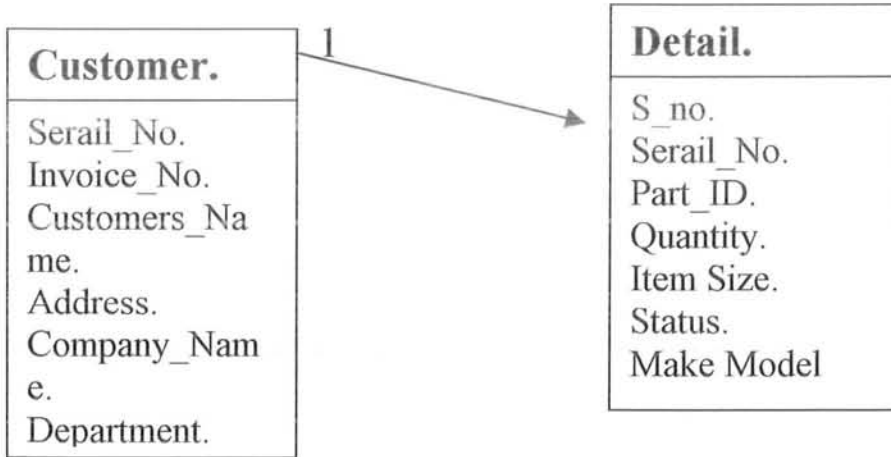
Oracle 7 and Developer 2000 is used because of many reasons this database is suitable.

USER'S GUIDE

The User's Guide

The user's guide of the software, which developed in Oracle, is given below. First of all when one wants to open the software, different objects will be displayed on the window of the database. One will start Oracle for Windows 95 from program menu and open the form named "MAIN MENU". This form has different four buttons. Like shown in fig;



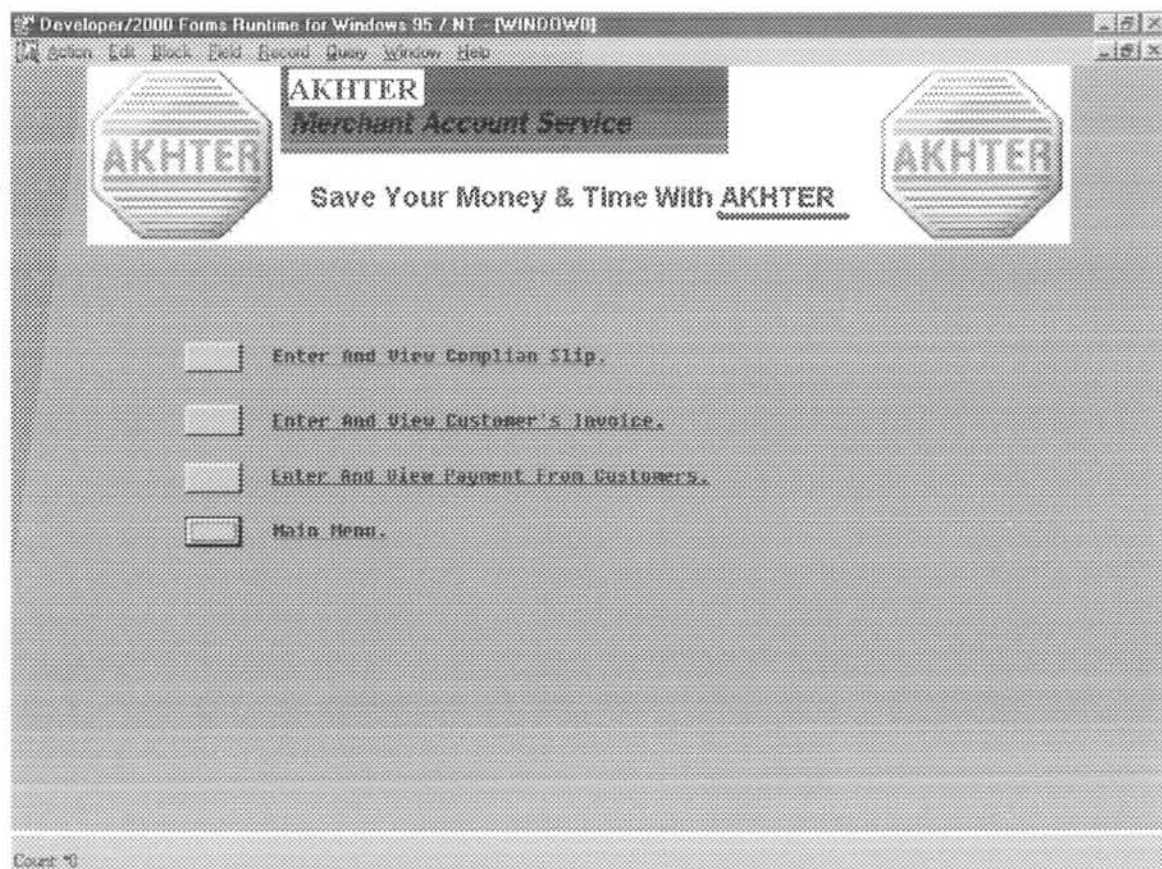


customers
Serial_No. Customers_ID. Equipment_ID.

Workpart
Workpart_ID. Workorder_ID Part_ID. Quantity. Unit_Price.

payment
Payment_ID. Workorder_ID. Pymment_Amount. Date_Received.

workorder
Workorder_ID. Date_Received. Equipment_ID. Make_Model. Serial_Number. Problem_Description. Date_Finished. Condition. Warranty. Status. Workdone. Inhouse. Visit_Charges. Discount. Others. Problem_Found. Total. Received_By. Serial_No. Engineer_ID.



Complain & Invoices Table's menu.

Developer/2000 Forms Runtime for Windows 95 / NT - [WINDOW0]
 Action Edit Block Field Record Query Window Help

AKHTER
Customers Support Service
 Save Your Money & Time With AKHTER

Serial No 1015 Customers Id 101
 New Customer's Entry

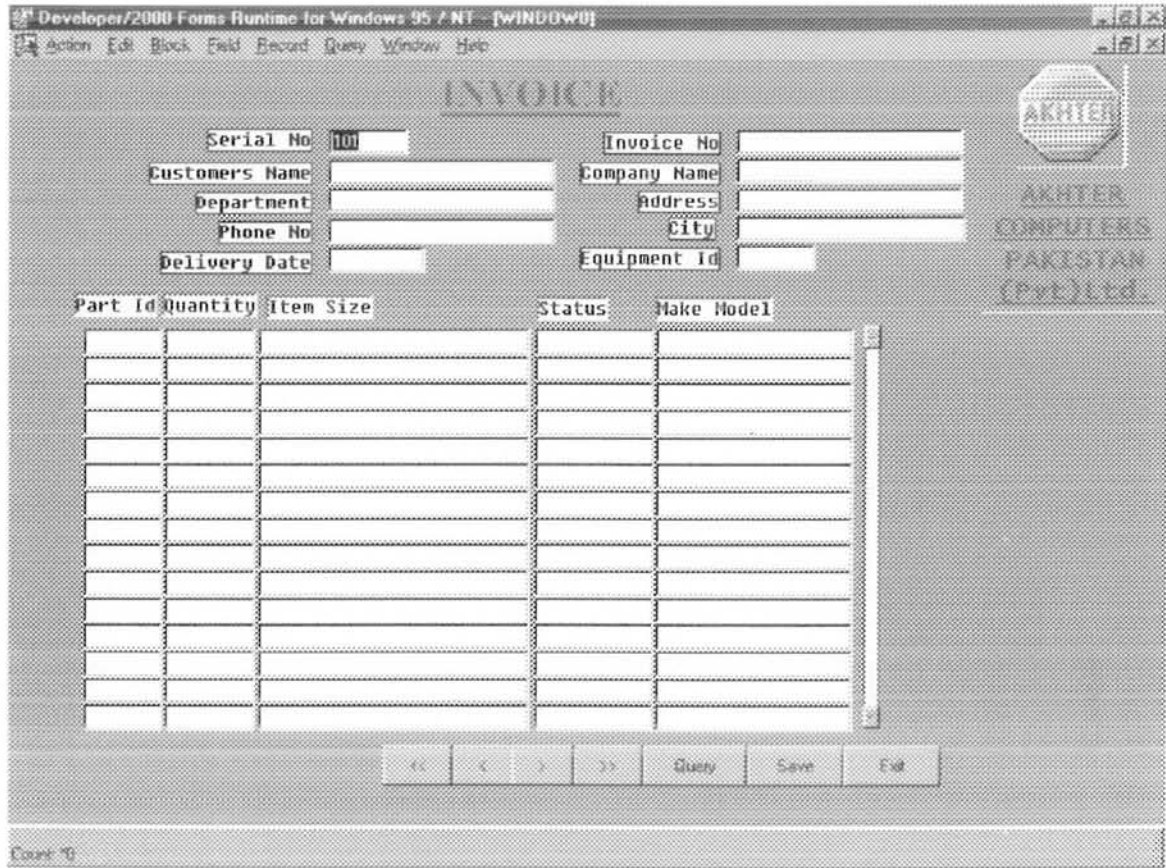
AKHTER COMPUTERS PAKISTAN (PVT) LTD.

Workorder Id	105	Date Received	02-OCT
Equipment Id	1	Make Model	hyhkj
Serial Number	klhkhkj	Problem Description	klhk
Date Finished	04-OCT	Condition	jkhjhj
Warranty	hjkjh	Status	hkljkh
Workdone	jkkjh	Inhouse	<input checked="" type="checkbox"/> Y/N
Visit Charges	889	Discount	99
Others	9008	Problem Found	
Total	9798	Received By	jhkk1
Engineer Id	1	<input type="checkbox"/> Parts Replaced	<input type="checkbox"/> Payment Receipt

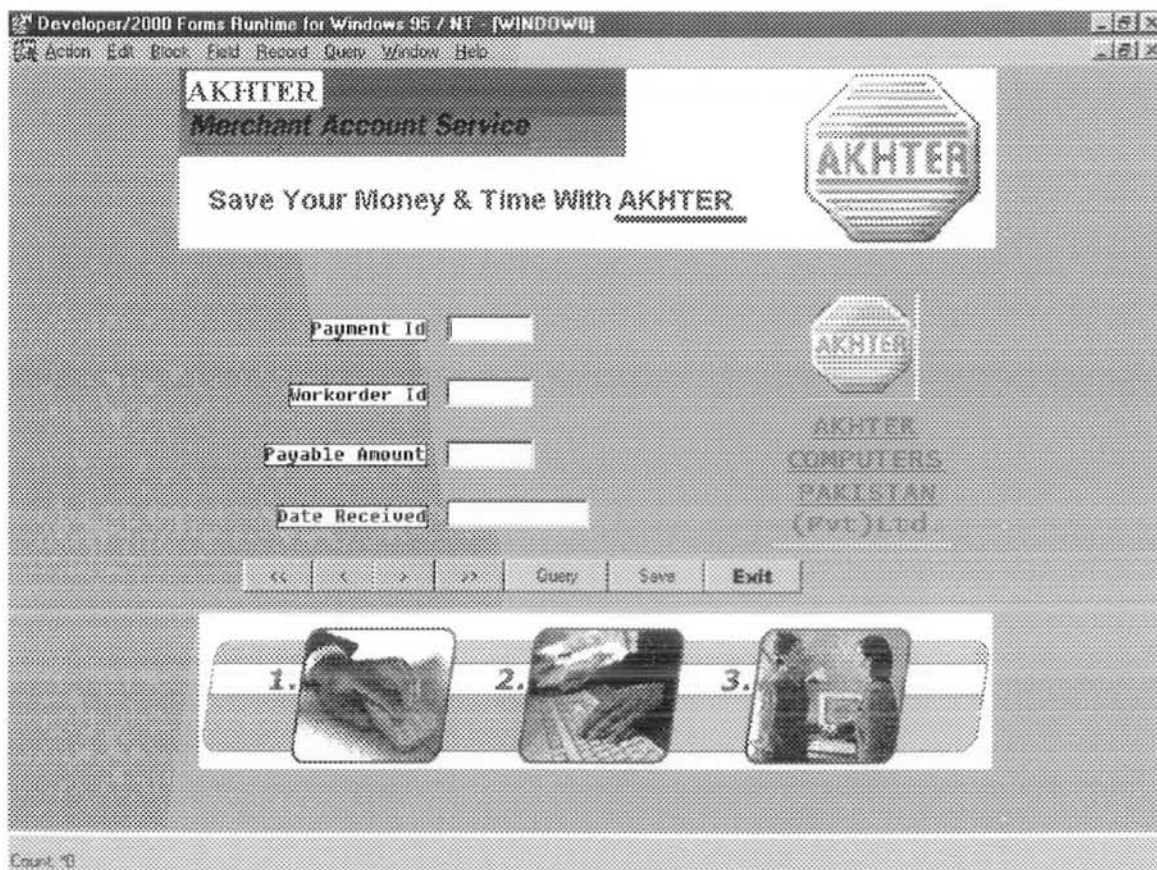
Form-1000: Record has already been inserted.
 Count: 0

Start | C:\DRAWING | My Documents | akh Naleper | Developer/20... | 1:14 PM

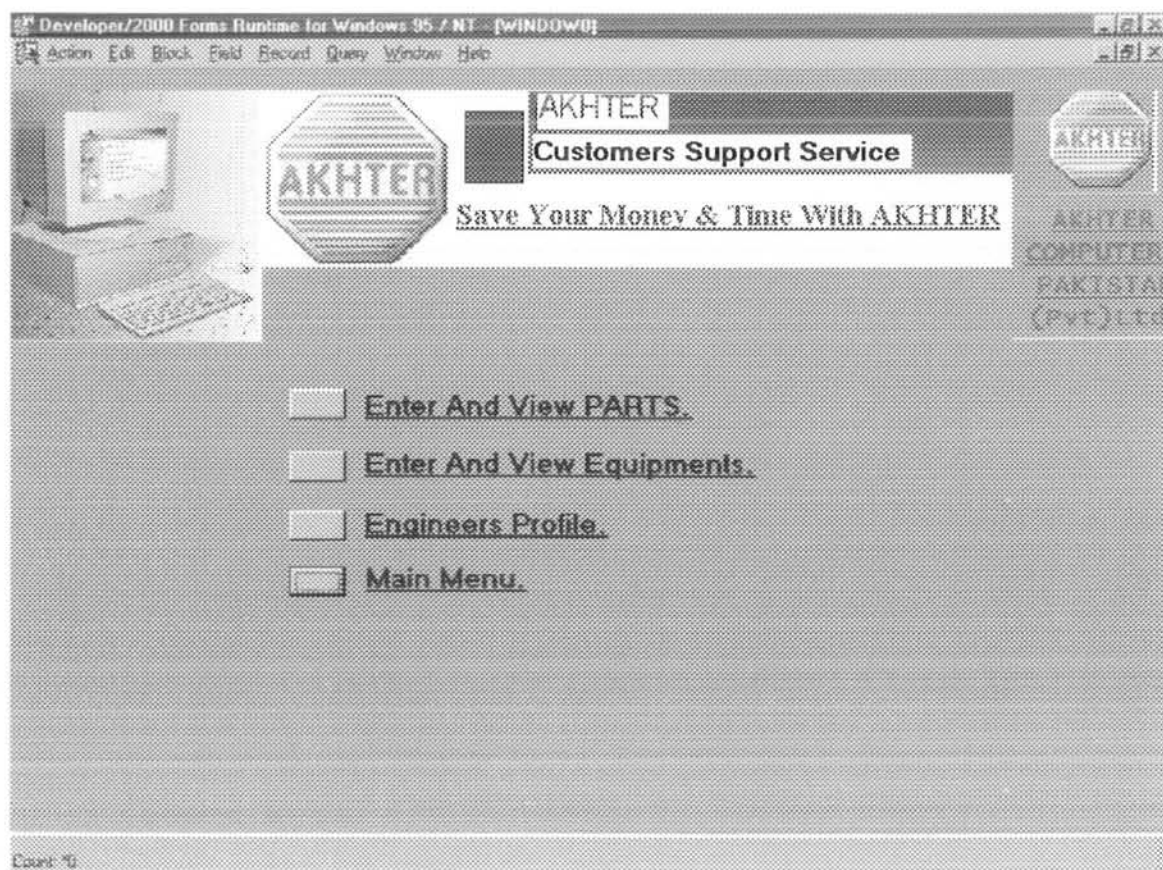
Complain Slip



Invoice Slip

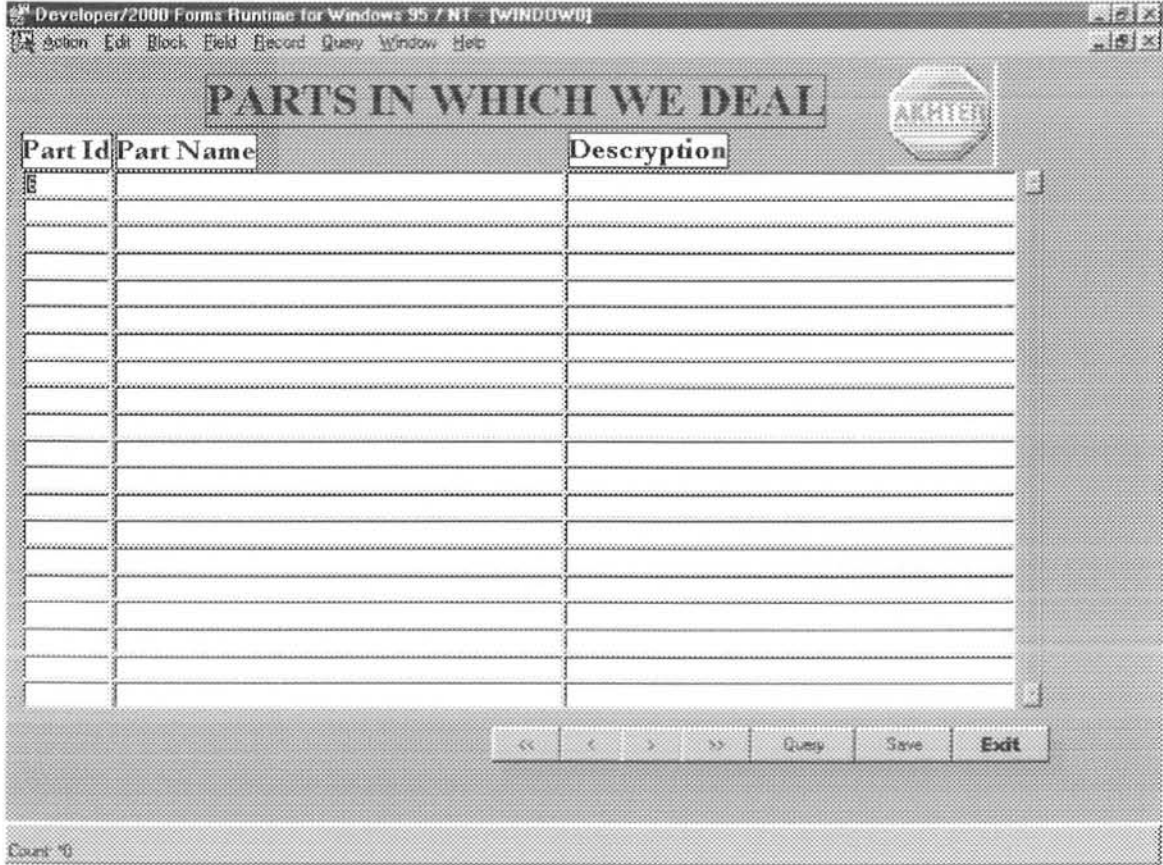


Payment By the Customers.



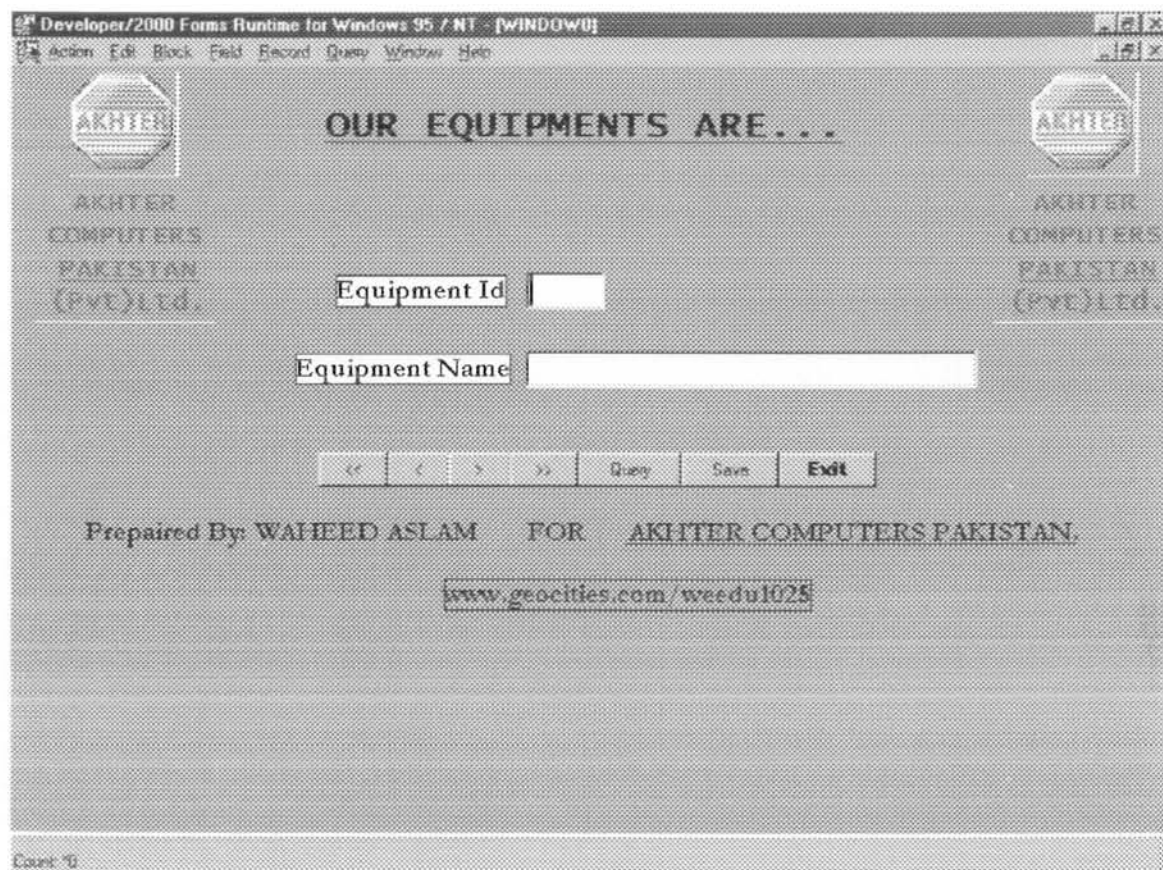
Single Tables for Entering Data.

The User's Guide



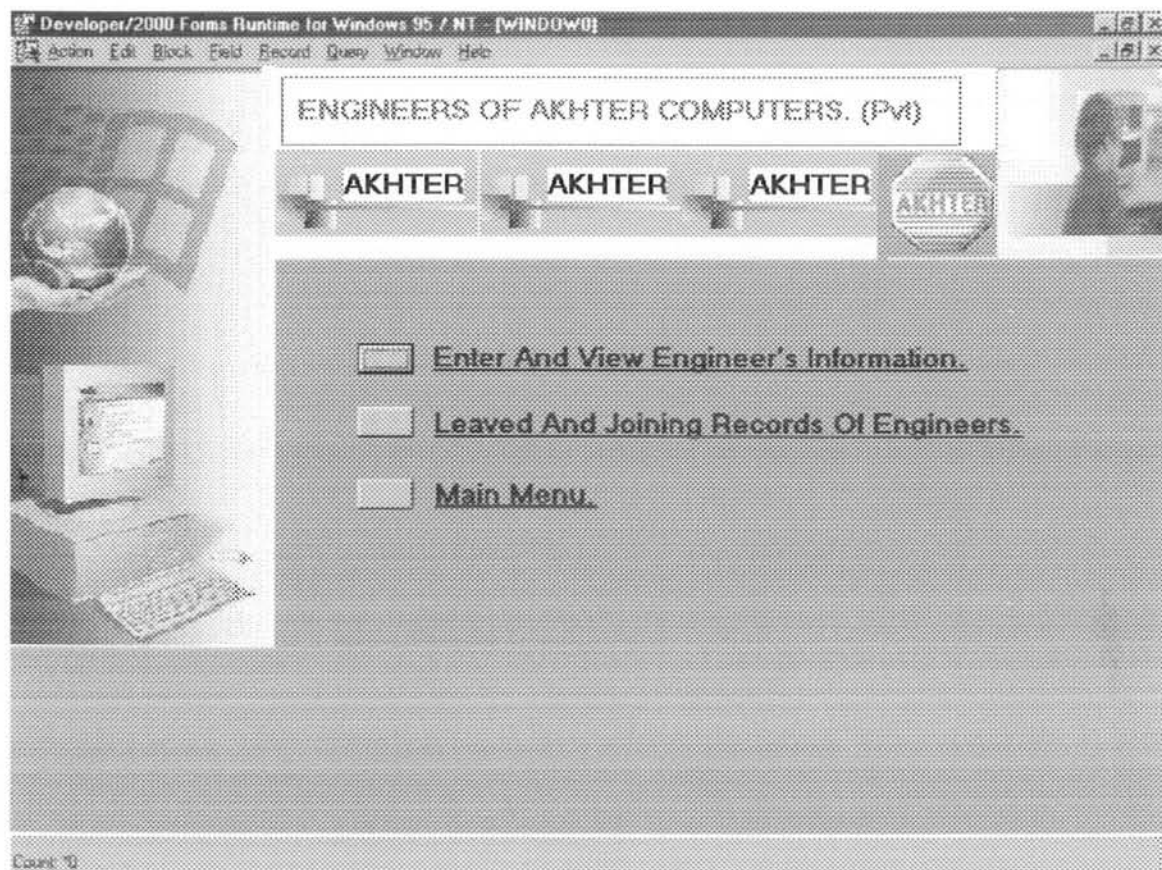
Enter & view Parts Information table.

The User's Guide

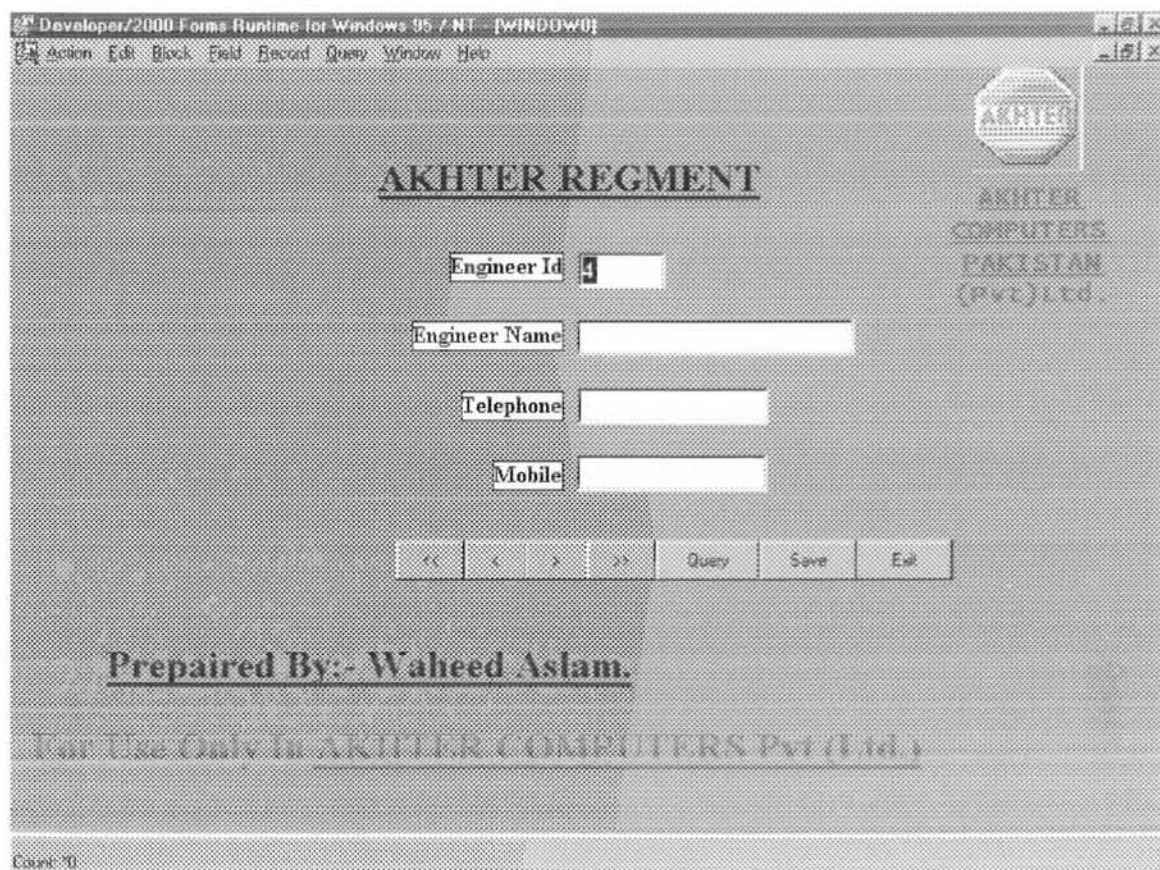


Enter & view Equipments Information table.

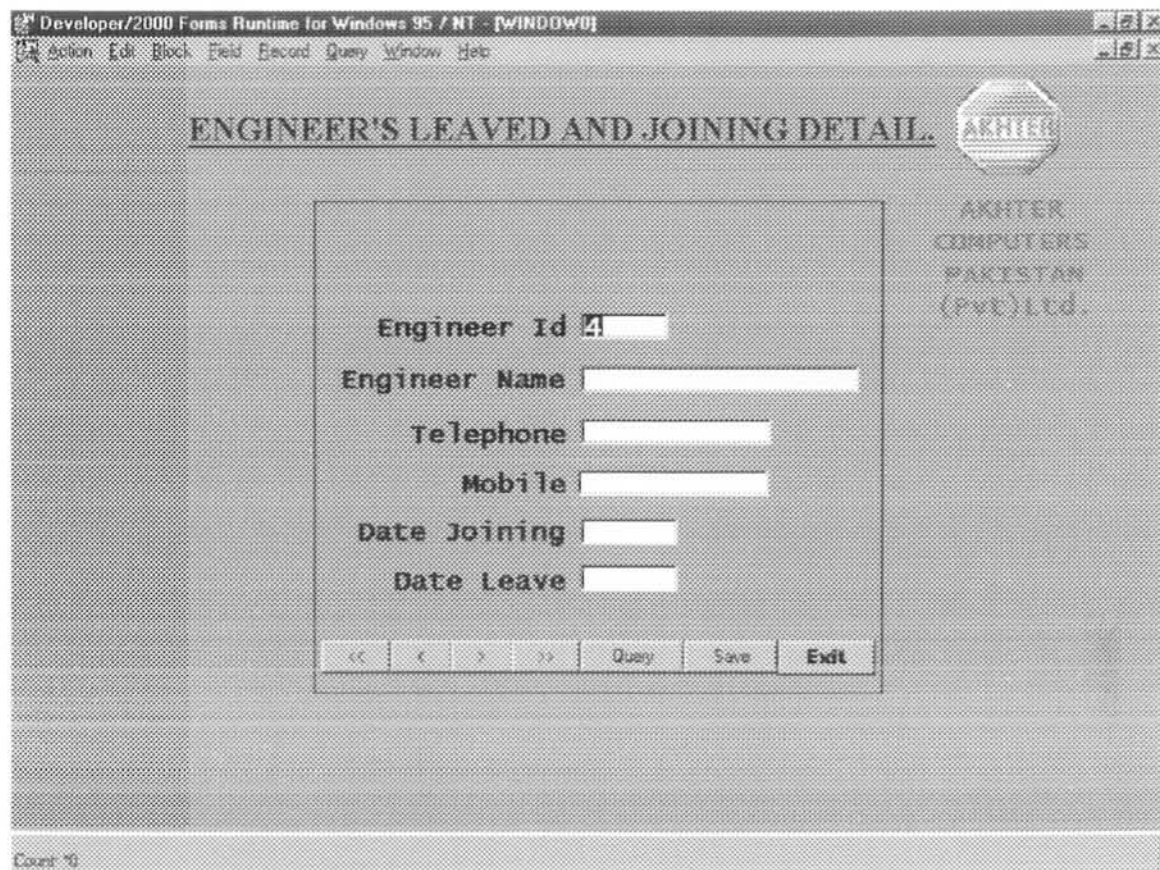
The User's Guide



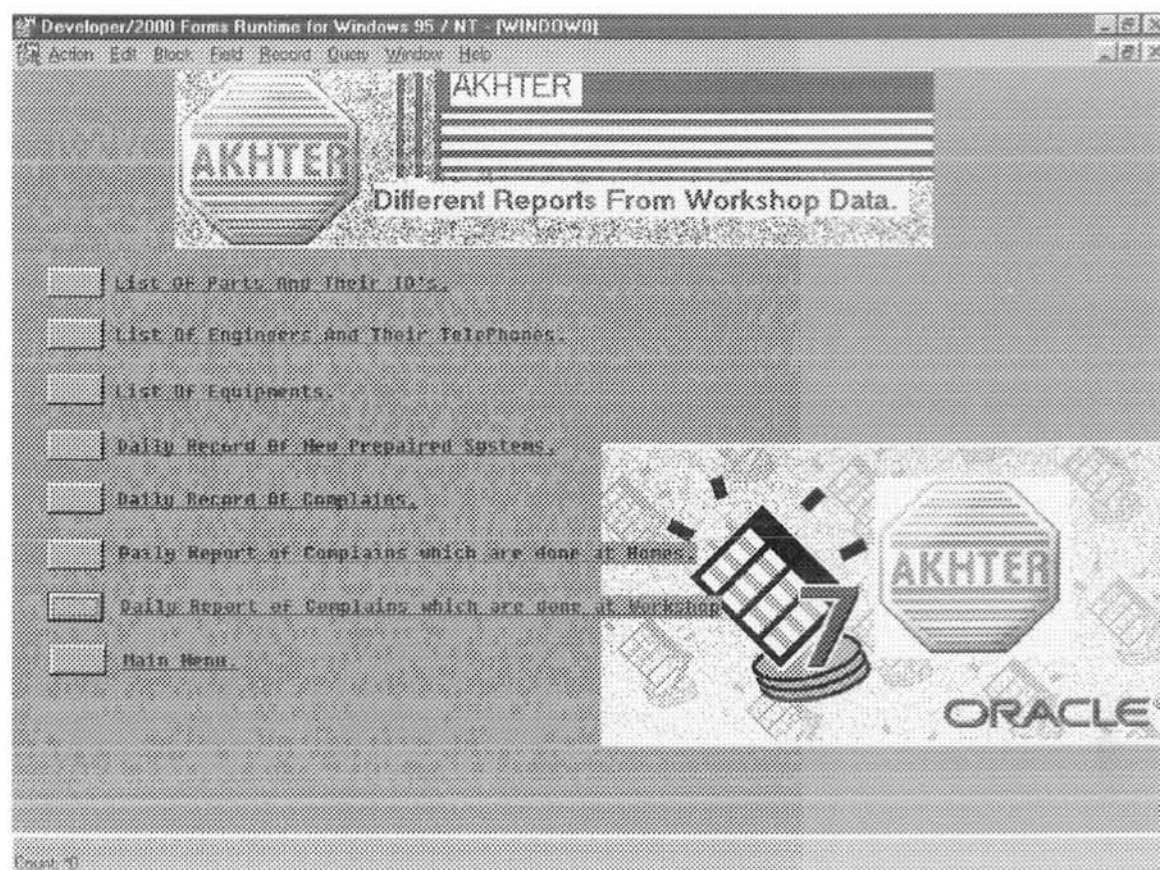
Engineer's Information menu



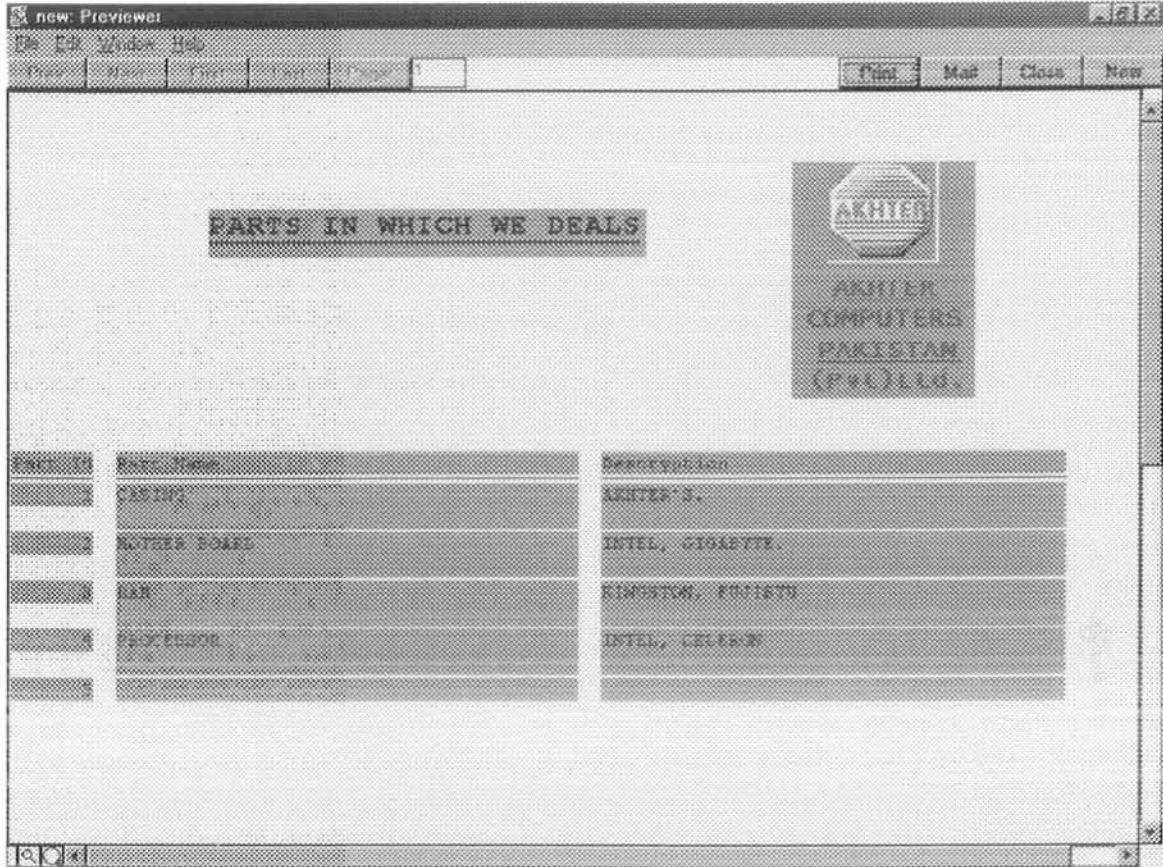
Engineer's Bio Data.



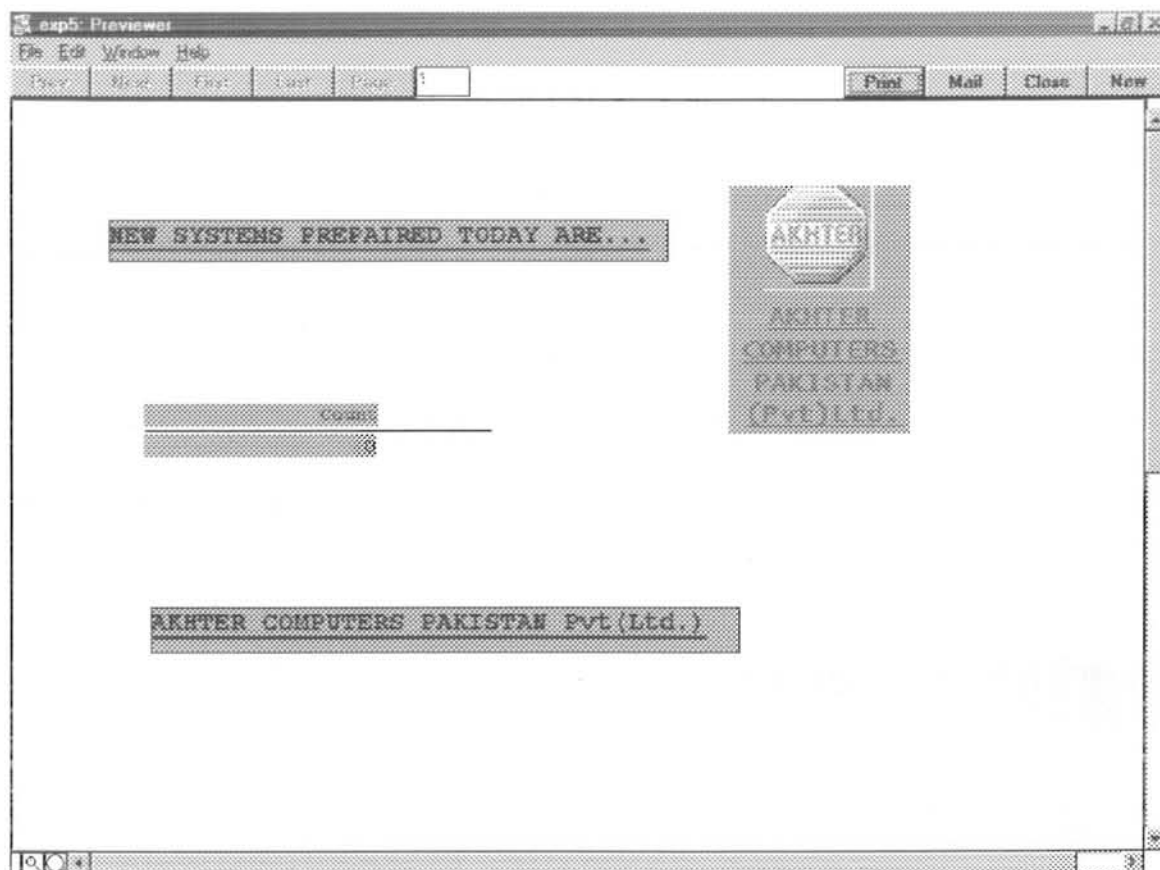
Joining and Leaving records.



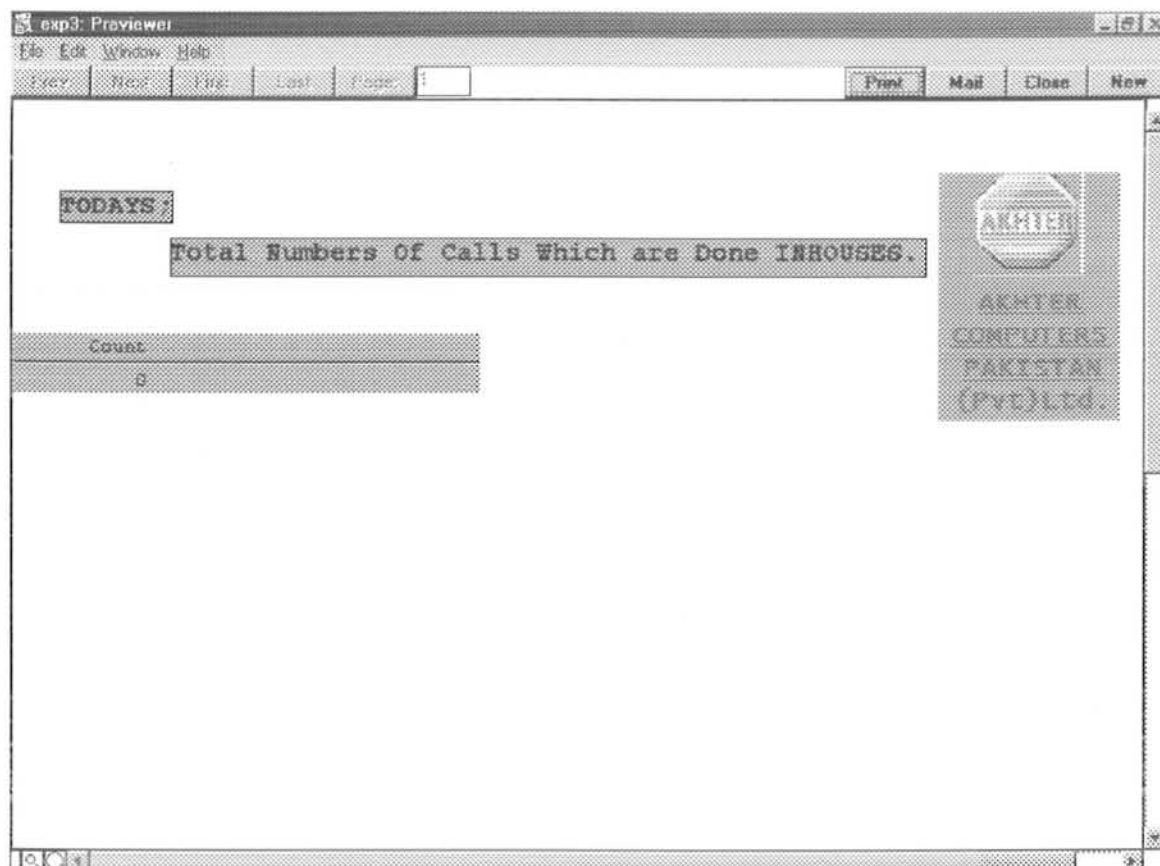
Reports Main Menu.



Parts Report.



New Repaired Systems Summary.



Total Complains are at Home Service.