

JOB MONITORING SYSTEM

PROJECT WORK DONE AT

COMPUTER POWER (INDIA) LIMITED
CHENNAI

PROJECT REPORT



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REQUIREMENTS FOR THE AWARD OF THE DEGREE OF
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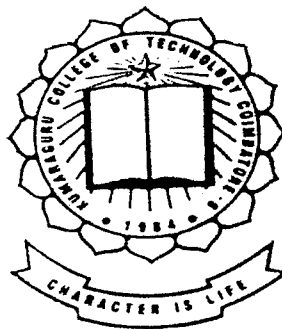
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Coimbatore – 641 006

April 2001

CERTIFICATE

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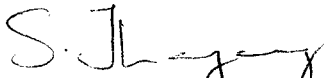
JOB MONITORING SYSTEM

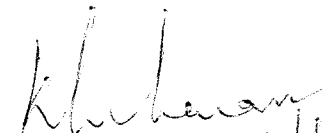
Submitted to

Kumaraguru College of Technology
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in partial fulfillment of the requirements for the award of the
Degree of **M.Sc. (Applied Sciences – Computer Technology)**
is record of original work done by

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Professor and Head 23/4/09


Internal Guide 23/4

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Internal Examiner 27/4


External Examiner 27/4/2009



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TO WHOMSOEVER IT MAY CONCERN

This is to certify that Miss. **S.Subhashini**, final year M.S.C (Computer Technology) student of Kumaraguru College of Technology,Coimbatore has successfully completed the project work entitled “ **JOB MONITORING SYSTEM**” in our organization from December '2000 – March 2001'. During this period, her performance was good.

For Computer Power India Ltd,

N. THIAGARAJAN
Project Head

DECLARATION

I hereby declare that the project entitled **Job Monitoring System**, submitted to **Bharathiar University** as the project work of **M.Sc Applied Science (Computer Technology)** Degree, is a record of original work done by me under the supervision and guidance of Mr.N.Thiagarajan, Project Head Computer (Power) Limited and Mr.K. R. Baskaran, Asst. Professor / CSE, Kumaraguru College of Technology, Coimbatore. This project work has not found the basis for the award of any Degree/Diploma/Associateship/Fellowship or similar title to any candidate of any university.

Place: **CHENNAI**

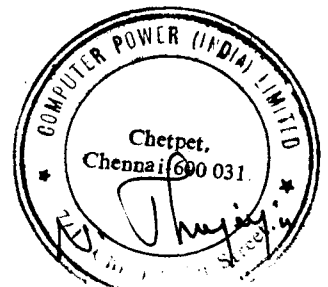
Date: **9.4.2001**

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Synopsis

SYNOPSIS

This project "Job Monitoring System" is an ERP package which focuses mainly on servicing of two wheelers. This project was developed for a famous automobile dealers in Chennai. There are various modules which help to develop this project. This system is user-friendly so that the end-user need not have a good knowledge about computers.

Each module was developed with the objective to make the computerization process more efficient. At every stage a great deal of information is maintained about the customers and vehicle, so that processing of information will be easy at any stage.

The screens are designed in such a way so that the user does not find any difficulty in entering the details. Needed reports are generated so that the output gives an idea about how the process is taking place. These features considerably reduce manpower and money.

The entire project is menu driven so that the user can easily navigate through the modules. This project tries to solve the manual operations to make the maintenance and operations quiet easier.

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Introduction

1.1. PROJECT OVERVIEW :-

This project “**Job Monitoring System**“ is a part of the “**Integrated Automobile System**” which caters to the needs of two wheeler dealership for sales, spares, service and accounting operations. This is an Enterprise Resource Planning software which integrates all the department and functions into a single computer system in order to share information and communicate with each other. ERP automates the tasks involved in performing a business process. With ERP, when a customer service representative takes an order from a customer, he or she has all the information necessary to complete the order. Everyone else in the company sees the same computer screen and has access to the single database that holds the customer's new order. When one department finishes with the order it is automatically routed via the ERP system to the next department. To find out where the order is at any point, one need only log into the ERP system and track it down.

This project focuses mainly on servicing of vehicles. The automobile dealers have a number of sub-dealers and customers. The types of services offered are **normal** service, **free** service, and **warranty** period service. Free service is offered for a certain period of time or at certain mileage whichever occurs first. The number of such services ranges from four to five. Normal service is the paid service. This is done whenever the customer wishes to do so. Certain parts of the vehicle are covered under warranty for a certain period of time. If such part is found defective, they are replaced free of cost. These types of services come under warranty period service.

The various modules developed are briefly explained .

Job Card Information :-

This module captures information about the customers, vehicles, list of complaints, mechanic name and commitment date. The module is very important, because maximum of input is being gathered.

Spare Part Issue Information :-

This module deals with the spares that are necessary to service a particular vehicle. Here a request number is generated, which is useful to note what spares are issued to a particular vehicle.

Servicing (Work Done) Information :-

This module is also named as workdone interface. This is categorized into two types such as,

Pure Labour Charge : This should be charged for repairing the vehicles

Replacement Charge : This should be charged for the spare

parts + replacement charge for the labour.

The replacement of spare parts charge can be changed dynamically depending upon the customer.

Spare Part Return Information :-

Damaged spare parts will be replaced by the new ones. If the old spare works well then the new spare part obtained, is be returned to the stock dealers. Here the issue and return of spares parts will be dealt separately by stock dealers.

Billing :-

Another important module is to bill the charge for the vehicle serviced. Here customer does the payment through cash or credit. This module will take care of generation of bills, print them and immediately issue to the customers.

Two types of bills are generated such as labour bill, service bill. The service bill contains the services made to that particular vehicles and their charges. Customer will get a clear idea of, what type of service the vehicle has undergone and the labour charges. Labour billing is done for the mechanic who was involved in servicing the vehicle.

Closure of Job Card :-

This module will produce the delayed reason if it is not serviced within the mentioned date. Otherwise the job card can be closed (this means that the vehicle is to be delivered).

Gate Pass :-

Before issuing the gate pass the service bill, labour bill should be checked for confirmation. Then gate pass is issued in order for the vehicle to be delivered.

Estimation :-

Estimation is done if the customer is interested in knowing an approximate charge that would incur for servicing his/her vehicle. This module is solely generated for the interest of the customer.

1.2. ORGANIZATIONAL PROFILE : -

Computer Power (India) Ltd. is India's leading information Technology Company providing turnkey solution to customers both in India and abroad. Now, it is specializing in designing total business solutions for several markets such as automotive distribution, manufacturing, Banking and financial services industry. It provides services in the area of custom-built solutions, Technical consulting, Data Ware housing, System Integration and Web enabling.

Another feature of this company is, it offers ERP solutions. These ERP solutions are designed to be universal in nature, i.e. it can cater to a wide range of establishments irrespective of their size. Using popular development tools helps to open a variety of databases their by allowing it's clients to have their preferences. It's mission is to empower the industries and business to be competitive in the real sense of the word, an attribute that mandates proactive and automated systems and procedures to be in place.

In the most recent years, Computer Power has established a clear and sustainable leadership in automating the automobile dealership operations, which is once again enterprise in nature. Automotive distribution which was identified a decade ago as a potential market, is today comprising of almost all leading international players such as Suzuki, Kawasaki, Mitsubishi, Hyundai, Ford, GM etc. Virtually an unlimited potential and opportunity for channel partnerships.

IAS (Integral Automobile Dealership System) Solutions are highly evolved and very mature. They are packaged as discrete components and each

components as and when they are installed. The following section gives the brief discussion about the services offered by the company.

Services Offered

Custom Built Solutions

Computer Power has the necessary skills and state-of-the-art infrastructure to undertake large-scale Software development projects, fully adhering to the classical stages of Software Engineering. Computer Power is formal, yet customer friendly. This approach is crucial for protection of the Client's Investments.

Technical Consulting

Comprehensive consulting services on IT strategies, Project Management, Bench Marking of Hardware & Software, Architecture, System Administration, Performance Analysis, Disaster Recovery, Relocation of projects and Porting.

Data Warehousing

A wide range of skills is available on contract for designing data warehouse, database sizing & storage solution, determining the data mining requirements and implementing OLAP modules.

System Integration

New applications that are built using current technologies need to be integrated with the existing and running Systems that are mission critical and/or time tested and proven. This is a global and perpetual need. Sharing of computing resources and database across the globe are becoming the order of the day. Computer Power specializes in offering effective integration solutions.

System Study & Analysis

2.1. EXISTING SYSTEM: -

Existing system was a manual system. Minimum of 100 customers visit the automobile dealers per day. It was a tedious activity to keep track of all the customers. As the volume of data grows, manual handling of it will be tedious and time consuming and highly error prone. Report generation was not an easy task for these cases. Data organization was also not well formed. Lots of man power is needed for all the above mentioned tasks which ultimately led to the drawback of the system.

LIMITATIONS OF THE EXISTING SYSTEM: -

- * Maintaining Accuracy of data

- * Retrieving proper existing details

- * Necessary Reports

- * Friendliness to the users.

2.2. PROPOSED SYSTEM

Maintaining the accuracy of data and processing of information is very essential for any organization. This can be achieved well through computerization. Computerization is economical both in terms of money and manpower used. The proposed system is extremely user friendly with well defined screens and limited inputs. Information retrieval has become quick and easy. As a result of increasing number of customers day by day, the staff take less time in various activities involved in the system and also answering their queries.

The necessity of good information is required in operating various activities involved in this company. At every stage, a great deal of information is maintained about the customer and vehicle details, calculating labour and service charges and bills and report generation. Henceforth these activities were done at ease and the chance for error is also minimal, unlike in existing system. Information processing was no more a difficult task.

These were the factors that lead to the development of "**Job Monitoring System**".

2.3. REQUIREMENTS ON NEW SYSTEM

The main idea of the proposed system is to watch every action in servicing the automobiles. So the needed features are a menu-driven interface, speedy performance, user friendly so that it can be used by least skilled workers, accuracy of output and faster rendering of service which is the most essential. Generation of reports, should be helpful for both short term and long term planning.

Since the system adheres to the principle of functional independence, modifications done to any part of the software should not affect other parts of the system. This system should be very effective for a long period of time. The software has to developed with a view to implement all the features needed by the enduser and also to withstand in the midst of changing trends.

2.4. USER CHARACTERISTICS :-

The system has been designed has been designed for the use of the least skilled worker, by having excellent help facilities at every stage. Data entry operations are made easy by simply keying the necessary details. Menu driven screens are provided, so that the user can navigate through each module as desired. Reports can be produced by specifying the dates. Appropriate validations are provided so that the user can correct themselves during the time of data entry.

Programming Environment

3.1. HARDWARE CONFIGURATION: -

PROCESSOR	: PENTIUM-III INTEL T440BX
CACHE MEMORY	: 512KB CACHE MEMORY
RAM CAPACITY	: 256MB SD RAM
HD DRIVE	: 19.1GB SCSI HARDDISK DRIVE
FLOPPY DRIVE	: 1.44MB FLOPPY DISK DRIVE
DISPLAY CARD	: AGP CARD WITH 8MB RAM
MONITOR	: 17" SVGA COLOR MONITORS
KEYBOARD	: 104 KEYS PS2 KEYBOARD
MOUSE	: 3-BUTTON PS2 MOUSE WITH PAD
CLOCK SPEED	: 233MHz SPEED

3.2. SOFTWARE REQUIREMENTS: -

OPERATING SYSTEM : WINDOWS 98

FRONT-END TOOL : JAVA 2.0

BACK-END TOOL : MS-ACCESS 7.0

DESCRIPTION OF SOFTWARE :-

Java is used because it has got a lot of feature like ,platform independent and it provides sufficient controls and components. Java has got several features they are explained given below.

Productivity

Client/Server scalability

Portability

Productivity:-The Java 1.2.2 uses Integrated development environment which provides an environment for the users to develop applications. It is made up of number of components like menu bar, tool bar etc.

Portability:-Portability and global deployment are the trademarks of Java 1.2.2. Build your applications using Microsoft Windows, Applet Macintosh or motif and deploy them in any of these environments or on character mode terminals.

Client/Server scalability:-Scalability comes to Java developers. It is inherent in the architecture of the product. It is definitive in drag-and-drop client/server portioning of procedures and it's evident in the embedded features that allow internet based customers to scale from 5 to 5000 users.

The entire project is designed by using Java swings. Swing components facilitate efficient GUI development. Swing components contain a replacement for the heavyweight AWT components as well as complex user interface components such as trees and tables.

Swing components contain a pluggable look and feel. This allows all applications to run with native look and feel on different platforms. PL&F allows applications to have the same behavior on various platforms. Any user can select the pluggable look and feel already present or develop their own pluggable look and feel.

Another feature of the swing is MVC architecture. Model View Controller architecture is used consistently throughout the swing component set. Each component has an associated model class and an interface it uses.

System Design & Development



4.1. INPUT DESIGN

The inputs for the various modules are described below:

The user has to provide his/her password in order to view the menu-driven screen. If the password field is invalid then there would be an error in connection.

Job Card Information Module :

Here all the details of the customer and the vehicle are to be specified. The type of service has to be specified whether it is free, paid or warranty service. The job card number which is auto generated for every new job card made. Other details like mileage, remarks, mechanic name had to be entered in the job card. After entering all the details save button is clicked so that the details are stored in the database.

Spare Part Issue Module :

In this module the spares that are necessary to service a particular vehicle are recorded. The information to be specified are job card number, spare code, vehicle details, spare issue number, quantity and the type of service. Once the details are entered the save button is clicked so that the details specified are stored in the database.

Work Done module :

In this module the inputs to be made are job card number, vehicle number, sale date, job card date, work code and description about whether it is pure labour or replacement of any spare part. Once the details are entered the save button is clicked so that the details specified are stored in the database. If there are any changes to be made delete button can be made use of and the details can be entered once again.

Spare Part Return Module :

This is similar to the spare part issue except the detail of spare part which has to be returned. Here all the details entered are similar to spare part issue. Once when all the details are specified the needed changes are made in the database.

Labour Billing Module :

This module is for the mechanic who has serviced a particular vehicle. The details to be entered are job card number and the rest of the details are like service code, service description and the total amount are automatically displayed.

Service Billing :

This is for the customer who has come for payment. Here only the job card number has to be specified and the rest of the details are like spare part change, vehicle details and the total amount are automatically displayed.

Gate Pass Module :

This is to ensure that the vehicle is ready for delivery. When the job card number is specified all the other details regarding the customer, vehicle will be automatically displayed.

4.2. OUTPUT DESIGN

The output design for all the modules can be seen from the screen design in the Appendix. The reports are generated for labour billing and service billing. The labour bill includes the spare code, spare description, spare charge. The service bill includes the bill number, date and amount. Here the report are generated by the way of user entering the input date range. Bills are produced which are of labour bill for the mechanic who has serviced a particular vehicle and service bill for the customer which consist of the complaints which has been rectified, the charges for the services done. The details are produced in the service bill. The screen designs for these bills can be seen in the Appendix.

4.3. DATABASE DESIGN:

The tables needed for the **Job Card Module** are given below:

Table Name : Jcard

Table Description : Job Card

Field Name	Type	Description
tservice	Text	Type of service
jcardno	Number	Job card no
jdate	Date/Time	Job date
rgdno	Text	Register no
sdate	Date/Time	Service date
engno	Text	Engine no
fno	Text	Frame no
cname	Text	Customer name
cadd1	Text	Customer address1
cadd2	Text	Customer address2
cadd3	Text	Customer address3
pin	Text	Pin code
phone1	Text	Phone1
phone2	Text	Phone2
model	Text	Model
Make	Text	Make

Table Name : mechanic

Table Description : Mechanic Name

Field Name	Type	Description
Id	AutoNumber	Identification number
Mcode	Text	Mechanic code
Mname	Text	Mechanic name
Tvehicle	Text	Type of vehicle

Table Name : complaints

Table Description : Complaints

Field Name	Type	Description
Comp_code	Text	Complaint code
Comp_desc	Text	Complaint description

Table Name : jcomplaints

Table Description : Complaints

Field Name	Type	Description
jacrdno	Number	Jobcard number
sino	Text	Serial Number
ccode	Text	Complaint Code

Table Name : pass_word

Table Description : Pass word

Field Name	Type	Description
Id	AutoNumber	Jobcard number
username	Text	User name
password	Text	Pass word

The tables needed for the **Spares Module** are given below:

Table Name : tservice

Table Description : Type of Service

Field Name	Type	Description
Id	AutoNumber	Identification number
tservice	Text	Type of service

Table Name : spare_mas

Table Description : Spare Master

Field Name	Type	Description
Id	AutoNumber	Identification number
pcode	Text	Part code
pdesc	Text	Part Description
rate	Number	Rate

Table Name : spare_type

Table Description : Spare Type

Field Name	Type	Description
Id	AutoNumber	Identification number
sissuetype	Text	Spare issue type
sissuecode	Text	Spare issue code

Table Name : spare_details

Table Description : Spare Details

Field Name	Type	Description
requestno	Number	Request number
jcardno	Text	Jobcard number
sissuedate	Date/Time	Spare issue date
partcode	Text	Part code
type	Text	Part type
quantity	Number	Quantity
price	Number	Price
amount	Number	Amount

Table Name : service_mas

Table Description : Service Master

Field Name	Type	Description
Id	AutoNumber	Identification number
scode	Text	Service code
sdesc	Text	Service description
price	Number	Price

Table Name : service_details

Table Description : Service Details

Field Name	Type	Description
id	AutoNumber	Identification number
serviceno	Number	Service Number
jcardno	Text	Jobcard number
sdate	Date/Time	Service date
sdesc	Text	Service description
amount	Number	Amount

The tables needed for the **Billing Module** are given below:

Table Name : labour_bill

Table Description : Labour Bill

Field Name	Type	Description
jcardno	Number	Jobcard number
billno	Number	Bill number
billdate	Date/Time	Bill Date
billtime	Text	Bill Time
name	Text	Name
serno	Number	Service number
total	Number	Total

Table Name : s_bill

Table Description : Service Bill

Field Name	Type	Description
Id	AutoNumber	Identification number
jcardno	Number	Jobcard number
billno	Number	Bill number
billdate	Date/Time	Bill Date
billtime	Text	Bill Time
name	Text	Name
rqno	Number	Request number
total	Number	Total

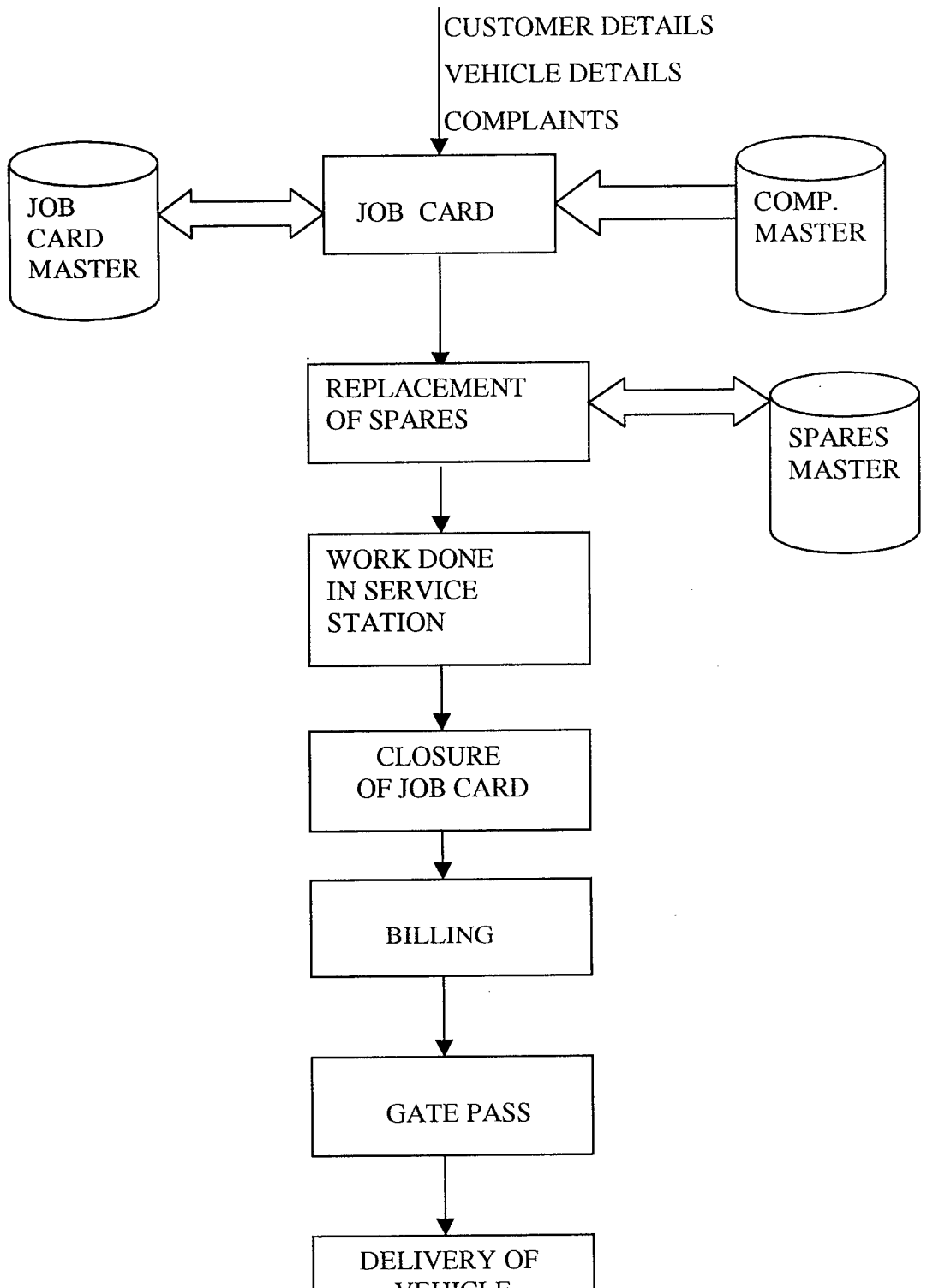
The table needed for the **Gate Pass Module** is given below:

Table Name : gatepass

Table Description : Gate Pass

Field Name	Type	Description
Id	AutoNumber	Identification number
jcardno	Number	Jobcard number
sbillno	Number	Service bill number
lbillno	Number	Labour billno
curdate	Date/Time	Date
name	Text	Name
rgdno	Text	Register number

4.4 PROCESS DIAGRAM: -



System Implementation & Testing

5.1 SYSTEM IMPLEMENTATION

Since JAVA2.0 provides sufficient controls and components, this system can be implemented in efficient and user friendly manner by using the controls.

Features of Java :-

Collections are group of objects. Java 2.0 provides several type of collections, such as linked lists, dynamic arrays, and hash tables for our use. Collections offer a new way to solve common programming problems.

More flexible security mechanisms are now available for Java Programs. Policy files can define the permissions for code from various sources.

Digital certificates provide a mechanism to establish the identity of a user. You may think of them as electronic passports. Java programs can parse and use certificate to enforce security policies.

Various security tools are available that enable you to create and store cryptographic keys and digital certificates, sign Java Archive (JAR) files, and check the signature of a JAR file.

The Accessibility library provides features that make it easier for people with sight impairments or other disabilities to work with computers. Of course, these capabilities can be useful for any user. The Java 2D library provides advanced features for working with shapes, images and text.

Drag and Drop capabilities allow you to transfer data within or between applications. Text components can now receive Japanese, Chinese, and Korean characters from the keyboard. This done by using a sequence of keystrokes to represent

Performance improvements have been made in several areas. A Just-In-Time (JIT) compiler is included in the JDK. Many browsers include Java Virtual Machine that is used to execute applets. Various tools such as javac, java, and javadoc have been enhanced. Debugger and profiler interfaces for the JVM are available.

Thus the system is implemented by using JAVA2.0 best controls for limited coding.

5.2. SYSTEM TESTING: -

Software testing is a critical element of software quality assurance and represents the ultimate review of specification of design and coding. The objectives of testing can be given as

- Testing is a process of executing a program with the intent of finding an error.
- A good test case that has a probability of finding an as yet undiscovered errors.
- A successful test is one that uncovers an as yet undiscovered error.

Testing cannot show the absence of defects; it can only show that software defects which are present. Testing is a set of activities that can be planned in advance and conducted systematically. For this reason template for software testing must

segment has been correctly implemented as well as high level test that validate major system functions against customer requirements. The strategy for software testing consists of **unit Testing**, which concentrates on each unit of the software as implemented in the source code. Next is the **integrating testing**, where the focus is on the design and the construction of the software architecture. Next comes the **validation testing**, where requirements established as part of software requirement analysis are validated against the software that has been constructed. Finally we have the **system testing**, where the software and other system elements are tested as a whole.

The proposed system was tested using above specified test.

SYSTEM TESTING: -

Software is only one element of larger computer based System. Ultimately, software is incorporated with other system elements and a series of system integration and validation test is conducted. These tests fall outside the scope of the software engineering process and are not conducted solely by the software developer. However, steps taken during software design and testing can be greatly improving the probability of successful software integration in the larger system.

System testing is actually a series of different tests whose primary purpose is to fully exercise the computer based system. Although each test has a different purpose, all work should verify that all system elements have been properly integrated and perform allocated functions.

UNIT TESTING: -

Unit testing focuses verification effort on the smallest unit of software design of the module. Using the design description as a guide, important control paths are tested to uncover errors within the boundary of the module. The relative complexity of tests and the error detected as result is limited by the constrained scope established for unit testing. The unit test is always white box oriented, and the scope can be conducted in parallel for multiple modules. In Job Monitoring System modules all of them are tested using the first strategy namely the unit testing. Here all the loops are verified in order to ensure that the required result is obtained and the control paths do not go endlessly. Each module was divided into small units and was tested for any errors. This makes our task easier while performing other functions. Thus all modules were checked to ensure that they are error free.

INTEGRATION TESTING: -

Integration testing is systematic technique for constructing the program structure while at the same time conducting test to uncover errors associated with interfacing. The objective is to take Unit-Tested modules and build a program structure that has been directed by the design. Therefore all the units were combined together and once again tested so that to verify the modules are error free. There is often a tendency to attempt non incremental integration that is, to construct the program using a "Big Bang" approach. All modules are combined in advance. The entire program was tested as a whole. Sets of errors were encountered. Correction was done at the necessary place and once again tested.

Once these errors were corrected, new ones appeared and the process continued. According to the integration testing in the proposed system all the modules are integrated and tested for its accuracy.

VALIDATION TESTING: -

At the culmination of integration testing, now the software is completely assembled as package, interfacing errors have been uncovered and corrected and a final series of software tests had to be conducted. A simple definition is that validation succeeds when the software functions in manner that can be reasonably expected by the customer. Reasonable expectations are defined in the software requirement specification documentation that describes all the user visible attributes of the software. The Specification contains a section called validation criteria. Information contained in that section forms the basis for validation testing approach. Validation criteria have been defined in all the modules so that when the user goes wrong in entering the input details he can correct himself by seeing the alert messages. Therefore all the interface designs were checked a number of times so that the user may provide enter the correct details.

The proposed system was tested using above specified test.

5.3. REFINEMENTS BASED ON FEEDBACK: -

Refinements were made based on the feedback given by the endusers. Even with the best quality assurance activities, some defects were uncovered in the software. Those include few changes that were to be made in the validation of certain key fields. Corrective maintenance was made in the software to correct defects. Also report generation wanted to be made base on the type of service made (i.e.) free, paid or warranty service. If the enduser feels additional functions to be updated in the proposed system during the course of usage of the software then this system can be extended beyond it's original functional requirements.

Conclusion

CONCLUSION

The “Job Monitoring System” software developed in Java 2.0 is a menu-driven, very fast, user friendly with many options to improve the accuracy of the service and the reports that are generated. The main feature of the software is to faster service access to automobile dealers. The output of the system is reports, which help in both for short term and long term planning.

Since the system adheres to the principle of functional independence, modifications can be easily made to any part of the software without affecting other parts. This system can be very effective for a long period of time. The software has been developed with a view to faster the services provided by the organization with accuracy.

Keeping future enhancements in mind, various documents have been maintained through the development and the implementation of this project. The coding standards and the naming conventions followed in this project were the ones specified by the Java manuals.

Scope For Future Development

7.0 FUTURE ENHANCEMENT

This project can be enhanced so that it can cater to the needs of the end user at every stage of the operation like sales, service and accounting. If the user wishes various other reports can also be generated as well as the screen designs can be changed according to the convenient of the users. This can also be posted on Internet so that all operations can be made on on-line basis.

Bibliography

8.0 BIBLIOGRAPHY

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Hobbs,
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Appendices

SCREEN 1 #MAIN MENU

MAIN MENU

Jobcard

Spares

Billing

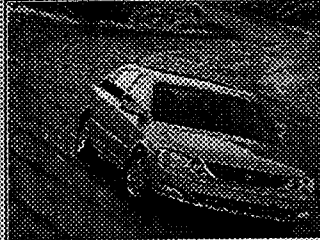
Gatepass

Reports

Ramkay Agencies

No. 405/57, Chrompet, Chennai - 600 029

(JOB MONITORING SYSTEM)



Developed By ...

Computer Power (I) Ltd.,

7/1 Chitty Bazar St, Chrompet,

Chennai - 60.

Under Guidance : Mr. Thiagarajan Iyer

SCREEN 2 # JOB CARD



Ramkay Agencies

No. 105/57, Chrompet, Chennai - 600 029

Date: Apr 3, 2001
Time: 11:17:3

Paid to: **tc0003**

Job No: **4**
Dep. No: **TN04C51 29**
Emp. ID: **E145**

Job Date: **4/3/2001**
Entry Date: **29/03/1995**
Invoice No: **F156**

Customer Details

Client Name: **K.SIVAN**
Address: **NO:11, 50-TH STREET**
ASHOK NAGAR
CHENNAI
Pin Code: **600083**
Phone (1): **4890220** | **4894491**
Remarks: **H/L BULB BLINKING**

Vehicle Details

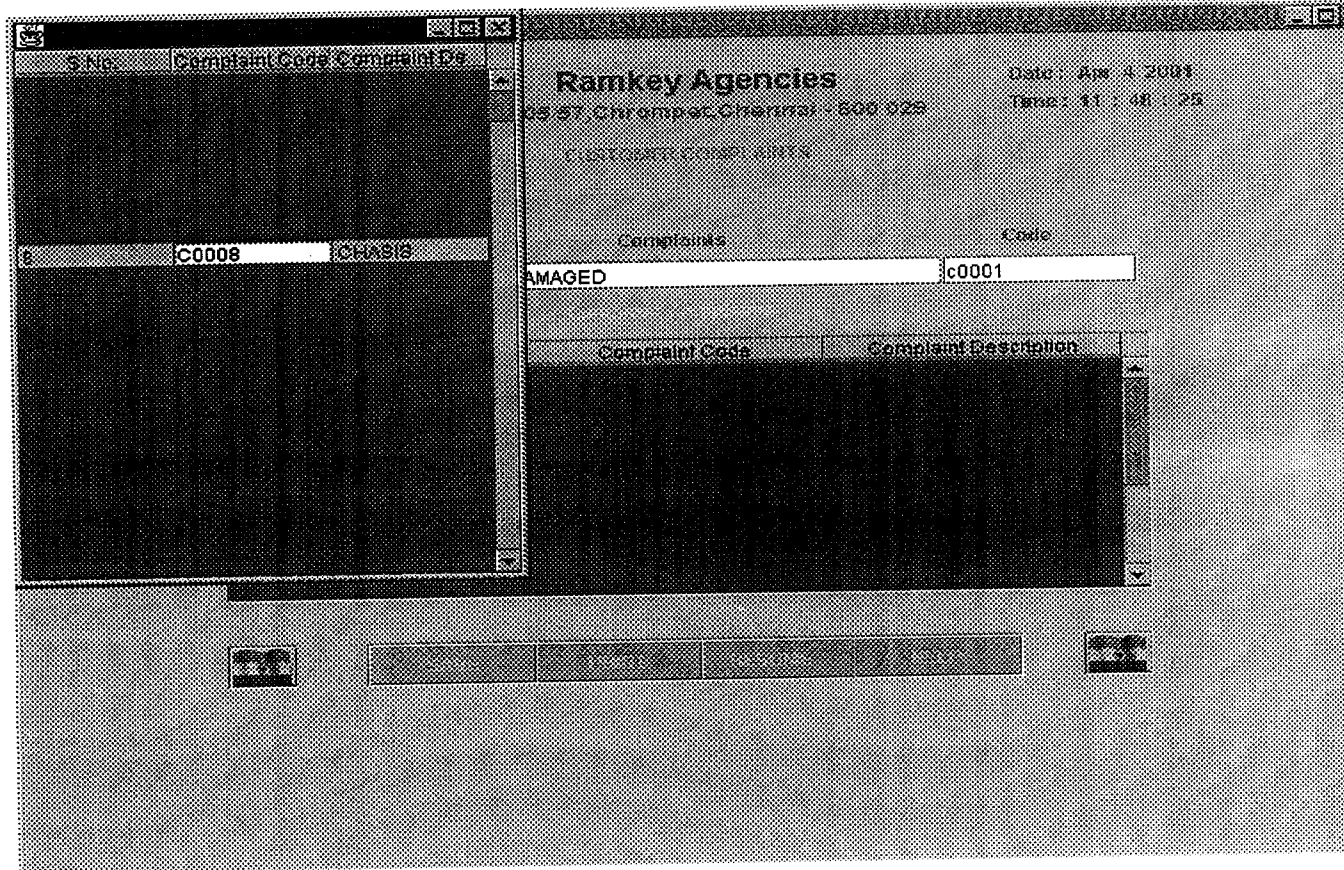
Brand: **TVS** | **SCOOTY**
Color: **GREEN**
Cylinder No: **7136**
Last Serv: **2**
Emp. Name: **mc001 Arun**
Job Date: **5/3/2001**

Print

PC SAVE

Print

SCREEN 3 # COMPLAINTS



SCREEN 4 # COMPLAINTS



Ramkey Agencies
No. 105/57, Chrouppel, Chennai - 600 029

Date: Apr 4 2001
Time: 11:52:48

CONTACT: 0439 4000

Serial No	Complaints	Code
1	BRAKE DAMAGED	c0001

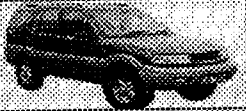
Sl No	Complaint Code	Complaint Description



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SCREEN 5#SPARE ISSUE



Ramkey Agencies

No. 105/57 Chromel Channel - 500 023

Date: Apr 4 2001
Time: 0:15:36

SPARE ISSUE INFORMATION

Spare Issue No	6	Issue Type	WHEEL COVER
Spare Issue Date	4/3/2001	Issue Status	Paid
Plant No	5	Approved Date	Paid ts0003
Plant Code	TN04C5129	Issue Month	4/3/2001
Plant City	E145	Issue Month	29/03/1995
		Issue No	F156

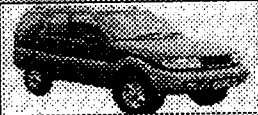
Spare Issue Details

Part Code	Part Desc	Type	Quantity	Price	Amount
c010	WHEELCOVER	Paid		20	40

Part Code	Part Desc	Type	Qty	Price	Amount

				Total:	130
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SCREEN 6 #SPARE RETURN INFORMATION



Ramkay Agencies

No. 105/57, Chrompet, Chennai - 600 029

Date: Apr 4, 2001
Time: 3: 24: 41

SPARE RETURN INFORMATION

Customer No.	4	Issue Type	Paid
Spa. Retn. Date	4/3/2001	Retn. Type	Paid 150003
Motor No.	5	Spa. Retn. Date	4/3/2001
Model No.	TN04C5129	Spa. Retn. Code	2003R1985
Eng. No.	E145	Spa. Retn. Part	F158

Spare Return Details

Part Code	Part Desc	Type	Quantity	Price	Amount
c001	H/LBULB	Paid	1	25	25
c001	H/LBULB	Paid	1	25	25
c006	CHASIS	Paid	1	40	40
c010	WHEELCOVER	Paid	2	20	40

NEW	SAVE	DELETE	RESUME	PRINT	Total: 105
-----	------	--------	--------	-------	------------

SCREEN 7 # WORK DONE



Ramkay Agencies
 No. 105/57, Chrompet, Chennai - 600 029

Date: Apr 4 2001
 Time: 3:38:11

Service Code: SC003

sc003

Service No: 8

Service Date: 6/3/2001

WORK DONE INFORMATION

VEHICLE IDENTIFICATION

JCard No: 8
 Reg No: TN04CS129
 Eng. No: E145

Jcard Date: 4/3/2001
 Sale Date: 28/03/1995
 Frame No: F158

Service Items Details

sc003	Warrantyperiodservice	30
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Work Code	Work Desc	Amount

NEW SAVE DELETE RESUME PRINT

120

SCREEN 8 # LABOUR BILL

Labour Bill

Job Card No: 5

Customer Name & Address:

NAME: CHITRA ADDRESS: TELUKKOPPEY PIN: 605014	<p>Bill No:</p> <p>Bill Date: Apr 14 2009</p> <p>Bill Time: 11:55:54</p>
---	---

Registration No: TX0120120	Engine No: K135	Frame No: 2313
Request No: 5	Make & Model: TVS SCORPIO	Ser Type: Repair Table

Sl. No	Service Code	Service Description	Amount

Total	120
Round Off	120
Grand Total	120

SCREEN # 9 SERVICE BILL

SERVICE BILL				Job Card No	5
Customer Name & Address			Bill No		
12345678			1234		
12345678901234			Bill Date		
12345678901234			12/31/2023		
Customer Pn			Bill Time		
12345678901234			12/31/23		
Registration No	1234567890	Engine No	12345	Frame No	12345
Request No	1234	Make & Model	1234567890	Ser Type	1234567890

SI No	Part Code	Part Desc	Qty	Price	Amount
[REDACTED]					

				Total	130
				Found Off	130
				Grand Total	130

SCREEN # 10 GATE PASS

GATE PASS ISSUE				JobCard No
Customer Name & Address :				5
Receiver		GPass No		
RENTAL DEP - HSEY		GPass Date	2012-01-01	
WAGON TRUCK	Pin - 1-0000	GPass Time	1:00:00	
CHASSIS				
Registration No	31000000	Engine No	2100	
JobCard No	400000	Make & Model	FUSILLONNY	
		Frame No	1100	
		Ser Type	Truck - tractor	
JobCard No	1	Spare Bill No	0	
		Service Bill No	0	

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Reports For Spare Part Issue Details :-

Ramkay Agencies,
No.105/57,R.K.S Road,
Chrompet,
Chennai - 600 023.

S.No	Spare Code	Spare Desc	Spare Charge
1	sxcd0021	Left Break	356.00
2	sxcd0022	Clutch	120.00
3	sxkd0023	Font Tire	20.00
4	sjcd0026	Nose	15.00
5	sxcd0221	Tube	200.00
6	sxcd1221	Right Break	192.00
7	sxcd0521	Back Tire	215.00
8	sgcd7821	Left Break	345.00
9	sxcd0921	Front Tire	895.00

Reports For Bills Details: -

Ramkay Agencies,
No.105/57,R.K.S Road,
Chrompet,
Chennai - 600 023.

S.No	Bill No	Date	Amount
1	055	2/2/2001	2225.00
2	056	2/2/2001	4112.00
3	057	2/2/2001	1125.00
4	058	4/3/2001	25.00
5	059	2/3/2001	300.00
6	060	3/3/2001	095.00
7	061	3/3/2001	3125.00
8	062	3/3/2001	5170.00
9	063	3/3/2001	7125.00
