

KUMARAGURU COLLEGE OF TECHNOLOGY
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
Coimbatore – 641006



April 2003.

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PETROCARD ON ONLINE

PROJECT WORK DONE AT
BHARAT PETROLEUM CORPORATION LIMITED
CHENNAI

PROJECT REPORT

Submitted in partial fulfillment of the requirements for the award of the
Degree of **Master of Computer Applications** of
Bharathiar University, Coimbatore.

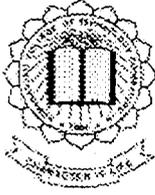
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CERTIFICATE

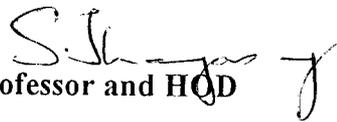
This is to certify that the project work entitled

“PETROCARD ON ONLINE”

Done By

V.MOHAN BALAJI
REG. NO: 0038M1039

Submitted in partial fulfillment of the requirements for the award of the
degree of Master of Computer Applications
of Bharathiar University.


Professor and HOD


Internal Guide

Submitted to University Examination held on 16.4.2003


Internal Examiner


External Examiner

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25.02.2003.

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Dear Sir,

**COMPLETION OF PROJECT WORK ON
"PETROCARD ON ONLINE"**

This is to certify that Mr. V. Mohan Balaji, final year MCA student of your college has successfully completed the above project assigned to him. The project work done by him is in line with our expectations and we are very much satisfied with his project work.

We wishing him all the very best in his career.

Thanking you,

Yours faithfully,
For BHARAT PETROLEUM CORPORATION LTD.,

V. NAGARAJAN,
TERRITORY MANAGER (RETAIL), CHENNAI.

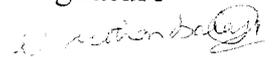
DECLARATION

I here by declare that the project entitled "PETRO CARD ON ONLINE", submitted to Bharathiar University as the project work of Master of Computer Application Degree, is a record of original work done by me under the supervision and guidance of Mr.V.Balasubramaniam, Operations Officer, **Bharat Petroleum Corporation Limited, Chennai** and Mrs.V.Vanitha M.E Department of Computer Science & Engineering, Kumaraguru College of Technology and this project work has not found the basis for the award of any Degree /Diploma/Associate ship Fellowship or similar title to any candidate of any University.

Name of Candidate
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Register Number
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Signature



Place: Coimbatore

Date: 08-04-2003

ACKNOWLEDGMENT

To add meaning to the perception, it is my indebtedness to honor a few who had helped me in this endeavor, by placing them on record.

With profound gratitude, I am extremely thankful to Dr.K.K.Padmanaban B.Sc. (Eng.), M.Tech, Ph.D., Principal, Kumaraguru College of Technology, Coimbatore for providing me an opportunity to undergo the M.C.A (Master of Computer Application) course and there by this project work also.

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Gratitude will find least meaning without thanking my guide Mrs.V.Vanitha M.E and course coordinator Mr.A.Muthukumar M.Sc., MCA, M.Phil for the valuable guidance and support throughout my project.

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My gratitude is due to all staff members of CSE department, my parents and all my friends for their moral support and encouragement for successful completion of my project

SYNOPSIS

The Petro card is a credit card sized, plastic smart card that has an embedded microprocessor chip which lets it accept and store information. Petro Card is the whole new way of filling fuel. The PetroBonus way from Bharat Petroleum. Here, each time you fill fuel, you earn valuable PetroMiles that you can redeem/exchange for wide range of exciting rewards. Petro Card used to by fuel, lubricants and bazaar items in Bharat Petroleum pumps and earns valuable PetroMiles in the Bargain.

This project is to manage the whole processes of Petro Card activities and this project helps the user to know the purpose of Petro Card and it makes BPCL to provide customer service very easily and quickly with reduction of error rate from the manual process.

The goal of the project is to automate the registration of Petro Cards, implementation of Evaluation concepts, automation of redemption process, Displaying status of Petro cards, automate fuel transactions and improved communication.

Internet is the predominantly node used for registering New consumers, for petro cards web acts as the interface in the registration process.

The Evaluation concepts include the replacement of petro cards, collection of consumer details, modification of personal identification number (PIN), in case of activation, deactivation, blocking and unblocking of personal identification number.

Redemption process is a two-way communication between consumer and BPCL. According to consumers request, BPCL directs the status as the response to the requested consumers.

Consumer's details are stored in centralized database, and according to consumers request, it is directed (from database) to consumer. Fuel transactions are updated as and when consumer uses the Petro card and consume.

Improved communication is achieved by implementing feedback forms and executing frequently asked questions (FAQ's). The additional feature is the communication between consumers through network communication.

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1. INTRODUCTION

1.1 PROJECT OVERVIEW

The project work entitled "Petro Card On Online" is been developed for Bharat Petroleum Corporation Limited, Chennai.

The application deals with automating the registration of Petro cards, automation of redemption process, generating status of Petro cards and displaying the same, automation of fuel transactions and achieving improved communication.

The system is achieved through different modules.

The modules in this system are

- Registration Module.
- Consumer Module.
- Communication Module.

1.Registration Module:

Registration is an online process for registering new user and to include them in petro bonus family. Internet is the predominant mode used for Online Registration.

The new user fills up the registration form, which includes user information details , card details (card number , card name , credit or debit card) , the amount to purchase the Petro card . and Requirement of Personal Identification Number (PIN) .

After filling the registration form, the user submits the details. The concerned authority of Bharat Petroleum Corporation Limited will validate the form. If all constraints are satisfied, the card will be issued to the user. Otherwise, the authorities will communicate with the consumer to resolve the problem exist in the form. After resolving the problem the card will be issued to the user. Once the card is issued the particular transactions is updated in the centralized database.

2.Consumer Module:

This module deals with consumer details such as complaints regarding Petro cards, consumer redemption, consumer's petro card status, and transactions made by consumer in the BPCL petrol station.

2.1 Login screen:

To become a member of petro bonus family, the user can get into the new user form, issued by the BPCL.

The consumer can create his own member identification. Once the form is filled, it can be submitted to BPCL. BPCL grants membership by examining the form according to constraints.

Then user can access the details of his Petro card in online and he can complaint the defects happened in the Petro card through online.

2.2 Complaints Regarding PetroCard:

The complaints, regarding the petro card are accumulated by the consumer. There is a separate complaint form, through which the consumer can specify his complaints.

The complaints specified are Replacement of petro cards, correction of name, PIN unblocking, PIN activation or deactivation charges are made according to the complaints.

Whenever the card gets damaged or its expiry date reached, the petro card can be replaced. for the chip corruption in the card there is no charges are made and company replaces the chip in the petro card.

Correction of name can be made according to consumer need. The personal Identification Number (PIN) can be unblocked and can be activated or deactivated by the consumer. Charges for the complaints can be done through either credit or debit card of the consumer.

2.3 Redemption:

Consumer makes a request to BPCL for rewards, through redemption form. This form includes consumer details, and the rewards offered by BPCL.

The form is automatically validated, and if criteria match, the rewards are awarded and the corresponding petro mile is deducted from petro card. If criteria does not matches, BPCL makes corresponding response to consumer.

2.4 Status:

The status of consumer petrocard is generated by BPCL, and according to the request, it is directed to consumer.

The status of the consumer petro card includes consumer details, petro card details such as date of issue of petro card, expiry date of petro card, PIN enabled or not .it inform the status whether petrocard is issued or not. Finally balance amount in the petro card and number of petro miles in card

2.5 Transaction:

Whenever consumer makes a transaction in BPCL petrol station or BPCL In & Outlet stores, its full information is updated in consumer database.

The transaction includes the petrol station information and consumer details such as transaction type (diesel, petrol, lube etc..) , amount spent , loyalty earned , date & time of transaction. The consumer can view his last ten transaction details.

3.Communication Module:

The communication between the consumer and BPCL can be achieved through this system. The communication is totally online. Rewards, Talk to Us, customer care and FAQ's are some modes through which the user can communicate with BPCL.

3.1Rewards:

Rewards mode includes rewards show case, Redemption centers, Terms and conditions, and the Redemption process. The rewards that are offered to consumer by BPCL are listed in reward showcase.

This modules gives information about the location of the redemption centers of BPCL all over India. If consumer needs to view any information about redemption center, he can choose the particular center according to his convenience.

The terms and conditions belonging to BPCL are displayed. This will be useful for consumer to know about the company's terms and conditions. Terms and conditions includes accrual of petromiles , Benefits and privileges and information about RCI holidays.

Accrual of petromiles described information about how to earn petro points. The consumer can view benefits and privileges offered by the BPCL.

3.2 Talk to Us:

The consumer can make online feedback. The feedback may be suggestion or complaints. These are passed as queries. The company authorities will overview this feedback and if they are meaningful, then the company will try to implement these suggestion and complaints made by consumer.

Help line facilities are also available. These Help line facilities are useful for communicating with BPCL.

3.2 Customer care:

Customer care gives some tips about how to prevent the accidents, road safety tips, antitheft tips, and tips about maintenance of vehicle.

3.4 Frequently Asked Questions:

Consumer's wants to know more about the system or (if he wants) to clarify any doubts about the system, then he can make use of Frequently asked questions .The FAQ also has query facilities, through which the consumer can pass queries to BPCL. The authorities of a particular department will view those queries, and response to consumer by answering these queries either through e-mail or post.

3.5 Additional Facilities of the system:

Customer communication:

The consumers of petro bonus family can communicate to each other through the customer communication facilities enhanced with in the system. The communication is achieved through sending mails, receiving mails between the consumer and vice versa.

1.2 ORGANIZATIONAL PROFILE

Bharat Petroleum traces its history to 1928 when the Burmah Shell Oil Storage & Distribution Company of India was incorporated in England to enter the petroleum products business in India. The business of the Company grew substantially given the international backing of Shell and it achieved the leadership position in India. In 1952, Shell and Burmah Oil Company set up Burmah Shell Refineries Limited to set up a refinery at Mahul in Bombay (Now called Mumbai).

The entire operations of Burmah Shell in India were nationalised in 1976 and the Refinery and Marketing Companies were merged to form Bharat Petroleum. Bharat Petroleum is a downstream oil refining and marketing company with present revenues in excess of Rs. 20600 crores.

India's second largest oil company in terms of market share. Bharat Petroleum is a premier company that has Navratna status by the Government of India. Bharat Petroleum's network is spread all over India. From LPG and Kerosene for domestic consumption, to automotive fuels and lubricants for vehicles, to feedstock and fuels for industrial applications, Bharat Petroleum touches the lives of 700 million Indians in some way every day.

Bharat Petroleum also manufactures and markets petrochemicals like Benzene, Toluene and LAB feedstock and have recently started manufacturing MTBE, an additive for Unleaded Gasoline. In order to be closer to their customers, Bharat Petroleum has constantly been building up infrastructure. Their strong marketing infrastructure includes coastal and inland storage facilities with a total tankage capacity of 27.15 lakh kls, comprising of 8 port installations, 7 inland installations, 2 bunkering installations, 1 lubricating oil blending plant, 12 pipeline TOPs, 65 company operated depots, 64 commission operated/special agreement depots and 28 despatch units. Their retail network comprises of 4423 Retail Outlets and 964 kerosene/light diesel oil dealerships spread across the length and breadth of the country. In a major technological upgradation drive, Bharat Petroleum introduced internal standard, state-of-the-art facilities at their New Generation Retail Outlets.

These outlets have all the modern facilities (including automatic car wash facility) and also have convenience stores attached to them. They cater to the needs of international and domestic airlines through a network of 16 Aviation Fuelling Stations spread throughout the

country, of which Bureau Veritas International has awarded ISO 9002 Aviation Stations at Mumbai, Calcutta, Delhi and Bangalore.

BPC has 1205 LPG distributors catering to 8.03 million consumers. LPG infrastructure includes 28 LPG bottling plants with a total capacity of 1032 TMTPA. BPC was the first in the industry to be awarded ISO 9002 accreditation for an LPG Bottling Plant. 21 Bottling Plants have already received ISO 9002 certification. Bharat Petroleum has been associated with and supported the cause of various agencies and NGOs like CRY, for sponsoring its projects of rehabilitation of villages in East India, Cancer Patients Aid Association and NAB by sponsoring their various fund raising programmes etc. It has also been supporting various medical institutions like Rajiv Gandhi Cancer Foundation in Delhi, Shankara Netralaya in Guwahati to name a few.

The PetroBonus™ program is the BPCL Customer Rewards Program. It is a unique program, which offers you the convenience of an e-purse! As a PetroBonus™ member you can purchase any item at a BPCL PetroBonus™ outlet with the BPCL Petro Card™ (a stored value Smart Card). The Smart Card is a revolutionary & convenient payment mechanism kicking up a storm all over the world. For you, it simply means greater convenience, speed of transaction, and lots of rewards and benefits.

The Petro Card™ is a credit card-size plastic card that, unlike a credit card, has an embedded microprocessor chip, which lets it accept, store and send information. It can hold as much as 80 times more data than magnetic-stripe cards.

Petro Card can be preloaded with cash that can be utilized for payments over a period of time at select BPCL PetroBonus™ outlets in cities. We can load as small an amount as Rs. 500 on our card, upto as much as Rs. 20,000 at one time, if we are paying by cash. When we purchase any item from any PetroBonus™ outlet and pay with our Petro Card, we earn valuable points (called Petromiles™). We can exchange the Petromiles™ we have earned for a wide range of exciting rewards.

We also get a quarterly Statement of Account for all your transactions on the Petro Card™ during the quarter for accounting purpose. The statement says the date, time, place of transaction, product purchased and the Amount used. The Statement for the transactions carried out on the card, is in the name of the individual customer (in case of Individual Customer) or in the corporate customer name (in case of Corporate) and is mailed directly to the mailing address.

The enrollment forms are available at the PetroBonus™ outlets as well as our site www.bharatpetroleum.com/petro and can be deposited at the PetroBonus™ outlets along with the one time enrollment fee of Rs 250.

The PetroBonus™ program is currently operating in Ahmedabad, Bangalore, Baroda, Bhubneshwar, Chandigarh, Chennai, Cochin, Coimbatore, Cuttack, Delhi (including Noida, Gurgaon, Gaziabad & Faridabad), Goa, Hyderabad / Secundrabad, Kolkata, Mathura, Mumbai (including Thane, Vashi, Kalyan & Panvel), Pune, Puri, Trivandrum and Indore. Besides these cities, the card is also accepted at select BPCL outlets on the following major national road routes:

- Mumbai – Pune – Bangalore – Chennai
- Mumbai – Ahmedabad – Udaipur – Jaipur – Delhi
- Mumbai – Ratlam – Indore – Kolkata
- Kolkata – Bhubneshwar – Vishakaptnam – Vijaywada – Chennai
- Chennai – Salem – Coimbatore
- Kolkata – Dhanbad – Mathura – Delhi
- Delhi – Ludhiana
- Chennai – Trivandrum

2. SYSTEM STUDY

2.1 EXISTING SYSTEM

In the existing system, the registrations are carried out manually in the petrol stations. The consumer does not directly know the status of the petro card. Complaints regarding petro card are either posted or submitted in the concerned petrol station.

For issuing card to the customer it will take 21 working days (excluding Saturday and Sunday). For-getting Redemption, the consumer may take more than 8 to 10 weeks. The Quick rewards are given to the customer from nearer redemption center of the Bharat petroleum .The Cherished rewards are given to the customer only by Bharat Petroleum Head Office in Mumbai. The following are the disadvantage of the existing system.

Disadvantages:

- High human intervention.
- Time consuming.
- Error prone.
- Cost ineffective (for BPCL).

2.2 PROPOSED SYSTEM

The main objectives of the proposed system are to over come the disadvantage of the existing system. In the proposed system Petro card registration is done in online and the consumer can get petro card through post. In this system consumer can select the Redemption Item, the complaints regarding the petro card and feedbacks through online.

Consumer can keep track of petromiles and the balance amount. Consumer can know last ten transactions made in the BPCL petrol station. In this customer care tips and whole process of the Petro bonus program such as FAQ's, rewards, terms and conditions etc.. Are specified for the consumer convenience. The following are the advantage of the proposed system.

Advantages:

- Error Reduction.
- Low Human Intervention.
- Customer Satisfaction.
- User Friendly.
- Cost Effective.

2.3 USER CHARACTERSTICS

The user of the system should have some basic knowledge about accessing Internet and must be aware of the procedures involved in the online registration of the petro card. The user must also know about the terms and conditions of petro card, while accessing it. He has the responsibility to check for errors and to correct them.

3. PROGRAMING ENVIRONMENT

3.1 HARDWARE SPECIFICATION

| | | |
|-------------------|---|--------------------|
| Processor | : | Intel Pentium III |
| Cache | : | 256 KB |
| RAM | : | 128 MB |
| Hard Disk Drive | : | 20 GB Ultra DMA |
| Floppy Disk Drive | : | 3.5", 1.44 MB |
| CDROM | : | Creative |
| Monitor | : | SAMTRON(15" color) |
| Keyboard | : | 104 keys |
| Mouse | : | FRONTECH |

3.2 SOFTWARE REQUIREMENTS

| | | |
|------------------|---|---------------------|
| Operating System | : | Windows 98 |
| Web Server | : | Personal Web Server |
| Client side | : | Html , Javascript |
| Server side | : | ASP |
| Back-End | : | Oracle 8 |
| Browser | : | Internet Explorer |

3.3 SOFTWARE DESCRIPTION & DESIGN TOOLS

Active Server Pages (ASP):

ASP is very powerful and yet easy-to-learn server side scripting environment. Active Server Pages comes with Internet Information Server for Windows NT server and with Personal Web Server for Windows NT workstation and Windows 98. This environment enables you to create a web site that is dynamic, fast and interactive without requiring you to worry about the capabilities of your clients browsers, which you must do if you rely on client side scripting like client-side JavaScript or client-side VBScript.

We can create dynamic web pages in many ways. Microsoft's solution to building dynamic web pages is through the use of Active Server Pages, commonly abbreviated as ASP. Active Server Pages contain two parts: programmatic code and embedded HTML. The programmatic code can be written in a number of scripting languages. A scripting language is a particular syntax used to execute commands on a computer. A program composed of commands from a particular scripting language is referred to as a script. Some particular web related scripting languages include VBScript and JavaScript. Most ASP pages are created using VBScript. The syntax is similar to Visual Basic's syntax. The embedded HTML allows for existing static web pages to be easily converted into dynamic web pages. An ASP page must contain an .asp extension.

The Internet runs on a client-server model. With the Internet, the server is a particular Web Server. The client on the Internet is a web Browser. The Web Server has to process the programmatic code in ASP before sending the HTML to the client. The client can not tell the difference between an ASP page and a static web page because in both cases, it receives just HTML.

Client-side scripting is programmatic code in an HTML file that runs on the browser. ASP scripts are server-side scripts, which are executed on the web server. These scripts are processed and their output is sent to the client.

ASP is designed by Microsoft to make it easier to web application developer to create sophisticated web applications. ASP applications are executed on the server side. Some of the benefits of ASP are as follows:

- ASP is available on multiple platforms.
- ASP development is easy to learn.
- ASP compliments client-side scripting.

JAVA SCRIPT:

Java Script is a compact, object-based scripting language for developing client and server intranet applications.

The Java Script language resembles Java, but without Java's static typing and strong type checking. JavaScript supports most of Java's expression syntax and basic control flow constructs. In contrast to Java's compile-time system of classes built by declarations, JavaScript supports a run-time system based on a small number of data types representing numeric, Boolean, and string values.

JavaScript has a simple instance-based object model that still provides significant Capabilities.

JavaScript also supports functions, again without any special declarative requirements. Functions can be properties of objects, executing as loosely typed methods.

In contrast, JavaScript descends in spirit from a line of smaller, dynamically typed languages like JyperTalk and DBase. These scripting languages offer programming tools to a much wider audience because of their easier syntax, specialized built-in functionality, and minimal requirements for object creation.

- Interpreted (not compiled) by client.
- Object-based. Code uses built-in, extensible objects, but no classes code integrated with, and embedded in HTML (accessed from HTML pages).
- Variable data types not declared (loose typing).
- Dynamic binding. Object references. Static binding. Object references must check at run-time.
- Secure. Cannot write to hard disk.

JavaScript can be embedded in an HTML document in two ways:

- As statements and functions using the SCRIPT tag.
- As event handlers using HTML tags.

CLIENT SERVER ARCHITECTURE:

In the client server model of pc the power can be spread across the client and the server. The client software supplies the interface and the knowledge of how to pass the request to the server, and then format the data from the user then it is returned from the server. The approach divides the processing across several computers, which has the advantage of not overloading any Single processor.

ODBC (OPEN DATABASE CONNECTIVITY)

Open Database connectivity helps us to access different databases. This allows a single uniform language to access different databases, instead of using the proprietary languages of each database. This is done by API (application program interface). The API is developed fro each database such that it interprets the request so that any database can write the information.

The open connectivity allows an application to get data from any kind of database. The ODBC sit on the client and is called from an application. The request from the client is sent to the OCBC driver manager, which decides whether the data base driver is installed in the client either Fulfills or denies the request and sends the information back to the driver manager which returns information to the client application.

A driver usually contains the callable API functions fro a single database. The drivers and Driver manager needs to be installed on every client machine. The drivers are dynamic link libraries (DLL) and the driver manager is an executable programs fro each database. You want to connect to a data source name (DSN). The DSN tells to the driver where the database is located.

ORACLE 8:

Oracle 8, the database for Internet computing, changes the way information is managed and accessed to meet the demands of the Internet age, while providing significant new features for traditional Online Transaction Processing (OLTP) and Data Warehouse applications, It provides advanced tools to manage all types of data in Websites , but it also delivers the performance , scalability , and

availability needed to support Very Large Database (VLDB) and mission-critical applications.

- It simplifies the management of applications
- It simplifies the management of Internet content.
- It simplifies the deployment of applications

HTML:

HTML specifies web page elements like table, frame, paragraph, bulleted lists etc. Cascading Style Sheets can be used to determine an element's size, color, position and a number of other features. Scripting languages can be used to manipulate the web pages elements so that styles assigned to them can change in response to a user's input .The advantages of style sheet includes the ability to make global changes to all documents from a single location.

4. SYSTEM DESIGN

The system design is the final phase that indicates the proposed system and its process.

4.1 Input Design

In the input design of the “Petro card on Online”, the database fields: input screen and output record screen, etc is designed to match the user needs and the system feasibility.

- The databases are designed in a compact manner using all the necessary fields. The redundancy and duplication of fields are avoided.
- All the input screens in this system are user friendly and the sizes of all screens are standardized.
- The Reports generated here gives the minute information, which are useful in decision-making.

The design of the system states the solution to the requirements. The design will determine the success of the system and this phase indicates the final system. The input design is the link that ties information system into its users. Input design consists of developing specification and procedures for data preparation, steps necessary to put transaction data into a form are usable for computer processing.

Main objectives that are to be met in the design are:

- Controlling the amounts of input
- Avoid inordinate delay
- Controlling errors

In the registration module, user can generate user information details, card details (card number, card name, and credit or debit card), the amount to purchase the Petro card, and requirement of Personal Identification Number (PIN).

In the Consumer module, consumer posts his complaints regarding Petro cards.

The complaints specified are Replacement of petro cards, correction of name, PIN unblocking, PIN activation or deactivation charges are made according to the complaints. Consumer also request for redemption through this module. The requests are made according to the consumption of petro miles.

The consumer can make online feedback. This is achieved in communication module. The feedback may be suggestion or complaints. These are passed as queries.

Consumer's wants to know more about the system or (if he wants) to clarify any doubts about the system, and then he can make use of frequently asked questions. The FAQ also has query facilities, through which the consumer can pass queries to BPCL.

DATA PREPARATION

Form number is unique and is automatically generated in serial order. Inputs are entered according to the type specified. For example if numeric is specified as type, then only the numeric value should be entered.

The Secondary reference associated with every form number is to be established while defining form number.

The primary reference is to establish which generally will be a secondary reference associated with one of the form number.

The serial number and the date are automatically generated in the complaint form, feedback form. The serial number is serial in order and it is starting from one.

DATA ENTRIES

In the registration module the data entered are consumer details, required petro card option and mode of the card (credit or debit).

In the complaint form the data such as type of complaints, consumer details, amount details, mode of the card (credit or debit) are the inputs.

In the redemption form, the consumer details and the reward item are given as the inputs. In this, reward item selection is a multiple option.

4.2 Output Design

Outputs from the computer systems are required primarily to communicate results of processing to users (including machine-based system) they are also used to provide 'Hard Copy' of the results for the later consultation.

Various types of output required by most systems are external output whose destination is outside.

Internal output whose destination is within the organization, which requires careful design. Interactive output which involve user in communication with the computer.

Name given to each data item should be record and its characteristics described clearly in standard form.

- Whether alphabetic or numeric
- Number of characters
- Position of decimal points

OUTPUT SPECIFICATION

The System developed will be successfully only if it generates the outputs in the required format, the petro card on online system has several screens for the purpose of providing the necessary information to the user.

Major components in output design are:

- Petro bonus programme information
- Reports

Reports are standard, some of the reports are

- Status report, which gives the current status of the corresponding consumer petro card.
- Transaction report, which gives the last ten transaction of the consumer made with the BPCL.

The petro card on online system is designed to provide a user friendly interface ,therefore the output is understandable even by a novice.

The reports generated by the system are simple and user specific.

Error messages make entry very interactive, the user is alert with error message during the data entry.

On executing the system, it prompts for userid and password .if the above matches the user is redirected to the main menu; only the authorized user is redirected to the main menu links to complaints, redemption, etc.

Some of the sample reports and enquiry forms are shown in Appendix B.

4.3 Database Design

Database design are crucial in managing the data received through the forms, the management of data involves both the definition of structures for storage of information for the mechanism of information.

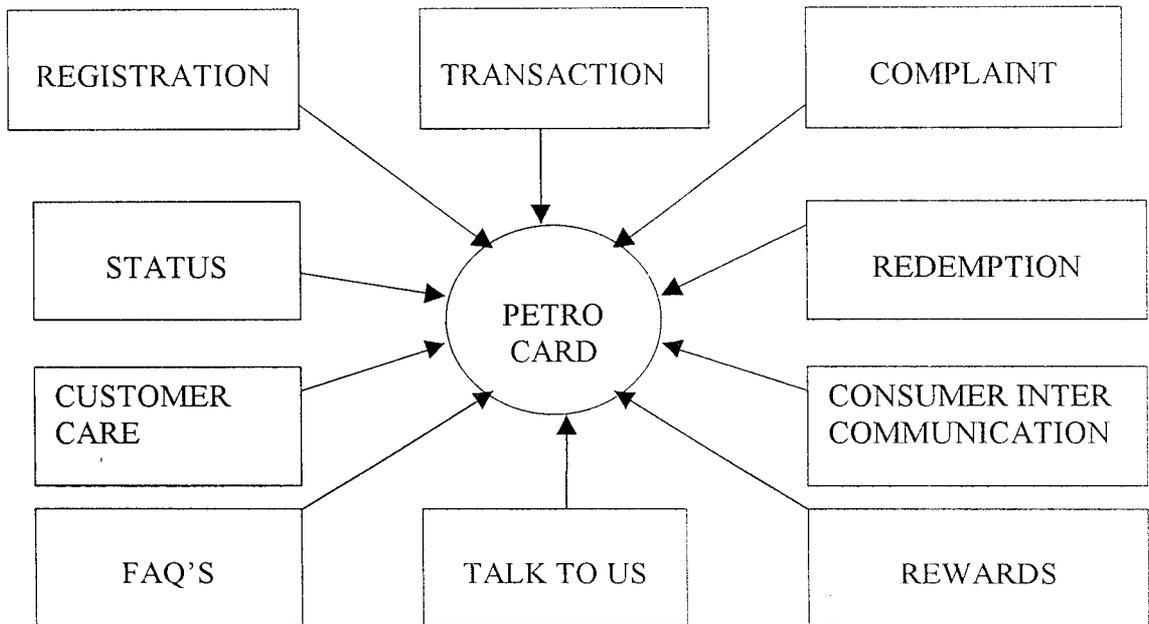
The database table used in the system in desired in Appendix A.

4.4 Process Design

The process design is defined as an ordered set of events that accomplishes some tasks required for a system. The events are actions, operations, or series of changes taking place in a definitive manner.

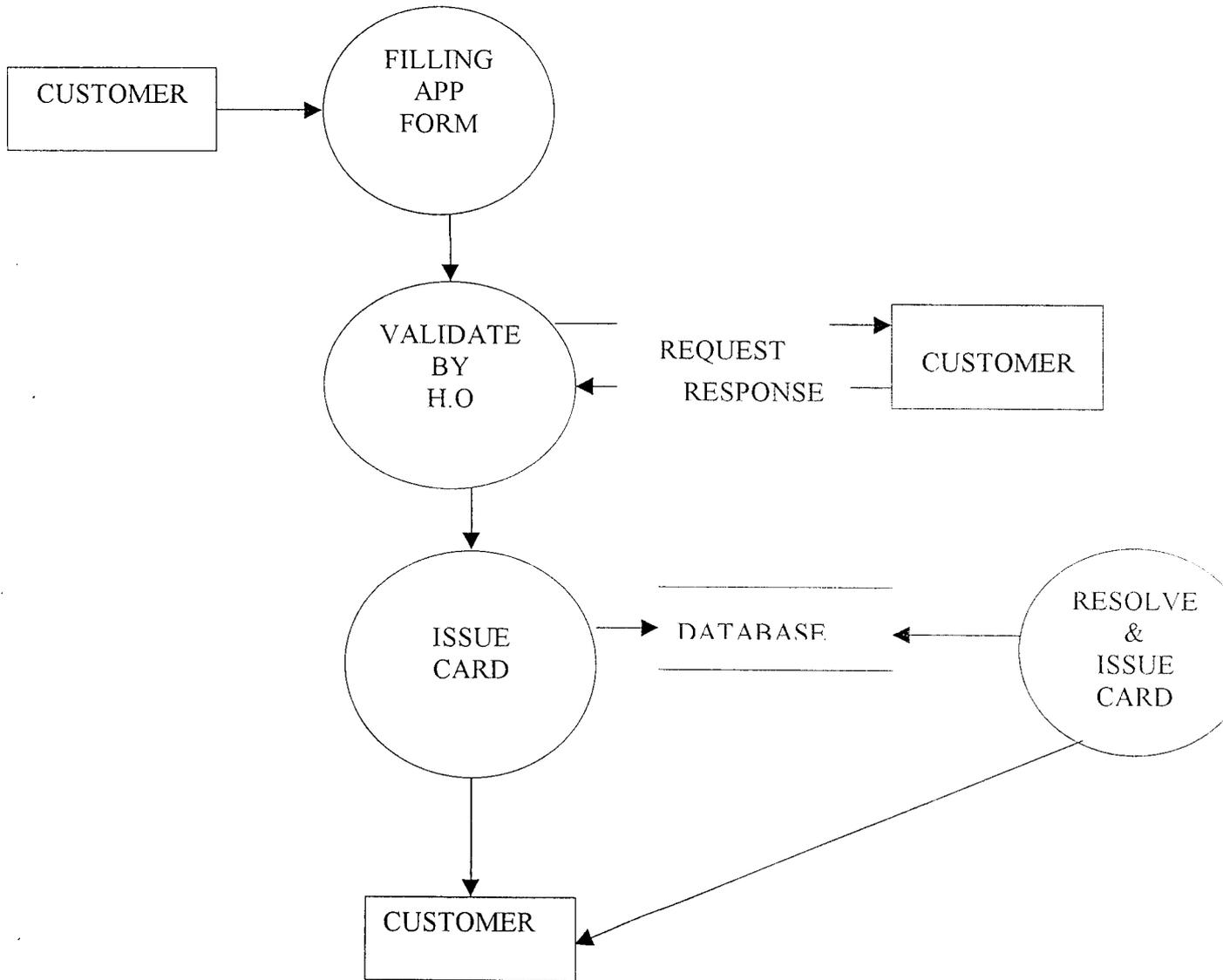
A DFD consists of numerous unit cells, which is defined to accomplish a specific task and is uniquely identified. Each cell has, required entry condition with inputs, task standards, procedures, methods, responsibilities and measures. Exit condition define the result produced, their levels of validation, and may post task condition.

OVERALL DFD



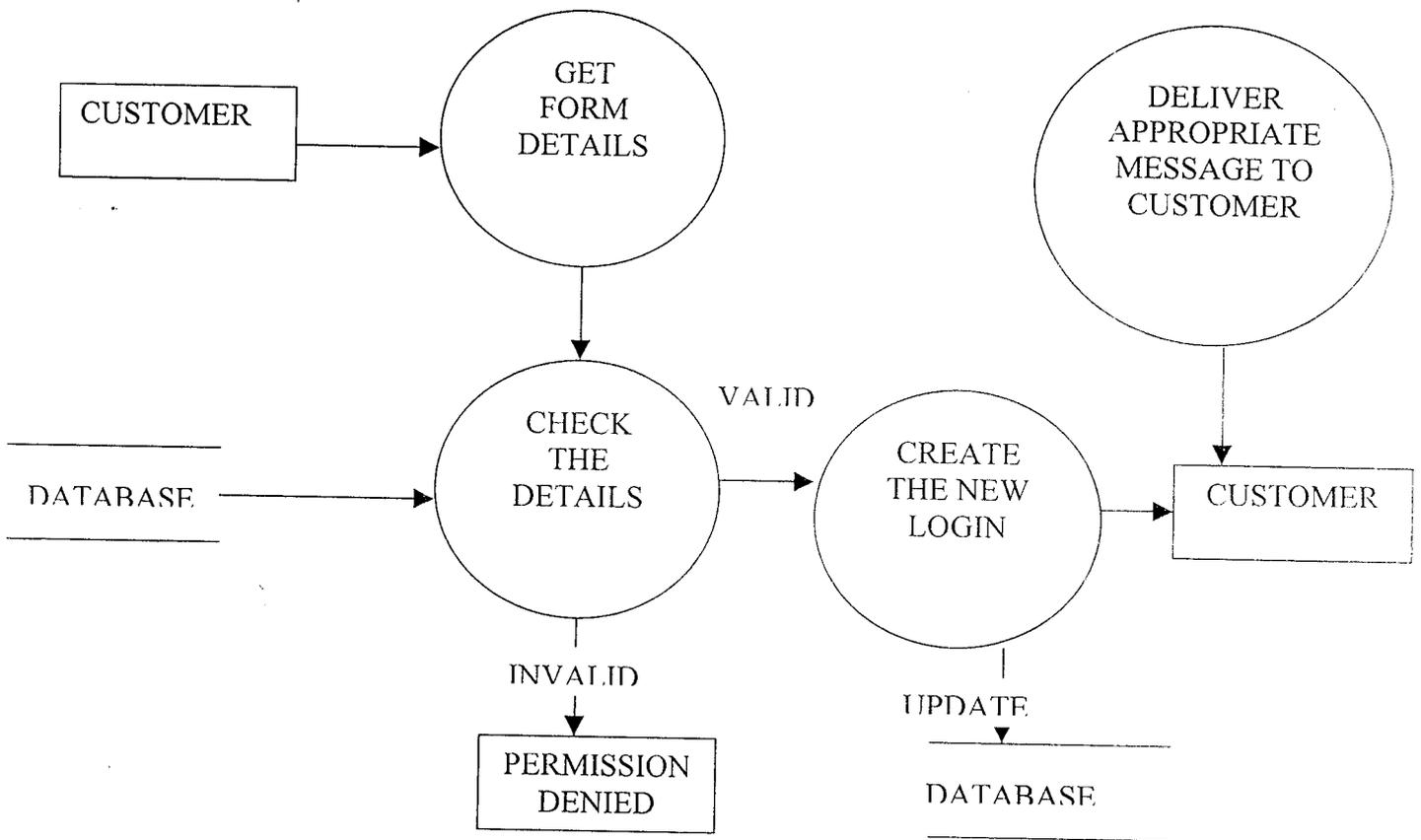
APPLICATION DETAILS

Registration is an online process for registering new user and to include them in petro bonus family.



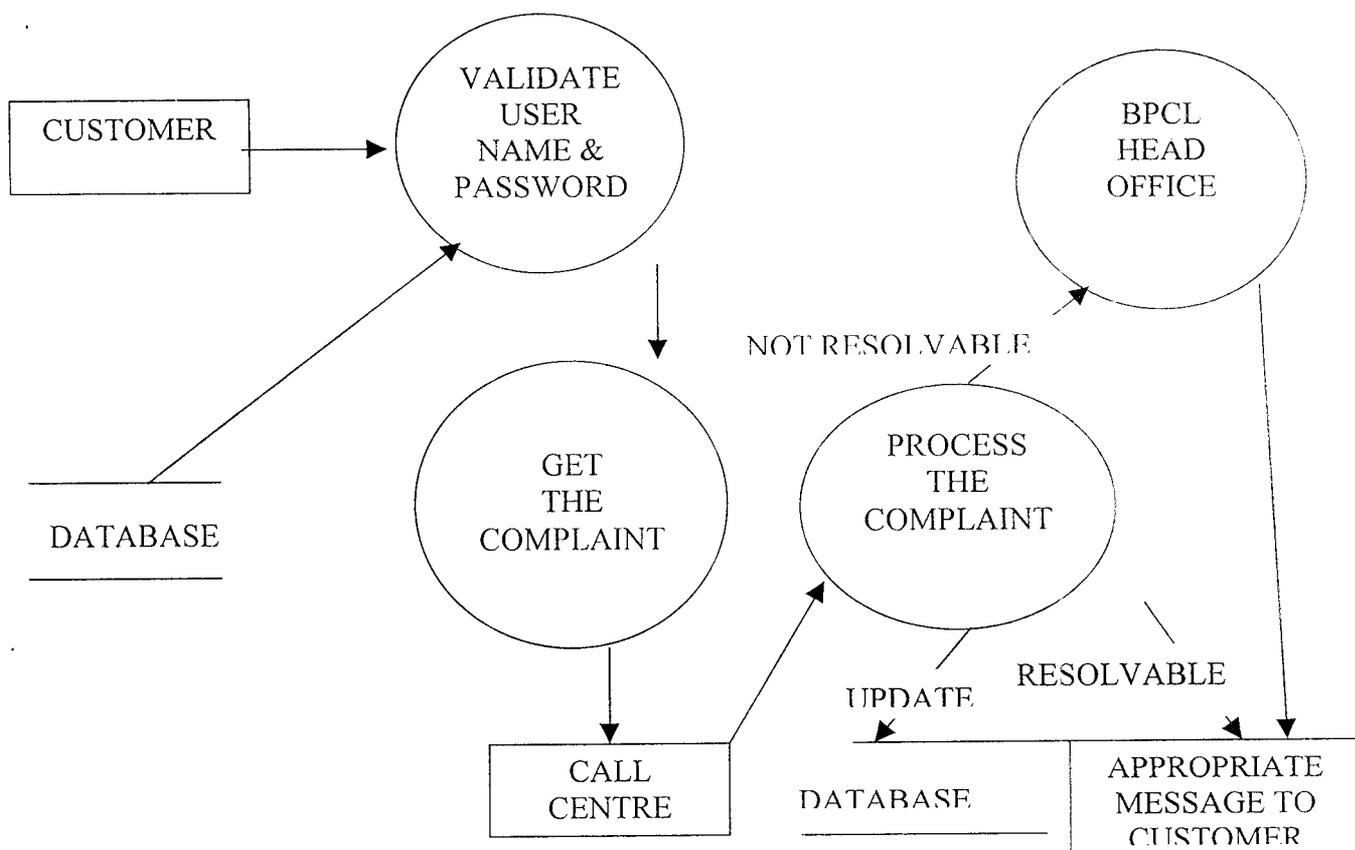
LOGIN DETAILS

The consumer can create his own member identification. Once the form is filled, it can be submitted to BPCL. BPCL grants membership by examining the form according to constraints.



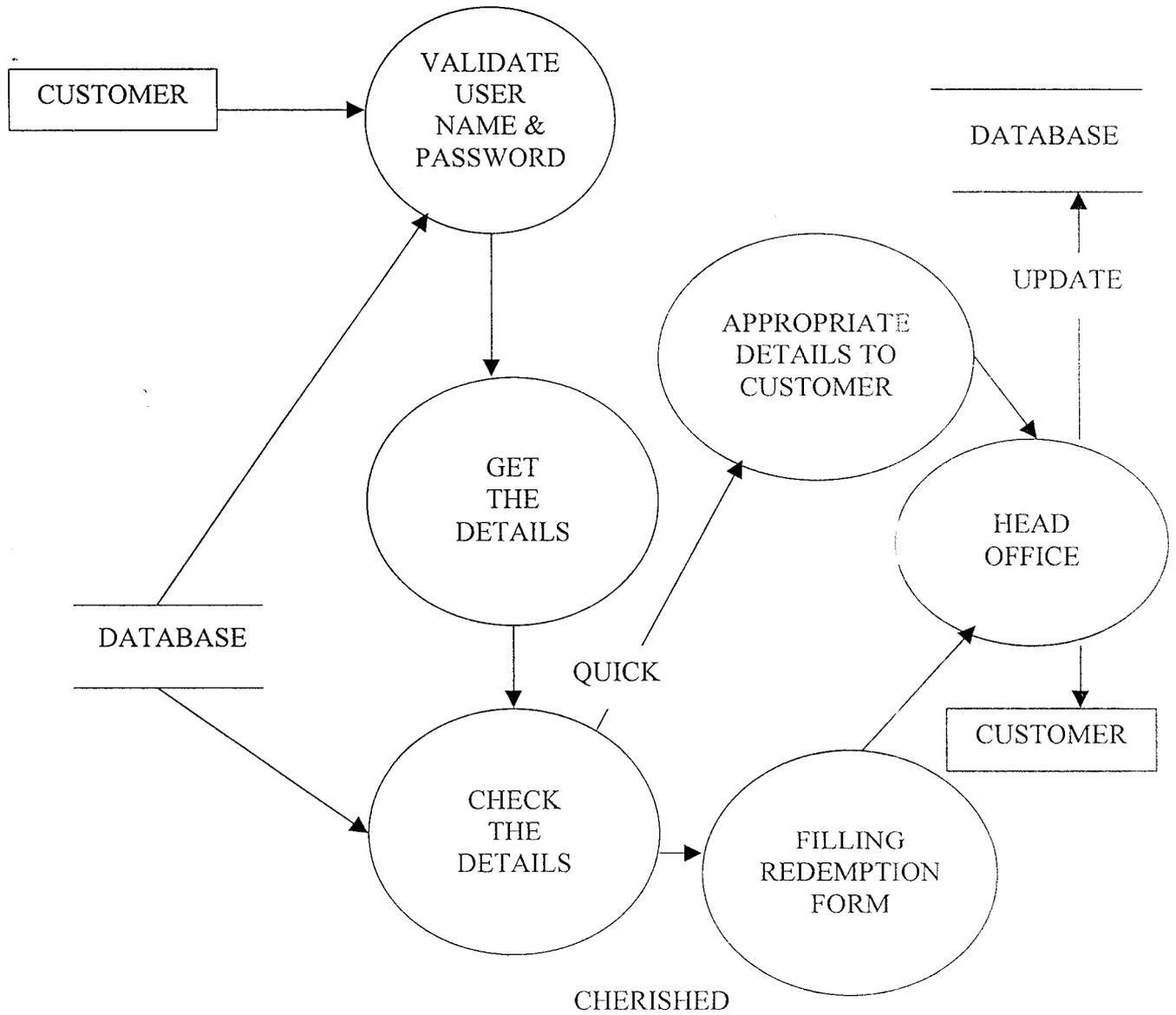
COMPLAINT DETAILS

The complaints specified are Replacement of petro cards, correction of name, PIN unblocking, PIN activation or deactivation charges are made according to the complaints.



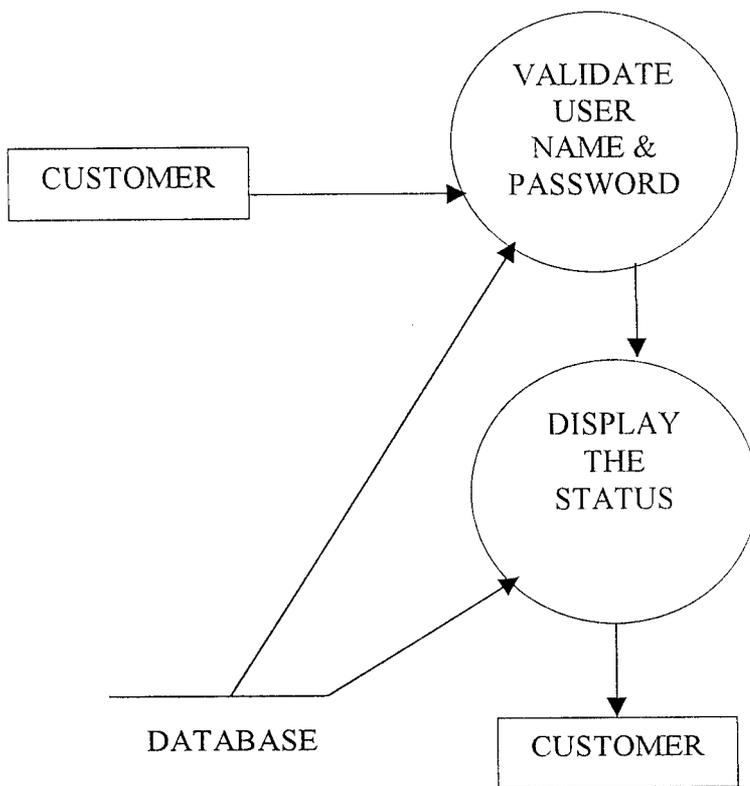
REDEMPTION DETAILS

Consumer makes a request to BPCL for rewards, through redemption form. This form includes consumer details, and the rewards offered by BPCL.



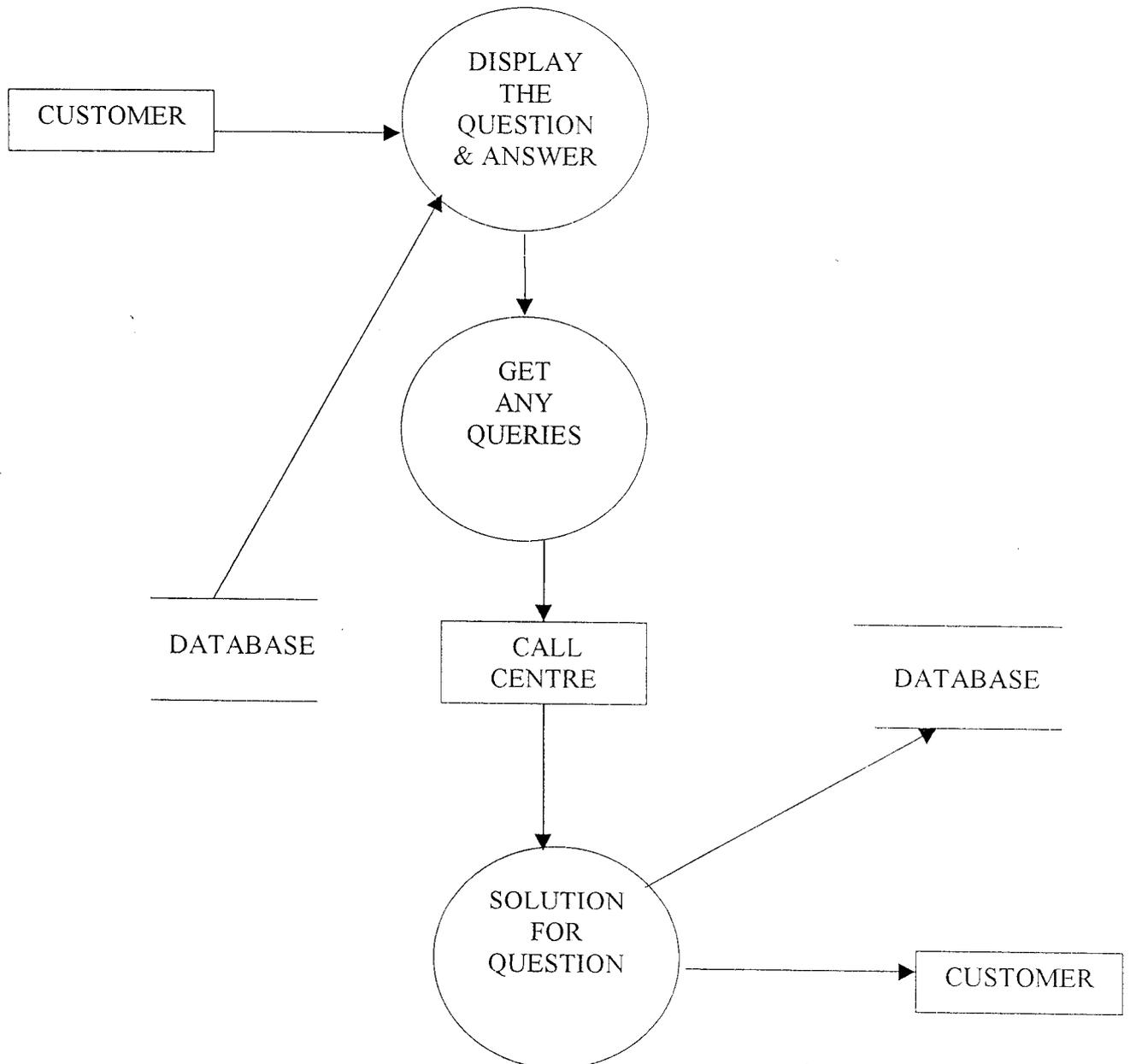
STATUS DETAILS

The status of consumer petrocard is generated by BPCL, and according to the request, it is directed to consumer.



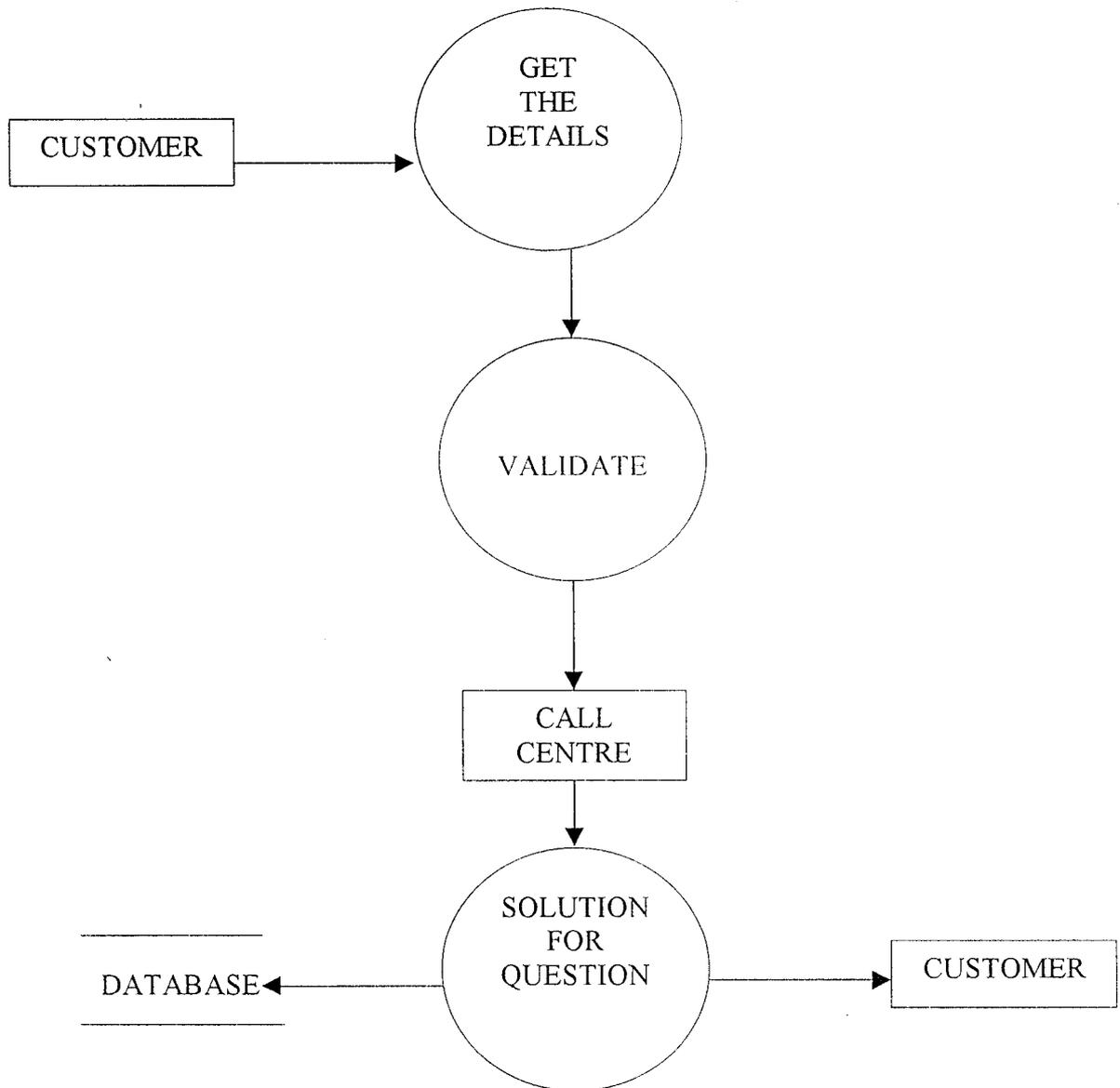
FAQ'S DETAILS

Consumer's wants to know more about the system or (if he wants) to clarify any doubts about the system, then he can make use of Frequently asked questions.



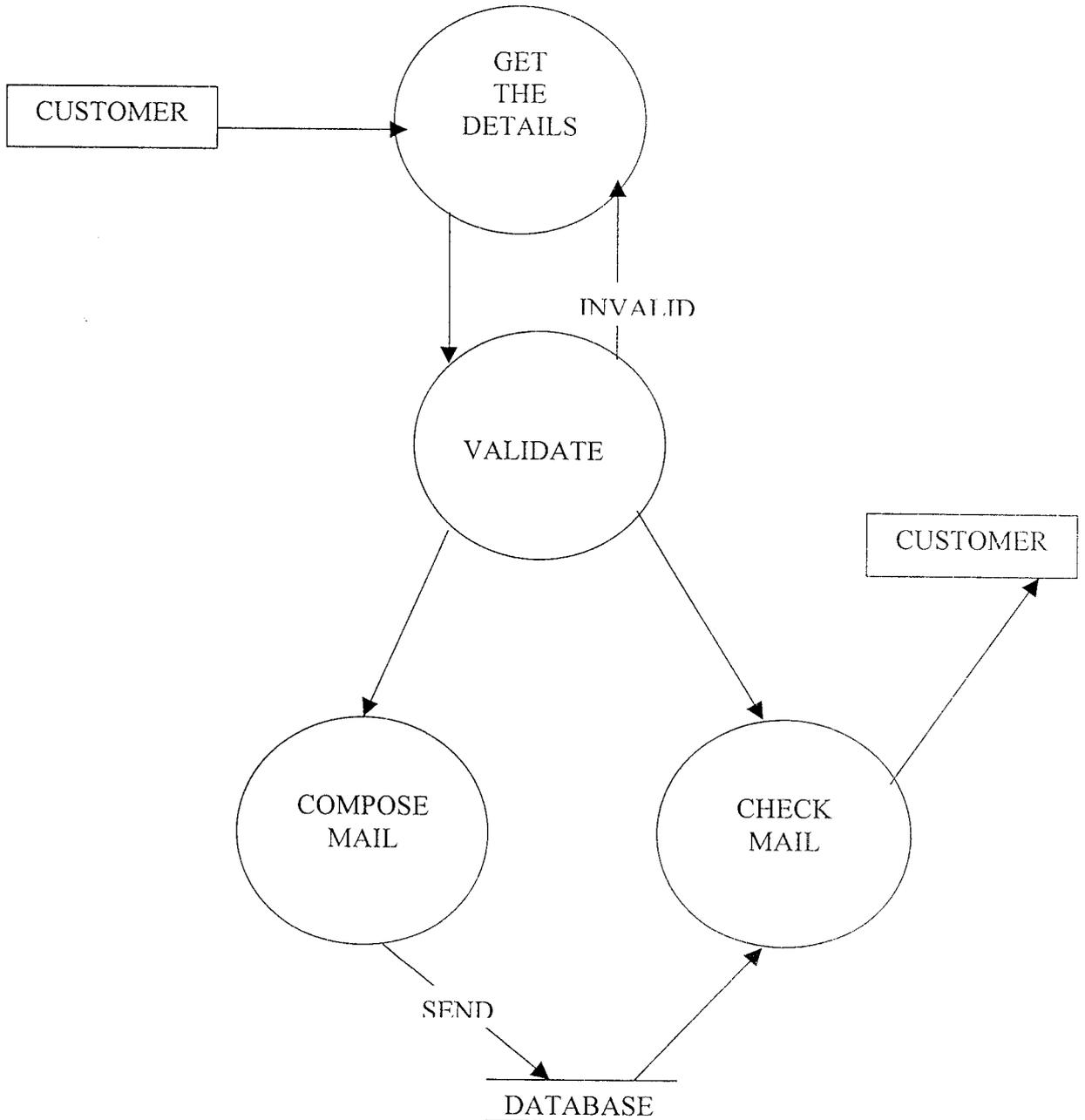
FEEDBACK DETAILS

The consumer can make online feedback. The feedback may be suggestion or complaints. These are passed as queries. The company authorities will overview this feedback and if they are meaningful, then the company will try to implement these suggestion and complaints made by consumer.

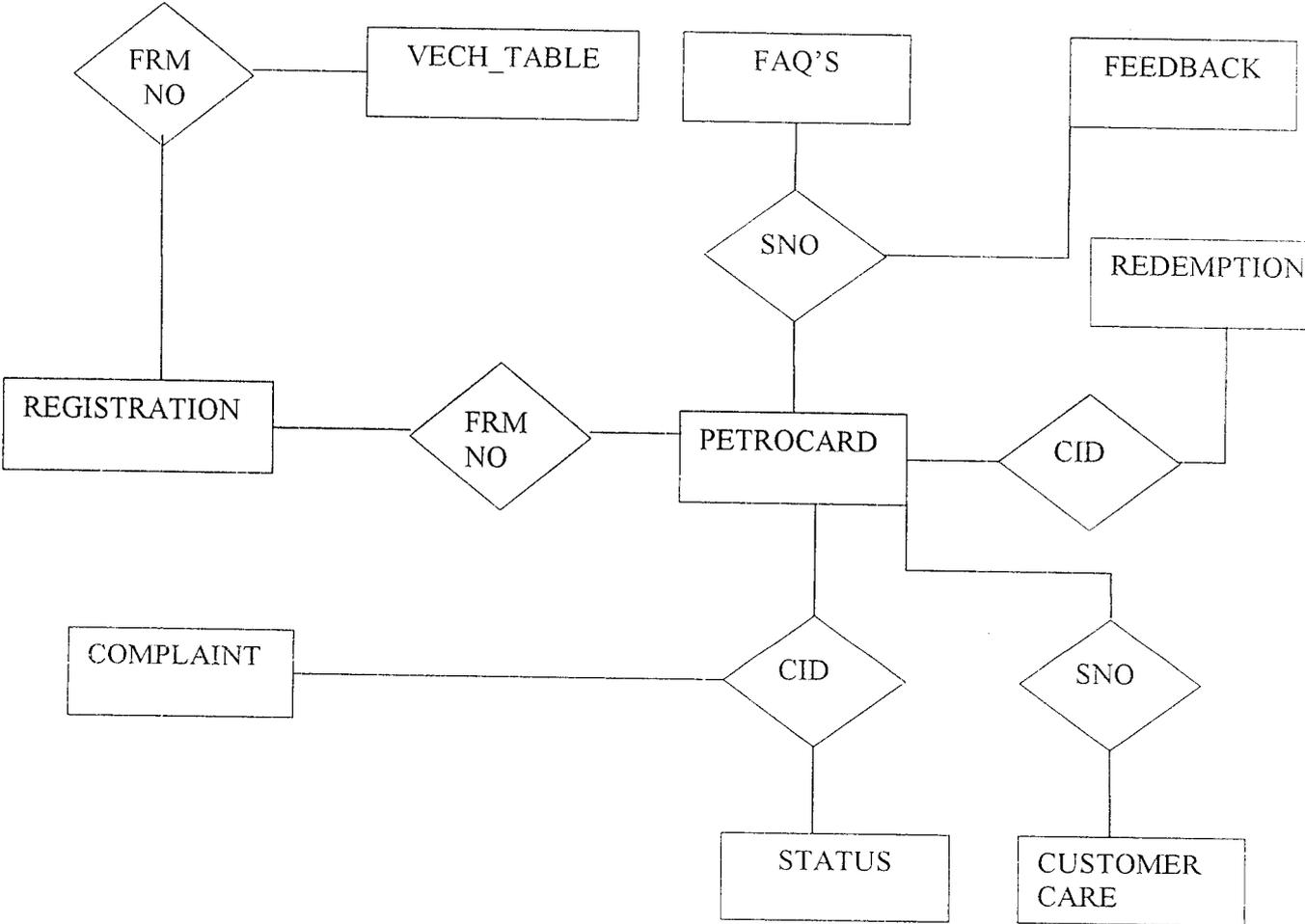


CONSUMER INTERCOMMUNICATION DETAILS

The consumers of petro bonus family can communicate to each other through the customer communication facilities enhanced with in the system. The communication is achieved through sending mails, receiving mails between the consumer and vice versa.



ENTITY RELATIONSHIP DIAGRAM



5. SYSTEM IMPLEMENTATION & TESTING

5.1 SYSTEM IMPLEMENTATION

Implementation is the stage of the project when the theoretical design is turned into a working system. At this stage the main workload, the upheaval and the major impact on the existing practice shifts of the user department. If the implementation stage is not carefully planned and controlled, it can cause chaos. Thus it can be considered to be the most crucial stage in achieving a new successful system and in giving the users confidence that the new system will work and be effective.

Implementation involves careful planning, investigation of the current system and its constraints on implementation, design of methods to achieve the changeover, training of staff in the changeover procedures and evaluation of changeover methods. The first task is implementation planning, i.e., deciding on the methods and time scale to be adopted.

Once the planning has been completed, the major effort in the computer department is to ensure that the programs in the system are working properly. At the same time the user department must concentrate on training user staff. When the staff has been trained, a full system test can be carried out, involving both the computer and clerical procedures.

Education involves creating the right atmosphere and motivation the user. Staff education section encourages participation from all sides.

The theoretical design is turned into a working system by uploading the system in the internet.

Registration is an online process for registering new user and to include them in petro bonus family. Internet is the predominant mode used for Online Registration.

The new user fills up the registration form, which includes user information details , card details (card number , card name , credit or debit card) , the amount to purchase the Petro card , and Requirement of Personal Identification Number (PIN) .

After filling the registration form, the user submits the same. The concerned authority of Bharat Petroleum Corporation Limited will validate the form. If all constraints are satisfied, the

card will be issued to the user. Otherwise, the authorities will communicate with the consumer to resolve the problem exist in the form. After resolving the problem the card will be issued to the user. Once the card is issued the particular transactions is updated in the centralized database.

To become a member of petro bonus family, the user can get into the new user form, issued by the BPCL.

The consumer can create his own member identification. Once the form is filled, it can be submitted to BPCL. BPCL grants membership by examining the form according to constraints.

Then user can access the details of his Petro card in online and he can complaint the defects happened in the Petro card through online.

The consumer accumulates the complaints, regarding the petro card. There is a separate complaint form, through which the consumer can specify his complaints.

The complaints specified are Replacement of petro cards, correction of name, PIN unblocking, PIN activation or deactivation charges are made according to the complaints.

Whenever the card gets damaged or its expiry date reached, the petro card can be replaced. For the chip corruption in the card there is no charges are made and company replaces the chip in the petro card.

Correction of name can be made according to consumer need. The personal Identification Number (PIN) can be unblocked and can be activated or deactivated by the consumer. Charges for the complaints can be done through either credit or debit card of the consumer.

Consumer makes a request to BPCL for rewards, through redemption form. This form includes consumer details, and the rewards offered by BPCL.

The form is automatically validated, and if criteria match, the rewards are awarded and the corresponding petro mile is deducted from petro card. If criteria does not matches, BPCL makes corresponding response to consumer.

The status of consumer petrocard is generated by BPCL, and according to the request, it is directed to consumer.

The status of the consumer petro card includes consumer details, petro card details such as date of issue of petro card, expiry date of petro card, PIN enabled or not .it inform the status whether petrocard is issued or not. Finally balance amount in the petro card and number of petro miles in card

Whenever consumer makes a transaction in BPCL petrol station or BPCL In & Outlet stores, its full information is updated in consumer database.

The transaction includes the petrol station information and consumer details such as transaction type (diesel, petrol, lube etc.), amount spent, loyalty earned, date & time of transaction. The consumer can view his last ten transaction details.

The communication between the consumer and BPCL can be achieved through this system. The communication is totally online. Rewards, Talk to Us, customer care and FAQ's are some modes through which the user can communicate with BPCL.

Rewards mode includes rewards show case, Redemption centers, Terms and conditions, and the Redemption process. The rewards that are offered to consumer by BPCL are listed in reward showcase.

This module gives information about the location of the redemption centers of BPCL all over India. If consumer needs to view any information about redemption center, he can choose the particular center according to his convenience.

The terms and conditions belonging to BPCL are displayed. This will be useful for consumer to know about the company's terms and conditions. Terms and conditions includes accrual of petromiles, Benefits and privileges and information about RCI holidays.

Accrual of petromiles described information about how to earn petro points. The consumer can view benefits and privileges offered by the BPCL.

The consumer can make online feedback. The feedback may be suggestion or complaints. These are passed as queries. The company authorities will overview this feedback and if they are meaningful, then the company will try to implement these suggestion and complaints made by consumer.

Help line facilities are also available. These Help line facilities are useful for communicating with BPCL.

Customer care gives some tips about how to prevent the accidents, road safety tips, antitheft tips, and tips about maintenance of vehicle.

Consumer's wants to know more about the system or (if he wants) to clarify any doubts about the system, then he can make use of Frequently Asked Questions. The FAQ also has query facilities, through which the consumer can pass queries to BPCL. The authorities of a particular department will view those queries, and response to consumer by answering these queries either through e-mail or post.

The consumers of petro bonus family can communicate to each other through the customer communication facilities enhanced with in the system. The communication is achieved through sending mails, receiving mails between the consumer and vice versa.

5.2 SYSTEM TESTING

A strategy for software testing integrates software test case design techniques into a well-planned series of steps that result in the successful construction of software. As importantly, a software testing strategy provides a road map for software developer, the quality assurance organization, and the customer a roadmap that describes the steps to be conducted as a part of testing. When these steps are planned and then undertaken and how much effort, time and resources will be required.

In many ways testing is an individualistic and the number of different types are tests varies as much as different development approaches. And hence testing considered as a set of activities that can be planned in advance and conducted systematically. Software testing is one element of a broader topic that is often referred to as verification and validation. Verification refers to the set of activities that ensure that the software correctly implements a specific function. Validation refers to a different set of activities that ensures that the software has been built is traceable to customer requirements.

Purpose of Testing:

- To attain the quality of the product
- To find and eliminate any residual errors from previous stages.
- To demonstrate the presence of all specified functions in the product.
- To validate the software as a solution to the original problem.

Black Box Testing:-

Black Box Testing focus on the fundamental requirements of software and on the input and output of module. It enables the software engineer to derive sets of input conditions that will truly exercise all functional requirements of a program. Black box testing, rather a contemporary approach that is likely to uncover different class of errors. It attempts to find that errors in the following category.

- Errors in database structure and database access.
- Incorrect and missing functions.
- Performance errors.
- Initialization and termination errors.

White Box Testing: -

White box testing is a test case design method that uses control structure of the procedural design to drive test cases. Using white box testing method, software engineer can test cases that,

- Exercise all logical decisions on their 'true' or 'false' sides.
- Guarantee that all independent paths with a module have been exercised at least once.
- Exercise internal data structure to ensure validity.
- Execute all loops at their boundaries and their operational bounds.

Unit Testing: -

Unit testing focuses verification effort on these smallest of software design modules. Using the detailed 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 errors detected as a result is limited by the constraint scope established for unit testing. The unit testing is always white box oriented, and the step can be conducted in parallel for multiple modules. The module interface is tested can ensure that information properly flows in it and out of the program unit under test. Boundary conditions are tested to ensure that the module operates properly at boundaries established to limit or restrict processing. Unit testing is normally considered on adjunct to coding steps. After source code has been developed, reviewed and verified for correct syntax, unit test case design begins.

In this system, the unit test has performed in following modules that are registration module, consumer module and the communication module. The information flow has been tested; the module operates properly at boundaries.

The registration form in the registration module will be complete, if and only if all the details entered in the form satisfies the constraints specified already.

System Testing: -

System testing is a series of different tests whose 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.

There are four different types of system testing.

- Recovery Testing
- Security Testing
- Stress Testing
- Performance Testing

Recovery Testing: -

Many compiler-based systems must recover from faults and resume processing within pre-specified time. Recovery testing is a system test that forces the software to fail in a variety of ways and verifies that recovery is properly performed. In this system, the data transactions cannot be lost; the system will automatically recover from improper operations such as power failure, high network traffic.

Security Testing:

Security testing attempts to verify that protection mechanisms built into a system will, in fact protect it from improper penetration. The system security must be tested for invulnerability from frontal attack.

In this System each user has their own login id and password. In this system every user has the highest-level security. Encoding and session tracking achieve the security of the system.

6. CONCLUSION

The complete design and development of the system '**PETRO CARD ON ONLINE**' is presented in this dissertation. A good amount of user-friendly features have been incorporated in this system and it is possible for any user to exploit these features to get the maximum benefit.

The programming techniques used in the design of the system provide a scope for further expansion and implementation of any changes, which may occur in future. The various reports generated by the system have provided to be quite useful.

The system has been tested with sample data covering all possible options for each function. Its performance is satisfactory. The system is under implementation.

This system is developed with the specifications and abiding by the existing rules and regulations of the company.

Since the requirements of any organization and their standards are changing day to day the system has been designed in such a way that its scope and boundaries could be expanded in future with little modifications. As a further enhancement this system can be integrated with any other system.

This package has been developed using ASP for designing phase and ORACLE 8 for storage of data. The main aim behind the development of this package is to provide a comprehensive solution that is capable of handling and meeting the company's stated and implied requirements.

7. FUTURE ENHANCEMENT

This project is suited for the Online Registration, sending Complaints regarding petro card, Redemption to consumer, Accessing all the details about Petro Card of Bharat Petroleum Corporation Limited. In future the petro card may be in need for recharging through on line. Similarly, the company needs may change day by day. This system is very flexible for any enhancement in future

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APPENDICES

A.DATA DICTIONARY

Registration Table:

This table structure is used to store all the details about consumer who Registering for Petro Card.

| S.No | Field Name | Type | Length | Constraints | Description |
|------|-------------|---------|--------|-------------|--------------------------------|
| 1 | Form_no | Number | 10 | Primary Key | Form number |
| 2 | Name_app | Varchar | 25 | | Name of Applicant |
| 3 | Title | Varchar | 5 | | Title |
| 4 | Name_app_c | Varchar | 25 | | Name of Applicant in card |
| 5 | Sex | Varchar | 1 | | Sex |
| 6 | D O B | Date | 8 | | Date of Birth |
| 7 | Addr | Varchar | 50 | | Address |
| 8 | City | Varchar | 15 | | City |
| 9 | Pin_code | Number | 6 | | Pin code |
| 10 | Telephone | Number | 10 | | Telephone Number |
| 11 | Mobile | Number | 10 | | Mobile Number |
| 12 | S_provider | Number | 10 | | Service provider |
| 13 | E_Mail | Varchar | 50 | | E-Mail ID |
| 14 | Occup | Varchar | 20 | | Occupation |
| 15 | Name_comp | Varchar | 30 | | Name of company |
| 16 | Design | Varchar | 10 | | Designation |
| 17 | Card_type | Varchar | 15 | | Credit/Debit Card type |
| 18 | C_name | Varchar | 25 | | Credit/Debit Card Name |
| 19 | C_no | Number | 16 | | Credit/Debit Card Number |
| 20 | Expiry_date | Date | 8 | | Expiry date |
| 21 | Pin | Varchar | 1 | | Personal Identification Number |
| 22 | P O B | Varchar | 20 | | Place Of Birth |
| 23 | M M Name | Varchar | 20 | | Mother's Maiden Name |
| 24 | Place | Varchar | 20 | | Place |
| 25 | Date1 | Date | 8 | | Date |
| 26 | Amt | Number | 3 | | Amount |

Compliant Table

This table structure is used to store all the complaints details regarding Petro Card.

| S.No | Field Name | Type | Length | Constraints | Description |
|------|------------|---------|--------|-------------|--------------------------|
| 1 | cid | Varchar | 10 | Foreign Key | Consumer ID |
| 2. | Sno | Number | 10 | Primary Key | Serial Number |
| 3. | Date1 | Date | 8 | | Date |
| 4. | Comp | Varchar | 10 | | Compliant |
| 5. | D_o_r | Date | 8 | | Date of Reporting |
| 6. | T_o_r | Varchar | 6 | | Time of Reporting |
| 7. | Amt_card | Number | 5 | | Amount on Card |
| 8. | P_card | Number | 5 | | PetroMiles on Card |
| 9. | C_type | Varchar | 20 | | Credit/Debit Card Type |
| 10. | C_name | Varchar | 20 | | Credit/Debit Card Name |
| 11. | C_no | Number | 16 | | Credit/Debit Card Number |
| 12. | Amt | Number | 3 | | Amount |
| 13. | Exp_date | Date | 8 | | Expiry Date |

Feedback Table:

This table structure is used to store all the feedback about services provided by the company.

| S.No | Field Name | Type | Length | Constraints | Description |
|------|------------|---------|--------|-------------|---------------|
| 1 | Sno | Varchar | 10 | Foreign Key | Serial Number |
| 2. | Type | Number | 15 | | Feedback Type |
| 3. | Feedback | Varchar | 150 | | Feedback |
| 4. | Name | Varchar | 25 | | Name |
| 5. | Addr | Varchar | 50 | | Address |
| 6. | City | Varchar | 20 | | City |
| 7. | State | Varchar | 20 | | State |

Item Table:

The company uses this table structure to display all the Petro Bonus rewards offered.

| S.No | Field Name | Type | Length | Constraints | Description |
|------|-------------|---------|--------|-------------|-------------|
| 1 | Itemcode | Number | 10 | Primary Key | Item Code |
| 2. | Reward-name | Varchar | 30 | | Reward Name |
| 3. | Petromiles | Number | 8 | | PetroMiles |

Login Table:

This table structure is used to create new user ID and this table is used to access the petro Card features.

| S.No | Field Name | Type | Length | Constraints | Description |
|------|------------|---------|--------|-------------|-----------------|
| 1 | Login name | Varchar | 25 | | Login Name |
| 2. | C_id | Varchar | 10 | Primary Key | Consumer ID |
| 3. | Pass | Varchar | 25 | | Password |
| 4. | Form_no | Number | 10 | | Form Number |
| 5. | Email | Varchar | 50 | | E-Mail ID |
| 6. | S_question | Varchar | 25 | | Secret Question |
| 7. | S_answer | Varchar | 10 | | Secret Answer |

Message Table:

This table structure is used to store all the details about consumer Intercommunication.

| S.No | Field Name | Type | Length | Constraints | Description |
|------|------------|---------|--------|-------------|--------------|
| 1 | To | Varchar | 25 | | To Address |
| 2. | From | Varchar | 25 | | From Address |
| 3. | Date | Date | 8 | | Date |
| 4. | Time | Varchar | 8 | | Time |
| 5. | Subject | Varchar | 25 | | Subject |
| 6. | Message | Varchar | 250 | | Message |
| 7. | Messageid | Varchar | 10 | | Message ID |

POQ Table:

This table structure is used to store all the questions posted by the consumer.

| S.No | Field Name | Type | Length | Constraints | Description |
|------|------------|---------|--------|-------------|---------------|
| 1 | Sno | Number | 10 | Primary Key | Serial Number |
| 2. | Type | Varchar | 10 | | Type |
| 3. | Query | Varchar | 50 | | Query |
| 4. | Name | Varchar | 25 | | Name |
| 5. | Address | Varchar | 50 | | Address |
| 6. | City | Varchar | 20 | | City |
| 7. | State | Varchar | 20 | | State |
| 8. | email | Varchar | 50 | | E-Mail ID |

Redemption Table:

This table structure is used to store the details of procurement of consumer.

| S.No | Field Name | Type | Length | Constraints | Description |
|------|------------------|---------|--------|-------------|----------------------|
| 1 | C_id | Varchar | 10 | Foreign Key | Consumer ID |
| 2. | Item_code | Number | 5 | Foreign Key | Item Code |
| 3. | No_o_petro miles | Number | 8 | | Number Of PetroMiles |
| 4. | Date | Date | 8 | | Date |

Status Table:

This table structure is used to show all the status of consumer about Petro Card.

| S.No | Field Name | Type | Length | Constraints | Description |
|------|-------------|---------|--------|-------------|------------------|
| 1. | C_id | Varchar | 10 | Foreign Key | Consumer ID |
| 2. | Form_no | Varchar | 10 | Foreign Key | Form Number |
| 3. | C_no | Number | 16 | | PetroCard Number |
| 4. | Issue_date | Date | 8 | | Issue Date |
| 5. | Pin_enabled | Varchar | 1 | | Pin Enabled |
| 6. | Exp_date | Date | 8 | | Expiry Date |
| 7. | Status | Varchar | 10 | | Status |
| 8. | Amt_card | Number | 5 | | Amount on Card |
| 9. | Petro_miles | Number | 8 | | PetroMiles |

Petrol Station Master Table:

This table structure is used to store all the details about petro pumps.

| S.No | Field Name | Type | Length | Constraints | Description |
|------|------------|---------|--------|-------------|------------------|
| 1. | Bunk_id | Varchar | 10 | Primary Key | Bunk ID |
| 2. | Bunk_name | Varchar | 25 | | Bunk Name |
| 3. | Addr | Varchar | 50 | | Address |
| 4. | City | Varchar | 20 | | City |
| 5. | State | Varchar | 20 | | State |
| 6. | Telephone | Number | 15 | | Telephone Number |

Transaction of Customer Table:

This table structure is used to store all the details about consumer transaction with Petrol pumps.

| S.No | Field Name | Type | Length | Constraints | Description |
|------|----------------|---------|--------|-------------|------------------|
| 1. | C_id | Varchar | 10 | Foreign Key | Consumer ID |
| 2. | B_id | Varchar | 10 | Foreign Key | Bunk ID |
| 3. | Trans_type | Varchar | 20 | | Transaction Type |
| 4. | Amount | Number | 5 | | Amount |
| 5. | Loyalty_earned | Number | 8 | | Loyalty Earned |
| 6. | Date | Date | 8 | | Date |
| 7. | Time | Varchar | 8 | | Time |

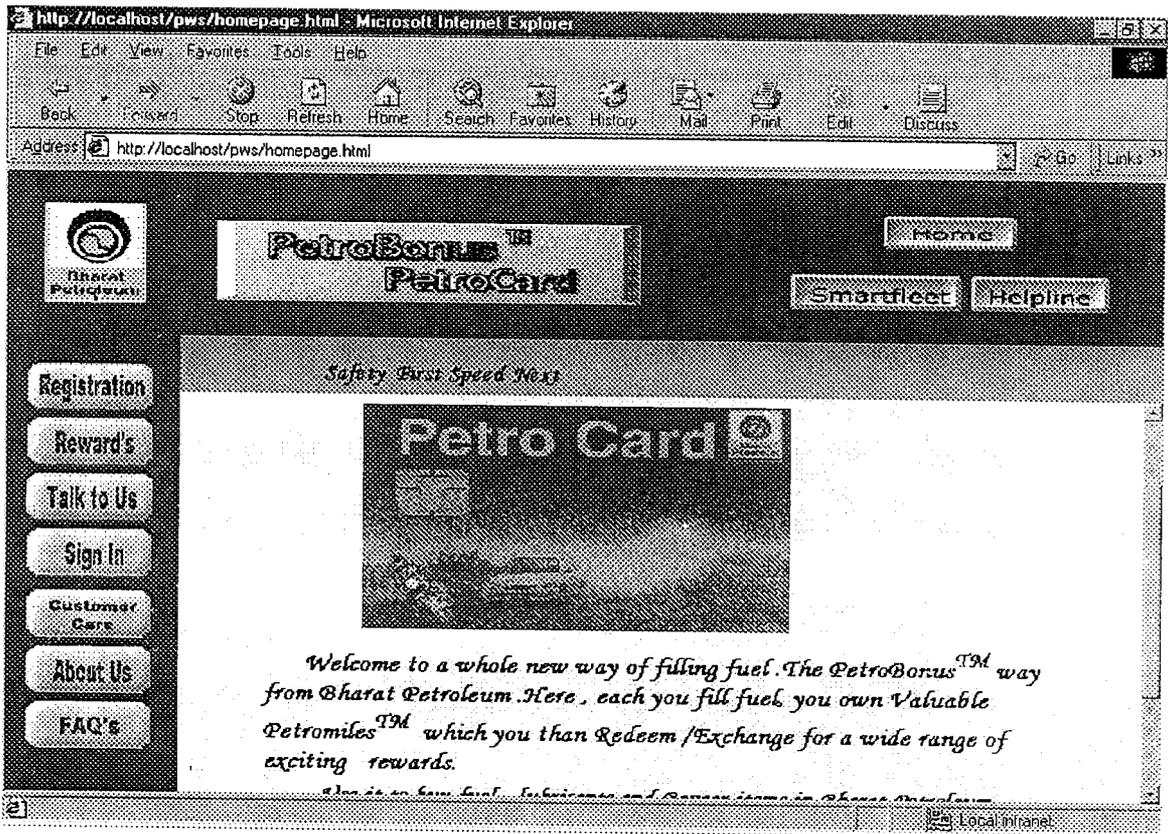
Vehicle Table:

This table structure is used to store all the details about consumer's vehicle who Registering for Petro Card.

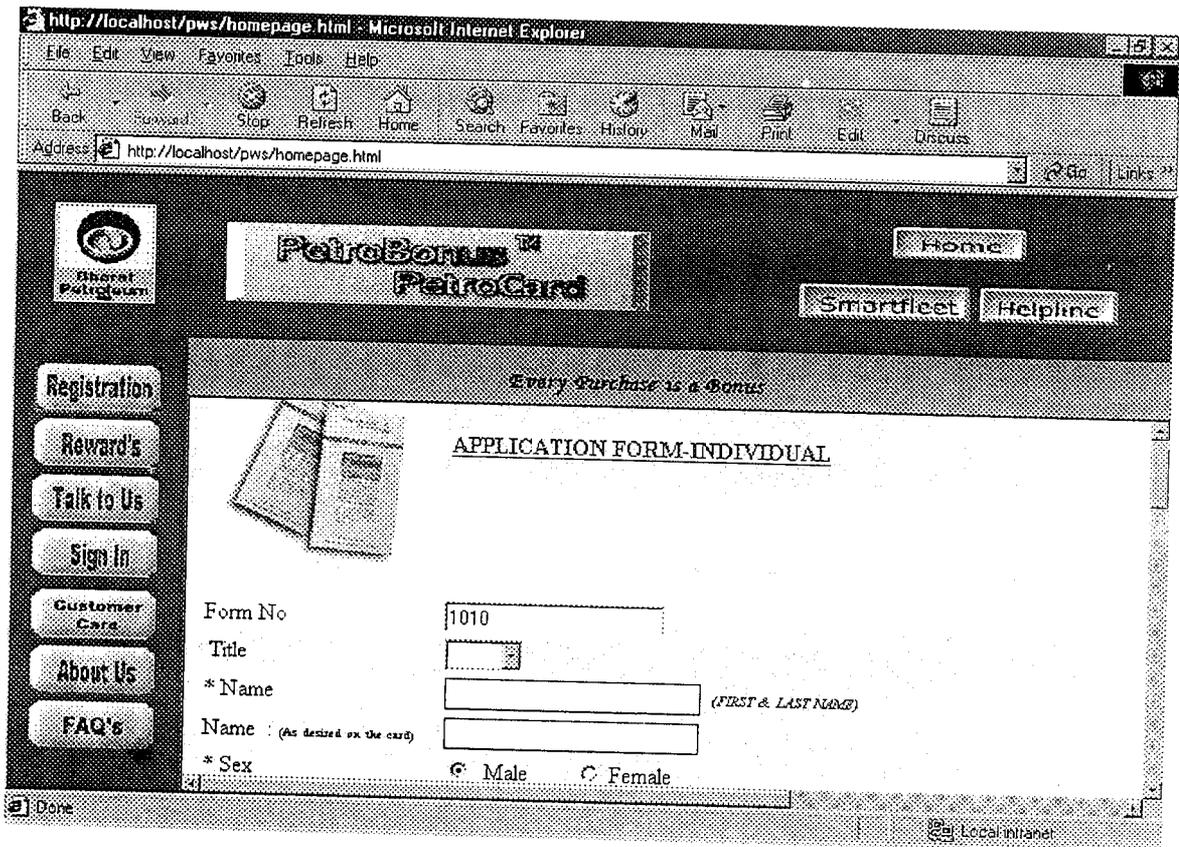
| S.No | Field Name | Type | Length | Constraints | Description |
|------|------------|---------|--------|-------------|-------------------|
| 1. | Form_no | Varchar | 10 | Foreign Key | Form Number |
| 2. | V_type | Number | 2 | | Vehicle Type |
| 3. | No_v | Number | 2 | | Number of Vehicle |
| 4. | V_brand | Varchar | 25 | | Vehicle Brand |
| 5. | Lube used | Varchar | 25 | | Lube Used |

B. Screens

Home Page



Registration Form



http://localhost/pws/homepage.html - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Discuss

Address: http://localhost/pws/homepage.html

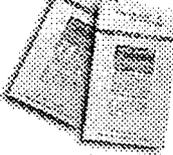
Home Smartfleet Helpine

Registration Reward's Talk to Us Sign In Customer Card About Us FAQ's

PetroBonus™
PetroCard

Every Purchase is a Bonus

APPLICATION FORM-INDIVIDUAL



Form No: 1010

Title:

* Name: (FIRST & LAST NAME)

Name: (As desired on the card)

* Sex: Male Female

Done Local intranet

Registration Form

http://localhost/pws/homepage.html - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Discuss

Address http://localhost/pws/homepage.html Go Links

PetroBONUS TM
PetroCard

HOME Smartfleet Helpline

Registration
Reward's
Talk to Us
Sign In
Customer Care
About Us
FAQ's

Safety First Speed Next

* Date Of Birth JAN 1950
DP MM YYYY

* Address

* City

* Pin code

Telephone Mobile

Service Provider e-mail address

Occupation Name of Company

Designation

Done Local Intranet

Registration Form

http://localhost/pws/homepage.html - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Discuss

Address: http://localhost/pws/homepage.html

 **PetroBonus™** **PetroCard** [Home](#) [Smartfleet](#) [Helpline](#)

Safety First Speed Next

Registration
Reward's
Talk to Us
Sign In
Customer Care
About Us
FAQ's

Details of vehicles owned

| Type | No. of vehicles owned | Vehicle Brand | Lubricants used |
|--------------|-----------------------|----------------------|-----------------------------------------|
| Two wheeler | <input type="text"/> | <input type="text"/> | <input type="text" value="Super Kool"/> |
| Four wheeler | <input type="text"/> | <input type="text"/> | <input type="text" value="Super Kool"/> |

*Choose your Card *Enter the Card Name

*Credit Card /Debit Card Number *Amount

Done Local Intranet

Registration Form

http://localhost/pws/homepage.html - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Discuss

Address http://localhost/pws/homepage.html

 **PetroBONUS™** **PetroCard** [HOME](#) [Smartfleet](#) [Helpline](#)

Registration **Reward's** **Talk to Us** **Sign In** **Customer Care** **About Us** **FAQ'S**

Safety First Speed Next

* Expiry Date JAN 1950
MM YYYY

* Personal Identification Number (PIN) requirement for Petro Card Yes No

* Unique Identifiers for Petro Card:

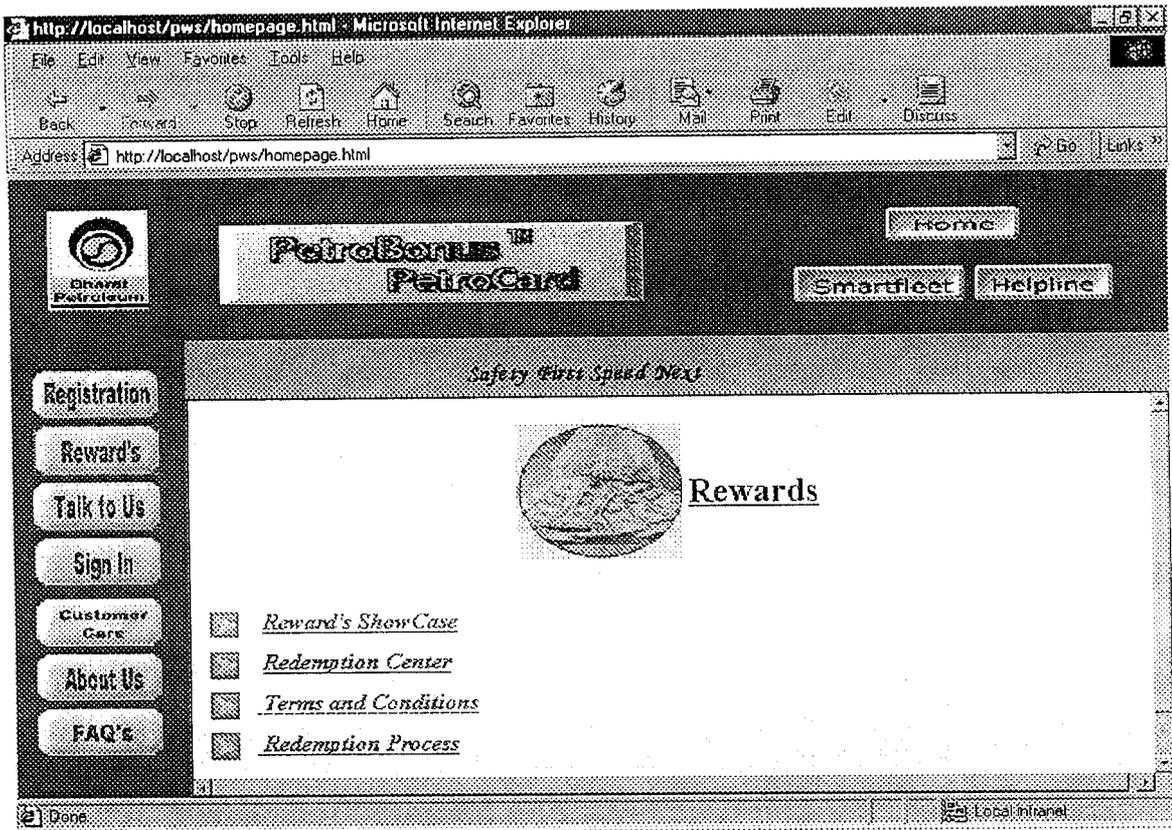
*a) Place of Birth

*b) Mother's maiden name

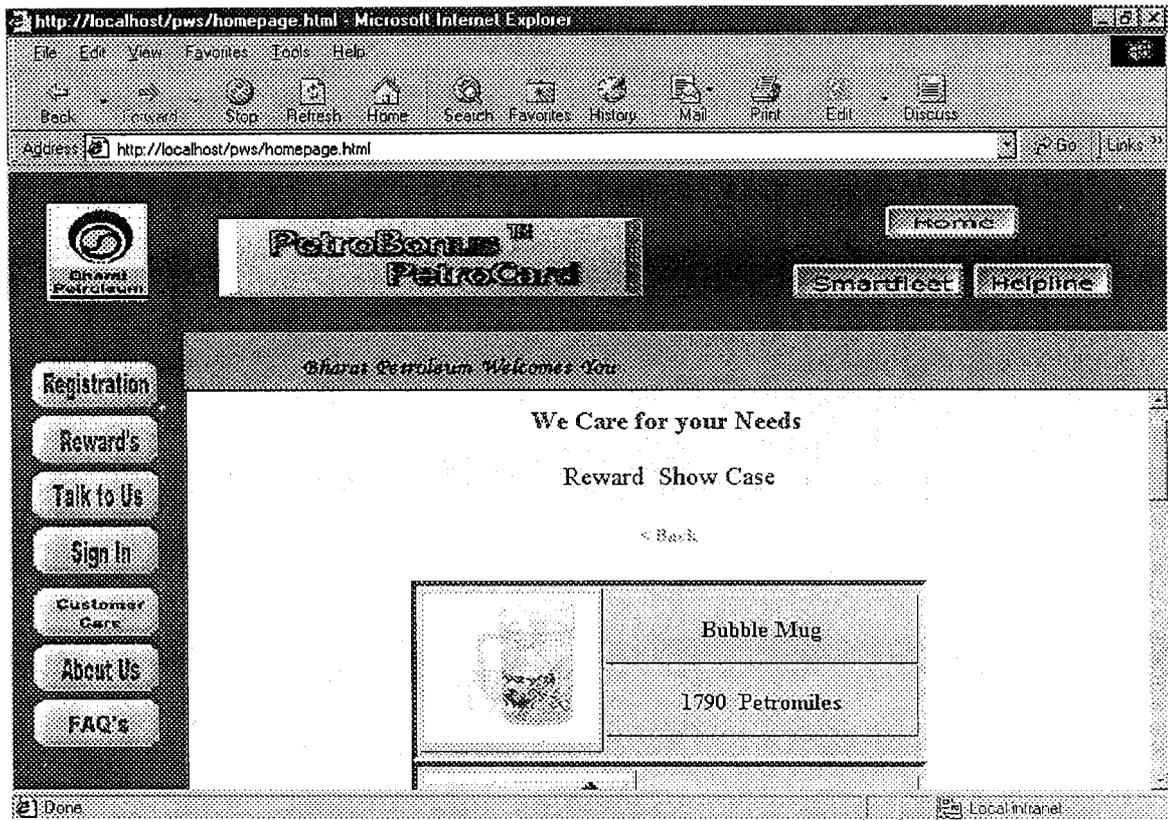
I declare that I have read the terms and Conditions mentioned and I agree that by using the Petro Card I accept the same. The Information provided on the application is correct and true to the best of my knowledge and any misrepresentation of the same will amount to termination of the card.

Done Local Intranet

Rewards



Reward showcase



Redemption Center

http://localhost/pws/homepage.html - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Discuss

Address http://localhost/pws/homepage.html Go Links

PetroBonus TM PetroCard Home Smartfleet Helpline

Safety First Speed Next

Registration Reward's Talk to Us Sign In Customer Care About Us FAQ's

Select the City to Know the Redemption Center

Chennai

Click Here

< Back

Local intranet

Redemption Center

The screenshot shows a Microsoft Internet Explorer browser window displaying a web page for the PetroBonus PetroCard Chennai redemption center. The browser's address bar shows the URL `http://localhost/pws/homepage.html`. The page features a dark header with the PetroBonus PetroCard logo and navigation buttons for Home, Smartfleet, and Helpline. A sidebar on the left contains buttons for Registration, Reward's, Talk to Us, Sign In, Customer Care, About Us, and FAQ's. The main content area is titled "Chennai" and lists several agencies: M/s. V.S. Subramania Chetty, 14 Rajaji Salai; Radha Agencies, G.S. T. Road; Ekayars, 23, Venkatanarayana Road; Elite Petrol Service, No. 27, Cathedral Road; Sarathy Agencies, Adjacent To Malar Hospital; Lokesh Agencies, 92, Arcot Road; Bharat Petroleum Corp Ltd(COCO), 32-A, Anna Nagar, Western Extn; and Pauls Auto Services, 15, College Road. The browser's status bar at the bottom indicates "Done" and "Local intranet".

PetroBonusTM PetroCard

Home Smartfleet Helpline

Safety First Speed Next

Chennai

Registration
Reward's
Talk to Us
Sign In
Customer Care
About Us
FAQ's

M/s. V.S. Subramania Chetty, 14 Rajaji Salai.
Radha Agencies, G.S. T. Road.
Ekayars, 23, Venkatanarayana Road.
Elite Petrol Service, No. 27, Cathedral Road.
Sarathy Agencies, Adjacent To Malar Hospital.
Lokesh Agencies, 92, Arcot Road.]
Bharat Petroleum Corp Ltd(COCO) , 32-A, Anna Nagar, Western Extn. Pauls Auto Services, 15, College Road.

Done Local intranet

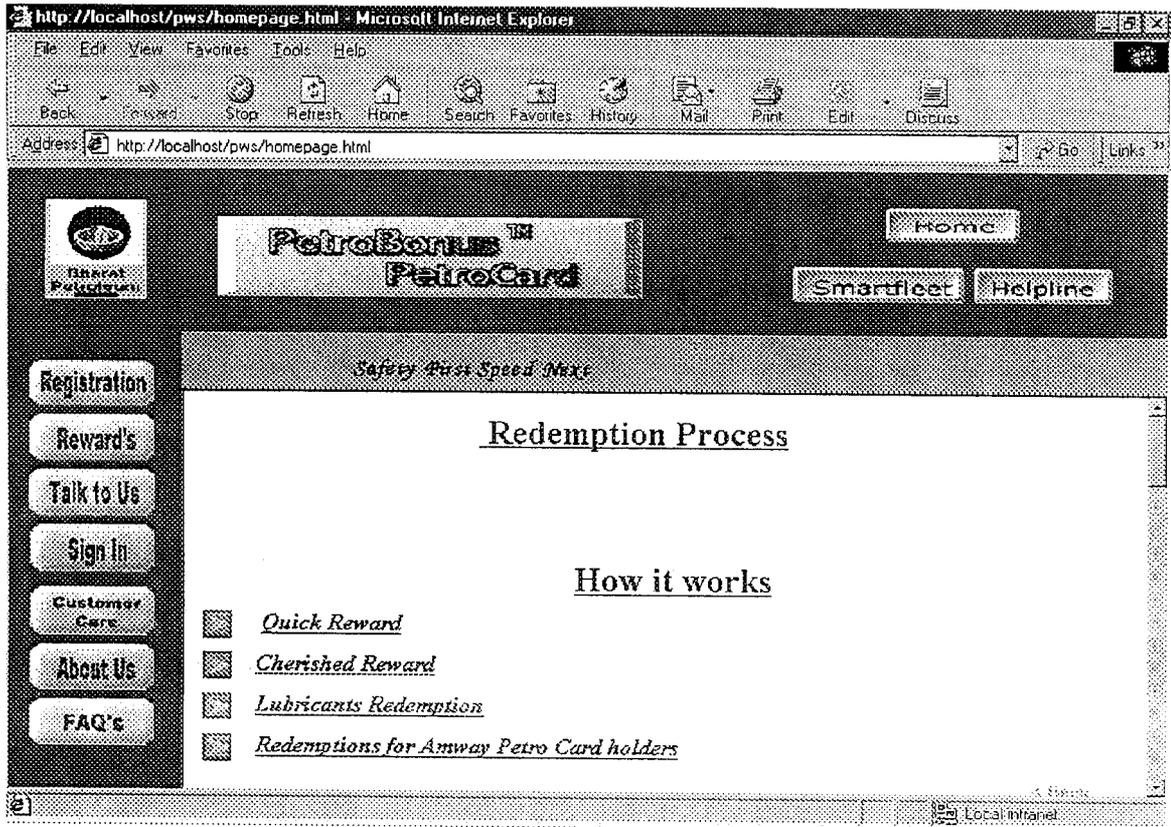
Terms and conditions

The screenshot shows a Microsoft Internet Explorer browser window displaying the 'Terms & Conditions' page for the PetroBonus PetroCard program. The browser's address bar shows 'http://localhost/pws/terms.html#aa'. The page features a dark header with the 'Ghazal Petroleum' logo on the left, the 'PetroBonus PetroCard' logo in the center, and navigation buttons for 'Home', 'Smartfleet', and 'Helpline' on the right. Below the header, a grey banner reads 'Ghazal Petroleum Welcomes You'. The main content area is white and contains the title 'Terms & Conditions' followed by a list of links: 'Terms and Conditions', 'Accrual of Petromiles', 'Benefits & Privileges', and 'For RCI Holidays'. A vertical sidebar on the left contains buttons for 'Registration', 'Reward's', 'Talk to Us', 'Sign In', 'Customer Care', 'About Us', and 'FAQ's'. The status bar at the bottom indicates 'Local intranet'.

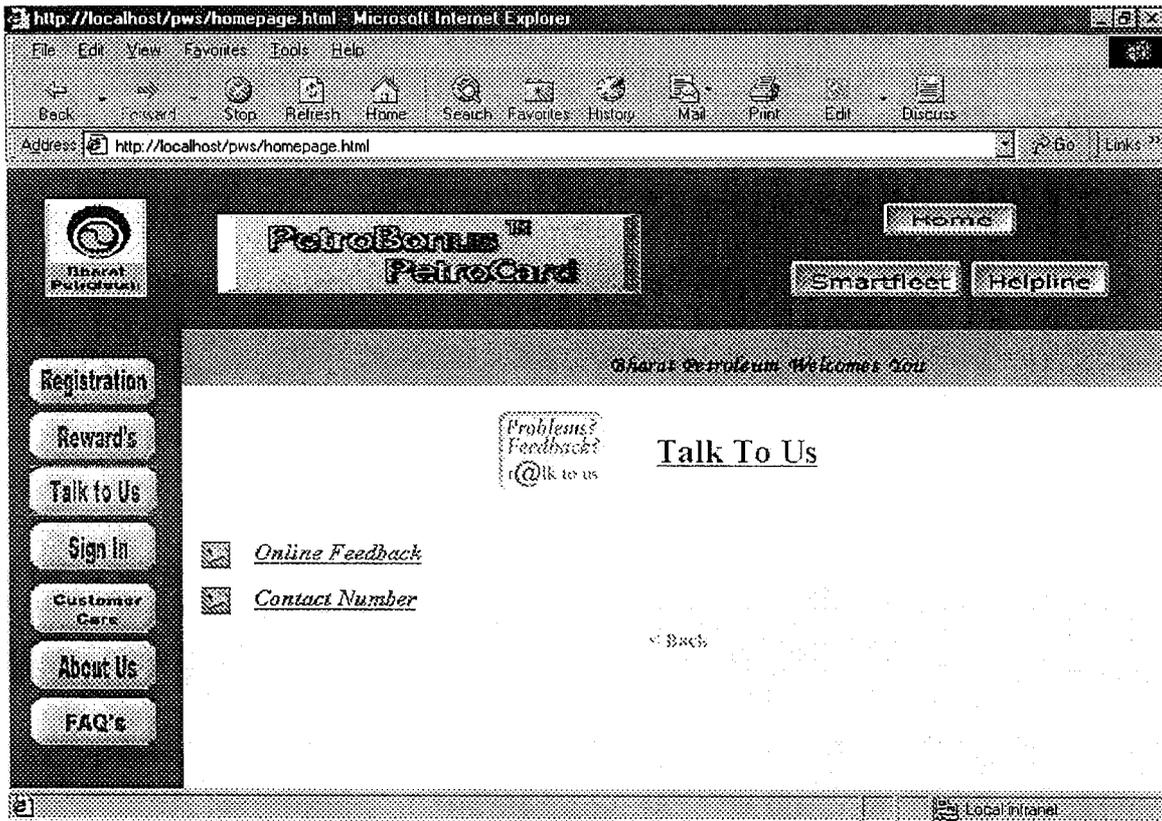
http://localhost/pws/terms.html#aa

Local intranet

Redemption Process



Talk To Us



Feedback Form

The image shows a screenshot of a Microsoft Internet Explorer browser window displaying a feedback form. The browser's address bar shows the URL `http://localhost/pws/homepage.html`. The page header includes the Dhara Petroleum logo, the text "PetroBonus PetroCard", and navigation links for "Home", "Smartfleet", and "Helpline". A sidebar on the left contains buttons for "Registration", "Reward's", "Talk to Us", "Sign In", "Customer Care", "About Us", and "FAQ's". The main content area is titled "Feedback Form" and contains the following fields:

- Feedback Type:** A dropdown menu with "Suggestion" selected.
- Feedback:** A large text input area.
- Personal Details:**
 - Name:** A text input field.
 - Address:** A text input field.

The browser's status bar at the bottom shows "Done" and "Local intranet".

Help line Form

The screenshot shows a Microsoft Internet Explorer browser window displaying the PetroBonus website. The address bar shows 'http://localhost/pws/homepage.html'. The website header includes the PetroBonus logo, navigation buttons for 'Home', 'Smartfleet', and 'Helpline', and a slogan 'Every Purchase is a Bonus'. A left sidebar contains buttons for 'Registration', 'Reward's', 'Talk to Us', 'Sign In', 'Customer Card', 'About Us', and 'FAQ's'. The main content area is titled 'Helpline Numbers' and lists contact numbers for various cities: Ahmedabad (2677 6097), Bangalore (2212 4125), Chennai (2822 4467), Delhi (2341 4217), Hyderabad (5562 7263), Kolkata (2217 1957), Mumbai (2674 8013), and Pune (2400 3901). A universal number 1901 115100 is also provided. The browser status bar at the bottom shows 'Done' and 'Local intranet'.

| City | Phone Number |
|-----------|--------------|
| Ahmedabad | 2677 6097 |
| Bangalore | 2212 4125 |
| Chennai | 2822 4467 |
| Delhi | 2341 4217 |
| Hyderabad | 5562 7263 |
| Kolkata | 2217 1957 |
| Mumbai | 2674 8013 |
| Pune | 2400 3901 |

Login Screen

http://localhost/pws/homepage.html - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Discuss

Address: http://localhost/pws/homepage.html

PetroBonus
PetroCard

Home Smartfleet Helpline

Registration
Reward's
Talk to Us
Sign In
Customer Care
About Us
FAQ's

Shant Petroleum Welcomes You

Enter the following details to view your PetroBonus Page

Login Name

Login ID

Password

Submit Reset

[New Sign Up](#) [Forgot Password](#)

Done Local intranet

New Consumer Creation

The screenshot shows a Microsoft Internet Explorer browser window displaying the PetroBonus PetroCard website. The address bar shows the URL `http://localhost/pws/homepage.html`. The browser's menu bar includes File, Edit, View, Favorites, Tools, and Help. The toolbar contains icons for Back, Forward, Stop, Refresh, Home, Search, Favorites, History, Mail, Print, Edit, and Discard. The address bar also includes a search box and a Go button.

The website header features the PetroBonus PetroCard logo on the left, a navigation menu with buttons for Home, Smartfleet, and Helpline on the right, and a slogan "Safety First Speed Next" in the center. A vertical sidebar on the left contains buttons for Registration, Reward's, Talk to Us, Sign In, Customer Care, About Us, and FAQ's.

The main content area is titled "Login ID Creation Form" and contains the following text: "Enter the following details to create the new login id and become the member of the petrocard on online. The following information should be correct and valid information." Below this text are four input fields labeled "Form No", "Login Name", "Login ID", "Password", and "Re-type Password".

At the bottom of the form area, there is a section labeled "Personal Details :".

The browser's status bar at the bottom shows "Done" on the left and "Local intranet" on the right.

New Consumer Creation

http://localhost/pws/homepage.html - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Discuss

Address: http://localhost/pws/homepage.html

Home Smartfleet Helpline

PetroBonus
PetroCard

Every Purchase is a Bonus

Registration

Reward's

Talk to Us

Sign In

Customer Care

About Us

FAQ's

Personal Details :

Email

Select the secret question
(This secret question will help when you forgot your password)

Write an answer for your secret question

Contact Information :

Address

City

Pin code

Telephone No

Done Local Intranet

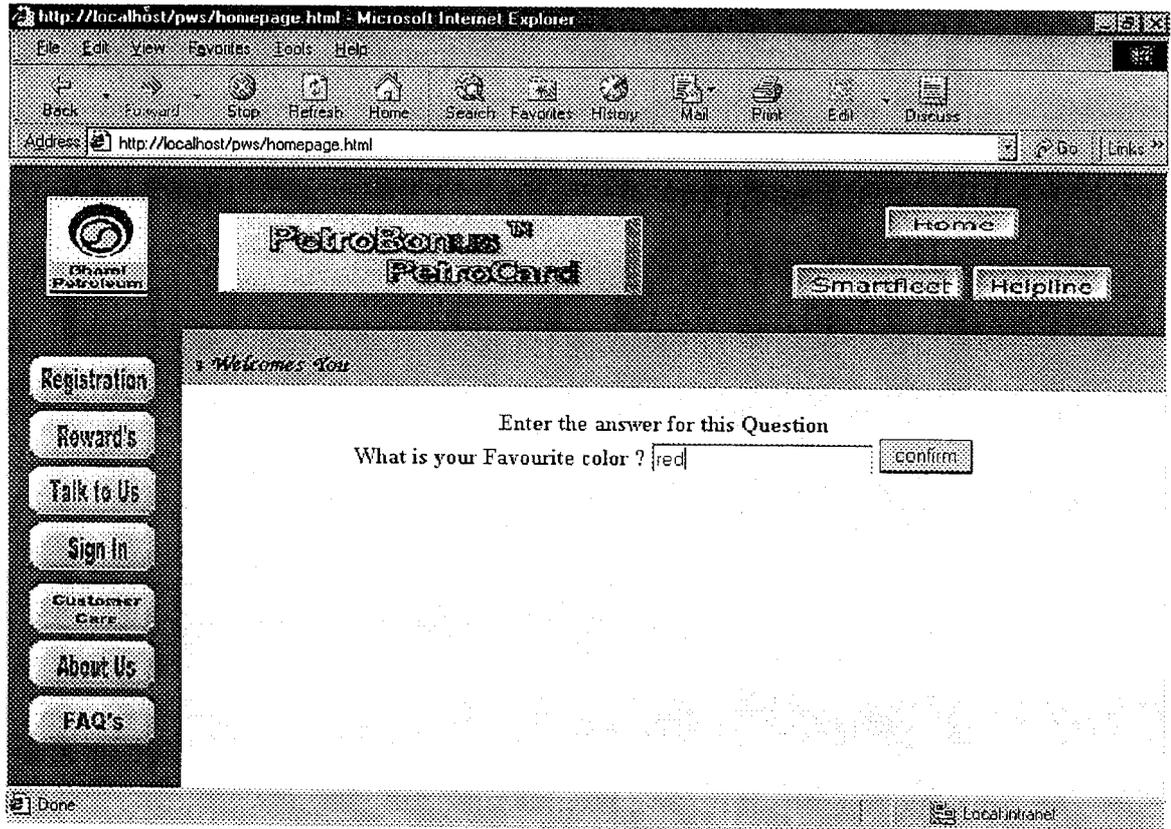
Forgot Password

The screenshot shows a Microsoft Internet Explorer browser window displaying the PetroBonus website. The address bar shows 'http://localhost/pws/homepage.html'. The website header includes the PetroBonus logo, navigation buttons for Home, Smartfleet, and Helpline, and a slogan 'Safety First Speed Next'. A sidebar on the left contains buttons for Registration, Reward's, Talk to Us, Sign In, Customer Care, About Us, and FAQ's. The main content area features a 'Login ID Recovery Form' with the following fields and values:

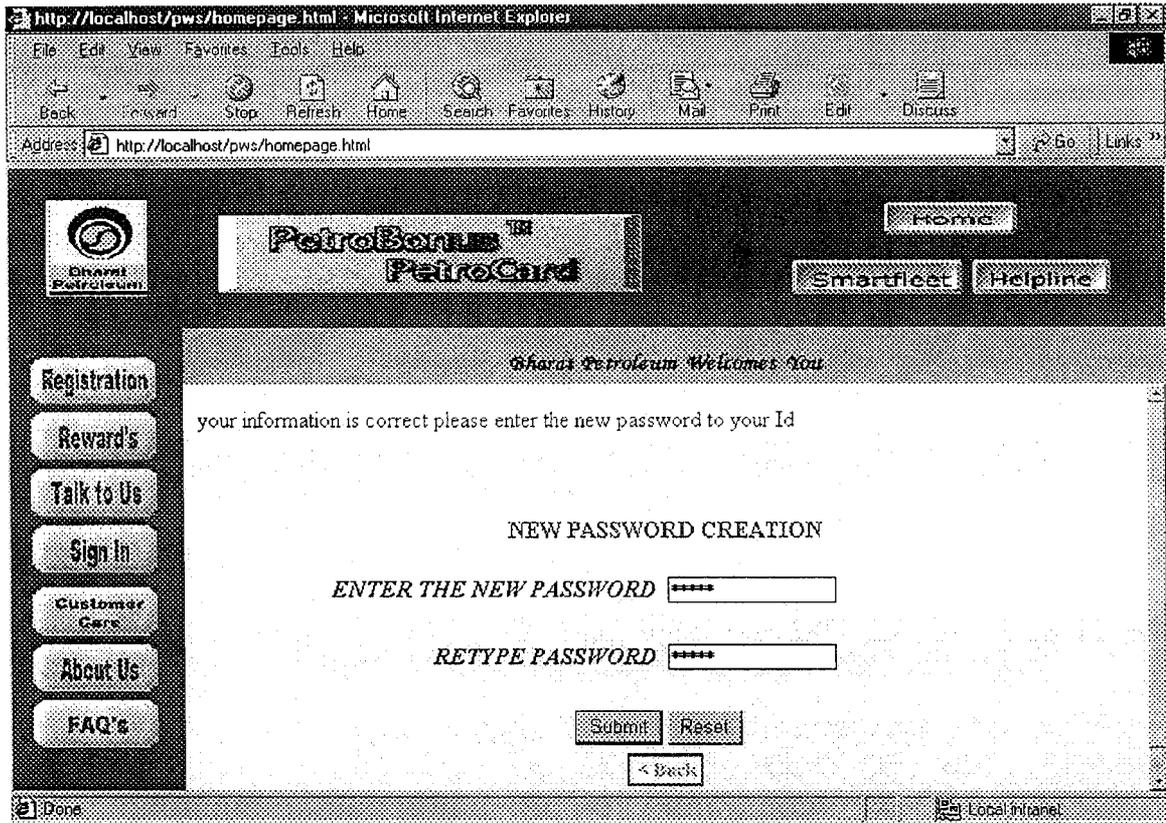
| Field | Value |
|------------|--------|
| Form No | 1000 |
| Login Name | m okan |
| Login ID | 100 |

Buttons for 'Submit' and 'Reset' are located at the bottom of the form.

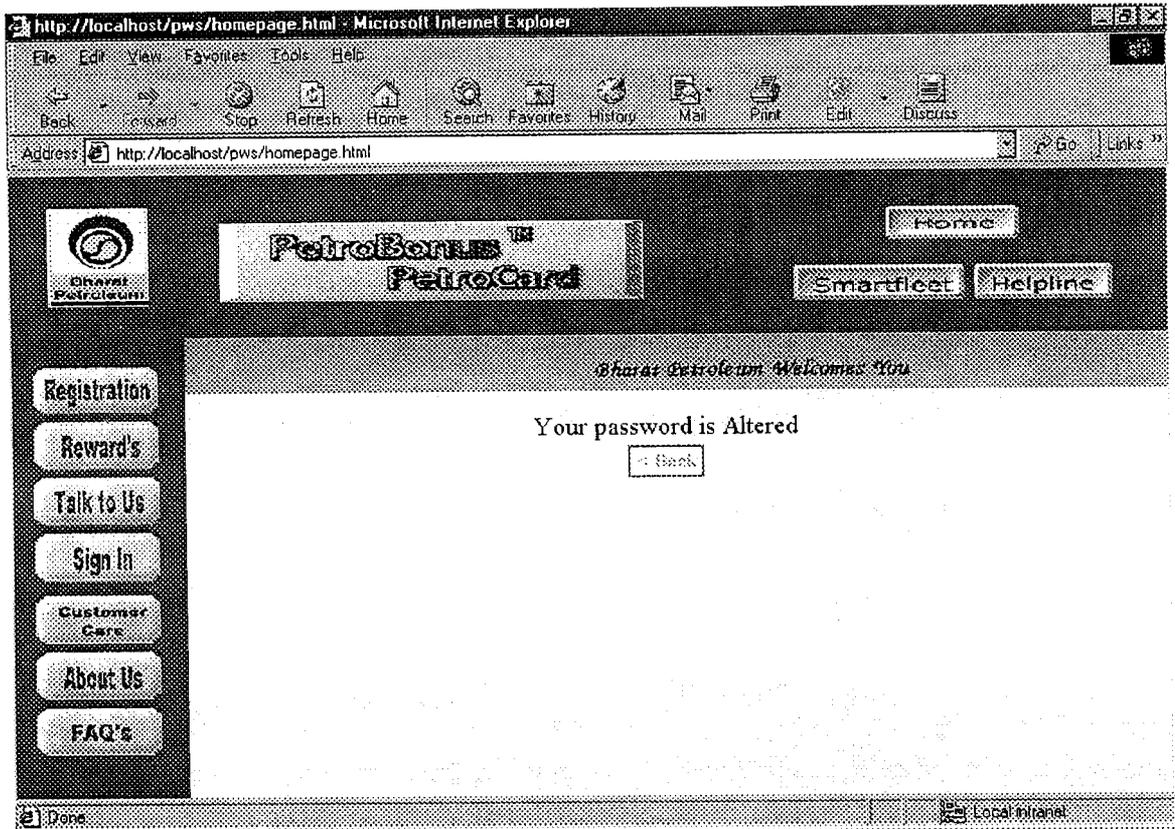
Forgot Password



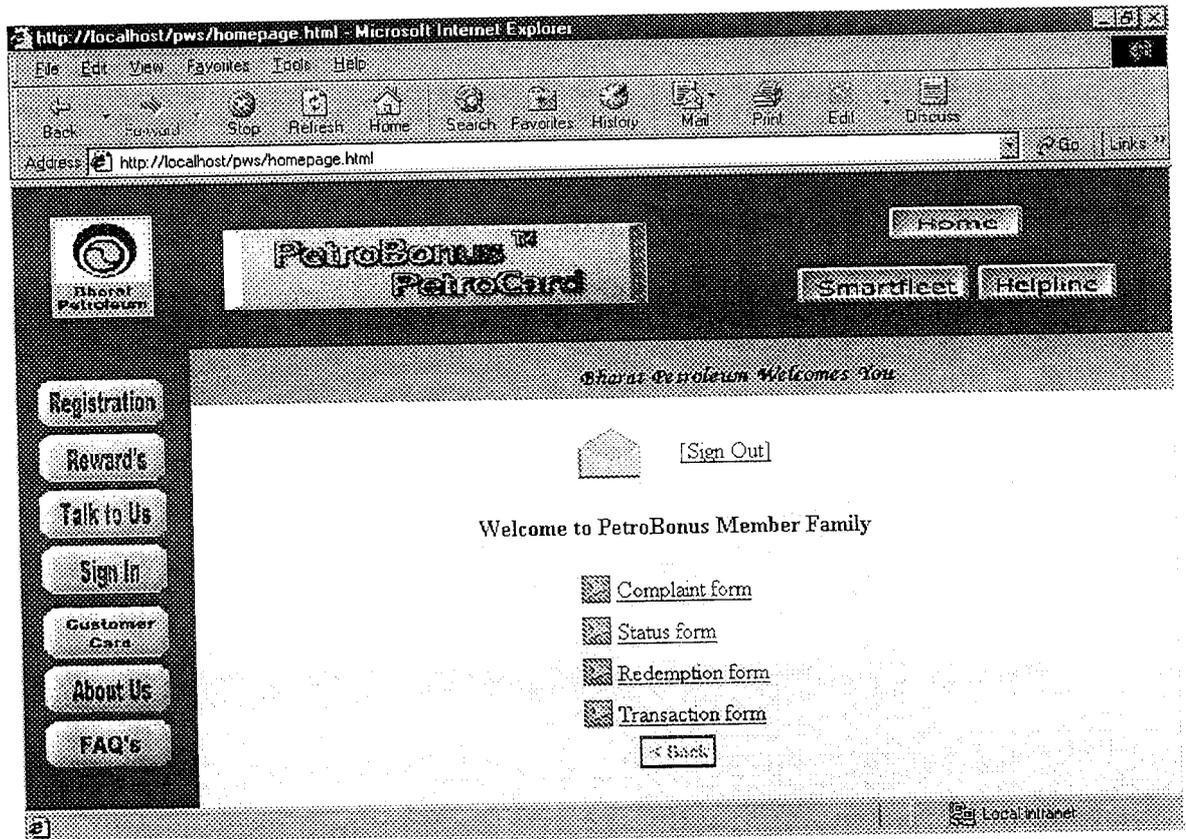
Forgot Password



Forgot Password



Consumer Module



Complaint Form

http://localhost/pws/homepage.html - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Discuss

Address: http://localhost/pws/homepage.html

home Smartfleet Helpline

Gharat Petroleum

Gharat Petroleum Welcomes You

Compliant Form

Serial No : 4 Date : 3/30/03

* Request for (select as applicable)

Replacement of Card : Correction of The Name

Pin unblocking : Pin activation/deactivation (change from earlier selection)

* Information required for Lost Card :

Done Local intranet

Status Form

http://localhost/pws/homepage.html - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Discuss

Address: http://localhost/pws/homepage.html

Smart Petroleum

PetroBonus™
PetroCard

Home Smartfleet Helpline

Charas Petroleum Welcomes You

< Back

Status of the Petrocard

| | | | | | |
|-------------|---------|------------|------------------|--------------|--------|
| Member Name | Mrvijay | Address | salem | Telephone No | 466664 |
| City | salem | Pincode | 636006 | Cust ID | 100 |
| Fees No | 1001 | Card No | 1234123412341234 | Issue date | 2/4/03 |
| Pin Enabled | y | Exp date | 12/1/04 | status | issued |
| Amt on card | 600 | Petromiles | 1147 | | |

Done Local Intranet

Redemption Form

http://localhost/pws/homepage.html - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Discuss

Address: http://localhost/pws/homepage.html

Home Smartfleet Helpline

PetroBonus™
PetroCard

Every Purchase is a Bonus

Redemption Form

Member Name : Mrvijay
Petro Card No : 1234123412341234
Address : salem
Telephone No : 466664
City : salem
Pin code : 636006

Reward Name

- Parker Beta Ball Pen 2055
- Digital Wrist Watch 3060
- Fun 4 U Gift Set 3250

Done Local intranet

Redemption Form

http://localhost/pws/homepage.html - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Discuss

Address http://localhost/pws/homepage.html

Home Smartfleet HelpLine

Charas Petroleum Welcomes You

Item you have Selected :

| Item Selected | Item Code | Petro Miles |
|----------------------|-----------|-------------|
| Parker Beta Ball Pen | 302 | 2055 |
| Digital Wrist Watch | 303 | 3060 |
| Total | | 5115 |

your petromiles is less than Redemption you have selected (1147)

< Back

Transaction Form

http://localhost/pws/homepage.html - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Discuss

Address http://localhost/pws/homepage.html Go Links

PetroBonus
PetroCard

Home Smartfleet Helpline

Every Purchase is a Bonus

Registration
Reward's
Talk to Us
Sign In
Customer Care
About Us
FAQ's

Transaction of the Petrocard
Petrol Bunk Details

| Bunk ID | Bunk Name | Address | City | State | Telephone |
|---------|-----------|--------------|------------|------------|-----------|
| 10 | Ganapathy | Gandhi Nagar | chennai | Tamil Nadu | 271238 |
| 11 | Muruga | Nehru Nagar | Salem | Tamil Nadu | 234567 |
| 12 | raja | Anna Nagar | Salem | Tamil Nadu | 221221 |
| 13 | MahaVishu | Ram Nagar | Chennai | Tamil Nadu | 212111 |
| 14 | mohan | R.S.PURAM | Coimbatore | Tamil Nadu | 121212 |

Done Local intranet

Transaction Form

http://localhost/pws/homepage.html - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Discuss

Address http://localhost/pws/homepage.html



PetroBonus™
PetroCard

Home Smartfleet Helpline

Phillips 66

Charles Petroleum Welcomes You

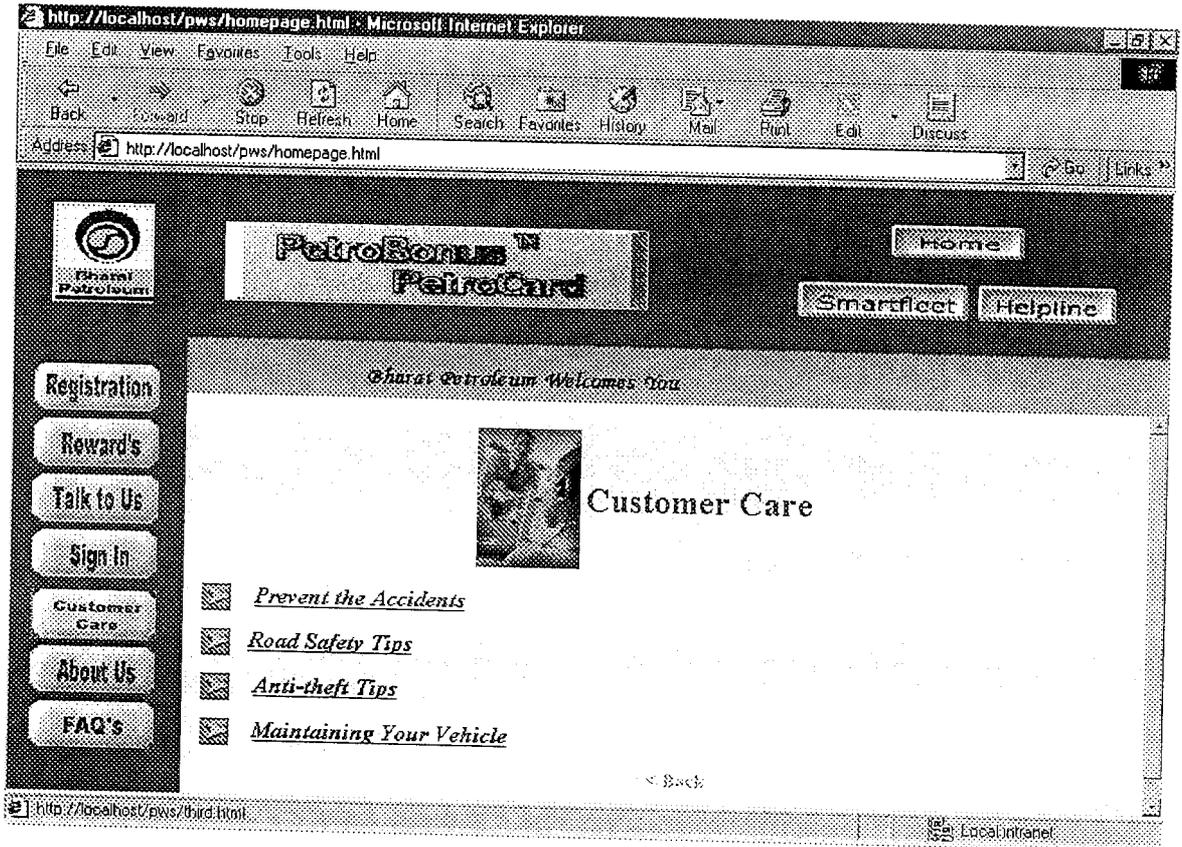
Registration
Reward's
Talk to Us
Sign In
Customer Card
About Us
FAQ's

Customer Details

| C_ID | Bank_ID | Trans_Type | Amnt | Loyalty_Earned | Date | Time |
|------|---------|------------|------|----------------|----------|-------------|
| 100 | 10 | PETROL | 200 | 400 | 12/25/03 | 2:00:00 AM |
| 100 | 11 | DIESEL | 200 | 213 | 12/23/03 | 10:00:00 AM |
| 100 | 14 | MAK | 11 | 111 | 12/12/12 | 3:00:00 AM |
| 100 | 13 | PETROL | 123 | 344 | 7/8/04 | 12:00:00 PM |
| 100 | 12 | GLIDE2T | 78 | 878 | 8/9/01 | 9:00:00 AM |
| 100 | 10 | PETROL | 99 | 9 | 9/2/02 | 8:00:00 AM |
| 100 | 13 | PETROL | 222 | 222 | 2/2/02 | 2:00:00 AM |
| 100 | 10 | DIESEL | 111 | 111 | 1/1/01 | 1:00:00 AM |

Done Local intranet

Customer Care



About Us

http://localhost/pws/homepage.html - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Discuss

Address http://localhost/pws/homepage.html Go Links

PetroBonus PetroCard Home Smartfleet Helpline

Registration Reward's Talk to Us Sign In Customer Care About Us FAQ's

Every Purchase is a Bonus

[About Us](#)

Welcome to the rewarding world of **PetroBonus**. On September 29, 1999, Bharat Petroleum Corporation Limited launched the PetroBonus Programme - the first of its kind in India. With the launch of this programme, we were moving into a new age, that of convenience for the consumers. PetroBonus is a unique programme offering you the convenience and security of paying for your fuel through an electronic purse, with the added opportunity to collect valuable rewards and exclusive benefits!

Your membership to PetroBonus enables you to make payments for merchandise that you have taken from a PetroBonus outlet using the stored value Smart Card (the Petro Card™) - a revolutionary and convenient payment mechanism. It simply means greater convenience and security, speed of transaction, and rewarding opportunities to earn points with lots of gifts and benefits when you shop at a PetroBonus outlet. And that's just the beginning. Petro Card also opens up huge savings for you at restaurants, stores and many other merchant establishments across the country.

Today, PetroBonus is the largest loyalty programme in the country with over 1 Million members. The Petro

Done Local intranet

FAQ's Form

The screenshot shows a Microsoft Internet Explorer browser window displaying the Petro Bonus website. The address bar shows `http://localhost/pws/homepage.html`. The website header includes the Petro Bonus logo, navigation buttons for Home, Smartfleet, and Helpline, and a slogan "Safety First Speed Next". A left sidebar contains buttons for Registration, Reward's, Talk to Us, Sign In, Customer Care, About Us, and FAQ's. The main content area is titled "Frequently Asked Question" and features a "Select the Category" section with a list of links: Petro Card, Petro Bonus Programme, Petro Miles Earnings, Redemption/Reward/Benefits Enquiry, and General Questions.

http://localhost/pws/homepage.html - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Discuss

Address http://localhost/pws/homepage.html Go Links

Petro Bonus™
PetroCard

Home Smartfleet Helpline

Safety First Speed Next

Registration
Reward's
Talk to Us
Sign In
Customer Care
About Us
FAQ's

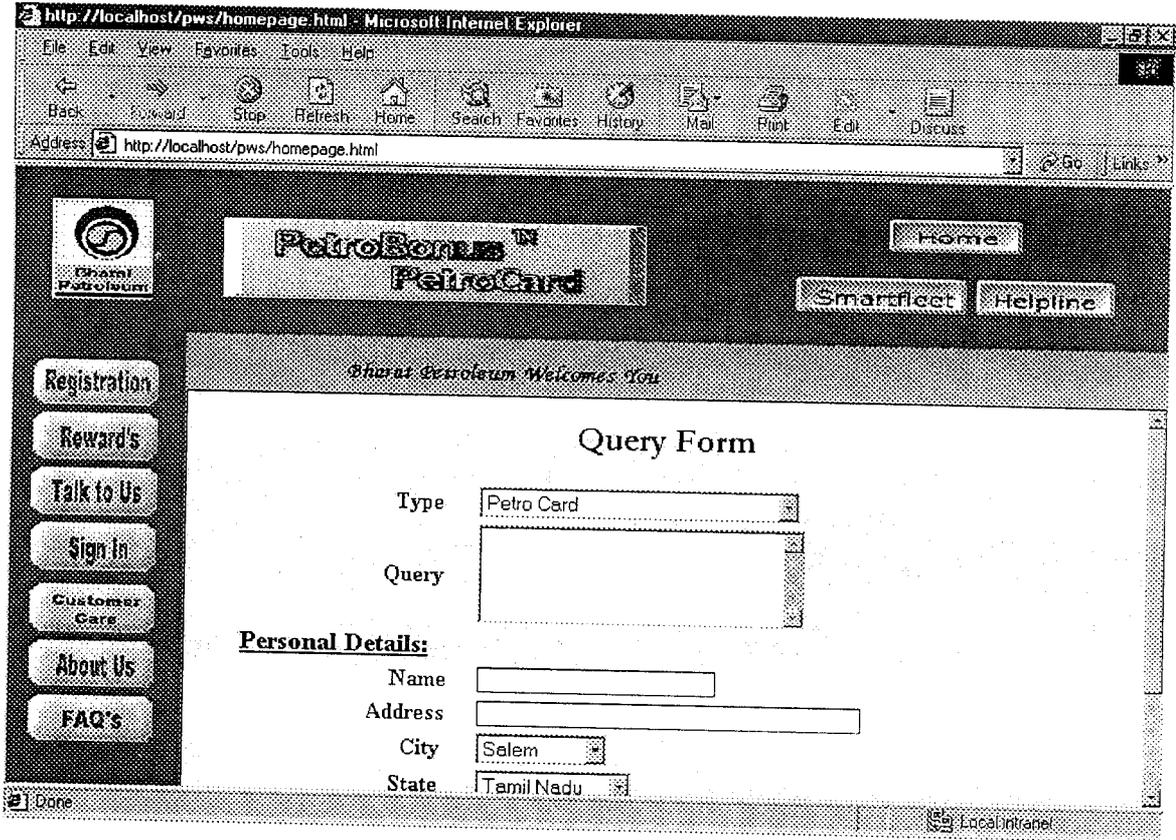
Frequently Asked Question

Select the Category

- [Petro Card](#)
- [Petro Bonus Programme](#)
- [Petro Miles Earnings](#)
- [Redemption/Reward/Benefits Enquiry](#)
- [General Questions](#)

Done Local Intranet

FAQ's Form



http://localhost/pws/homepage.html - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Discuss

Address http://localhost/pws/homepage.html Go Links

 PetroCard

Home Smartfleet Helpline

What PetroCard Welcomes You

Query Form

Type

Query

Personal Details:

Name

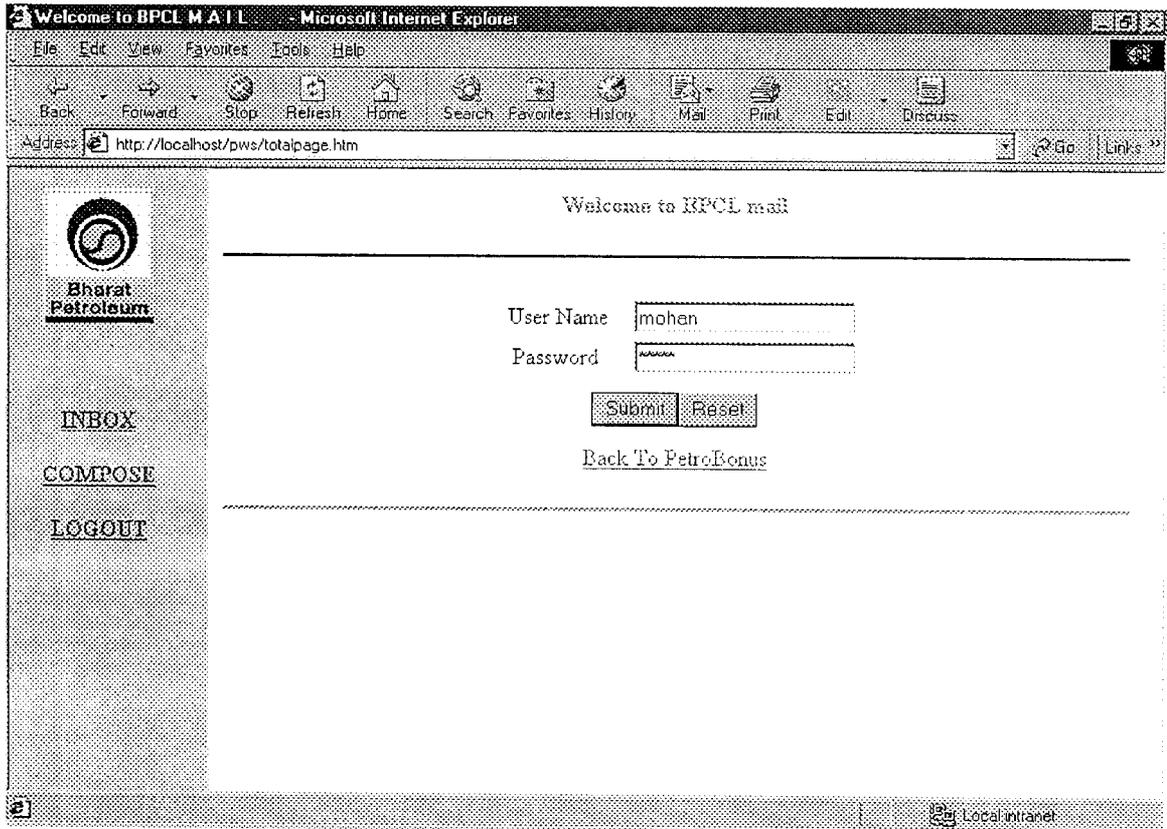
Address

City

State

Done Local intranet

Sign Up to mail



Inbox Form

The screenshot shows a Microsoft Internet Explorer browser window titled "Welcome to BPCL MAIL - Microsoft Internet Explorer". The address bar displays "http://localhost/pws/totalpage.htm". The main content area is titled "Inbox for mohan" and features a table of email entries. Above the table are "delete" and "reply" buttons. On the left side, there is a sidebar with the "Bharat Petroleum" logo and navigation links for "INBOX", "COMPOSE", and "LOGOUT". The status bar at the bottom shows "Done" and "Local intranet".

| Select | From | Subject | Date |
|--------------------------|-------|----------------|---------|
| <input type="checkbox"/> | mohan | sachintendukar | 3/18/03 |
| <input type="checkbox"/> | raja | jolly | 3/19/03 |
| <input type="checkbox"/> | raja | jei | 3/29/03 |

Compose Form

