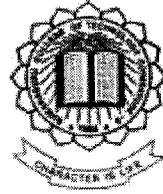




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ONLINE BUSPASS MANAGEMENT SYSTEM

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Of

**KUMARAGURU COLLEGE OF TECHNOLOGY
COIMBATORE**

A PROJECT REPORT

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Of

MASTER OF COMPUTER APPLICATION

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Coimbatore-641006.

DEPARTMENT OF COMPUTER APPLICATION

Bonafide Certificate

Certified that this project report titled **ONLINE BUSPASS MANAGEMENT SYSTEM** is the bonafide work of **Mr. M. MOHAMMED IMRAN (Registration Number: 71205621025)** who carried out the research under my supervision. Certified further, that to the best of my knowledge the work reported here in does not form part of any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.


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Submitted to Project and Viva Examination held on 01.07.2008


Internal Examiner


External Examiner

Project completion certificate

May 29, 2008

This is to certify that Mr.M.Mohammed Imran (Reg.No:71205621025) has completed project "Bus Pass Management System" using .Net. This project has been completed at Ideasurge Solutions Private Limited.

This project is tested and run on real time environment. We are very happy to say that project has been completed to our satisfaction.

Project duration: Dec 2007 to may 2008

Yours cordially,



Krishna Sudha
COO,
Ideasurge Solution Private Limited,
Bangalore.

ABSTRACT

The project titled “ONLINE BUSPASS MANAGEMENT SYSTEM” deals with computerized management of government concern.

The concern management is computerized to reduce work and time. In the new method, the entry becomes easy and reports can be taken easily. Student and employee can easily get the bus-pass through the web.

The asp.net pages are attractively designed and validations are made out wherever necessary to accept the correct data only. Reports are designed using data reports and can be taken date-wise or between two dates.

The main objective of this project is student details, employee details, student renewal pass, employee renewal pass, payment method, verification information in a computerized manner, which is the only way to administrate. The project enables the government to maintain the data regarding the received amount, bus-pass renewal.

Finally the report is generated for the maintenance of student, employee, bus-pass renewal, and billing and payment method. “WEB TRAFFIC ANALYSIS” deals with tracking websites can record the visitor activity on any site.

This “WEB TRAFFIC ANALYSIS” explains how to track web pages through own web application without relying on external tracking tools. This does not eliminate the need for external tools, but it gives some satisfaction to have our tracking that can play with and modify to suit to our business requirements. This is all possible due to the rich API provided by the .NET framework.

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LIST OF ABBREVIATIONS

| | |
|---------------|-----------------------------------|
| API | Application Programming Interface |
| ASP | Active Server Page |
| CGI | Common Gateway Interface |
| CGI | Common Gateway Interface |
| DBMS | Database Management System |
| DDL | Data Definition Language |
| DML | Data Manipulation Language |
| FAQ | Frequently Asked Questions |
| HTML | Hyper Text Markup Language |
| HTTP | Hyper Text Transfer Protect |
| IIS | Internet Information Server |
| ODBC | Open Database Connectivity |
| ORDBMS | Object RDBMS |
| RDBMS | Relational DBMS |
| SQL | Structured Query Language |

CHAPTER 1

1. INTRODUCTION

1.1 ABOUT THE PROJECT

The project titled “ONLINE BUSPASS MANAGEMENT SYSTEM” deals with computerized management of government concern. Using ASP.NET/MY-SQL develops this project. ASP.NET is used as front-end tool and MY-SQL is used as back-end tool.

The main objective of this project is student details, employee details, student renewal pass, employee renewal pass, payment method, verification information in a computerized manner, which is the only way to administrate. The project enables the government to maintain the data regarding the received amount, bus-pass renewal. Finally the report is generated for the maintenance of student, employee, bus-pass renewal, and billing and payment method.

Administrator module contains all the information about student, employee, college information, which is only way to administrate. Variety of data's are created in administrator module like what are all the colleges registered in “ONLINE BUS PASS MANAGEMENT SYSTEM” and company vice information etc.,

The new user module contains the information about student and employee details. In student section variety of information are maintained like, student name, user name, password, student address, college email id, student email id etc. the same kind of information maintained in employee also. After registration user can get the user name and password. The next time the user directly goes to existing user module, and renewal the bus pass in very short period. Finally reports are generated in secured manner.

The project enables the government to maintain the data regarding the received amount, bus-pass renewal. Finally the report is generated for the maintenance of student, employee, bus-pass renewal, and billing and payment method.

Being a lot more powerful than a simple page counter or a web site hit tracker, Website features detailed visitor statistics using ASP.net and an MY-SQL database. “WEB TRAFFIC ANALYSIS” publishes the article Statistics for advanced discussions on website statistics. It collects its data, analyzes it and generates real-time usage reports.

As a web application developer, interested to know the location of the visitors coming to a web site. This is important from business standpoint to target our audience accordingly. In this page tracking web page contain several reports like user host address, date, user agent, browser, URL, visits etc. It collects data from our website visitors and stores that information into an MY-SQL database.

In this module is having the collection of all main modules. The user can directly goes to any modules in home page. In this page contains some latest information like, offer prices, new future facility etc.

A services module describes the information about company existing product details, price details, version details etc. Register page contains several details like user account details, company details, service plan details etc, the concern management is computerized to reduce work and time. In the new method, the entry becomes easy and reports can be taken easily. Clients can easily get web traffic analysis system through the web. The asp.net pages are attractively designed and validations are made out wherever necessary to accept the correct data only. Reports are designed using data reports and can be taken date-wise or between two dates.

1.2 ORGANIZATION PROFILE

Ideasurge Solution Pvt.,Lmt., is a leading Global Technology and IT enterprise that comprises in India – Ideasurge Solution. The enterprise founded in 1998, is one of India's original IT garage start-ups. Its range of offerings Product Engineering, Technology and application Services, BPO, Infrastructure Services, IT Hardware, Systems Integration, and distribution of ICT products.

The infrastructure of the company has owns & manages Asterix PBX for inbound & outbound voice operations and two sites capable of 24x7 operations. It has clientele to Inbound IT helpdesk for US Health Insurance, Outbound selling for US Pharmacies. They are apart to innovative people practices are Proprietary performance & Reward management system, Granular performance management, Entirely automated.

Ideasurge Technologies have scaled 400% in employee strength to recruits division enables quick IT/ITeS ramp-up and ability to deliver in challenging or rare technologies. The commitment to process and delivery standards has to chief process architect since inception. The repeat business from every single customer by a delivery excellence. The ideasurge engineers edges are transition completed in two week with 24x7 operations to support stabilized by fifth week of engagement in first enhancement delivery by eighth week of engagement.

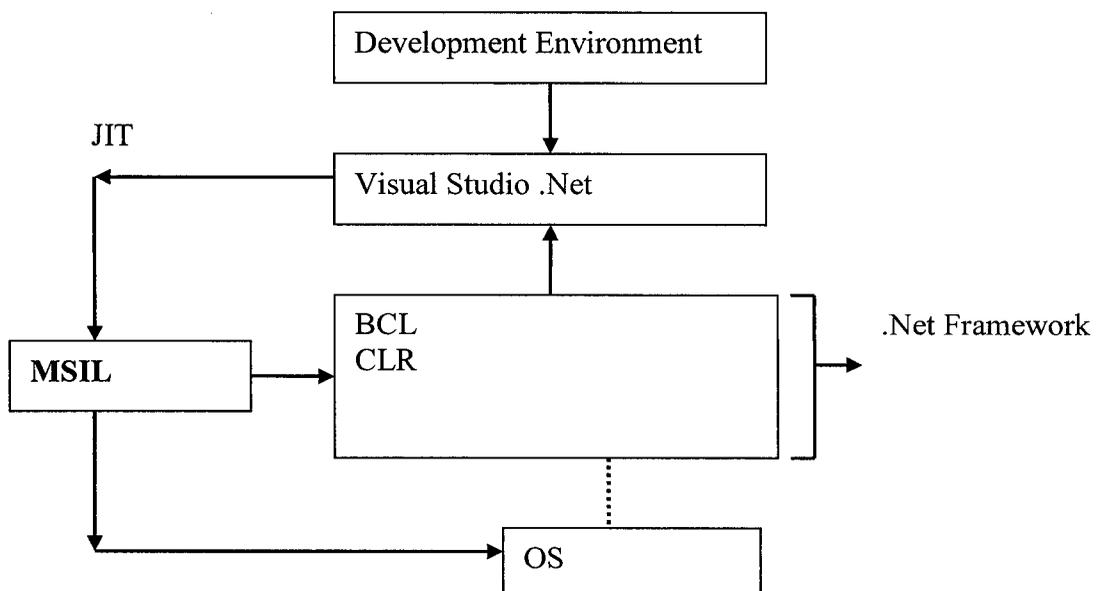
The company client leading healthcare and health insurance organization from the tri-state area. They want to leverage maximum advantage from tech spending it has wide and complex IT/Service requirements. Anti-piracy technology solutions provider in Europe and Product line in encryption, protocol analysis & sniffres by clients. A client aggressive US Online realty player and Innovative business model.

1.3 PROGRAMMING ENVIRONMENT

THE .NET FRAMEWORK

Microsoft .NET is a set of Microsoft software technologies for connecting your world of information, people, systems, and devices. It enables an unprecedented level of software integration through the use of XML Web services: small, discrete, building-block applications that connect to each other—as well as to other, larger applications via the Internet. XML Web services link applications, services, and devices together into connected solutions that enable you to act on information anytime, any place, and from any smart device. .NET-connected software delivers what developers need to create and connect XML Web services. The benefit to individuals is seamless, compelling experiences with information sharing.

Infrastructure of .NET



JIT → Just In Time. An acronym for "just-in-time," a phrase that describes an action that is taken only when it becomes necessary, such as just-in-time compilation or just-in-time object activation. JIT compilation the compilation that converts Microsoft intermediate language (MSIL) into machine code at the point when the code is required at run time.

MSIL → Microsoft Intermediate Language. A language used as the output of a number of compilers and as the input to a just-in-time (JIT) compiler. The common language runtime includes a JIT compiler for converting MSIL to native code.

CLR → Common Language Runtime. The engine at the core of managed code execution. The runtime supplies managed code with services such as cross-language integration, code access security, object lifetime management, and debugging and profiling support.

BCL → Base Class Library. Consists of program applications, all objects, types and classes.

ASP.NET

ASP.NET is the .NET framework layer that handles Web requests for specific types of files, namely those with (.aspx or .ascx) extensions. The ASP.NET engine provides a robust object model for creating dynamic content and is loosely integrated into the .NET framework.

ASP.NET is part of the .NET framework. ASP.NET programs are centralized applications hosted on one or more Web servers that respond dynamically to client requests. The responses are dynamic because ASP.NET intercepts requests for pages with a specific extension (.aspx or .ascx) and hands off the responsibility for answering those requests to just-in-time (JIT) compiled code files that can build a response "on-the-fly."

ASP.NET deals specifically with configuration (`web.config` and `machine.config`) files, Web Services (ASMX) files, and Web Forms (ASPX) files. The server doesn't "serve" any of these file types—it returns the appropriate content type to the client.

The configuration file types contain initialization and settings for a specific application or portion of an application. Another configuration file, called `machine.web`, contains machine-level initialization and settings. The server ignores requests for web files, because serving them might constitute a security breach.

Client requests for these file types cause the server to load, parse, and execute code to return a dynamic response. For Web Forms, the response usually consists of HTML or WML. Web Forms maintain state by round-tripping user interface and other persistent values between the client and the server automatically for each request.

A request for a Web Form can use View State, Session State, or Application State to maintain values between requests. Both Web Forms and Web Services requests can take advantage of ASP. Net's integrated security and data access through ADO.NET, and can run code that uses system services to construct the response.

ASP.NET uses .NET languages. ASP.NET code exists in multithreaded JIT compiled DLL assemblies, which can be loaded on demand. Once loaded, the ASP.NET DLLs can service multiple requests from a single in-memory copy.

ASP.NET supports all the .NET languages (currently C#, C++, VB.NET, and JScript, but there are well over 20 different languages in development for .NET), so you will eventually be able to write Web applications in your choice of almost any modern programming language.

In addition to huge increases in speed and power, ASP.NET provides substantial development improvements, like seamless server-to-client debugging, automatic validation

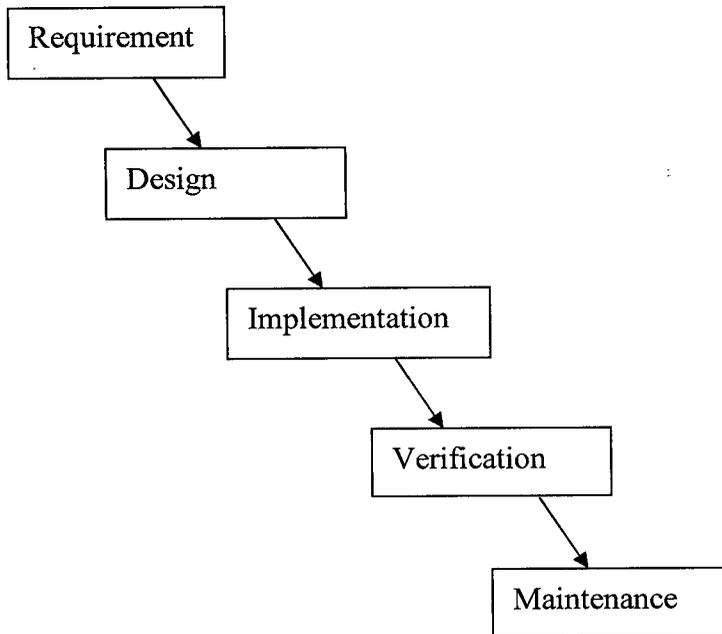
MAIN FEATURES OF ASP.NET

- ✓ Object-oriented
- ✓ Event-based
- ✓ Rich library of Web Controls
- ✓ Separation of layout (HTML) and logic (e.g. C#)
- ✓ Compiled languages instead of interpreted languages
- ✓ GUI can be composed interactively with Visual Studio .NET
- ✓ Better state management

CHAPTER 2
SYSTEM ANALYSIS

2.1 Methodology

Methodology followed in this project is Water fall model. Water fall model follows different phases in developing a software project.



(a) Fig 2.1

Requirements Specification

This phase is the process of gathering information. When the requirements are fully completed, one proceeds to design.

Design

Design should be a plan for implementing the requirements given. When the design is fully completed, an implementation of that design is made by coders.

Implementation

Implementation is the process of implementing our project by integrating various modules and making it as a workable module.

Verification

Verification is the process of verifying whether our requirement is achieved or not.

Maintenance

Maintenance is the process of maintaining our software in future if any malfunction occurs.

2.2 System Review

2.2.1 Existing System

The system which is followed at present is a manual system, can be eradicated by using this title, which has been computerized.

The system consists of database that has to be maintained with various information. The report generation and printing work are difficult. In the existing system each and every time a reference should be made. There are no high possibilities to commit errors and mistakes, which leads to produce the wrong statements to the management. Report keeping is also not an easy work.

Draw backs of existing system

1. Readability of records is constrained:

All the records may not be handled or written by the same person. So the format will be different resulting in loss.

2. Paper records are easily damaged with time.

3. High cost.

4. The software takes more space.

2.2.2 Proposed System

The drawbacks, which are faced during existing system, can be eradicated by using the proposed system. The main objective of the existing system is to provide a user-friendly interface. The system, which is proposed, now computerizes all the details that are maintained manually. Once the details are fed into the computer there is no need for various persons to deal with separate sections. Only a single person is enough to maintain all the reports. The security can also be given as per the requirement of the users.

Compared to the manual system the proposed system has the following features.

Features:

1. The system is more users friendly.
2. The interrelated data are grouped into different input screens.
3. Provides a high uniformity among all screens format.
4. The system works in high speed and accuracy.
5. Unmatched capability in ease of use and meaningful analysis.
6. Focus on intelligence, not just data.
7. Extensive online statistics.
8. One-click Summary Report includes all vital statistics, intelligently organized.
9. Automatic daily email delivery of Summary Report.
10. Customize reports through online filtering and segmenting.
11. Drill-down capability.
12. Absolute Satisfaction Guarantee.

Benefits of the proposed system:

- Large volumes of data can be stored with ease.
- Security is assured.
- Maintenance of file is flexible.
- Records stored are updated now and then.
- Extensive online statistics.
- One-click Summary Report includes all vital statistics, intelligently organized.
- Automatic daily email delivery of Summary Report.

2.3 Feasibility Analysis



Technical Feasibility

A study of function, performance, and constraints that may affect the ability to achieve an acceptable system.

In Technical feasibility objectives, functions and performance are somewhat busy, anything seems possible if the “right” assumptions are made. It is essential that the process of analysis and definition be conducted in parallel with an assessment of technical feasibility.

Economic Feasibility

An evaluation of development cost weighted again the ultimate income or benefit derived from the developed system or product.

Economic justification is generally the “bottom-line” consideration for most systems. It includes cost-benefit analysis, long-term corporate income strategies, impact on the profit centers or products, cost of resources needed for development and potential market growth.

CHAPTER 3

3. SYSTEM REQUIREMENTS

3.1 Hardware Specification

| | | |
|-------------------|---|---------------------------------|
| Operating System | : | Windows 2000 / XP |
| RAM | : | 128 Mb |
| Processor (Speed) | : | Pentium III (800 MHz) – Upwards |
| Hard Disk Size | : | 40 GB and above |
| VDU | : | SVGA |
| Keyboard | : | 104 Keys |
| Mouse | : | Optical |
| Display | : | 1024 X 768 |

3.2 Software Specification

| | | |
|------------------|---|-----------------|
| Operating System | : | Windows 2000/XP |
| Front End | : | ASP.NET |
| Web Server | : | IIS |
| Back End | : | MY-SQL |

3.3 SYSTEM FEATURES

ACTIVE SERVER PAGE

The Internet has brought about dramatic changes in the way the businesses are carried on in the global market. Many future technologies hold the key to improve business.

One of the major developments was the concept of Active Platform , Introduced by Microsoft in November 1996. The Active Platform model is Microsoft's vision of the generation of distributed computing. The architecture of Active Platform Model has two parts - a Client-side and a Server-side, both of which share a common tool set and both are based on some consistent standards and protocols.

Client-Side Scripts most often add improved user interface and validation. Server-side scripts are primarily used to capture business rules and access to data. Some of the client-side scripts are JavaScript and VBScripts. Some of the server-side scripting environments are Active Server pages and CGI/PERL.

List of some of the more common application of Active Server Pages:

The Build-in object

- Request – to get information from the user.
- Response – to send information to the user.
- Server – to control the Internet Information Server.
- Session – to store information about and change settings for the user's current web server session.
- Application – to share information about and change settings for the lifetime for the application.

The Request Object

The Request object is used to get information from the user that passed along in an HTTP request. The request and Response objects support collections:

Client Certificate – to get the certificate fields from the request issued by the web browser. The fields that you can request are specified in the X.509 standard.

- Query String – to get text such as a name, such as my favorite TV sitcom above.
- Form – to get data from an HTML form.
- Cookies – to get the value of application –defined cookie.
- Server Variables – to get HTTP information such as the server name.

The Response object the response object is used to send information to the user. The Response object supports only cookies as a collection (to set cookie values). The Response object also supports a number of properties and methods. Properties currently supported are

- Buffer – set to buffer page output at the server. When this is set to true, the server will not send a response until all of the server scripts on the current page have been processed, or until the Flush or End method has been called.
- Content Type – to set the type of content (i.e., text/HTML, Excel).
- Expires – sets the expiration (when the data in the user's cache for this web page is considered invalid) based on minutes (i.e., expires in 10 minutes).
- Expires Absolute – allow you to set the expiration date to an absolute date and time.
- Status – returns the status line (defined in the HTTP specification or the server).

The Response object supports the following methods:

- Adds Header – adds an HTML header with a specified value.
- Append To Log – appends a string to the end of the web server log file.
- Binary Write – writes binary data (i.e., Excel spreadsheet data).
- Clear – clears any buffered HTML output.
- End – stops processing of the script.
- Flush – sends all the information in the buffer.
- Redirect – to redirect the user to a different URL.
- Write – to write into the HTML stream.

The Server object

The server object supports one property called script timeout, which allows you to set the value for when the script processing will time out. The methods that are used are as follows

- Create Object- to create an instance of a server component. This component can be any component that you have installed on your server (such as Active).
- HTML Encode – to encode the specified string in HTML.
- Map Path – to map the current virtual path to a physical directory structure. You can then pass that path to a component that creates the specified directory or file on the server.
- URLEncode – applies URL encoding to a specified string.

MY-SQL

MY-SQL is the most popular relational database management system in the world. Its popularity is the result of several factors

- MY-SQL is available on a wide range of computer systems.
- MY-SQL Corporation continues to add powerful features to each new release of the products.
- The exponential growth in the quality of data maintained by organizations requires convenient and reliable data repositories.

At the heart of relational theory is the concept of the table. A table consists of a set of attributes, or columns, and zero or more rows. Each row is a set of attributes values.

MY-SQL is a set of tools for End-User Data Base Management. MY-SQL has a creator, a form designer, a query manager and report writer. MY-SQL includes definitions for Primary and Foreign Keys, and has a full referential integrity built in a level of the database engine itself.

FEATURES OF MY-SQL

- It helps in building of online transaction processing.
- Partitioning of tables and indexes is also possible.
- Advanced Querying.
- Parallel Query Enhancement.
- Fast Recovery and Backup.
- Manageable security.
- MY-SQL is a database designed for the Internet. It is the first database to integrate java programs, websites and internet contents.
- It provides a secure foundation for building and managing large enterprise foundation.

CHAPTER 4

4. SYSTEM DESIGN

4.1 Input Design

Input design is the part or overall system design, which requires very careful attention. Often the collection of input data is the most expensive part of the system. In terms of both the equipment used and the number of people involved in it is the point of most contracts for the user with the computer system and it is prone to error. If data going into system is incorrect, then the processing the output will magnify these errors. Input design is the process of converting an external user oriented description of the input system into a machine-oriented format.

In this input design, we enter the valid user name and password for user authentication. If it is valid user name and password, the system allows updating the resume and their status. It will applicable for both job seeker's as well as organization.

4.2 Output Design

One of the most important features of an information system for users is the output that is produced. Without quality output the entire system might appear to be so unnecessary that users will avoid using it, possible causing the system to fail, right output must be developed while ensuring the output element is designed so that people will find the system easy to use effectively.

Output screens are the tools to convey information to the users since the design of the output screen is very important for attracting the users; the output screens are designed in such a way that it is very interactive and informative. The outputs from the computer systems are primarily to communicate the results of processing to users.

The output screen in this project gives information when the particular jobseeker is short listed. Here we can get information about the organization and their statistics. The above information is displayed on an output screen with appropriate format.

The software generates an acknowledgement on successful submission of data's

4.3 Database Design

Table 4.3.1 END USER STUDENT REGISTRATION

| FIELD NAME | FIELD TYPE | CONSTRAINTS | DESCRIPTION |
|-------------------|-------------------|--------------------|----------------------|
| Stu_name | Varchar2(25) | Not Null | Name of the End-user |
| Username | Varcahr2(10) | Primary Key | Username |
| Password | Varchar2(25) | Not Null | Password |
| College | Varchar2(25) | Not Null | College name |
| Uni reg no | Varchar2(25) | Not Null | University number |
| Acd_year | Varchar2(30) | Not Null | Academic year |
| Dob | Datetime | Not Null | Date of birth |
| Address | Varchar2(20) | Not Null | Address |
| Emailed | Varchar2(20) | Not Null | Email id |

Table 4.3.2 RENEWAL PASS

| FIELD NAME | FIELD TYPE | CONSTRAINTS | DESCRIPTION |
|-------------------|-------------------|--------------------|--------------------|
| Duration | Int | Not null | Duration |
| Date | Datetime | Not Null | Date of register |
| From | Varchar2(30) | Not Null | From |
| To | Varchar2(30) | Not Null | To |
| Address | Varchar2(25) | Not Null | Permanent address |
| Userid | Varchar2(25) | Not Null | User id |

Table 4.3.3 END USER EMPLOYEE REGISTRATION

| FIELD NAME | FIELD TYPE | CONSTRAINTS | DESCRIPTION |
|-------------------|-------------------|--------------------|----------------------|
| Emp_name | Varchar2(25) | Not Null | Name of the End-user |
| Username | Varcahr2(10) | Primary Key | Username |
| Password | Varchar2(25) | Not Null | Password |
| Company | Varchar2(25) | Not Null | Company name |
| Emp_no | Varchar2(25) | Not Null | Emp number |
| Acd_year | Varchar2(30) | Not Null | experience year |
| Dob | Datetime | Not Null | Date of birth |
| Address | Varchar2(20) | Not Null | Address |
| Email id | Varchar2(20) | Not Null | Email id |

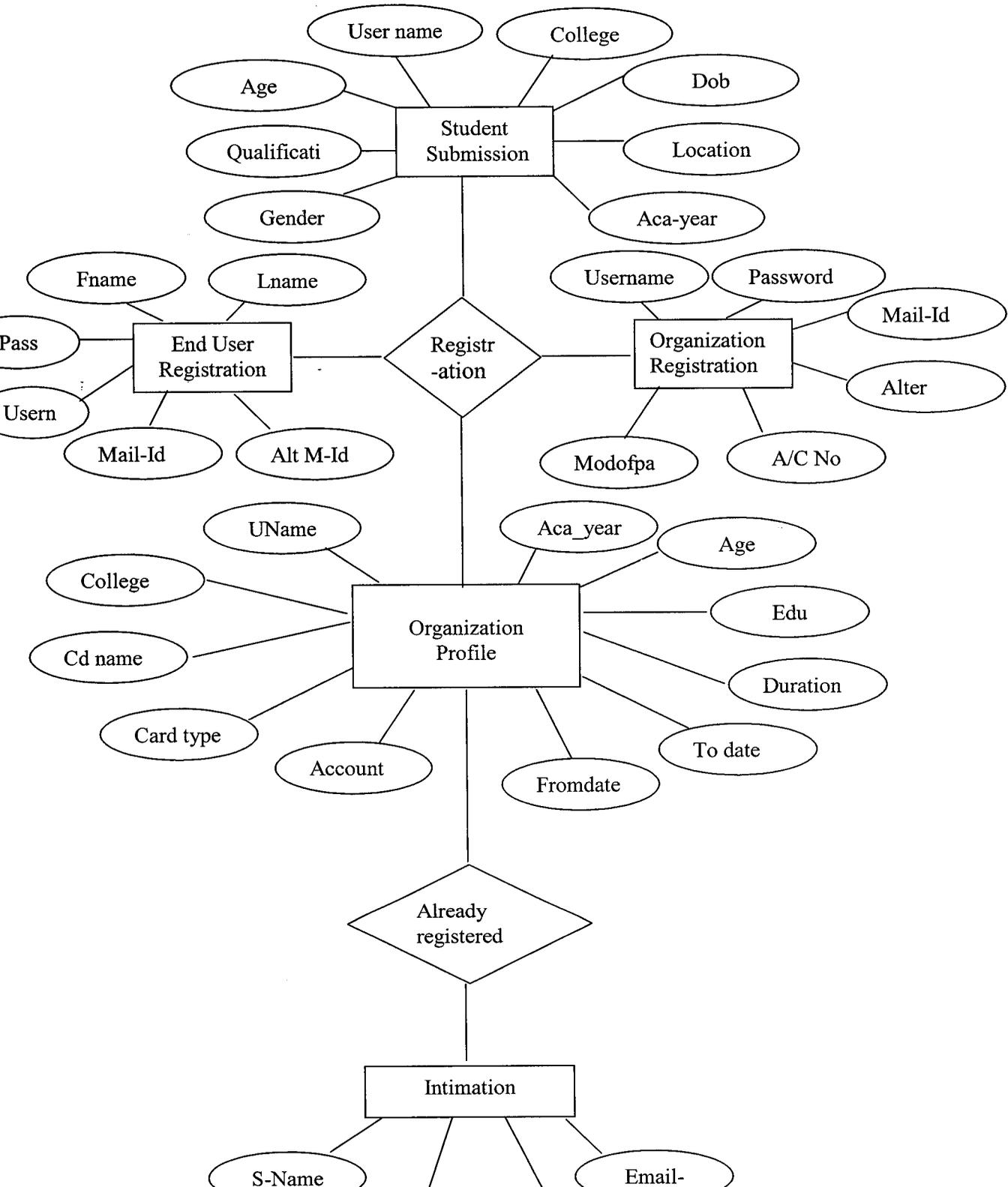
Table 4.3.4 WEB TRAFFIC ENTRY DETAILS

| FIELD NAME | FIELD TYPE | CONSTRAINTS | DESCRIPTION |
|-------------------|-------------------|--------------------|--------------------|
| Uname | Varchar2(25) | Primary Key | User name |
| Upassword | Varchar2(50) | Not Null | Password |
| Web_address | Varchar2(150) | Not Null | Web address |
| Company | Varchar2(200) | Not Null | Company address |
| Email_id | Varchar2(200) | Not Null | Email id |
| Address | Varchar2(200) | Not Null | Location address |
| State | Varchar2(100) | Not Null | State |
| Country | Varchar2(100) | Not Null | Country |
| Con_number | Varchar2(100) | Not Null | Contact number |
| Date | Varchar2(100) | Not Null | Date |
| Service_plan | Varchar2(100) | Not Null | Service plan |

Table 4.3.5 MAP TABLE

| FIELDNAME | FIELD TYPE | CONSTRAINTS | DESCRIPTION |
|------------------|-------------------|--------------------|--------------------|
| Country | Varchar2(50) | Not Null | Country name |
| State | Varchar2(50) | Not Null | State |
| Hcountry | Varchar2(50) | Not Null | Height country |
| Wstate | Varchar2(50) | Not Null | Width state |
| Wcountry | Varchar2(50) | Not Null | Width country |
| Hstate | Varchar2(200) | Not Null | Height state |

4.4 Entity Relationship Diagram



4.5 Data Flow Diagram

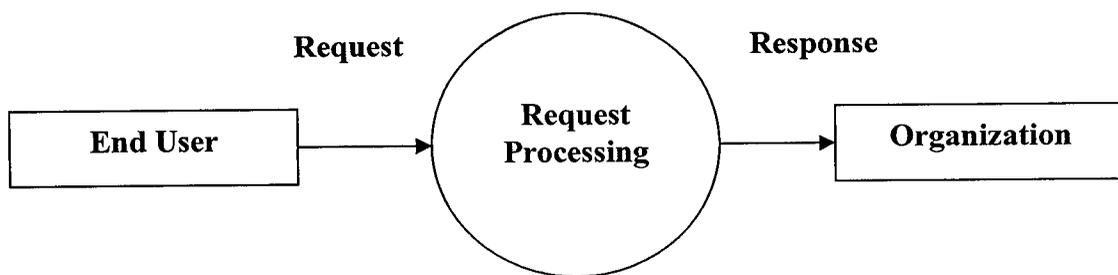
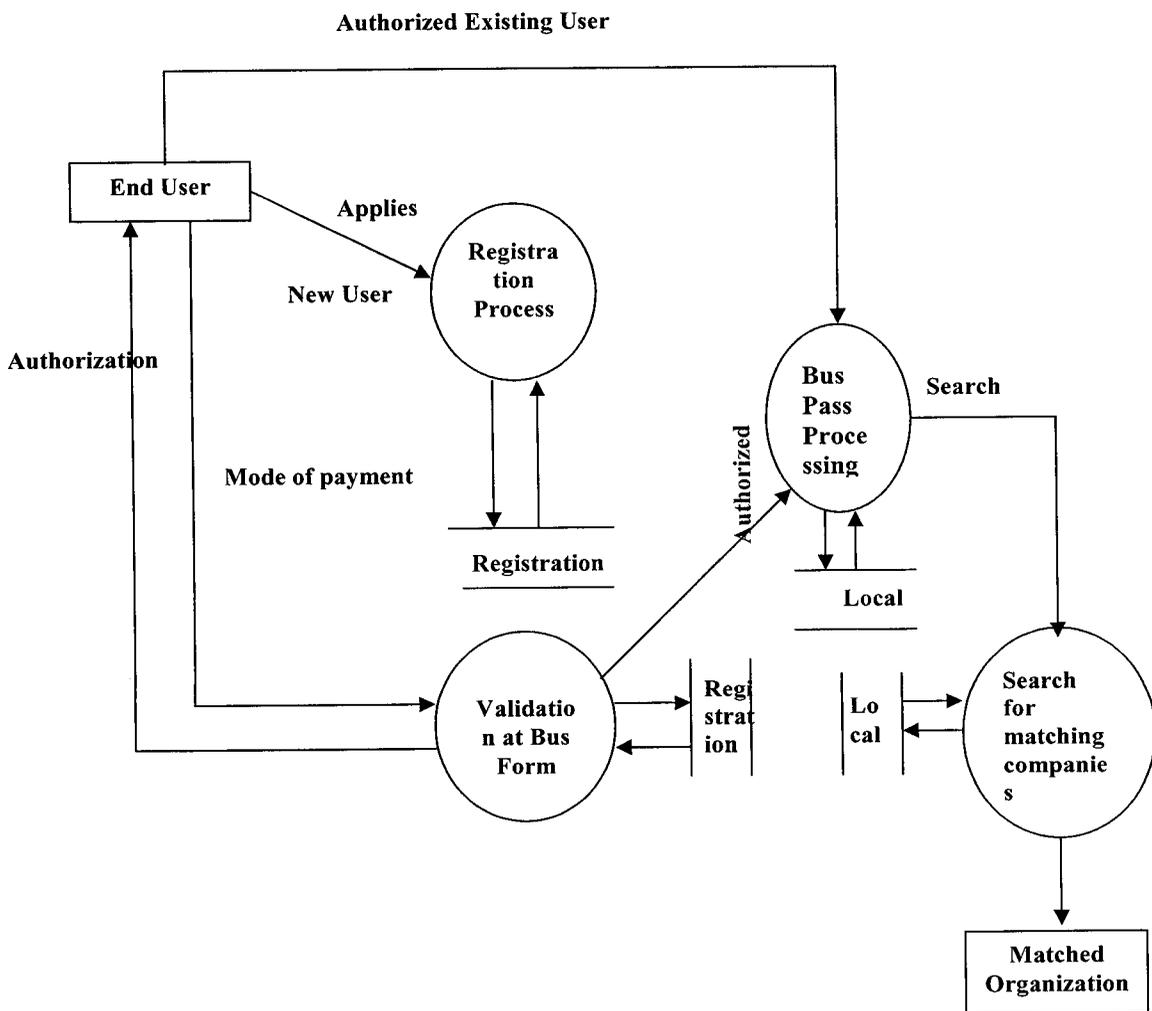


Figure 4.5.1 DFD Level 0

LEVEL ONE



LEVEL TWO

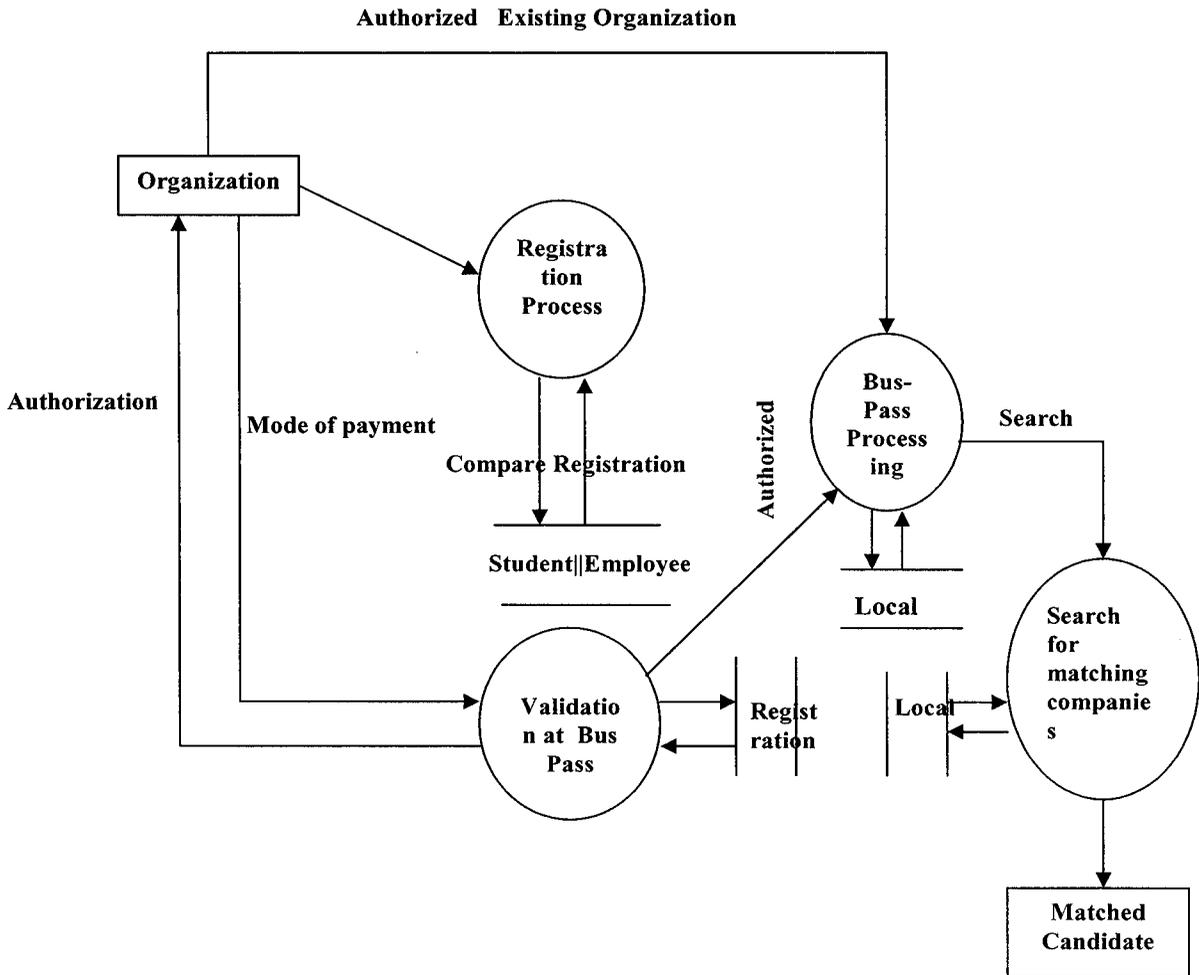


Figure 4.5.3 DFD Levels 2

4.6 MODULE DEVELOPMENT

Main pages of this project is

1. Admin
2. Home
3. About us
4. Administrator
5. New user
6. Instructions
7. FAQ
8. Quick search
9. Contact us
10. Service plan

ADMIN:

Administrator module contains all the information about student, employee, college information, which is only way to administrate. Variety of data's are created in administrator module like what are all the colleges registered in "ONLINE BUS PASS MANAGEMENT SYSTEM" and company vice information etc., Finally reports are generated in secured manner.

HOME:

In this module is having the collection of all main modules. The user can directly goes to any modules in home page. In this page contains some latest information like, offer of bus pass, new future facility etc.

ABOUT US:

About us module deals with what are all the options available in transportation renewal. The main objective of this project is Student details, Employee details, student renewal pass, employee renewal pass, payment method, and verification information in a computerized manner, which is the only way to administrate. The project enables the government to maintain the data regarding the received amount, bus-pass renewal. Finally the report is generated for the maintenance of student, employee, bus-pass renewal, and billing and payment method.

NEW USER:

In this module contains the information about student and employee details. In student section variety of information are maintained like, student name, user name, password, student address, college email id, student email id etc. the same kind of information maintained in employee also. After registration user can get the user name and password. The next time the user directly goes to existing user module, and renewal the bus pass in very short period.

INSTRUCTIONS:

In this instructions module contain the information about how to register the bus pass through the web. Step by step procedure for taking the bus pass through online. In this kind of information is mainly used to users.

FAQ:

In this module deals with the questions raised form user. In this module is mainly used for what are all the possibilities available in “ONLINE BUSPASS MANAGEMENT SYSTEM” project.

QUICK SEARCH:

Quick search module contains the all information about student, employee, college and company details etc. in this kind of module is mainly used for user can easily get the latest updated details in “ONLINE BUSPASS MANAGEMENT SYSTEM” project.

CONTACT US:

In this module deals with founder of “ONLINE BUSPASS MANAGEMENT SYSTEM” and phone number, fax number, admin-id, services about this project etc., the user can easily get the bus pass details through the web.

SAMPLE REPORTS:

Sample reports module contains the information about tracking the visitor country, state, IP-address, browser etc. these details are send to the database. Finally date, year, mostly visited countries etc will generate reports.

SERVICE PLAN:

A services module describes the information about premium, free, high volume details.

- Premium
- Free
- High volume

PREMIUM:

In this section describe the benefits of web traffic analysis services. It provides relevant, actionable, insight on web visitor behavior. Premium service charge will be displayed here.

FREE:

The free version of the web traffic analysis service includes only current day’s report. In this section adding some company advertisement also.

HIGH VOLUME:

In this section customers with over 30,000 page views of traffic per month. It will be offer special bulk pricing. Under bulk pricing, the user not restricted to number of

CHAPTER 5

5. SYSTEM TESTING

5.1 INTRODUCTION

After finishing the development of any computer based system the next complicated time consuming process is system testing. During the time of testing only the development company can know that, how far the user requirements have been met out, and so on.

Testing Methodologies

Following are the some of the testing methods applied to this effective project:

Source Code Testing

This examines the logic of the system. If we are getting the output that is required by the user, then we can say that the logic is perfect.

Unit Testing

Unit testing focuses on verifying the effort on the smallest unit of software-module. The local data structure is examined to ensure that the date stored temporarily maintains its integrity during all steps in the algorithm's execution. Boundary conditions are tested to ensure that the module operates properly at boundaries established to limit or restrict processing.

Integration Testing

Data can be tested across an interface. One module can have an inadvertent, adverse effect on the other. Integration testing is a systematic technique for constructing a program structure while conducting tests to uncover errors associated with interring.

Performance Testing

Performance Testing is used to test runtime performance of software within the context of an integrated system. Performance test are often coupled with stress testing and require both software instrumentation.

Output Testing

After performing the validation testing, the next step is output testing of the proposed system since no system would be termed as useful until it does produce the required output in the specified format. Output format is considered in two ways, the screen format and the printer format.

User Acceptance Testing

User Acceptance Testing is the key factor for the success of any system. The system under consideration is tested for user acceptance by constantly keeping in touch with prospective system users at the time of developing and making changes whenever required.

Various Testing Methods

The following are the several Testing Methods used for testing the programs:

White Box Testing

White box testing examines the basic program structures and its desires to the test data from the program logic. White box tests verify that the software design is valid and also whether it was built according to the specified design.

- ✓ Statement coverage - Executes all statements at least once.
- ✓ Decision Coverage - Executes each decision direction at least once
- ✓ Conditional Coverage - Executes each decision with all possible outcomes once.
- ✓ Decisional & Conditional Coverage - Executes all possible combinations of

Black Box Testing

Black box testing methods focus on the functional requests of the software. This type of testing method attempts to find incorrect or misusing functions, errors in data structures or external database access, if errors, performance errors and initializes and terminates errors.

Black box testing is conducted on integrated, functional components whose design integrity has been verified through coupling of traceable white box test. Black box testing traces the requirements focusing on system externals. It validates that the software meets the requirements irrespective of the parts of execution taken to each requests.

Validation Testing

At the culmination of integration testing, software is completely assembled as a package, interfacing errors have been uncovered and correct and final series of software test. Validation testing did not begin.

Validation testing can be defined in many ways but a simple definition is that validation succeeds when the software functions in a manner that can be reasonably accepted by the user/customer.

Software validation is achieved through a series of black box tests that demonstrate conformity with requirement. After validation list has completed one of the two possible conditions exist.

The function or performance characteristics confirm to specification and are accepted. A deviation from specification is uncovered and a deficiency list is created deviation or error discovered at this step in this project is corrected.

CHAPTER 6

6. SYSTEM IMPLEMENTATION

6.1 INTRODUCTION

Implementation is the state in the project where the theoretical design is turned into a working system. The most crucial stage in achieving a new successful system and giving confidence on the new system for the users that will work efficiently and effectively. The system is implemented only after thorough testing is done and if it is found to work according to the specification.

It involves careful planning, investigation of the current system and its constraints on implementation, design of methods to achieve changeover, and evaluation of the changeover methods apart from planning. Two major tasks for preparing the implementation are educating, training the users and testing the system.

Implementation Plan Preparation

The implementation process begins with the preparation of plan for implementation. According to this plan other activities are carried out. In this plan discussion has been made regarding the equipment, resources and how to test the activities. Thus a clear planner prepared for the activities.

The implementation stage involves careful planning, investigation of the existing system and its constraints on implementation, designing of methods to achieve changeover and evaluation of changeover methods.

The project is implemented by accessing simultaneously from more than one system and more than one window in one system. The application is implemented in the Internet Information Services 5.0 web server under the Windows 2000 Professional and accessed from various clients.

CHAPTER 7

7. CONCLUSION

7.1 CONCLUSION

As a web application developer, interested to know the location of the visitors coming to a web site. This is important from business standpoint to target our audience accordingly. In this page tracking web page contain several reports like user host address, date, user agent, browser, URL, visits etc. It collects data from our website visitors and stores that information into a MY-SQL database.

Student and employee can easily get the bus-pass through the web. The asp.net pages are attractively designed and validations are made out wherever necessary to accept the correct data only. Reports are designed using data reports and can be taken date-wise or between two dates. The project enables the government to maintain the data regarding the received amount, bus-pass renewal. Finally the report is generated for the maintenance of student, employee, bus-pass renewal, and billing and payment method.

7.2 FURTHER ENHANCEMENT

In the event of any online registration and payment being encountered while using the system, these bugs could be immediately reported on-line using the registration module which would be useful for fixing them. Information on registration could be queried as well which makes it useful to determine the status of registration which have already been reported and also to check whether new registration have been reported that requires amendments/modifications.

CHAPTER 8

8. APPENDICES

Screen Shots

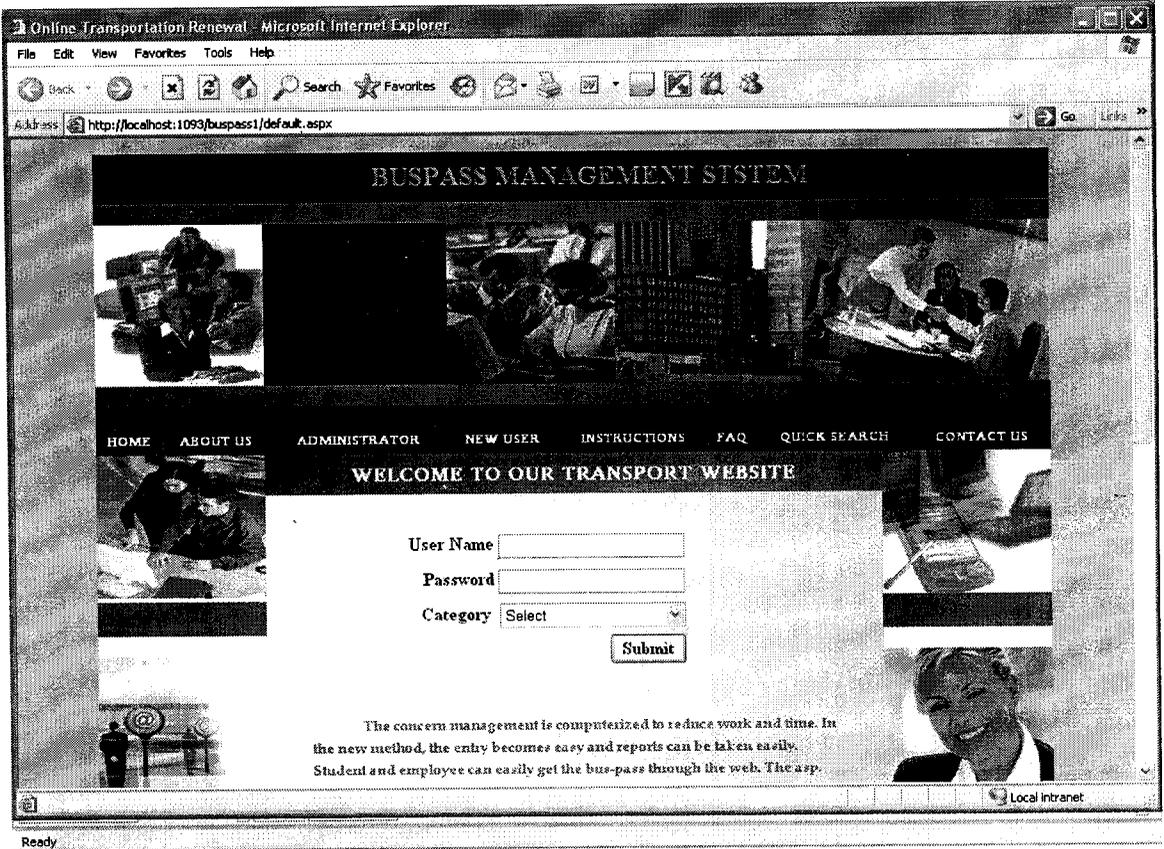


Figure A2.6 Login Form

ONLINE BUSPASS MANAGEMENT SYSTEM

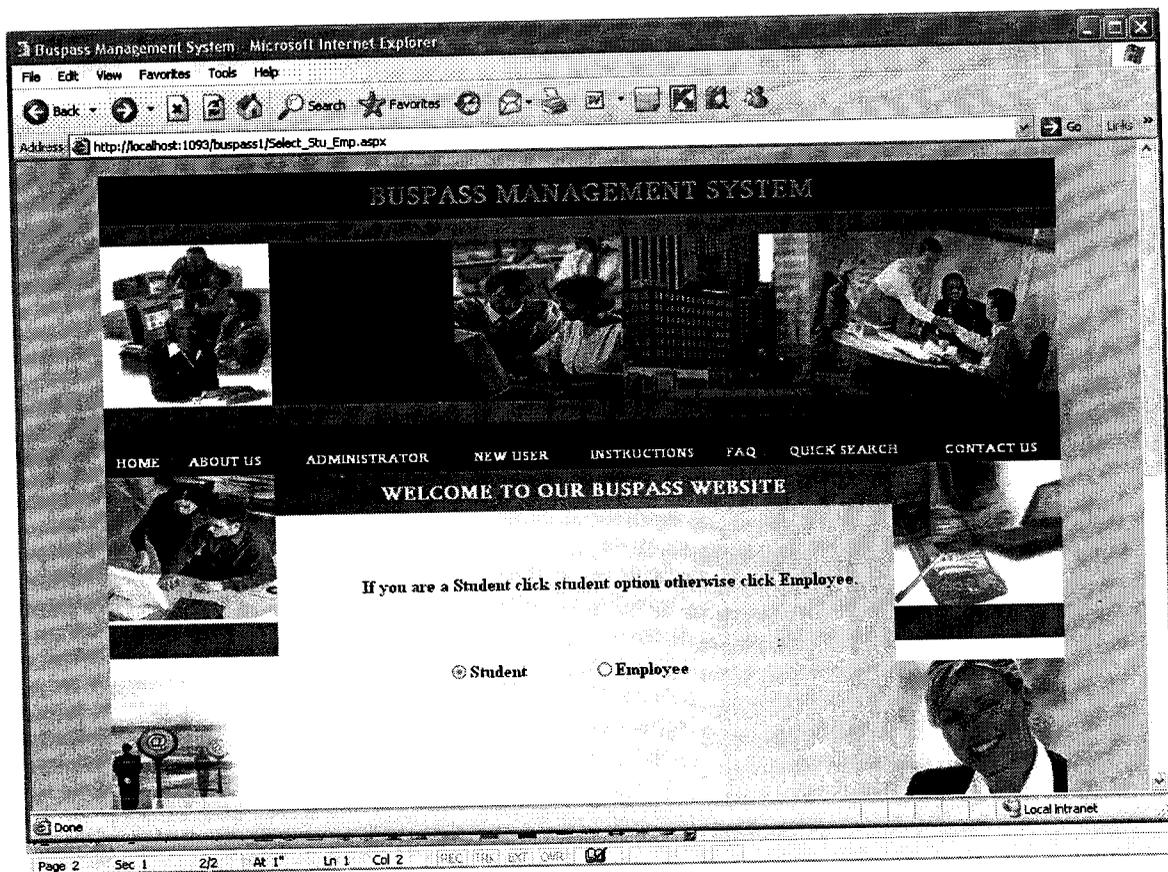


Figure A2.7 New User Login Form

Online Transportation Renewal - Microsoft Internet Explorer

http://localhost:1093/busspass/defa...asp.aspx

HOME ABOUT US ADMINISTRATOR NEW USER INSTRUCTIONS FAQ QUICK SEARCH CONTACT US

WELCOME TO OUR TRANSPORT WEBSITE

USER DETAILS

| | |
|-------------------|-------------------------------------|
| Student Name | guna |
| User Name | gunasekaran |
| Password | |
| Confirm Password | |
| College Name | kongu |
| University Reg.No | 71205621025 |
| Academic Year | 2003-2005 |
| Date Of Birth | 4 nov 1985 |
| Address | 285, Nethaji road Erode- 638001. |
| Phone No | 91-9694552121 |
| Email Id | gunak7@yahoo.com |

Local intranet

Figure A2.8 User Registration Form

ONLINE BUSPASS MANAGEMENT SYSTEM

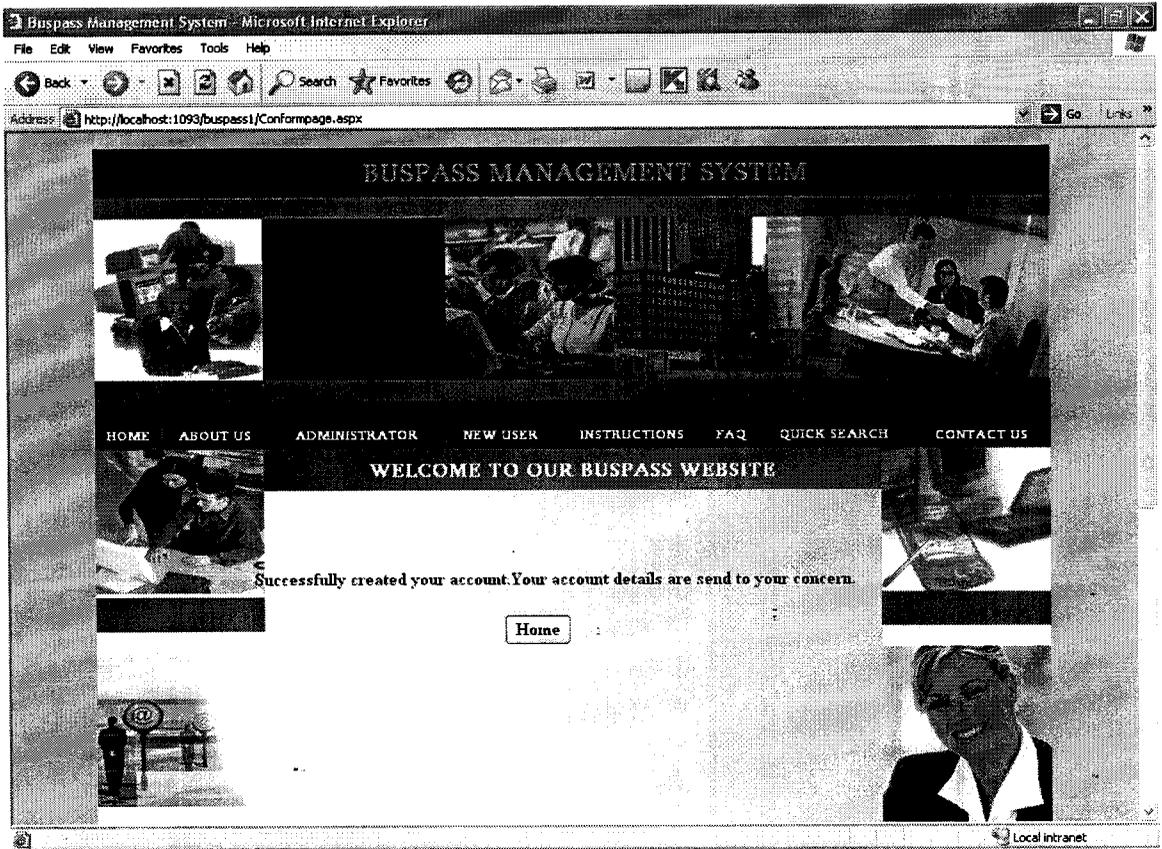


Figure A2.9 User Acknowledgement Page

ONLINE BUSPASS MANAGEMENT SYSTEM

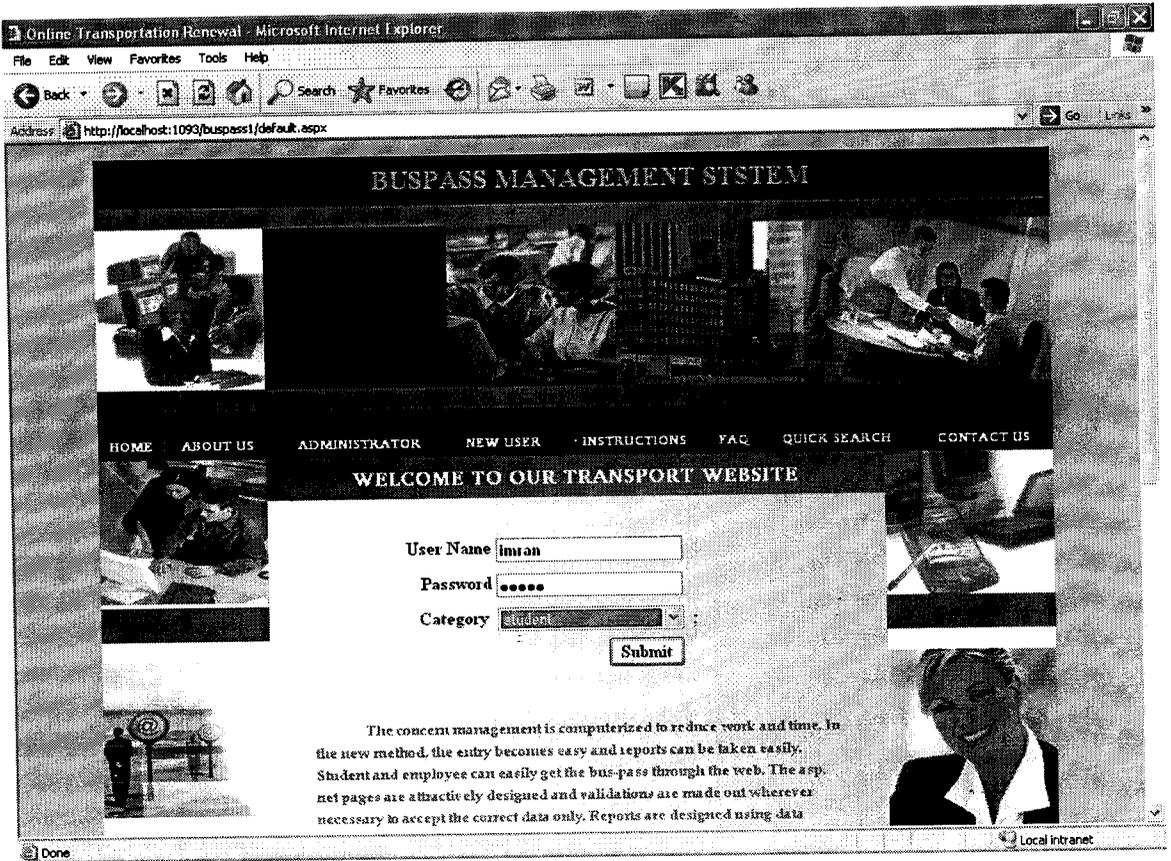


Figure A2.10 Home Page

ONLINE BUSPASS MANAGEMENT SYSTEM

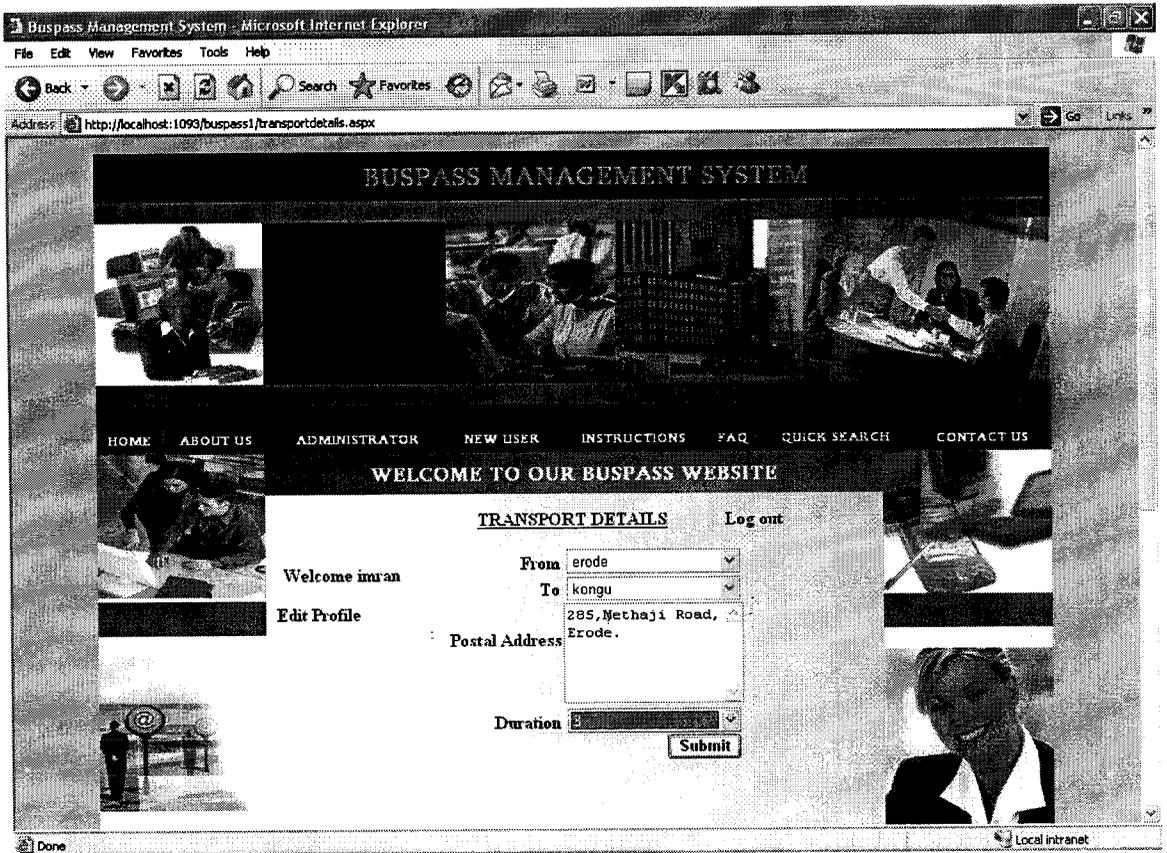


Figure A2.11 Transport Details

ONLINE BUSPASS MANAGEMENT SYSTEM

The screenshot shows a web browser window titled "Buspass Management System - Microsoft Internet Explorer". The address bar displays "http://localhost:1093/buspass1/Paymentdetails.aspx". The website header includes "BUSPASS MANAGEMENT SYSTEM" and a navigation menu with links: HOME, ABOUT US, ADMINISTRATOR, NEW USER, INSTRUCTIONS, FAQ, QUICK SEARCH, and CONTACT US. Below the menu is a banner that reads "WELCOME TO OUR BUSPASS WEBSITE". The main content area features a "PAYMENT DETAILS" form with a "Log out" link. The form displays the following information:

| | |
|----------------------|----------------------|
| Welcome inran | You payed Anount: 60 |
| Name On the Card | Credit Plus |
| Card Type | Master |
| Credit Card Number | ●●● |
| Expiration Date | 31 dec 1989 |
| Card Security Number | ●●● |

A "Submit" button is located below the form fields. The browser's status bar at the bottom shows "Done" and "Local intranet".

Figure A2.12 Payment Details Form

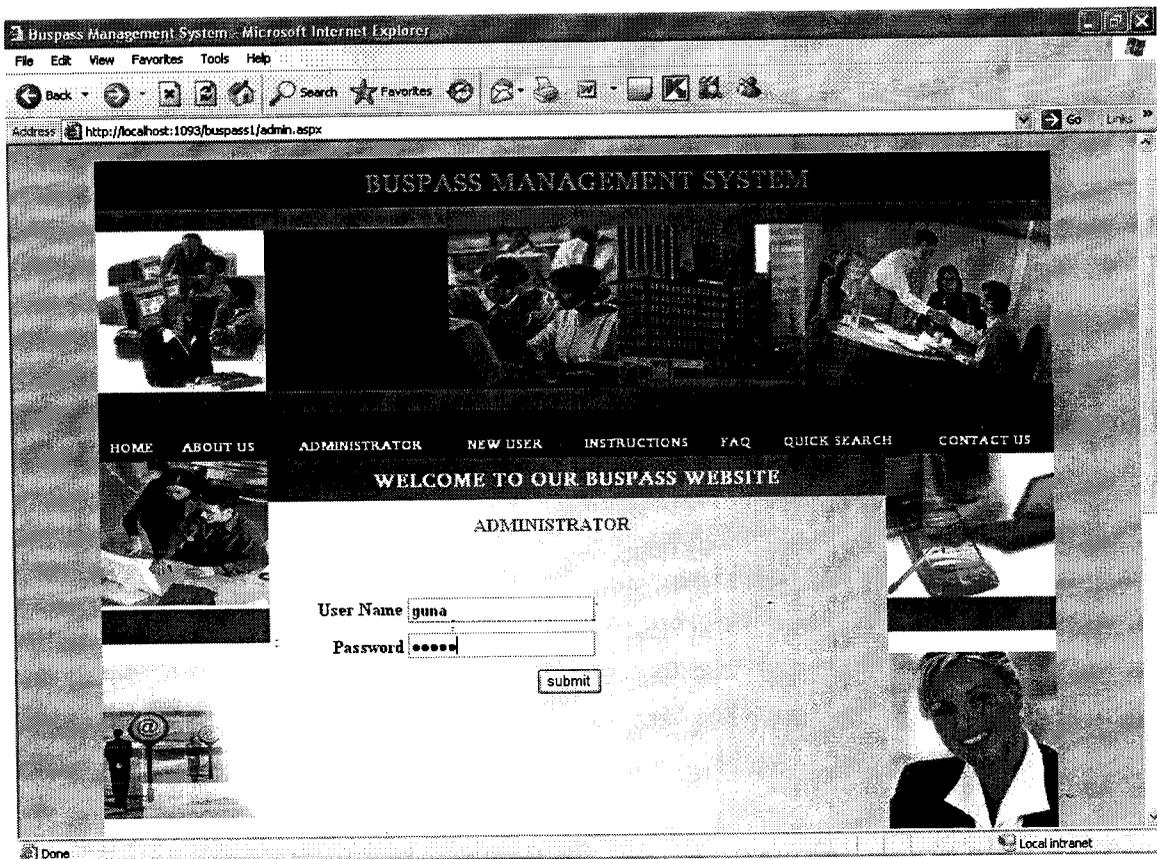


Figure A2.13 Administration Form

STUDENT EMPLOYEE TRANSPORT PAYMENT SELECTED LIST TRACK LOG OUT

WELCOME TO OUR BUSPASS WEBSITE

| stu_name | username | uni_reg | dobl | addr |
|-------------------|----------|-------------|---------------------------|-------------------------------|
| guna | guna | 4567 | 12/23/1989 12:00:00 AM | tnudgf |
| Mohammed Imran | imran | 786 | 7/23/1985 12:00:00 AM | 285,Nethaji Street, Erode. |
| saj | jij | 67788 | 9/28/1987 12:00:00 AM | tgftg |
| ppp | ppp | 77777777 | 9/28/1987 12:00:00 AM | yfd |
| sanas | sanas | 87775443545 | 9/28/1986 12:00:00 AM | eropde |

Local intranet

Figure A2.14 Student User Details Form

ONLINE BUSPASS MANAGEMENT SYSTEM

The screenshot shows a web browser window displaying the BUSPASS MANAGEMENT SYSTEM. The page features a navigation menu with links for STUDENT, EMPLOYEE, TRANSPORT, PAYMENT, SELECTED LIST, TRACK, and LOG OUT. Below the menu, a 'WELCOME TO OUR BUSPASS WEBSITE' message is displayed. A table lists user details for several employees, including their empname, username, dob, emailid, and phonen. The table data is as follows:

| empname | username | dob | emailid | phonen |
|---------|----------|------------------------|-----------------|------------|
| aa | aa | 9/30/1987 12:00:00 AM | ga@hh.com | 4564567878 |
| GK | gk | 10/26/1985 12:00:00 AM | dd@ij.com | 5567778789 |
| rrr | rrr | 9/28/1986 12:00:00 AM | dd@mao.com | 87768776 |
| patrick | sanas | 9/28/1986 12:00:00 AM | sanck@gmail.com | 898676766 |

The browser's address bar shows the URL <http://localhost:1093/buspass1/default13.aspx>. The status bar at the bottom indicates 'Local intranet'.

Figure A2.15 Employee User Details Form

ONLINE BUSPASS MANAGEMENT SYSTEM

Untitled Page - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Home Stop Search Favorites

Address: http://localhost:1093/buspass1/default14.aspx

STUDENT EMPLOYEE TRANSPORT PAYMENT SELECTED LIST TRACK LOG OUT

WELCOME TO OUR BUSPASS WEBSITE

| userid | framl | tol | durationl | edatel | fidatel | categoryl | postaladdressl |
|--------|------------|--------|-----------|-----------------------------|-----------------------------|-----------|----------------|
| sanas | erode | kongu | 2 | 4/24/2008 12:00:00 AM | 6/24/2008 12:00:00 AM | student | erode |
| sanas | erode | nandha | 2 | 4/24/2008 12:00:00 AM | 6/24/2008 12:00:00 AM | student | erode |
| sanas | erode | kongu | 2 | 4/24/2008 12:00:00 AM | 6/24/2008 12:00:00 AM | student | erode |
| gk | erode | kongu | 1 | 5/2/2008 12:00:00 AM | 6/2/2008 12:00:00 AM | employee | dfg |
| jjj | erode | nandha | 3 | 5/14/2008 12:00:00 AM | 8/14/2008 12:00:00 AM | student | jhgghg ikk |
| ppp | perundurai | kongu | 2 | 5/14/2008 12:00:00 AM | 7/14/2008 12:00:00 AM | student | uuu hhhh |
| ppp | erode | nandha | 2 | 5/14/2008 12:00:00 AM | 7/14/2008 12:00:00 AM | student | jkk |
| | | | | 5/14/2008 | 7/14/2008 | | |

Local intranet

http://localhost:1093/buspass1/default14.aspx

Figure A2.16 Transport User Details Form

ONLINE BUSPASS MANAGEMENT SYSTEM

The screenshot shows a web browser window displaying the 'ONLINE BUSPASS MANAGEMENT SYSTEM' website. The browser's address bar shows 'http://localhost:1093/buspass1/default15.aspx'. The website has a navigation menu with links for STUDENT, EMPLOYEE, TRANSPORT, PAYMENT, SELECTED LIST, TRACK, and LOG OUT. Below the menu, there is a 'WELCOME TO OUR BUSPASS WEBSITE' message. The main content area features a table with the following data:

| user | amount | Edate | status | category |
|-------|--------|-----------------------|------------|----------|
| vanas | 40 | 4/24/2008 12:00:00 AM | Registered | student |
| gk | 30 | 5/2/2008 12:00:00 AM | Registered | employee |
| lll | 30 | 5/14/2008 12:00:00 AM | Registered | student |
| PPP | 33 | 5/14/2008 12:00:00 AM | Registered | student |
| PPP | 20 | 5/14/2008 12:00:00 AM | Registered | student |
| ppp | 33 | 5/14/2008 12:00:00 AM | Registered | student |
| ppp | 60 | 5/14/2008 12:00:00 AM | Registered | student |
| aa | 60 | 5/27/2008 12:00:00 AM | Registered | employee |
| guna | 40 | 5/27/2008 12:00:00 AM | Registered | student |
| mrn | 60 | 6/19/2008 12:00:00 AM | Registered | student |

The browser's status bar at the bottom shows 'http://localhost:1093/buspass1/default15.aspx' and 'Local intranet'.

Figure A2.17 Payment User Details Form

ONLINE BUSPASS MANAGEMENT SYSTEM

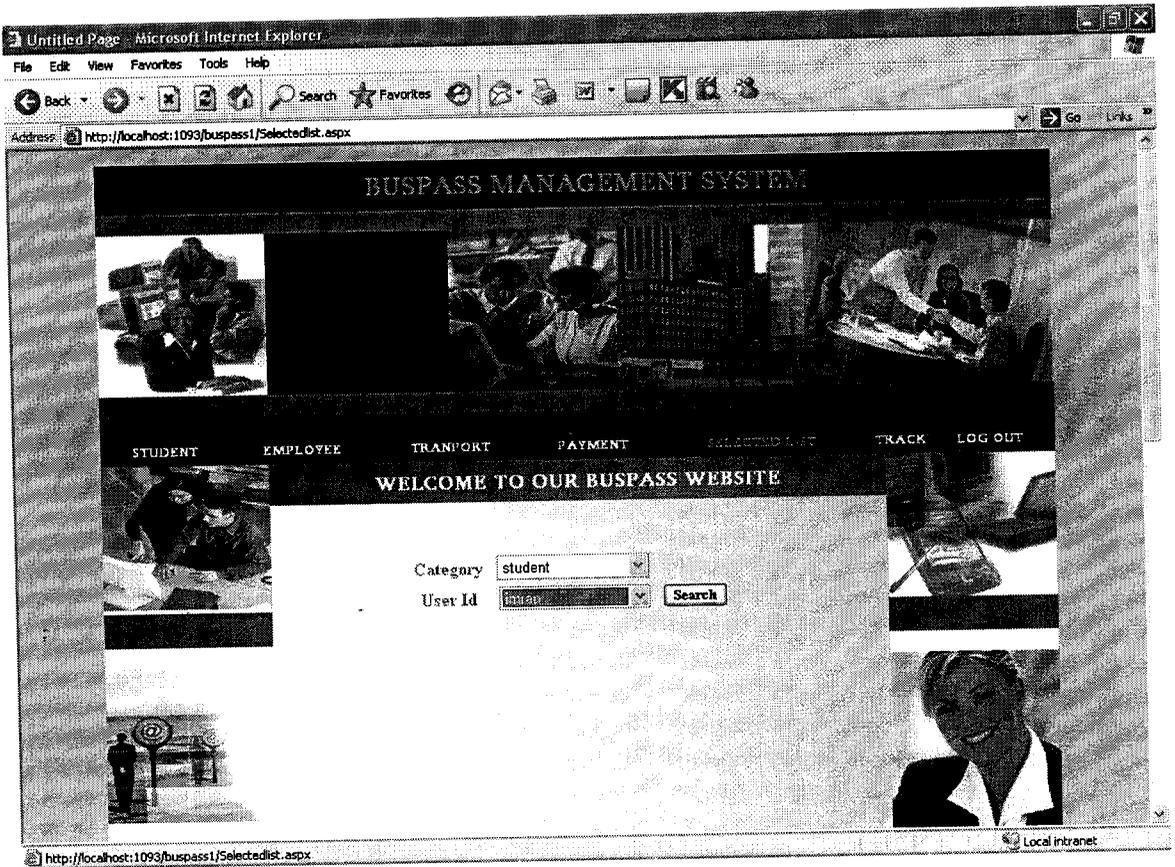


Figure A2.18 Selected List Form

ONLINE BUSPASS MANAGEMENT SYSTEM

Address: http://localhost:1093/buspass1/Selectedlist.aspx

| stu_name | username | uni_reg | dob1 | | addr |
|----------|----------|---------|-----------|----------|---------------------|
| Mohammed | imran | 786 | 7/23/1985 | 12:00:00 | 285,Nethaji Street, |
| Imran | | | AM | | Erode. |

Transport Details

| userid | from | to | duration | edate | fdate | category | postaladdress |
|--------|-------|-------|----------|-----------------------------|-----------------------------|----------|-----------------------------|
| imran | erode | kongu | 3 | 6/19/2008 12:00:00 AM | 9/19/2008 12:00:00 AM | student | 285,Nethaji Road, Erode. |

Payment Details

| user | amount | Edate | status | category |
|-------|--------|-----------------------------|------------|----------|
| imran | 60 | 6/19/2008 12:00:00 AM | Registered | student |

Live Support
Click here!

Local intranet

Figure A2.19 Selected List User Details Form

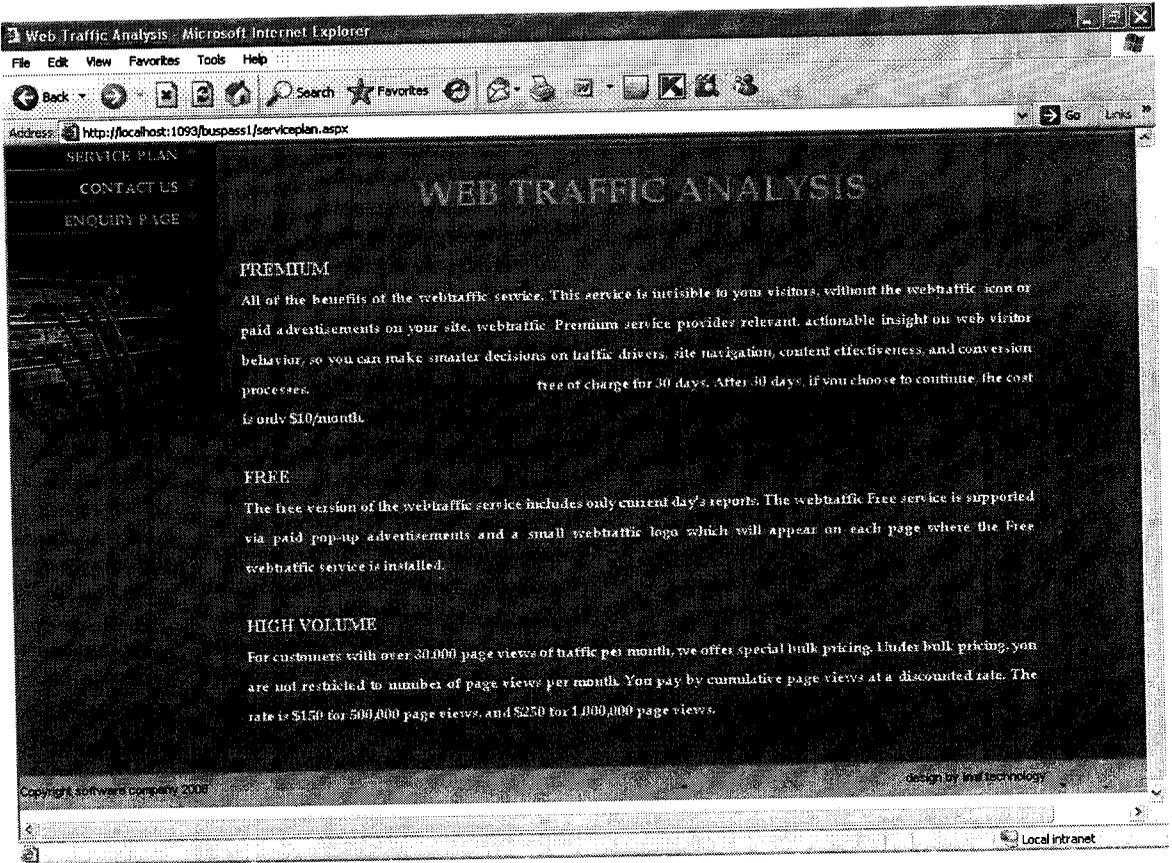


Figure A2.21 Service Plan Form

ONLINE BUSPASS MANAGEMENT SYSTEM

Web Traffic Analysis - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address: http://localhost:1093/buspass1/signup.aspx

WEB TRAFFIC SIGN-UP FORM

ACCOUNT SETUP

Please fill out the form below in order to create a new account web traffic account. If you are already using our web traffic Free Service, (or you are currently using the 30-Day Free Trial) of our web traffic Premium Service, click [here](#) to upgrade to our web traffic Premium Service.

Note, that our company is firmly committed to the privacy of customers. Click [here](#) for our detailed privacy policy.

User Name

Password

Confirm Password

Website Address

Company

Email

Address

Local Intranet

Web Traffic Analysis - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address: http://localhost:1093/buspass1/signup.aspx

CHOOSE SERVICE PLAN

- PREMIUM SERVICES
- FREE SERVICE
- HIGH VOLUME SERVICE
- TRY OUR PREMIUM SERVICE FREE

CREDIT CARD INFORMATION

Only required for Premium or High Volume Service

Credit card Number

Exp. Date

Card Type

- VISA
- MASTER CARD
- AMERICAN EXPRESS

I accept the terms and conditions

Submit

Local Intranet

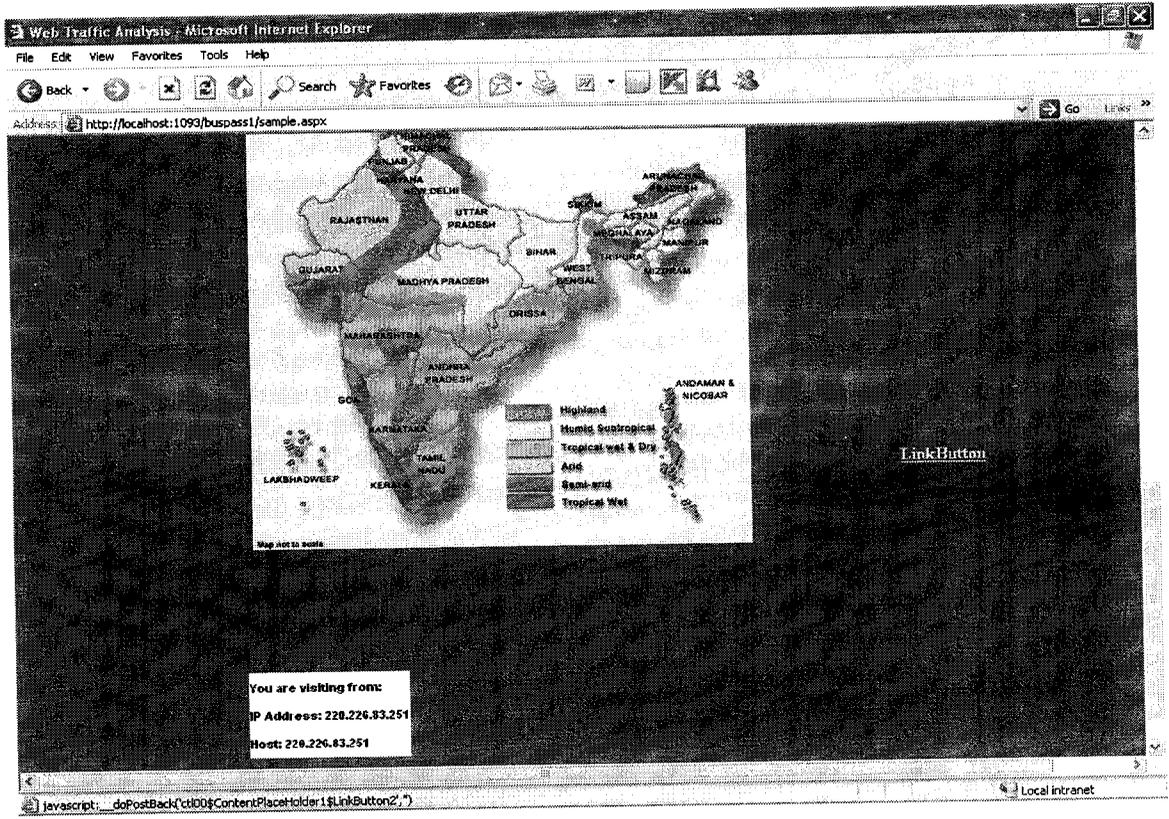
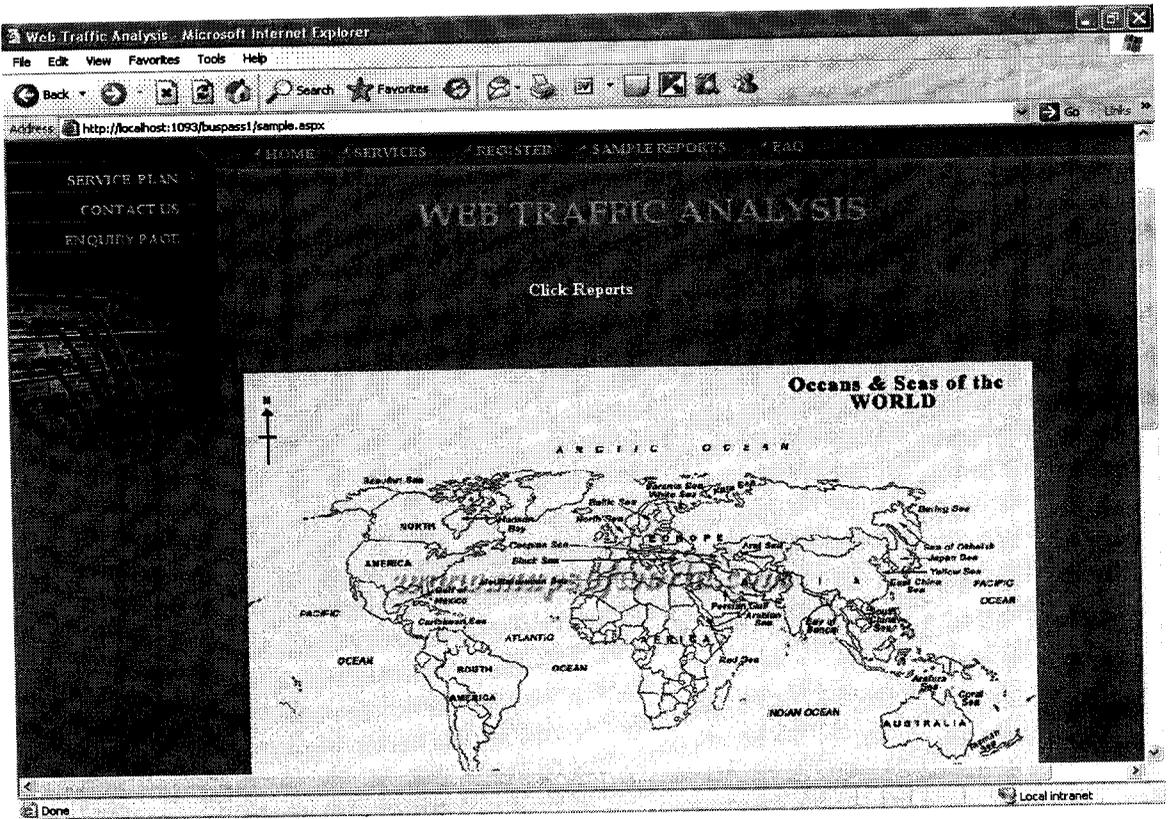


Figure A2.23 Sample Report Page

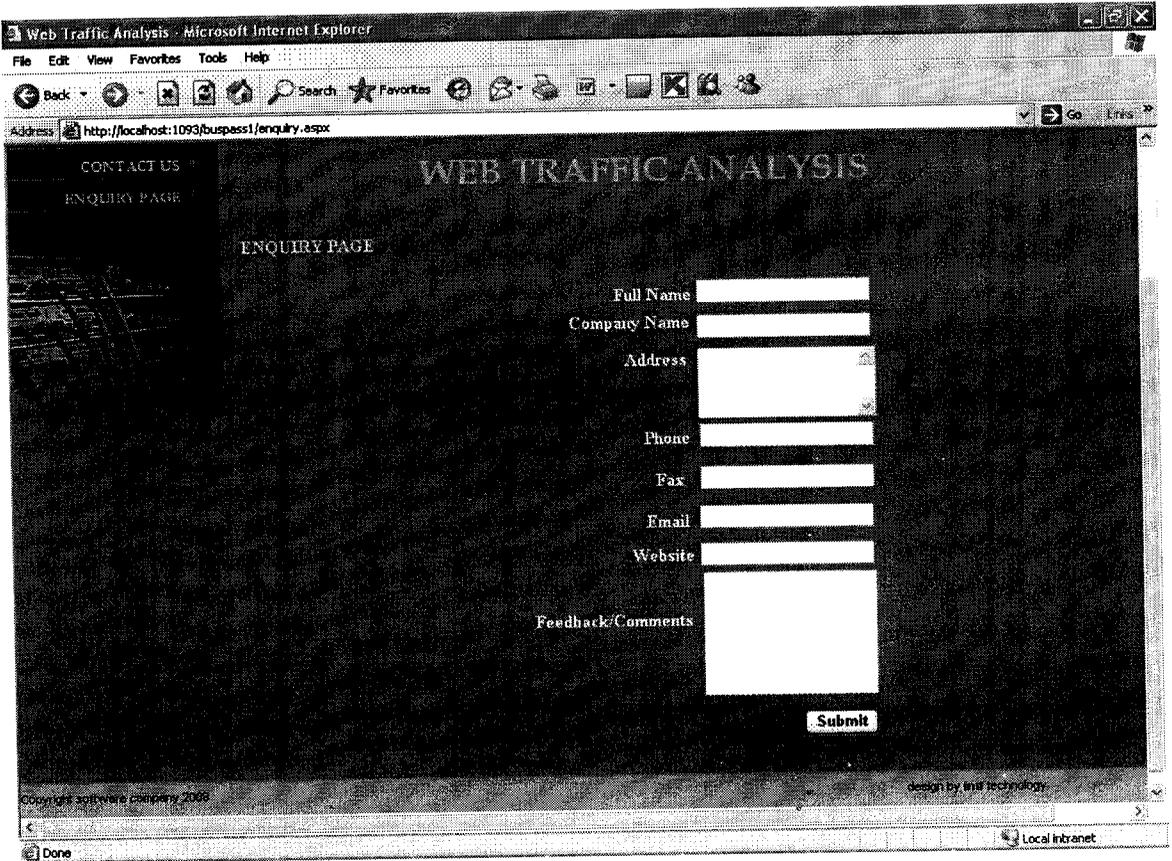


Figure A2.24 Enquiry Page

CHAPTER 9

9. BIBLIYGRAPHY

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4. <http://www.orafaq.com>
5. <http://javascript.com>
6. <http://msdn.microsoft.com>