

High-Tech Courier Services as an E-Courier services in India Prospective

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Abstract: This present study “e-Courier Services” has been developed to keeping in mind the heights of “Information technology has reached to new height” and when everything is powered with computers does make a great difference. This website contains information about user function such as booking the couriers and services, loading the collection of lots in the selected consignments in container as well as administrator function such as office registration, creating user, viewing suggestions and complaints of user, adding new cities and states, view the status of consignment etc. [Report and Opinion 2010;2(5):86-93]. (ISSN:1553-9873).

Keywords: Pincode locator, Destination locator, Pickup, Client, Consignment Search, Rate calculator

1. Introduction

The project “e-Courier Services” delivery status and notification system has being tested for the need of company running simultaneously e-courier services this is specially meant for their frontline user service information. This is one of the best efforts by us to prove that how Internet can be helpful in tire service industry. Where inquiries are always in queue. This system however is a snap shot of the whole scenario for the booming service industry. This basically deals with the queries of user for a company simultaneously running its e-courier service where the users having booked some couriers or both for delivery can view the status online about where there booked courier. How much more time it will take to reach the place, and whether received it in original state. And many other queries such as the reason of blockage, queries with the user care officers regarding handling etc. there is a user satisfaction guest book where user should put some notes about our service user complaint register.

As the domain in of the system is to a bigger area so the best and convenient way is internet as this is the best way to satisfy the user queries. A website can prove the best interface between the user and the company. With the advent of the internet technologies wavered. Every year millions of people around the world are using internet, interact in more ways than ever before to date the find old classmates check of medical elements and cures to react and express and interactive view of the news also gives live sales, help online and maximum hit mostly in the service industries. This is an instance to show that how internet can be the best deal with the fast growing network of

optical fiber making micro broadband and economical to access the internet. Whether in the modern or information retrieval term. The extract of all these whether the data access retrieval and our goal is placed in a well ordered by using it’s technologies on net. We will not lose our data whether it is user or service provider. So computer is now helpful in many other cases too:-

- Fast retrieval of information around the nation by browsing the net.
- Easy access by sitting home to most of the work places.
- Easy database access with the invaluable functions of online entertainment and jobs and placements. Through this portal we have tried to automate the process of an instance of user care industry service a web based support for a cargo and courier to provide automates service regarding their courier (packets and parcels) delivery status.

Features of e-courier services: The salient features of e-courier service are as follows

1. The main objective of project is to provide users with the facility of taking online courier service.
2. Due to the easy and secure accessing of site, multiple user access simultaneously.
3. Providing online Pickup Request.
4. Ease Packet Tracking facility.
5. User can see our all India branches online.
6. User can see our Pickup Schedule.
7. Users can check our Price of our different services.
8. Branch head can send our request to the admin for their problems.

- 9. Admin can create and terminate branch any time.
- 10. Admin can send common message to all branches.

1.1 Importance of e-courier

A courier service provides door to door shipping and delivery of packages, letters, and other shipments. Courier services range from local to international. As you consider how to select a courier service, look at your shipping needs. Do you typically ship locally or internationally? Do you ship in bulk or infrequently? Do you regularly require overnight or express shipping? If you can answer these simple questions, it will help you select a more appropriate courier service for your business needs. While typical mail and shipping solutions work well for many companies, a courier service may be a more economical, convenient and practical option for other companies

Courier services can make shipping packages of all sizes easy. Convenient online interfaces, automated billing and more make courier services an ideal option for many businesses. With some simple tips and tricks, you can figure out how to select a courier service that best suits your needs. Courier services typically offer delivery guarantees, insurance coverage on your shipment, and other helpful features. The ability to easily schedule pickups can be convenient and save time and trouble. Courier services can also offer timely delivery of your packages whether you require same day, express or overnight shipping. A consistent relationship with a courier service can make shipping an easy part of business. A good quality, easy to use courier service can make your customer and client transactions go smoothly.

1.2 Benefits of e-courier Services

In order to quantify the benefits of delivery of your parcel, you first have to know what to look for. Courier service can help you in different ways. Here are some of the areas to look for benefits in implementing a software system:

Time Reduction: Through online user/company can interact with our services and save the time to reach and contact to the courier company.

Rate Calculator: Through online user can check different price for services provide in that cities where the user want or not.

Packet Tracking: Through online user/company can interact with our services and save the time to reach and contact to the courier company.

Email Tracking: User can send the online request to the admin for his query.

Pickup Request: User can send the pickup request to the branch. The packet will be picked by company from the home.

1.3 Branches of E-courier services

This is a web based system. Branch admin can login after those do all the needed works like packet tracking, new record, dispatch and employee records. The system has three roles: for general users, branch and Admin who manages the system.

The purpose of online work simulator is to do work fast and best. Online work gives in an efficient manner and no time wasting for checking the report. The main objective of checking report gives the daily profit and loss. Branch admin can check the employee record easily.

Branch Admin can send the request to the Admin and receive the admin message.

1.4 Admin

Admin has all the control over the websites by that admin can create, terminate branch and can update the branch record any time. See report of all the branches that can be daily report, monthly report, quarterly report or yearly report.

Admin can give the discounts at different time due to economic reasons. When needed admin can send the message to all the branches.

1.5 Hardware and Software Requirements for E-courier services

1.5.1 Hardware includes:

| | |
|-------------------|-----------------------|
| Processor | Intel Pentium 2.8 GHZ |
| Memory | 512 M.B., D.D.R. RAM |
| Network Adapter | Ethernet Adapter |
| Modem | 56kpbs Voice Fax Data |
| Secondary Storage | 40 G.B |

1.5.2 Tools and Language Used:

| | |
|--------------------|-----------------------------|
| Platform | Windows |
| Operating System | Windows XP professional |
| Framework | ASP.Net FRAMEWORK 3.5 |
| Front-End Tool | Visual Studio 2008 |
| Scripting Language | HTML |
| Server | Internet Information Server |
| Back-End Tool | SQL Server 2005 |
| Technology | ASP.NET with C# |

2.0 Overall status of ordinary courier services

2.1 Problem Statement

- Manual Work
- Packet Tracking Problem
- Slow Service
- Pickup request facility
- Packet lost rate high
- Branch Location problem
- Report Problem
- Account summary
- Rate calculation
- Customer Feedback

2.2 Limitations of The Existing System

- Due to the following limitations of the existing system, computerization of the existing system is taking place. Computerized maintenance of accounts is definitely a better alternative to the conventional manual computing maintenance due to the forthcoming reasons.
- The data preparation and the data entry operations are dependent mainly on people. As labor costs are high, the cost of preparing and entering the data is also high.
- Going through the massive number of records manually involves lots of time and patience. Computer can do a search job instantaneously with no wastage of time. Calculations by computer systems are much faster and error free than what human can do.
- The medium of storage for manual maintenance is paper which is not a permanent and reliable medium, since it is easily susceptible to damage due to fire, insects, cyclones etc. It even involves security concerns. However, storage medium in computerized system is magnetic disk, which is a permanent storage device.
- In case of manual maintenance, introducing changes such as changes in address or name fields may not be reflected correctly across many ledgers using them. The inconsistent data allows the errors to creep in and integrity of the data is lost. However, in computerized system a central database is maintained any changes taking place in any field is reflected uniformly in any module using them. Record deletion process was also manual and it makes the paper work untidy.
- Account maintenance was not easy and much costly.

2.3 Proposed Methods and Procedures

2.3.1 Online courier service

Courier services can make shipping packages of all sizes easy. Convenient online interfaces, automated billing and more make courier services an

ideal option for many businesses. With some simple tips and tricks, you can figure out how to select a courier service that best suits your needs. Courier services typically offer delivery guarantees, insurance coverage on your shipment and other helpful features. The ability to easily schedule pickups can be convenient and save time and trouble. Courier services can also offer timely delivery of your packages whether you require same day, express or overnight shipping. A consistent relationship with a courier service can make shipping an easy part of business. A good quality, easy to use courier service can make your customer and client transactions go smoothly.

User can login to start a new topic or comment on an existing one. Each topic in the forum is associated with number of hits and the one with highest number of hits is displayed at the top. If any user wants to post the comment on any topic for this purpose, he can click on the respective topic and then can make the comment.

2.3.2 Administrator

Admin can manage all the information regarding exams, products and users. Admin can insert, delete or update details regarding a particular book, product or exam. Also admin can view the registered users.

This system will improve the functionality of the existing system as follows:

- The main advantage of online shopping is that it allows people to browse through many items and categories without leaving their house, to compare the prices of as many shops as they want, and also to order as many items as they can afford without having to worry about how they will transport them, because the online shopping websites also deliver the things to the buyer's home. Furthermore, the Internet is open 24 hours a day, 365 days a year, so you don't have to hurry or worry about finding a parking spot. Online shopping is the best solution for both those who consider it a chore that they try to avoid and for those who do it on a daily basis.
- In comparison to the present system the proposed online examination system will be less time consuming and is more efficient. Analysis will be very easy in proposed system as it is automated. Result will be very precise and accurate and will be displayed in very short span of time because calculation and evaluations are done by the simulator itself. The proposed system is very secure as no chances of leakage of question paper as it is dependent on the administrator only.
- Forums allow you to get educational information on your site, increase traffic through repeat visitors, capture email address and details of

posters, gain more creditability and build relationship with visitors.

- Proposed system will provide the administrator with the rapid functionality for information updating and retrieval of data while in the existing system this process is done at regular interval because this takes too much efforts and time.
- Every user is authenticated and only administrator can create, modify and view details of users. All other users can't make any disturbance to any user data.
- Possibility of Incorrect entries of data is reduced to the greater extent by performing validation checks during data entry.

3- Problem Solving Methodology of ordinary courier services:

3.1 Initial Investigation

To begin with solving the problem firstly fact finding is done. For this purpose we visited number of websites namely, firstflight.com, bluedart.com, blazeflash.com. From where we felt the need of developing a portal which could provide the users with facility of performing different activities such as packet tracking , pickup request , rate calculation and posting comments through mail tracking.

3.2 Analysis

The software will consist of the following input:

- Administrative information
- Packet information
- Branch information
- Rate calculation
- Network information

All of the above data will be stored in the database in the server, and the information includes both the text files and the graphic files.

The software will also consist of the following functions:

- Update information related pickup request
- Submit New record
- Packet Delivery record
- Employee Information
- Collects the valuable Feedback
-

Outputs of software will include:

- Report Generation
- Branch Location
- Rate Calculation
- Packet Tracking

3.3 Design

The project is designed to support online e-courier. The home page will provide all the above mentioned options. Also a search field will be provided to search services and helps to the category. Users can send their requests. Admin login option will be provided separately.

Home page will describe the details regarding of the courier service, and gives the consignment guidelines.

3.3.1 Modules

These modules with their sub modules are describe below:

(a) User Module:

In this module user can use various service by online with the help of internet. These services help the user to do their work effectively and efficiently. The services are following:-

- Pickup Request
- Destination Locator
- Pincode Locator
- Rate Calculator
- Consignment Guidelines
- National Services
- Regional Services

(b) Branch Module:

This module helps the branch admin to use various services after the logged on e-courier services like:-

- New Record
- Packet Dispatched
- Employee Record
- Message
- Request

(c) **Admin Module** : The Admin module helps the admin to do work with the differents facility that helps to solve the problem of manual work and contact can be easily maintain with the all(national) branches.

It includes the following sub modules-

- Branch Creation
- Branch Termination
- Send Message
- User request
- Request
- Update Branch
- Update Branch Services

3.3.2 USE CASE DIAGRAM

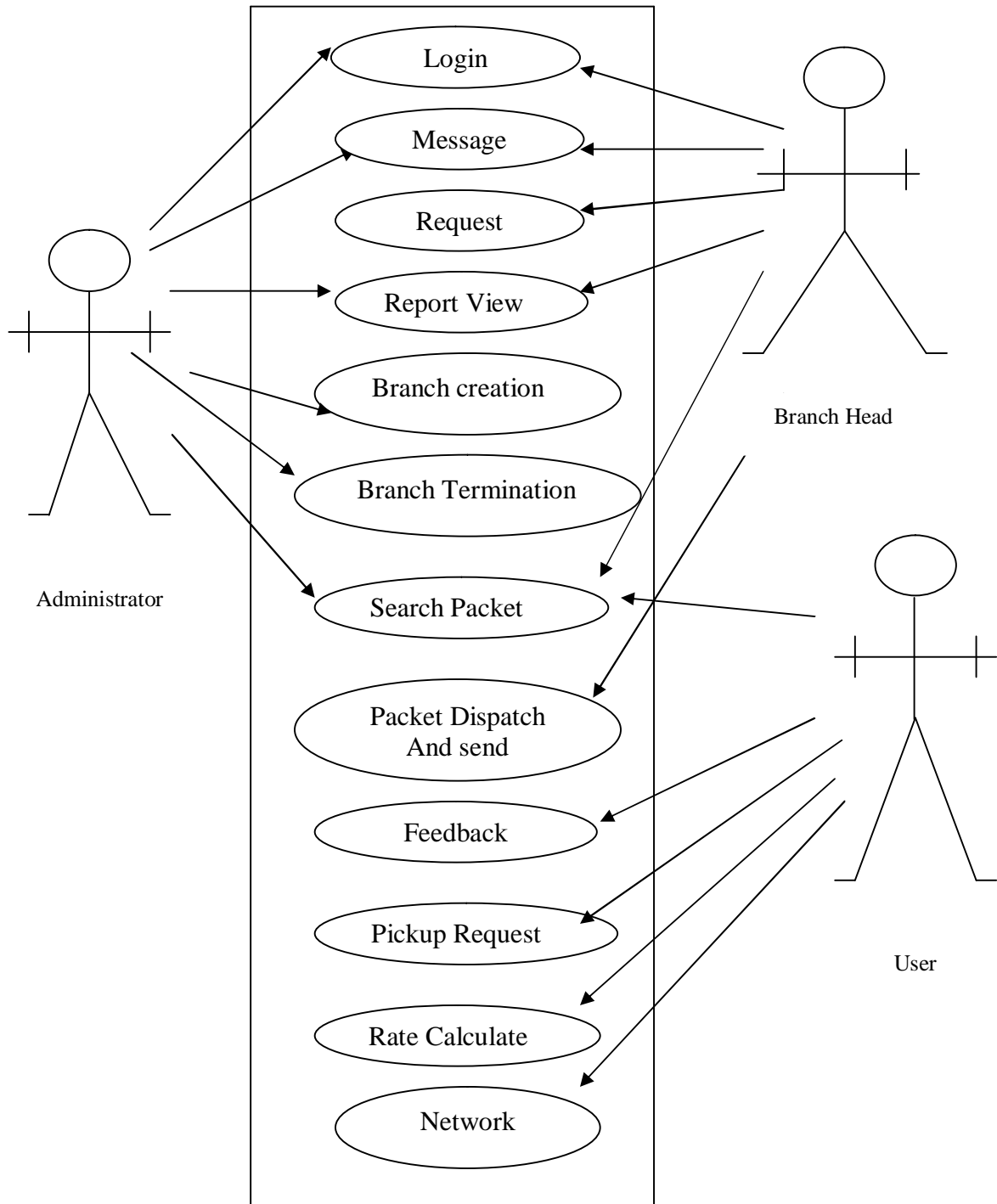


Figure 1.

3.3.3 Data Flow Diagram
At 0 level

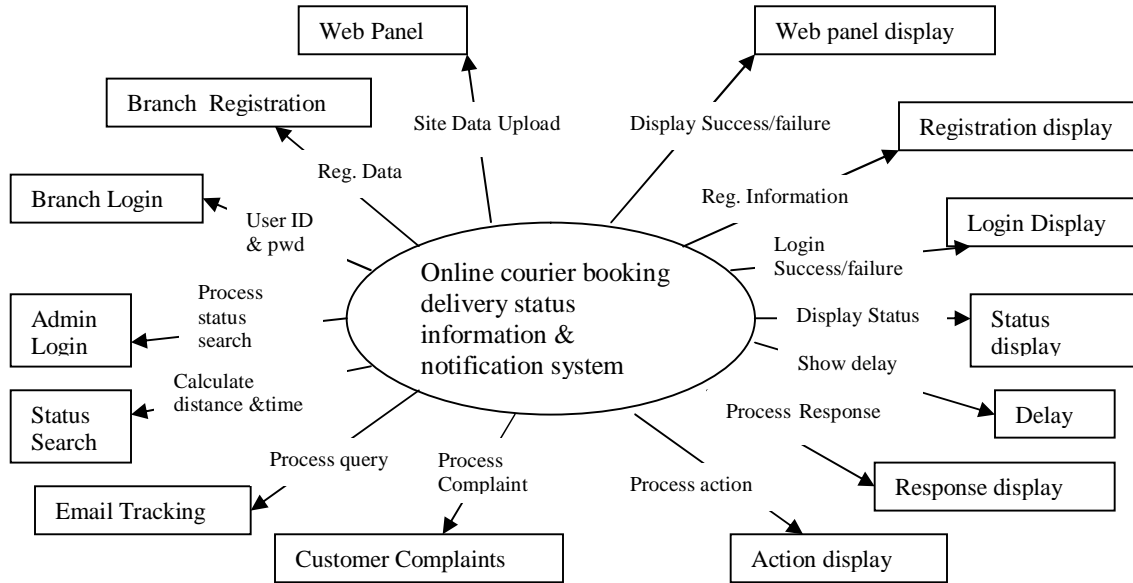


Figure 2

AT 1 Level

3.3.4 DATABASE TABLES

Table 3.1 Rate

| Table - dbo.rate | Table - dbo.pickup_req | Table - dbo.newre |
|------------------|------------------------|-------------------------------------|
| Column Name | Data Type | Allow Nulls |
| s_no | int | <input checked="" type="checkbox"/> |
| source | varchar(20) | <input checked="" type="checkbox"/> |
| destination | varchar(20) | <input checked="" type="checkbox"/> |
| rate | int | <input checked="" type="checkbox"/> |
| | | <input type="checkbox"/> |

Table 3.2 Pickup Request

| Table - dbo.pickup_req | Table - dbo.newrecord | Table - dbc |
|------------------------|-----------------------|-------------------------------------|
| Column Name | Data Type | Allow Nulls |
| name1 | varchar(20) | <input type="checkbox"/> |
| address | varchar(60) | <input type="checkbox"/> |
| p_no | varchar(20) | <input type="checkbox"/> |
| fax | varchar(20) | <input checked="" type="checkbox"/> |
| email | varchar(20) | <input checked="" type="checkbox"/> |
| date | datetime | <input checked="" type="checkbox"/> |
| time | datetime | <input checked="" type="checkbox"/> |
| source | varchar(60) | <input type="checkbox"/> |
| destination | varchar(60) | <input type="checkbox"/> |
| weight | varchar(60) | <input type="checkbox"/> |
| | | <input type="checkbox"/> |

Table3.3 New Record (packet)

| Table - dbo.newrecord | | |
|-----------------------|-------------|-------------------------------------|
| Column Name | Data Type | Allow Nulls |
| b_id | int | <input checked="" type="checkbox"/> |
| c_id | int | <input checked="" type="checkbox"/> |
| s_name | varchar(30) | <input checked="" type="checkbox"/> |
| s_addr | varchar(50) | <input checked="" type="checkbox"/> |
| s_pnt_no | varchar(15) | <input checked="" type="checkbox"/> |
| s_email | varchar(15) | <input checked="" type="checkbox"/> |
| s_city | varchar(15) | <input checked="" type="checkbox"/> |
| r_name | varchar(30) | <input checked="" type="checkbox"/> |
| r_addr | varchar(50) | <input checked="" type="checkbox"/> |
| r_pnt_no | varchar(15) | <input checked="" type="checkbox"/> |
| r_email | varchar(15) | <input checked="" type="checkbox"/> |
| r_city | varchar(15) | <input checked="" type="checkbox"/> |
| pin | int | <input checked="" type="checkbox"/> |
| weight | int | <input checked="" type="checkbox"/> |
| date | varchar(15) | <input checked="" type="checkbox"/> |
| amount | int | <input checked="" type="checkbox"/> |
| | | <input type="checkbox"/> |

Table3.7 Branch

| Table - dbo.branch | | |
|--------------------|--------------|--------------------------|
| Column Name | Data Type | Allow Nulls |
| br_id | int | <input type="checkbox"/> |
| br_name | varchar(20) | <input type="checkbox"/> |
| br_loc | varchar(20) | <input type="checkbox"/> |
| br_state | varchar(20) | <input type="checkbox"/> |
| br_add | varchar(100) | <input type="checkbox"/> |
| br_phone | varchar(20) | <input type="checkbox"/> |
| br_fax | varchar(20) | <input type="checkbox"/> |
| br_email | varchar(25) | <input type="checkbox"/> |
| br_pass | varchar(50) | <input type="checkbox"/> |
| | | <input type="checkbox"/> |

Table3.4 Message

| Table - dbo.msg | | |
|-----------------|--------------|-------------------------------------|
| Column Name | Data Type | Allow Nulls |
| msg | varchar(500) | <input checked="" type="checkbox"/> |
| date | varchar(15) | <input checked="" type="checkbox"/> |
| | | <input type="checkbox"/> |

Table3.8 User Request

| Table - dbo.request | | |
|---------------------|---------------|-------------------------------------|
| Column Name | Data Type | Allow Nulls |
| name | varchar(500) | <input checked="" type="checkbox"/> |
| branch | int | <input checked="" type="checkbox"/> |
| contact | varchar(15) | <input checked="" type="checkbox"/> |
| subject | varchar(20) | <input checked="" type="checkbox"/> |
| message | varchar(1000) | <input checked="" type="checkbox"/> |
| date | varchar(15) | <input checked="" type="checkbox"/> |
| | | <input type="checkbox"/> |

Table3.5 Admin Login

| Table - dbo.login | | |
|-------------------|-------------|-------------------------------------|
| Column Name | Data Type | Allow Nulls |
| id | varchar(20) | <input checked="" type="checkbox"/> |
| pwd | varchar(20) | <input checked="" type="checkbox"/> |
| | | <input type="checkbox"/> |

Table3.9 Employee Record

| Table - dbo.emp | | |
|-----------------|-------------|-------------------------------------|
| Column Name | Data Type | Allow Nulls |
| branch_id | varchar(20) | <input checked="" type="checkbox"/> |
| emp_id | varchar(20) | <input checked="" type="checkbox"/> |
| name | varchar(20) | <input checked="" type="checkbox"/> |
| addrs | varchar(25) | <input checked="" type="checkbox"/> |
| phone | varchar(15) | <input checked="" type="checkbox"/> |
| salary | varchar(10) | <input checked="" type="checkbox"/> |
| d_of_join | varchar(20) | <input checked="" type="checkbox"/> |
| | | <input type="checkbox"/> |

Table3.6 Dispatch

| Table - dbo.dispatch | | |
|----------------------|-------------|-------------------------------------|
| Column Name | Data Type | Allow Nulls |
| c_id | int | <input checked="" type="checkbox"/> |
| r_name | varchar(20) | <input checked="" type="checkbox"/> |
| mobile | varchar(10) | <input checked="" type="checkbox"/> |
| relation | varchar(10) | <input checked="" type="checkbox"/> |
| date | varchar(15) | <input checked="" type="checkbox"/> |
| | | <input type="checkbox"/> |

Table3.10 Feedback

| Table - dbo.mailtrack | | |
|-----------------------|--------------|-------------------------------------|
| Column Name | Data Type | Allow Nulls |
| eno | varchar(20) | <input checked="" type="checkbox"/> |
| email | varchar(25) | <input checked="" type="checkbox"/> |
| phone | varchar(15) | <input checked="" type="checkbox"/> |
| msg | varchar(500) | <input checked="" type="checkbox"/> |

4- Test & Evaluation

Testing a viable candidate system that fulfills the following requirements

- § Faster and accurate information retrieval.
- § Easy registration.
- § Login dependent information updating.
- § Correct and consistent maintenance of data and its quick retrieval.
- § Minimizing the page download time hence less investment.
- § Improving the switches button and hyperlink so that the candidate could find all the queries they need at the first sight.
- § Maintaining the fast download of the page by using the flavors of cookies.
- § Smooth transition and easy access to the pages not requiring much training to the end user.

5: Future Scope of E-courier services:

- Online Chat
- Overseas Service
- Pickup Request On chat
- Expanded geographical research
- Available 24/7/365 Never close

- Increase visibility through search Engine Marketing

6: Conclusion:

Web based application is the magic of today's world. The object of "*e-Courier Services*" project is to harness the power of Internet for our practical and potential one. This report explains to extensively cover this concept and plant a seed of inquisitiveness in the mind of users. We hope that the users as well as the companies would maximum utilize of our project and we keep on adding new facilities which would make it very useful for other discipline persons among other industries. The basic idea of this project is to explain the fundamental concepts of B2B (business to business) services and also building of computer knowledge would highly usable for general people.

REFERENCES:

- [1] www.firstflight.com
- [2] www.blazeflash.com
- [3] www.bluedart.com

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