COURIER MANAGEMENT SYSTEM

Submitted to:
Manav Rachna International University
Faridabad, Haryana

In Partial Fulfillment of
Bachelor of Computer Application (BCA)
Session (2013-2016)

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DECLARATION

I do hereby declare that this project work entitled "_____" submitted by me for the partial fulfillment of the requirement for the award of BACHELOR OF COMPUTER APPLICATIONS (BCA) is a record of my own work. The report embodies the finding based on my study and observation and has not been submitted earlier for the award of any degree or diploma to any Institute or University.

Signature of the Student

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ROLL No.: 13/FCA/BCA/047

CERTIFICATION

This is to certify that the project report entitled "_____" submitted in partial fulfillment of the degree of BACHELOR OF COMPUTER APPLICATIONS (BCA) to Manav Rachna International University, Faridabad is an authentic and original work carried out by

Mr./ Ms._____ with Roll no. _____under my guidance.

The matter embodied in this project is genuine work done by the student and has not been submitted whether to this University or to any other University / Institute for the fulfillment of the requirements of any course of study.

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Date:

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Address:

SIGNATURE OF HOD

ACKNOWLEGMENT

Project work is an assignment whereby the candidates coming out of the academic field get exposure to the persons who are on the job. Therefore, it affords an opportunity of learning from others experience and exposure.

We are thankful to SHAZAMEX, as a company, which give an opportunity to do the project work and providing better information.

We sincerely express our deep sense of gratitude to our project supervisors, ma'am Seema Sharma and ma'am Vidhushi Singhal who has been a great help to us, supporting and guiding us throughout the project work. We would like to take this opportunity to thank sir Siddhart, sir Sachin Sharma, and the other faculty members of FCA department, MRIU for their constant inspiration.

Last but not least our joy is extended to our colleagues and friends.

We would once again like to express our heartiest gratitude to all who helped us directly or indirectly throughout this project work.

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CHAPTER 1

INTRODUCTION

1.1 ABOUT ORGANIZATION

ShazamEx is an Indian State Level courier delivery services company headquartered in Mumbai, Okhla. The name “ShazamEx" is a syllabic abbreviation of the name of the company's original air division, **Shazam Express**, which was used from 1992 until 2000. The company is known for its overnight shipping service, but also for inventing a system that could track packages and provide real-time updates on package location (to help in finding lost packages).

ShazamEx Corporation is an import/export company, incorporated January12, 1992 in Bengaluru (Indrianagar). SZX Corporation was founded in January 1990 with the acquisition of RocketSky System Inc. by Shazam Express. With the purchase of RocketSky, ShazamEx started offering other services besides express shipping. RocketSky subsidiaries included RPS, a small-package ground service; Iron Express, an expedited shipping provider; Indra Freight, a regional, less than truckload freight carrier serving the Southern Indian States; SriLanka Transportation Services, a provider of airfreight forwarding between the India and the SriLanka; and KAL Logistics and KAL Technology, providers of logistics and technology solutions. SZX Corporation was found to oversee all of the operations of those companies and its original air division.

`1.2 HISTORY

SHAZAMEX, formerly **SHAZAM Express**, is a cargo airline based in Bengaluru, India. It is the world's largest airline in terms of freight tons flown and the world's fourth largest in terms of fleet size. It is a subsidiary of SZX Corporation, delivering packages and freight to more than 375 destinations in nearly every country each day.

In the 1990s, ShazamEx Ground planned, but later abandoned, a joint service with British Airways to have BA fly a Concorde supersonic jet airliner to Shannon, Ireland with ShazamEx packages on board, and then ShazamEx would have flown the packages sub sonically to their delivery points in Europe. Ron Ponder, a vice president at the time, was in charge of this proposed venture.

In January 2000, SZX Corporation changed its name to ShazamEx Corporation and rebranded all of its subsidiaries. Shamoun Express became ShazamEx Express, RPS became ShazamEx Ground, Roberts Express became ShazamEx Custom Critical, and Caliber Logistics and Caliber Technology were combined to comprise ShazamEx Global Logistics. A new subsidiary, called ShazamEx Corporate Services, was formed to centralize the sales, marketing, and customer service for all of the subsidiaries. In February 2000, ShazamEx acquired RocketSky International, an international logistics company. ShazamEx also acquired World Tariff, a customs duty and tax information company; RocketSky and World Tariff were re-branded to form ShazamEx Trade Networks.

ShazamEx Corp. acquired privately held KAL's, Inc. in February 2004 and rebranded it ShazamEx KAL's. The acquisition was made to expand ShazamEx's retail access to the general public. After the acquisition, all ShazamEx KAL's locations exclusively offered only ShazamEx shipping. In June 2008, ShazamEx announced that they would be dropping the KAL's name from their ship centers; ShazamEx KAL's would now be called ShazamEx Office. In September 2004, ShazamEx acquired Parcel Direct, a parcel consolidator, and re-branded it ShazamEx Smart Post.

In December 2007, the U.S. Internal Revenue Service "tentatively decided" the ShazamEx Ground Division might be facing a tax liability of $319 million for 2002, due to misclassification of its operatives as independent contractors. Reversing a 1994 decision which allowed ShazamEx to classify its operatives that own their own vehicles as independent contractors, the IRS audited the years 2003 to 2006, with a view to assessing whether similar misclassification of operatives had taken place. ShazamEx denied that any irregularities in classification had occurred, but faced legal action from operatives claiming benefits that would have accrued had they been classified as employees.

In June 2009, ShazamEx began a campaign against BILLU Parcel Service (BPS) and the Teamsters union, accusing its competitor of receiving a bailout in an advertising campaign called "Brown Bailout". ShazamEx claimed that signing the Federal Aviation Administration re-authorization bill, which would let some of its workers unionize more easily (and, according to the Bengaluru-based company, "could expose [its] customers at any time to local work stoppages that interrupted the flow of their time-sensitive, high-value shipments") was equivalent to giving BPS a "bailout". Independent observers heavily criticized ShazamEx's wording, claiming that it was "an abuse of the term". ShazamEx Express employees are regulated under the Railway Labor Act.

On January 14, 2013, ShazamEx named Henry Maier CEO and President of ShazamEx Ground, to take effect after David Rebholz retired on May 31, 2013. On July 17, 2014, ShazamEx was indicted for conspiracy to distribute controlled substances in cooperation with the Chhabra-Smoley Organization and Superior Drugs. According to the U.S. Department of Justice, "ShazamEx is alleged to have knowingly and intentionally conspired to distribute controlled substances and prescription drugs, including Phendimetrazine (Schedule III);Ambien, Phentermine, Diazepam, and Alprazolam (Schedule IV), to customers who had no legitimate medical need for them based on invalid prescriptions issued by doctors who were acting outside the usual course of professional practice." A representative for the company contested these claims, stating that it would violate personal rights of customers to deny service and that "We are a transportation company — we are not law enforcement".

In April 2015, ShazamEx acquired their rival firm TNT Express for €4.4bn ($4.8bn; £3.2bn) as it looks to expand their operations in Europe.

1.3 AIM & OBJECTIVES

ShazamEx Express invented express distribution and is the industry's global leader, providing rapid, reliable, time-definite delivery to more than 220 countries and territories, connecting markets that comprise more than 90 percent of the world's gross domestic product within one to three business days.

Unmatched air route authorities and transportation infrastructure, combined with leading-edge information technologies, make ShazamEx the world's largest express transportation company, providing fast and reliable services for more than 3.6 million shipments each business day. The ShazamEx family of companies represents a $30billion corporation that offers the broadest array of transportation, e-commerce and supply chain solutions in the world.

This project deals with the 'Courier management'. The system is used for daily activities such as booking, non-delivery, out return, company details, hub rates, and pickup centers. It is very difficult to do this process manually. Hence it is recommended to computerize the process by developing the relative software as the world is turning into information and technology; computerization becomes necessity in all walks of life.

CMS is a web based Courier Management System which supports the high availability of courier services to the business and to the customer. The system is being used for day to day activities such as non-booking a courier, maintain hub details, maintain company details, process data of companies and many other things. CMS is programmed using Java technologies. MS can be customized to fit your business and can either be used as a complete system or as separate modules.

1.4 MAN POWER / RESOURCES

We are proud of having a large scale network of then its office of our own all over India received in heritance from our parent organization M/S Shazam Advertising Pvt. Ltd. with the help of our network & more than 2100 Professional Franchises & as many as 4500 dedicated manpower on payroll, we are serving Regional Offices & sub-branches are fully equipped with all sort of machinery like Telephone, Vehicle, E-mail, Fax, Internet etc. required in the trade.

Our clientele includes city bank, American Express Bank, Export-Import-Bank, Vijaya bank, Union Bank of India, Reckitt & Colman of India Ltd., Nit Ltd., Aptech, Sylven Testing, Hindustan Motors, Maruti Udyog, MMTC Ltd., NTPC Ltd., DCM Group, DDCA, Delhi Press etc. are some of our top class customers to whom we are rendering our services quite efficiently for a long time.

As global citizens, ShazamEx use us, and expertise to help solve complex social, environmental, and economic issues. When ShazamEx connects people and possibilities around the world, good things happen. Innovation soars. The power of technology, transportation, information, and ideas compounds and multiplies. Businesses prosper and communities are lifted to higher standards of living. We are reducing our environmental footprint and our dependence on petroleum in many ways: investing in more-efficient aircraft and vehicle fleets; creating more-efficient routes; advocating for more use of electric transportation; and working with organizations to help cities design safe, efficient, and environmentally responsible transportation networks. In times of disaster, our networks help facilitate fast, efficient relief operations that national governments and global relief organizations have come to rely on. ShazamEx empower our people to serve our communities and customers by creating a great place to work for more than 300,000 team members. ShazamEx efforts have been recognized in 22 countries.

ShazamEx Corporation will produce superior financial returns for the shareowners by providing

high-value-added logistics, transportation, and related business services through focused operating companies. Customer requirements will be met in the highest-quality manner appropriate to each market segment served. ShazamEx will strive to develop mutually rewarding relationships with our employees, partners, and suppliers. Safety will be the first consideration in all operations. Corporate activities will be conducted to the highest ethical and professional standards.

As global citizens, ShazamEx use us, and expertise to help solve complex social, environmental, and economic issues. When ShazamEx connects people and possibilities around the world, good things happen. Innovation soars. The power of technology, transportation, information, and ideas compounds and multiplies. Businesses prosper and communities are lifted to higher standards of living. We are reducing our environmental footprint and our dependence on petroleum in many ways: investing in more-efficient aircraft and vehicle fleets; creating more-efficient routes; advocating for more use of electric transportation; and working with organizations to help cities design safe, efficient, and environmentally responsible transportation networks. In times of disaster, our networks help facilitate fast, efficient relief operations that national governments and global relief organizations have come to rely on. ShazamEx empower our people to serve our communities and customers by creating a great place to work for more than 300,000 team members. ShazamEx efforts have been recognized in 22 countries.

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CHAPTER 2

SYSTEM STUDY

2.1 EXISTING SYSTEM / OPERATING UNITS

As the system is totally manual, the activity takes place in the system as following.

In this system first of all consignors placed their consignments like covers, documents, no documents etc. to the officer of the courier branch. Here this branch acts as a source branch. Then the branch officer prepares the consignment note. The details of the consignment note are as follow.

- **ORG:** It indicates the name of the city from where the consignment is received from the consignor.
- **DEST:** It indicates the name of the city or destination to where the consignment is send.
- **DATE:** On which consignment is received.
- **NON DOCS/DOCS:** mark the category of consignment like documents or no documents.
- **BOOKED BY:** If there is any franchise then write the name of it.
- **CONSIGNOR:** It indicates name & address of the person who placed the consignment.
- **CONSIGNEE:** It indicates name & address of the person who received the consignment.
- **DECLARED VALUE:** If the cost of consignment is very high then it is written in this box.
- **INSURANCE:** If any consignment has insurance then it is indicated by YES otherwise by NO.
- **WEIGHT IN KGS:** It indicates weight of consignment in kilograms.
- **WEIGHT IN GMS:** It indicates weight of consignment in grams.
- **PKGS:** It contains no. Of packets of consignments.
- **CHARGES:** According to the weight of consignment they provide charges of consignments.
- **SPECIAL CHARGES:** When they provide any special services then the charge of it treated as special charge.
- **SERVICE TAX:** They also include charge of government tax.
- **TOTAL RS:** It is summation of charges, special charges & service tax.

- Make the 3 copies of the consignment note. From which one is given to the sender, one is use as cash or invoice in office purpose & other is use as 'Proof of Delivery (POD)', which is sent with consignments

- After receiving all consignments, they sort out the consignments according to the destination. Then based on destination, they prepare 'Manifest'.

- Manifest is one type of note, which contains all the consignments having same destination. They contain the following details.

- **MANIFEST NO:** It contains the no. of manifest.

- **FROM:** It contains the name of city from where the consignment is send.

- **TO:** It contains the name of city means destination, to where the consignment is received.

- **DATE:** Date on which the manifest is prepared.

- **CONSIGNMENT NO:** It contains all the consignments numbers.

- **TOTAL CONSIGNMENTS:** It indicate total no. of consignments.

- **TOTAL WT:** It contains the total weight of all consignments

- **TOTAL BAGS:** It contains the total no. of bags of consignments.

Make 3 copies of the manifest. From which one is used for the source office, other 2 are sent to the destination office. Then from these two copies one is return back to the source branch for conformation of delivery.

After preparing Manifest all the consignments are packed & then transhipping the consignments. There are 3 ways to transhipping the consignments.

1) By air.

2) By cargo.

3) By surface.

In air delivery boy takes the all consignments in the plane. It is also known as onboard courier. In cargo source branch booked the plane & the delivery boy of the destination branch received all the consignments. In surface courier services is provided by road.

After receiving consignments destination branch checked the manifest, whether any consignment is left or not. Then based on manifest the destination branch prepared the 'Delivery Run Sheet'. It contains the following details.

DRS NO: It contains the number of the delivery run sheet.

DATE: It contains the date on which the DRS are prepared.

BRANCH NAME: It indicates the name of the destination branch.

CONSIDNMENT NO: It contains all the consignment numbers.

PCS: It contains numbers pieces of the consignments.

CONSIGNEE: It contains the name of the person, who received the consignments.

NAME & SIGN OF THE CONSIGNEE: Here the name of the consignee & sign of his/her is taken.

RECEIVED DATE: It contains the date on which the consignee received the consignments.

The delivery boy of destination branch prepares this form. Then he gives the consignments to appropriate consignee & take his/her sign.

In the courier services, charges of the consignments are obtained from the rate table, which contains the different rate for the different weight of the consignments.

ShazamEx is organized into operating units, each of which has its own version of the wordmark designed in 1994 by Lindon Leader of Landor Associates, of San Francisco. The SZX is always purple and the Ex is in a different color for each division and platinum for the overall corporation use. The original ShazamEx logo had the Ex in orange; it is now used as the ShazamEx Express wordmark. The ShazamEx wordmark is notable for containing a subliminal right-pointing arrow in the negative space between the "E" and the "X", which was achieved by designing a proprietary font, based on Universe and Futura, to emphasize the arrow shape.

2.2 LIMITATIONS

- Using manual courier services, we have to make the whole Export Report, which contains the record of the consignments. It requires more time & more calculation.

- In courier service the rate of each consignment or item is fixed. The rate of consignments is depending on the weight of the consignments. So the calculation of rate & monthly income are not done easily.

- In courier services, the payment is made in credit or cash. So for the billing procedure for the regular customer, we have to refer all the records in Export Report. For this reasons this task is more time consuming.

One of the most common problems that is been received from the customer reviews is the delivery processes. The detail will be discussed in the propose section with its solution and its whole system.

2.3 PROPOSE SYSTEM & IT'S ADVANTAGES

In this section we will discuss to find out our new propose method for the existing system in order to enhance some of the modules which have some disadvantages. A multinational company has a very big risk to perform every task in every field and it has to be well planed with logical reasons.

Computerizing of the existing system is done with the help of some programming language & some database packages. So it will ease the work of the system.

- When system work as source then in consignment note.

  Here the organization is fixed, which is 'ANAND'. So the person needs not to enter it every time.

  1. It leaves the scope for destination, so the person can select desire destination.

  2. It takes current date it means system date. So that person need not to be entered it very time.

3. AMD-C contains consignment no. It is unique no. & it is use in Manifest & Delivery Run Sheet forms.

4. If the consignor is regular then user should not need to enter his/her name & address. It can be derived from the stored database.

5. If the consignor is not regular then the user has to enter the information about consignor.

6. The information of the consignee means receiver has to be entered by user.

7. The description, which contains declare value, insurance, weight in kilo, weight in grams, the user enters packets. In this declare value is chosen according to the kilograms & grams describe in form from the Rate table.

8. If any consignment contains insurance then it is marked in the form.

9. The no. of packets, charges, special charges, and service tax is entered by the user & according to this 'Total Rs.' is calculated.

Then three copies of this consignment note are prepared.

Now all the entered data are stored in database name as Consignment Details and Consignor Info.

In the Manifest form, the user enters the name of the destination on which user want to create Manifest.

10. According to the entered destination, all the appropriate consignment nos. are displayed automatically in Manifest.

11. The no. of consignment, total weight, total no. of bags is counted by performing some operation on them.

After this Manifest form is send to the destination branch with the consignments.

When the branch acts as Destination branch, then

Here the branch received Consignments & Manifest. Then it prepares Delivery Run Sheet according to Manifest. It fills information about:

– Branch Name \ Regional office

– Consignment No

– Date

– Pieces

– Name & address of consignee

Here we need not to enter the date because it automatically takes the system date. Above information are stored in 'Dest_Consignment_Details'.

2.4 ADVANTAGES OF PROPOSED SYSTEM:

1. In computer system of the courier service computation of the rate is easily & quickly done.

2. Computer system of the courier service provide fast access.

3. Accuracy in work.

4. Easy & fast retrieval of information.

5. Well-designed reports

6. Decrease the load of the person involve in existing manual system.

7. Access of any information individually.

8. Work becomes very speedy.

9. Easy to update information.

CHAPTER 3

FEASIBILITY STUDY

3.1 FEASIBILITY STUDY

A feasibility study aims to objectively and rationally uncover the strengths and weaknesses of an existing business or proposed venture, opportunities and threats present in the environment, the resources required to carry through, and ultimately the prospects for success. In its simplest terms, the two criteria to judge feasibility are cost required and value to be attained.

A well-designed feasibility study should provide a historical background of the project, a description of the product or service, accounting statements, details of the

operations and management, marketing research and policies, financial data, legal requirements and tax obligations. Generally, feasibility studies precede technical development and project implementation.

A feasibility study evaluates the project's potential for success; therefore, perceived objectivity is an important factor in the credibility of the study for potential investors and lending institutions. It must therefore be conducted with an objective, unbiased approach to provide information upon which decisions can be based.

Preliminary investigation examines project feasibility, the likelihood the system will be useful to the organization. The main objective of the feasibility study

In the Courier Management System project, the project can give any kind of information through reports and queries if required.

This is very sophisticated to use and modify. The project is designed in such a way that it can afford any changes that occurs in feature .The project can also be modified according to the needs.

It is feasible to have an integrated system with GUI and Relational Database for the courier System. The wastage of storage space is avoided by eliminating the data redundancy, which needs careful programming. The careful programming minimizes the processing time. The user can easily handle the system.

3.2 TECHNICAL FEASIBILITY

Technical feasibility:

The minimum hardware configuration for his Project to run is as follows:

- Atom Processor Onwards
- 512 MB RAM

For its execution it is mandatory that it be used with a GUI based Operating System like Windows XP and above.

Technical feasibility report:

Since the institution already has the required hardware and a supporting Operating System, it is technically feasible.

- **HARDWARE**

Intel based processor-run computer system, which have keyboard and mouse as input devices. This has been decided for its case of availability and up-gradation. The various registers maintained at the different department have enough information recording, which will help in digitizing the available data.

Technical feasibility centre on the existing computer system (hardware, software) and to what extent it can support the proposed addition. If the budget is a serious constraint, then the project is judged not feasible.

3.3 BEHAVIOURAL FEASIBILITY

The project has a very user friendly, GUI based interface also featuring help menu, which leaves no room for any confusion at the user end. There were some errors at the beginning of the project but it all has been taken out. It Was made for the user clean UI programing that means it was made with very simplistic UI (user interface) so the user can understand easily at the very first time.

No need for training the user to use the Project. Hence it is operationally feasible.

The aim of the system is only to satisfy the information needs; no employees will lose their position by the proposed system. In fact, the proposed system will help the organization in reducing the voluminous work involved. Also the involvement of users in every stage of the project is going to increase the success factor. The staff in not well educated for running a computerized system. They are adamant in perceiving a mechanical process of working as they have long been used to the manual entry system. This aspect needs considerable amount of attention.

Our system is also feasible for organization because it supports of the organization and its strategic plan.

3.4 ECONOMIC FEASIBILITY

The cost of developing this project is merely the man-hours that are put into it, apart from this, on the institutional front the costs that it will be bearing is to comply with the minimum system requirements for the same. Since the institution that will employ this project already has the required facilities,

This project is economically feasible.

The procedure is to determine the benefits and savings that are expected from a candidate system and compare it with the costs. If a benefit outweighs costs, then the decision is made to design and implement the system. Otherwise further alterations are made in the proposed system

1. Manpower cost
2. Hardware and software cost

CHAPTER 4

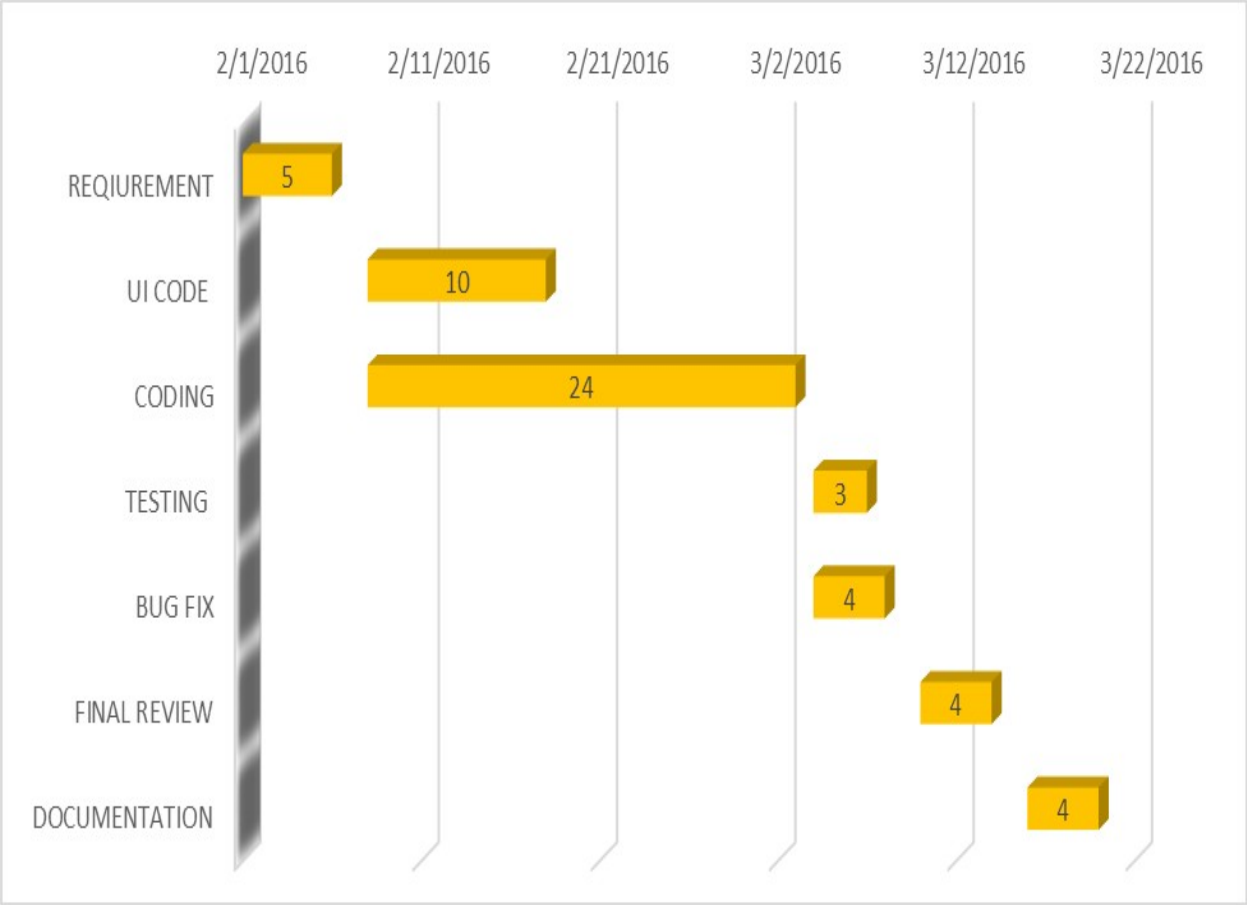
PROJECT MONITORY SYSTEM

4.1 GANTT CHART

A Gantt chart, commonly used in project management, is one of the most popular and useful ways of showing activities (tasks or events) displayed against time. On the left of the chart is a list of the activities and along the top is a suitable time scale. Each activity is represented by a bar; the position and length of the bar reflects the start date, duration and end date of the activity. This allows you to see at a glance:

- What the various activities are
- When each activity begins and ends
- How long each activity is scheduled to last.
- Where activities overlap with other activities, and by how much
- The start and end date of the whole project

To summarize, a Gantt chart shows you what has to be done (the activities) and when (the schedule).



CHAPTER 5

SYSTEM ANALYSIS

5.1 REQUIREMENT SPECIFICATION

Clients End:

- Browser : Any Web Browser (Chrome/Firefox Considered Best)
- Processor : Atom Processor or more
- RAM : 512MB or More
- Disk space : 128GB or more
- Others : Printer, Bar code Reader

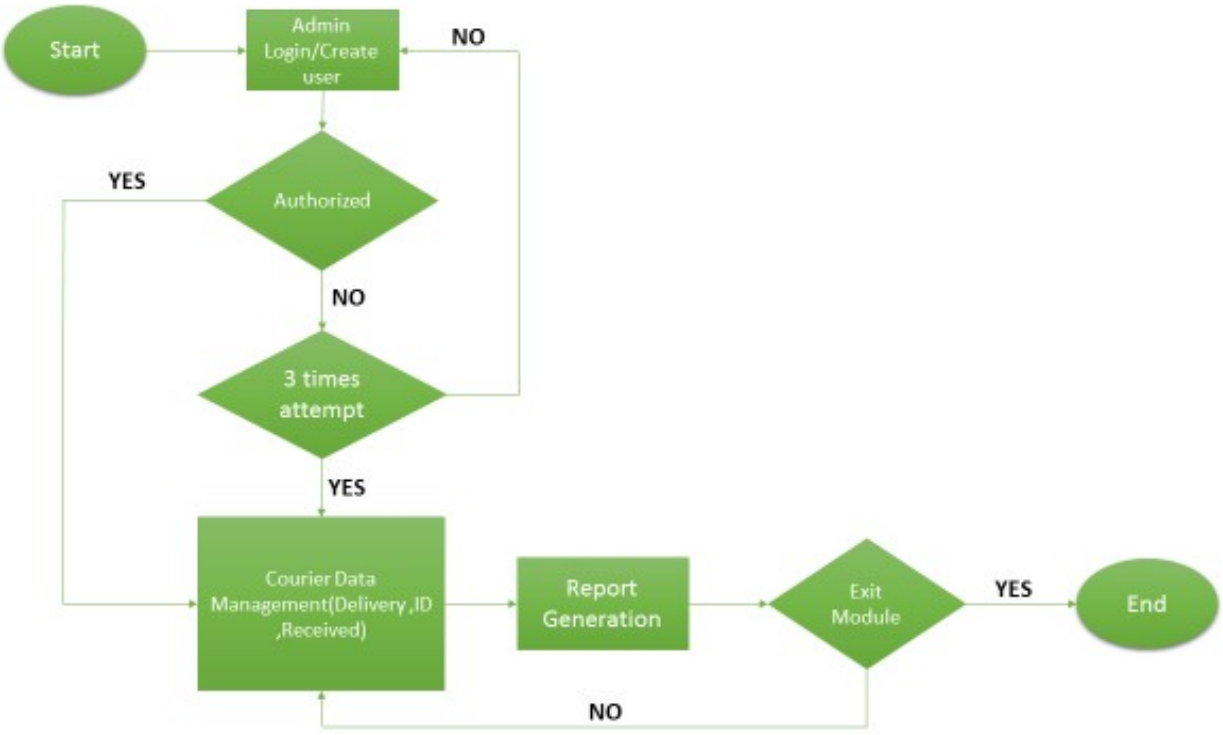
Server End:

- Web Server : IIS6 or Higher
- Database Server : SQL Server 2005
- Processor : Atom Processor or more
- RAM : 2GB or more
- Disk Space : 256GB or more

5.2 FLOWCHART

A flowchart is a formalized graphic representation of a logic sequence, work or manufacturing process, organization chart, or similar formalized structure. The purpose of a flow chart is to provide people with a common language or reference point when dealing with a project or process**.**

Flowcharts use simple geometric symbols and arrows (→)to define relationships. In programming, for instance, the beginning or end of a program is represented by an oval(⬭). A process is represented by a rectangle(▭) , a decision is represented by a diamond(◇)and an I/O process is represented by a parallelogram (▱) . The Internet is represented by a cloud(☁).



5.3 Data Flow Diagram(DFD)

A data flow diagram (DFD) illustrates how data is processed by a system in terms of inputs and outputs. As its name indicates its focus is on the flow of information, where data comes from, where it goes and how it gets stored.

There are essentially four different types of notations for data flow diagrams

A) Process Notations

B) Data store Notations

C) Dataflow Notations

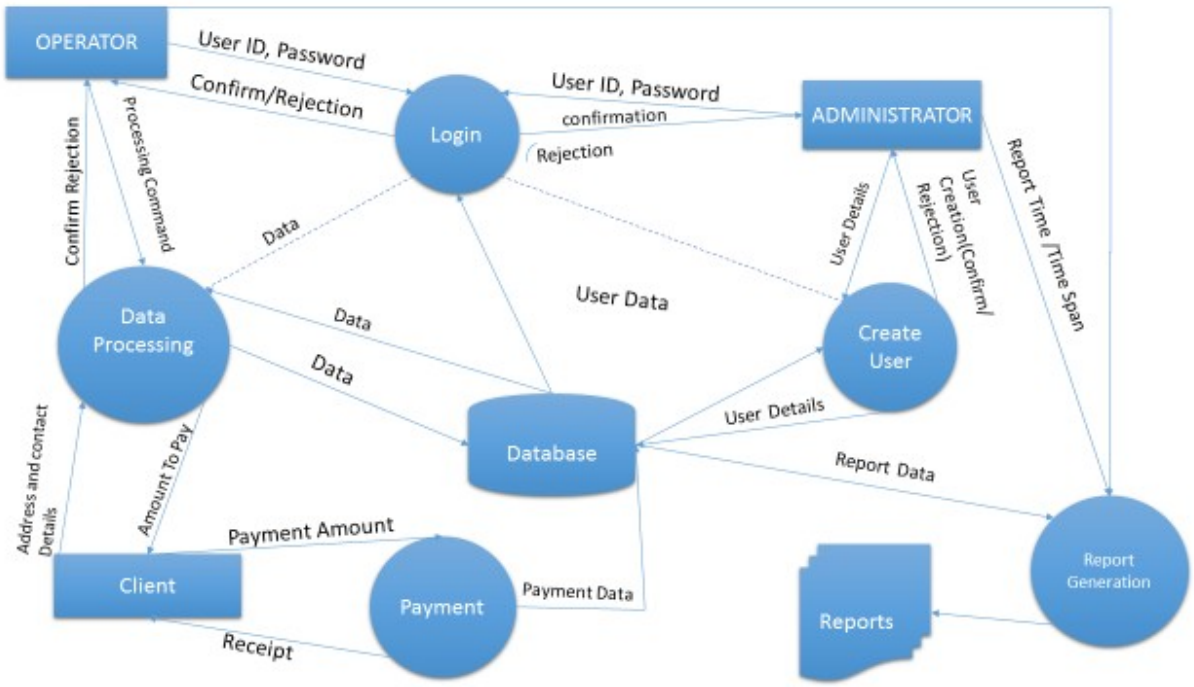
D) External Entity Notations

The DFDs also consists of Context Diagrams and DFD Layers and Levels.

Context Diagrams: A context diagram is a top level (also known as "Level 0") data flow diagram

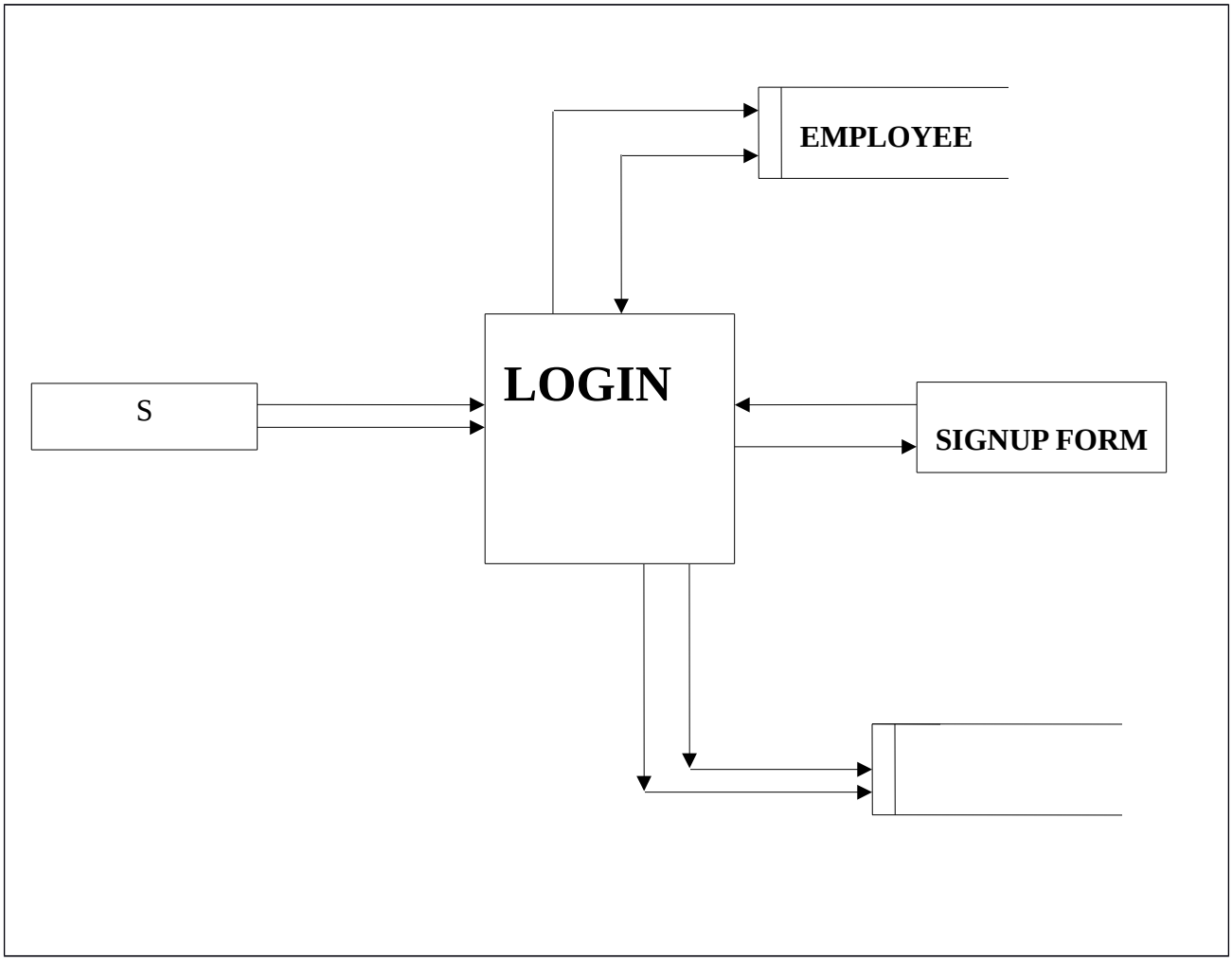
DFD Layers: Draw data flow diagrams can be made in several nested layers.

DFD Levels: The first level DFD shows the main processes within the system. Each of these processes can be broken into further processes until you reach pseudo code.

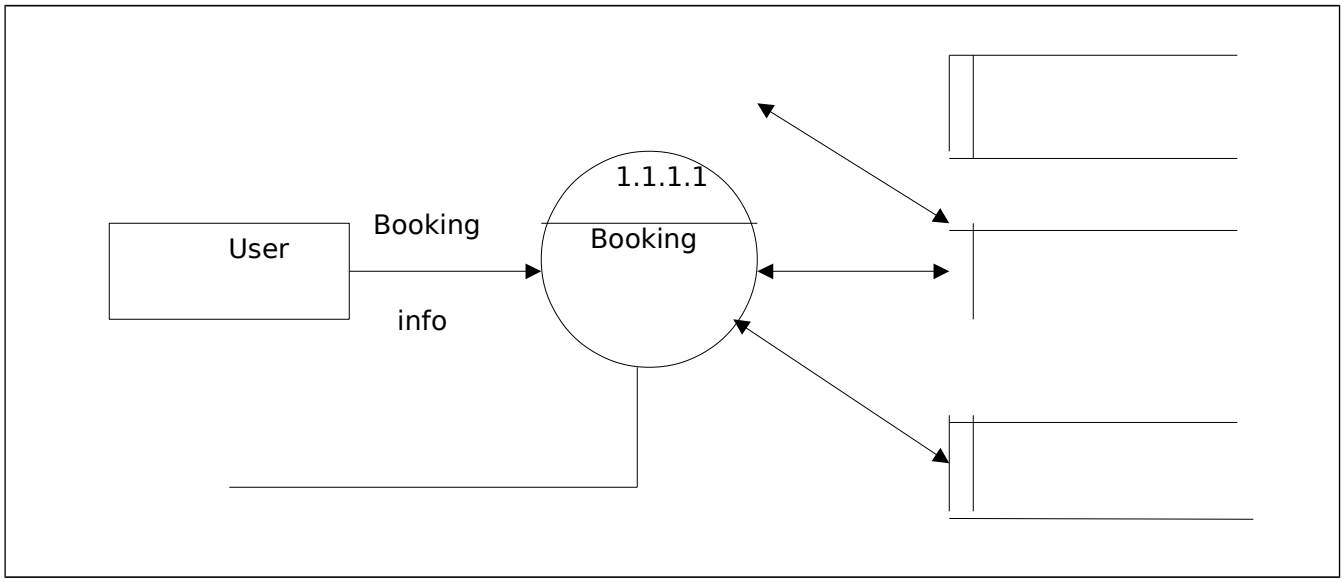


LEVEL 0 DATA FLOW DIAGRAM

LEVEL 1 DFD



Level 2 DFD



5.4 Entity-Relation Diagram

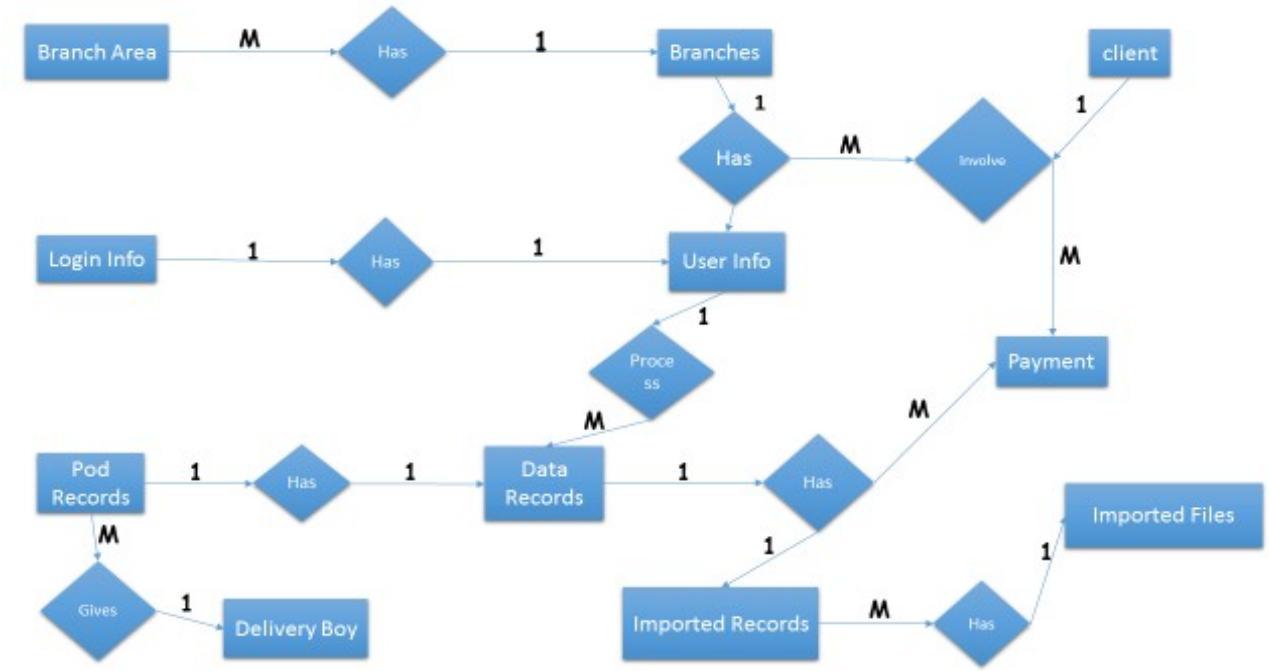
An entity-relationship diagram (ERD) is a graphical representation of an information system that shows the relationship between people, objects, places, concepts or events within that system. An ERD is a data modelling technique that can help define business processes and can be used as the foundation for a relational database.

The three main cardinal relationships are:

One-to-one (1:1) : For example, if each customer in a database is associated with one mailing address.

One-to-many (1:M) : For example, a single customer might place an order for multiple products. The customer is associated with multiple entities, but all those entities have a single connection back to the same customer.

Many-to-many (M:N) : For example, at a company where all call centre agents work with multiple customers, each agent is associated with multiple customers, and multiple customers might also be associated with multiple agents.



CHAPTER 6

SYSTEM DESIGN

6.1 DATA DICTIONARY

DATA ELEMENTS:

1. Username
2. Password
3. Employee ID
4. Name
5. Email
6. Phone No.
7. Address
8. City
9. State
10. PIN Code
11. Order ID
12. Package ID
13. Number of package
14. Service type
15. Package type
16. Package dimension
17. Shipping date
18. Payment type
19. Account name
20. Account number
21. CVV
22. Date of birth
23. Expired date

6.2 DATABASE TABLES

Employee :

Fields	Data Type	Attribute
EmpID	Number	Primary key
Name	Text	
Email	Text	
Phone	Number	
Address	Text	
City	Text	
State	Text	
PIN	Number	
Username	Text	
Password	Text	

Sender :

Fields	Data Type	Attribute
OrderID	Number	Primary key
Name	Text	

Phone	Number	
Address	Text	
City	Text	
State	Text	
PIN	Number	

Recipient :

Fields	Data Type	Attribute
OrderID	Number	Primary key
Name	Text	
Phone	Number	
Email	Text	
Address	Text	
City	Text	
State	Text	
PIN	Number	

Billing :

Fields	Data Type	Attribute
OrderID	Number	Primary key
Cardtype	Text	
Accountname	Text	
Cardnumber	Number	
CVV	Number	
DOB	Text	
Expireddate	Text	
paymenttype	Text	

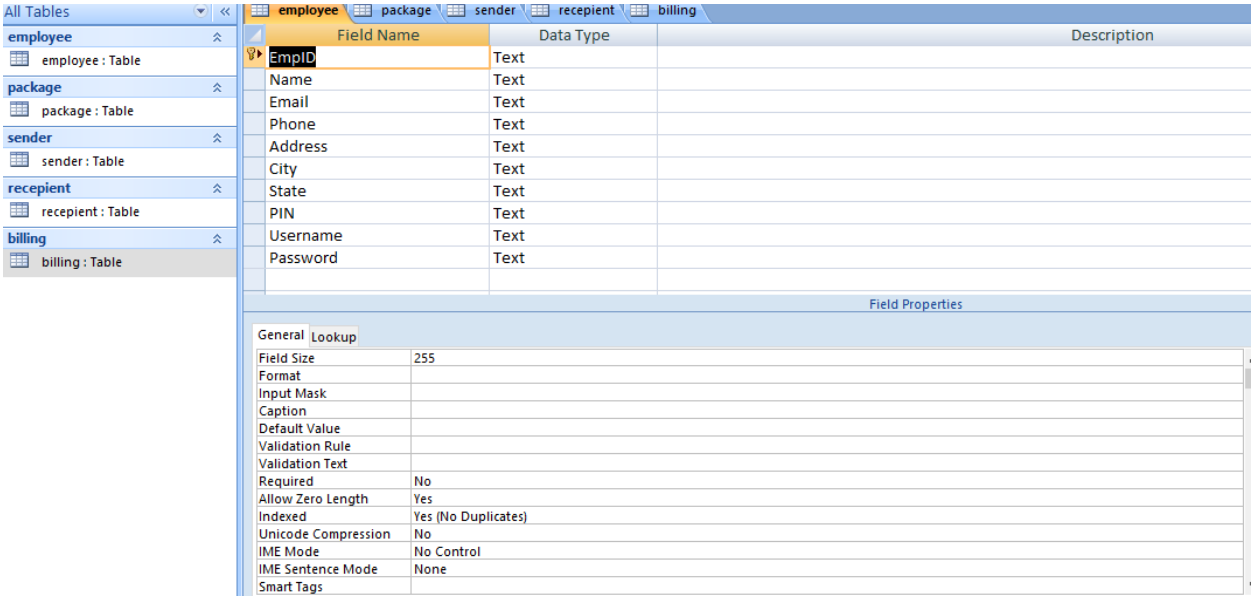
Package :

Fields	Data Type	Attribute
OrderID	Number	Primary key
Number	Number	
Weight	Number	
Servicetype	Text	

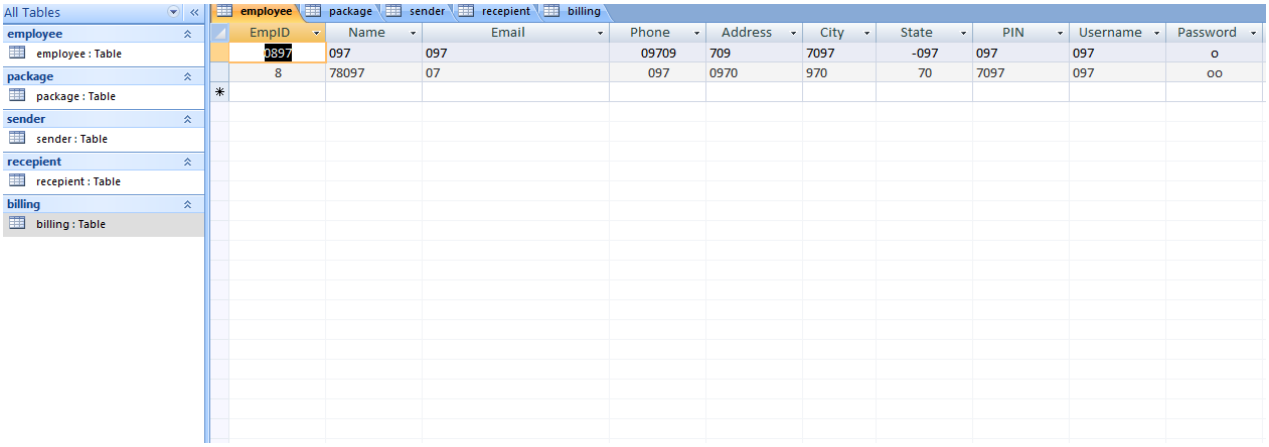
Packagetype	Text	
Dimension	Text	
Shippingdate	Text	
PackageID	Number	
Charge	Number	

6.3 DATABASE DESIGN IN SCREENSHOTS

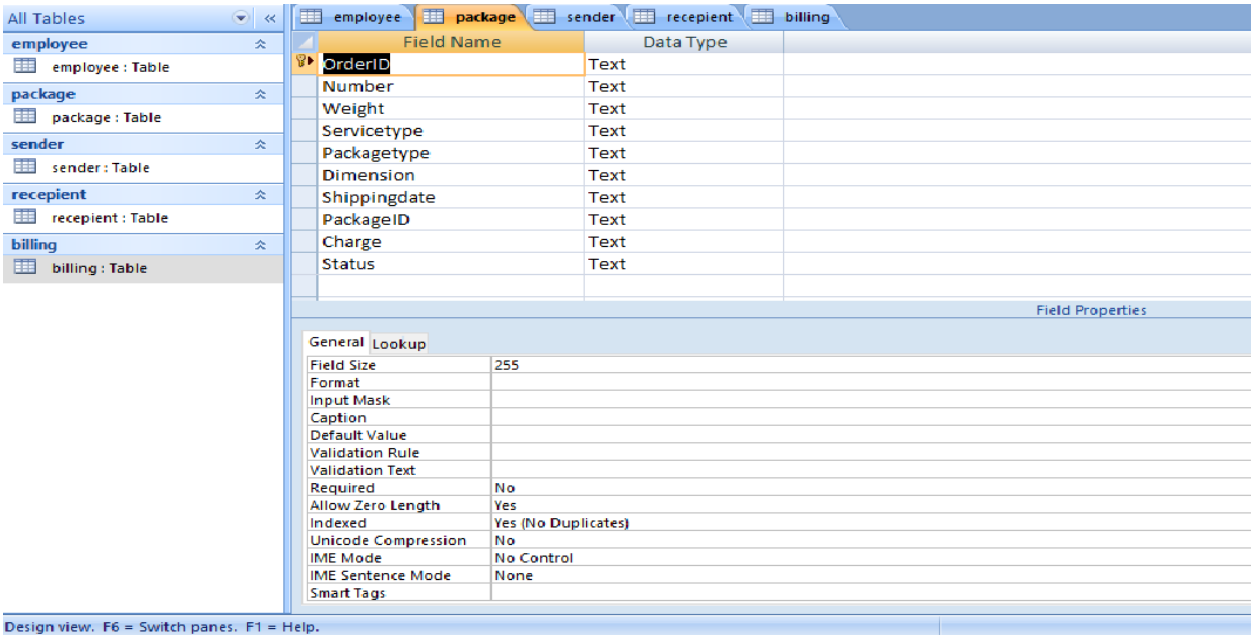
Employee table in Design view:



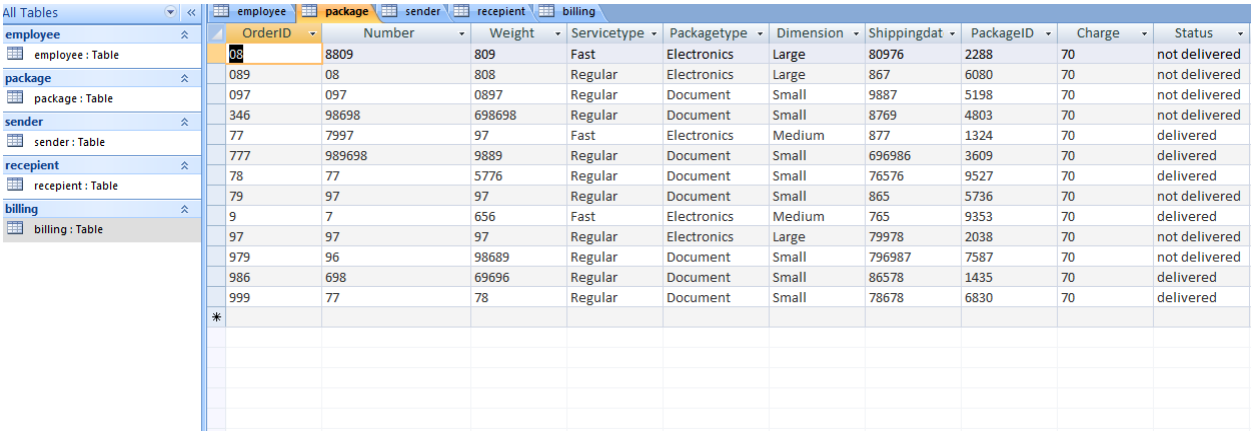
Employee table in datasheet view:



Package table in Design view:

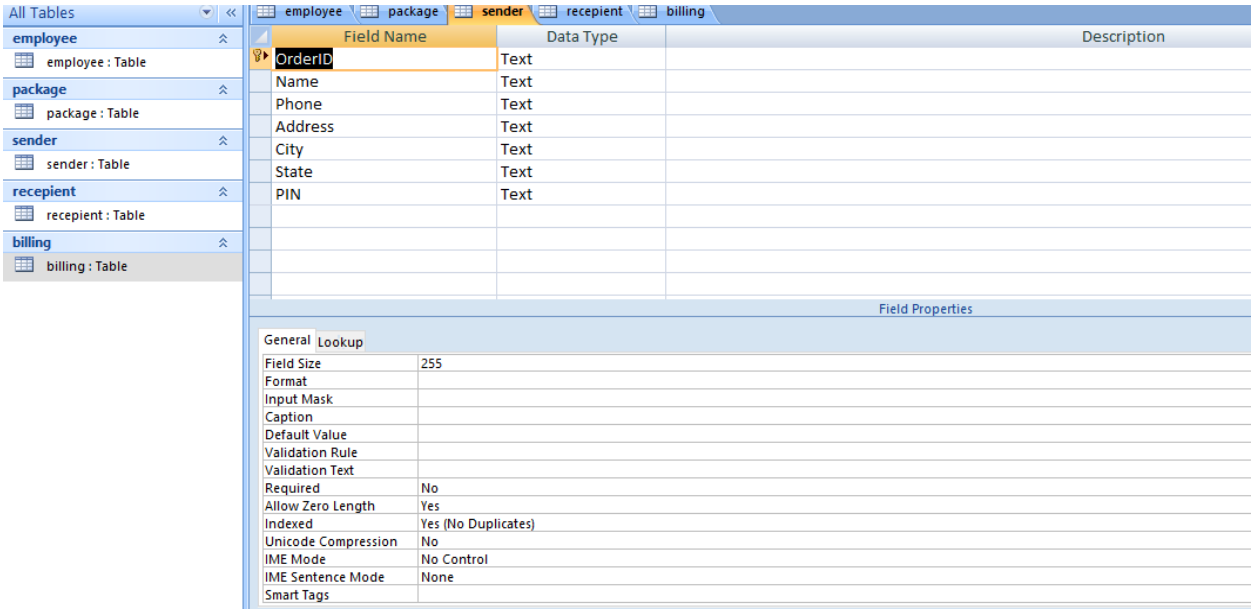


Package table in datasheet view:

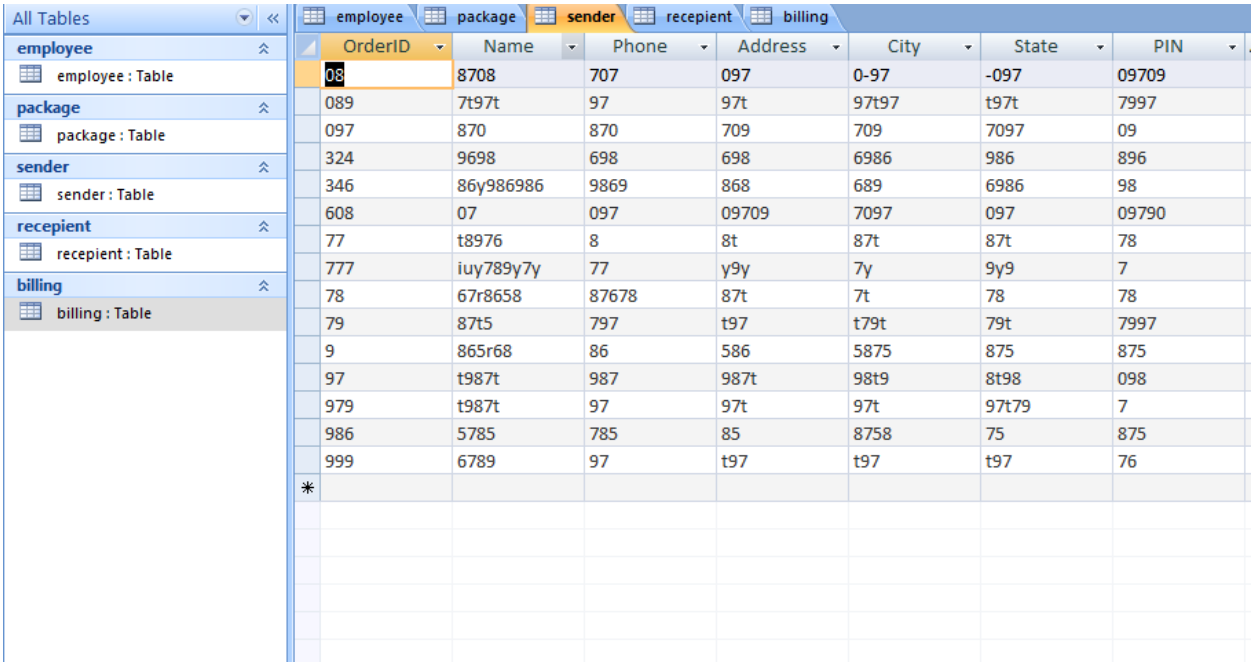


OrderID	Number	Weight	Servicetype	Packagetype	Dimension	Shippingdat	PackageID	Charge	Status
08	8809	809	Fast	Electronics	Large	80976	2288	70	not delivered
089	08	808	Regular	Electronics	Large	867	6080	70	not delivered
097	097	0897	Regular	Document	Small	9887	5198	70	not delivered
346	98698	698698	Regular	Document	Small	8769	4803	70	not delivered
77	7997	97	Fast	Electronics	Medium	877	1324	70	delivered
777	989698	9889	Regular	Document	Small	696986	3609	70	delivered
78	77	5776	Regular	Document	Small	76576	9527	70	delivered
79	97	97	Regular	Document	Small	865	5736	70	not delivered
9	7	656	Fast	Electronics	Medium	765	9353	70	delivered
97	97	97	Regular	Electronics	Large	79978	2038	70	not delivered
979	96	98689	Regular	Document	Small	796987	7587	70	not delivered
986	698	69696	Regular	Document	Small	86578	1435	70	delivered
999	77	78	Regular	Document	Small	78678	6830	70	delivered

Sender table in Design view:

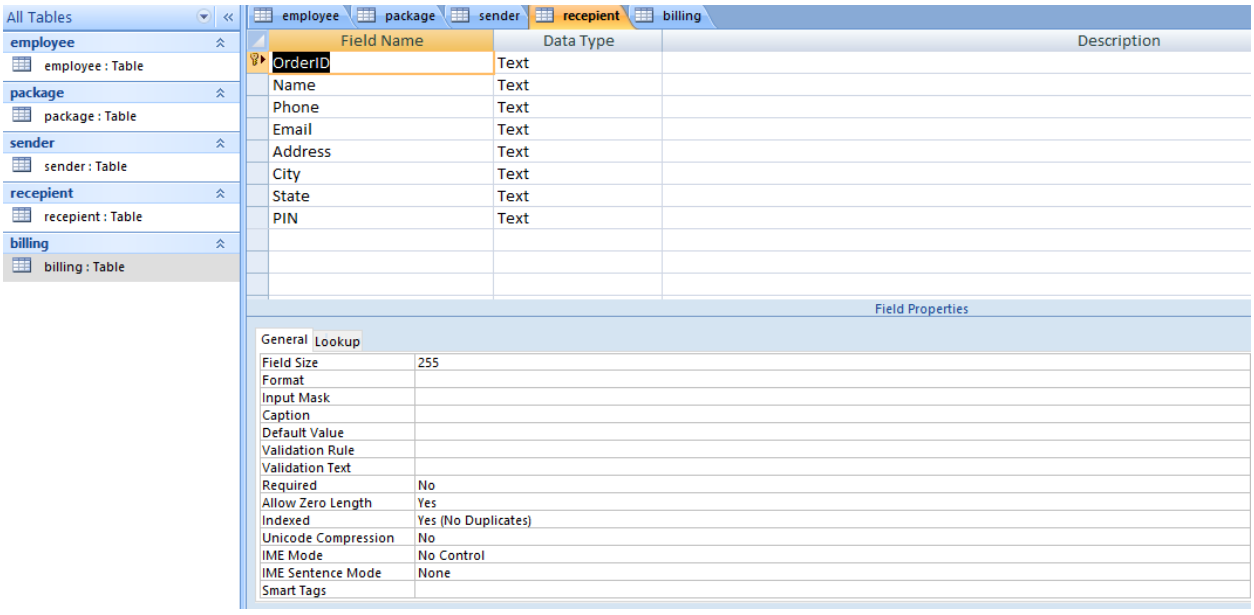


Sender table in datasheet view:



OrderID	Name	Phone	Address	City	State	PIN
08	8708	707	097	0-97	-097	09709
089	7t97t	97	97t	97t97	t97t	7997
097	870	870	709	709	7097	09
324	9698	698	698	6986	986	896
346	86y986986	9869	868	689	6986	98
608	07	097	09709	7097	097	09790
77	t8976	8	8t	87t	87t	78
777	iuy789y7y	77	y9y	7y	9y9	7
78	67r8658	87678	87t	7t	78	78
79	87t5	797	t97	t79t	79t	7997
9	865r68	86	586	5875	875	875
97	t987t	987	987t	98t9	8t98	098
979	t987t	97	97t	97t	97t79	7
986	5785	785	85	8758	75	875
999	6789	97	t97	t97	t97	76

Recipient table in Design view:



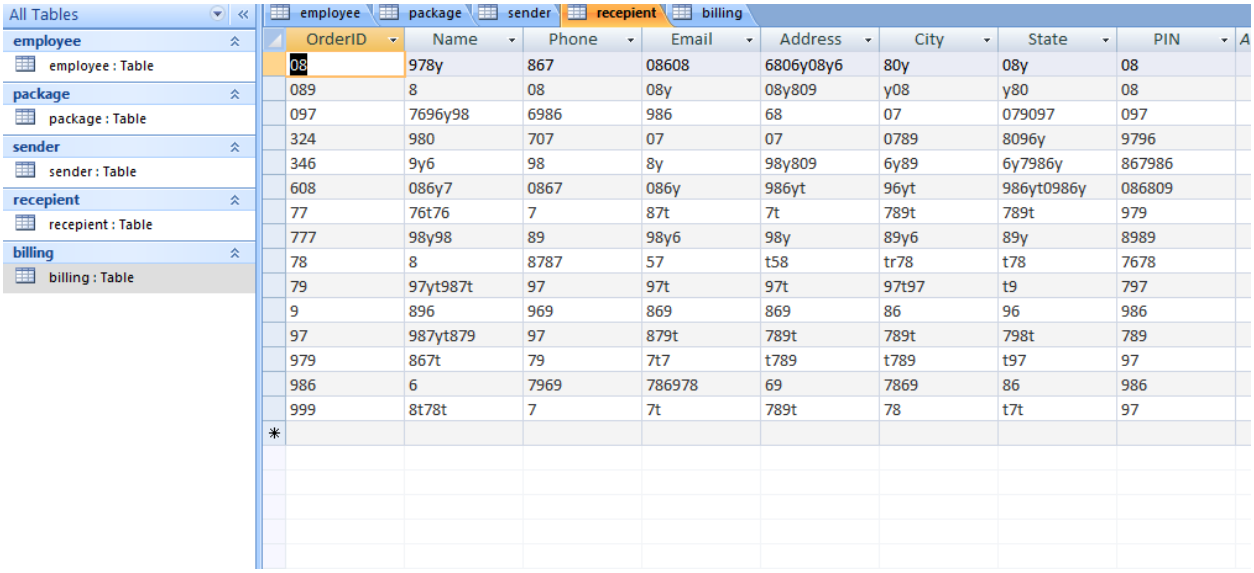
Field Name	Data Type	Description
OrderID	Text	
Name	Text	
Phone	Text	
Email	Text	
Address	Text	
City	Text	
State	Text	
PIN	Text	

Field Properties

General | Lookup

Field Size	255
Format	
Input Mask	
Caption	
Default Value	
Validation Rule	
Validation Text	
Required	No
Allow Zero Length	Yes
Indexed	Yes (No Duplicates)
Unicode Compression	No
IME Mode	No Control
IME Sentence Mode	None
Smart Tags	

Recipient table in datasheet view:

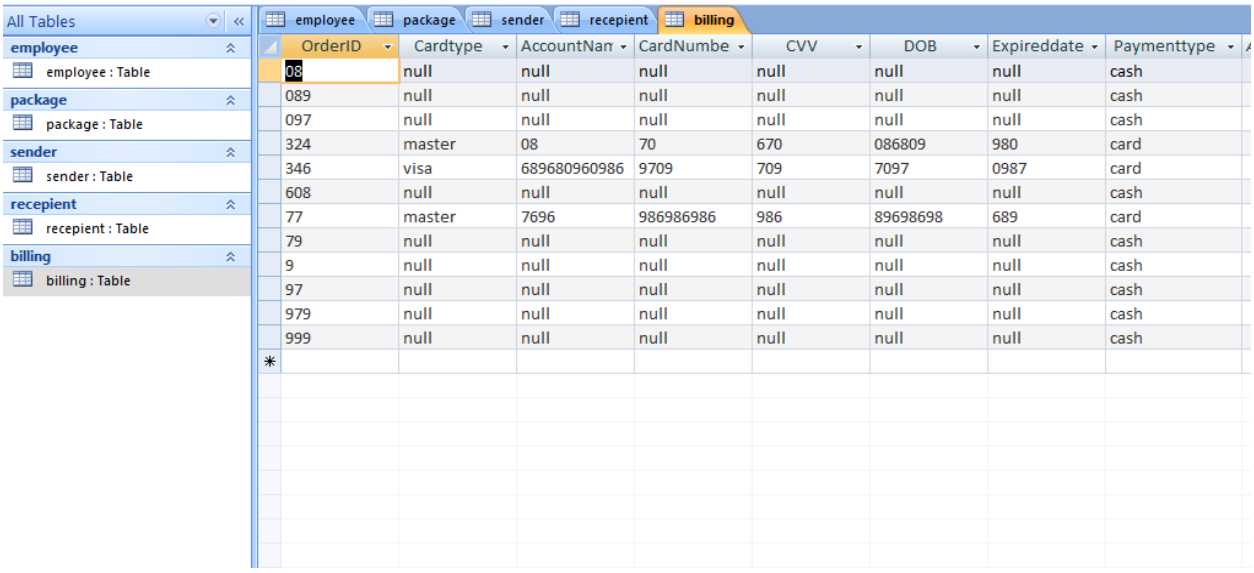


All Tables
employee
employee : Table
package
package : Table
sender
sender : Table
recepient
recepient : Table
billing
billing : Table

employee | package | sender | recepient | billing

OrderID	Name	Phone	Email	Address	City	State	PIN
08	978y	867	08608	6806y08y6	80y	08y	08
089	8	08	08y	08y809	y08	y80	08
097	7696y98	6986	986	68	07	079097	097
324	980	707	07	07	0789	8096y	9796
346	9y6	98	8y	98y809	6y89	6y7986y	867986
608	086y7	0867	086y	986yt	96yt	986yt0986y	086809
77	76t76	7	87t	7t	789t	789t	979
777	98y98	89	98y6	98y	89y6	89y	8989
78	8	8787	57	t58	tr78	t78	7678
79	97yt987t	97	97t	97t	97t97	t9	797
9	896	969	869	869	86	96	986
97	987yt879	97	879t	789t	789t	798t	789
979	867t	79	7t7	t789	t789	t97	97
986	6	7969	786978	69	7869	86	986
999	8t78t	7	7t	789t	78	t7t	97

Billing table in Design view:

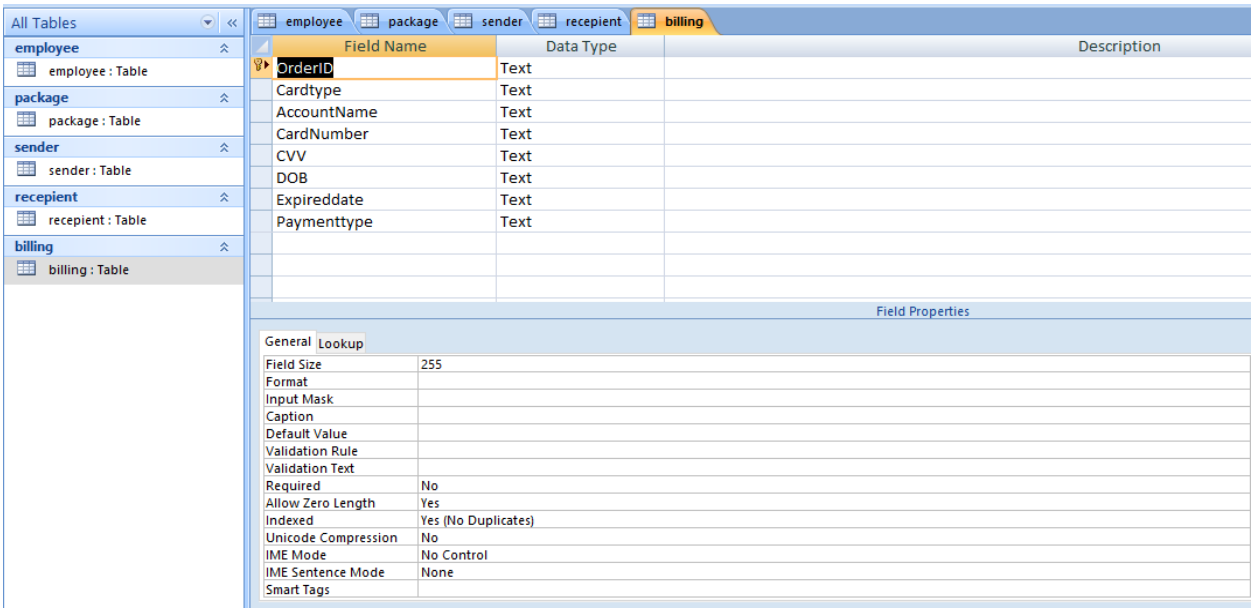


All Tables
employee
employee : Table
package
package : Table
sender
sender : Table
recepient
recepient : Table
billing
billing : Table

employee | package | sender | recepient | billing

OrderID	Cardtype	AccountNam	CardNumbe	CVV	DOB	Expireddate	Paymenttype
08	null	null	null	null	null	null	cash
089	null	null	null	null	null	null	cash
097	null	null	null	null	null	null	cash
324	master	08	70	670	086809	980	card
346	visa	689680960986	9709	709	7097	0987	card
608	null	null	null	null	null	null	cash
77	master	7696	986986986	986	89698698	689	card
79	null	null	null	null	null	null	cash
9	null	null	null	null	null	null	cash
97	null	null	null	null	null	null	cash
979	null	null	null	null	null	null	cash
999	null	null	null	null	null	null	cash

Billing table in datasheet view:



CHAPTER 7

INPUT / OUTPUT FORM DESIGN

7.1 SCREEN DESIGN

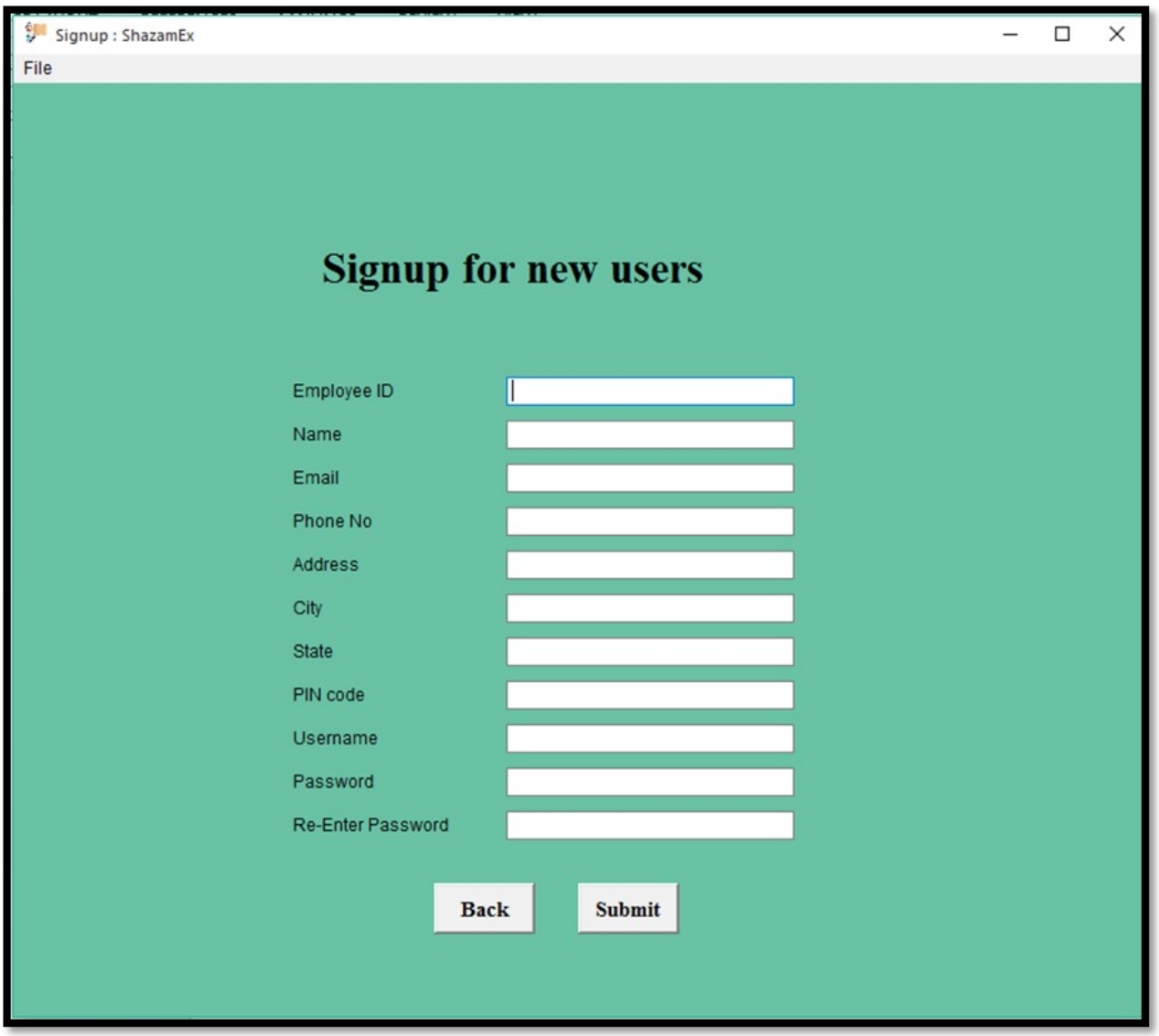
Design consists of architectural design and detail design. Architectural design involves identifying the s/w component, developing and decomposing them in processing modules and conceptual data structure, and specifying interconnection between the components. Detail design is concerned with the details of package "how to" process modules and how to implement the processing algorithm, data structure and interconnection among the modules and data structures.

The software also said to have a life cycle that is composed of several phases. Each of these phases is the development of either a part of the system or something associated with system such as a test plan & user manual.

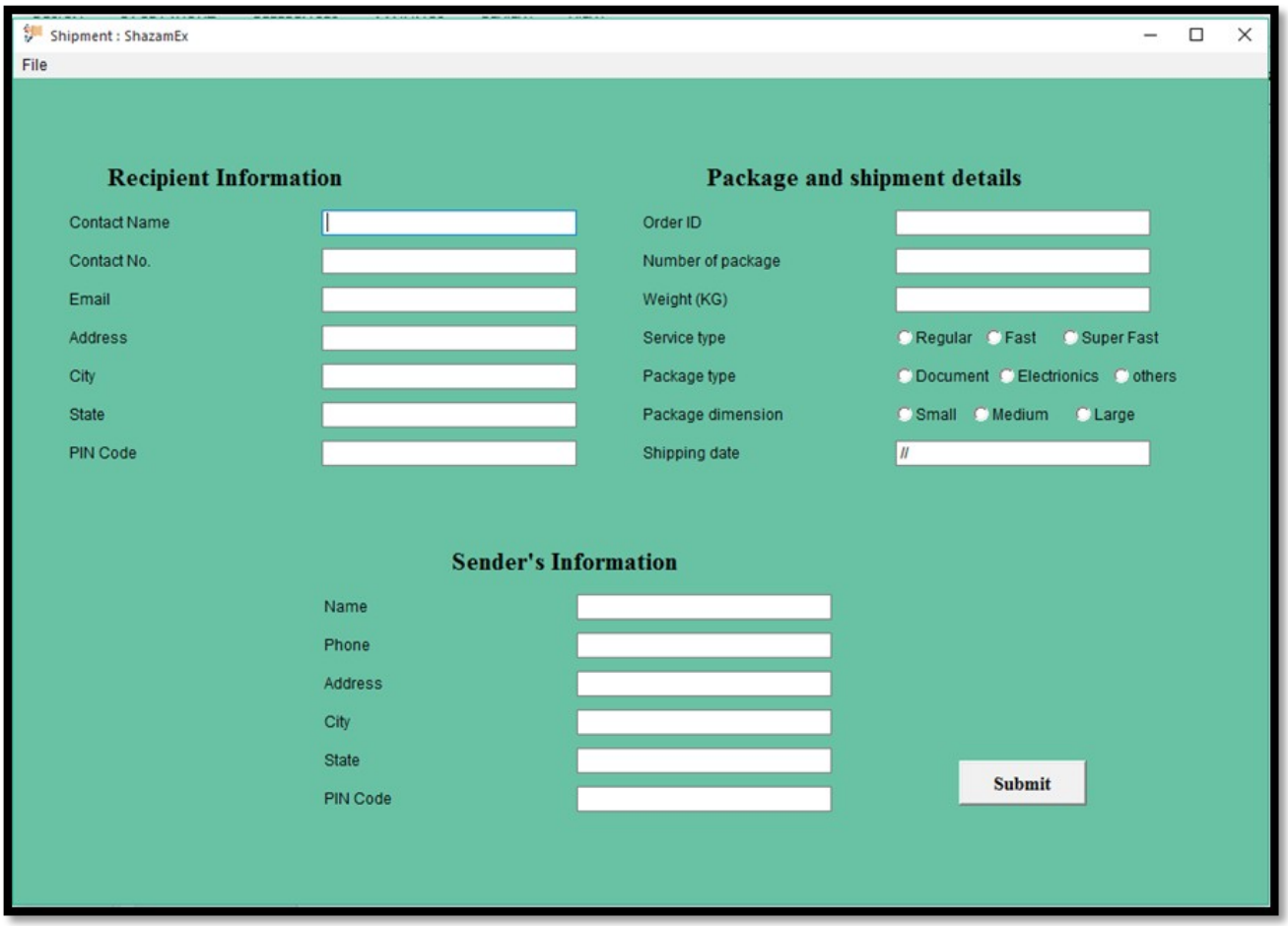
Each phase has well-define starting and ending point, with clearly identifiable input to the next phase. Or we can say that output of every phase will be the input to the next phase.

Screen 1 Home Page:

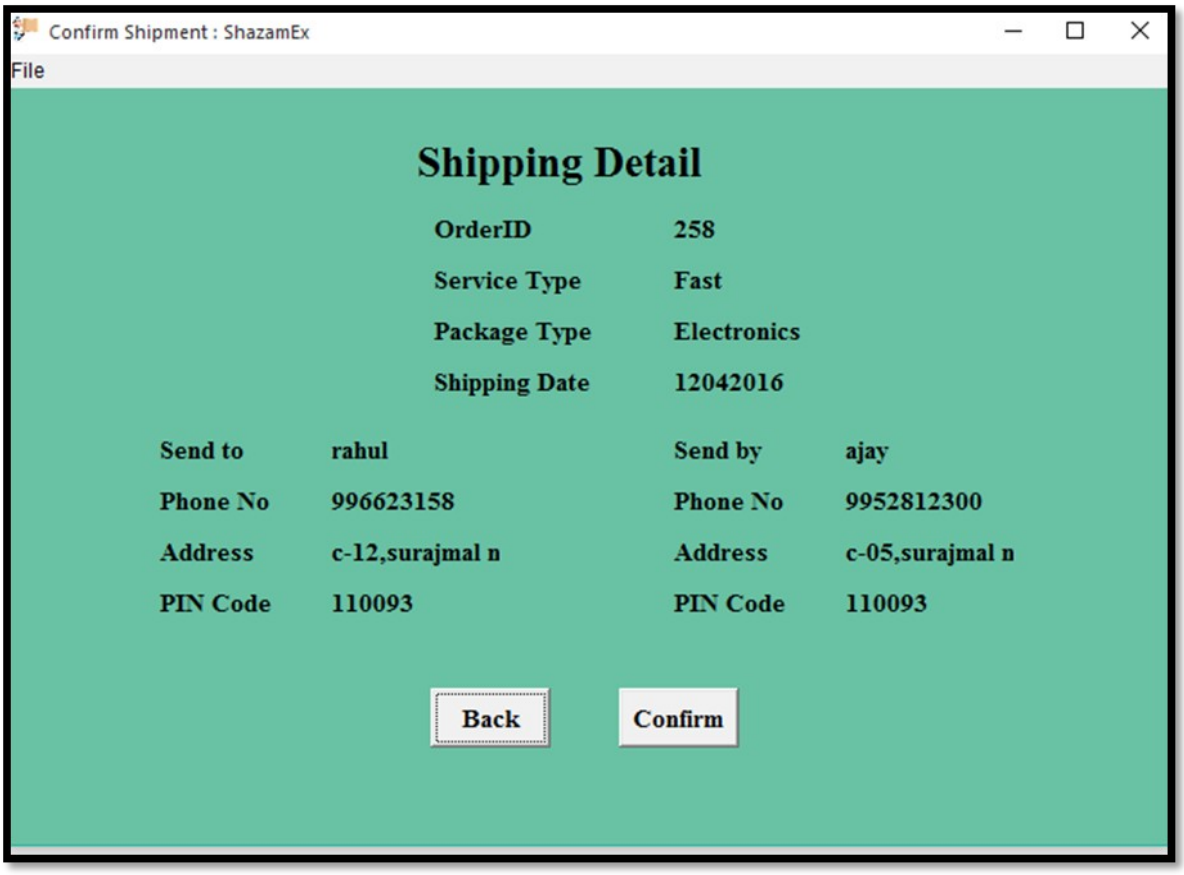
Screen 2 Sign Up



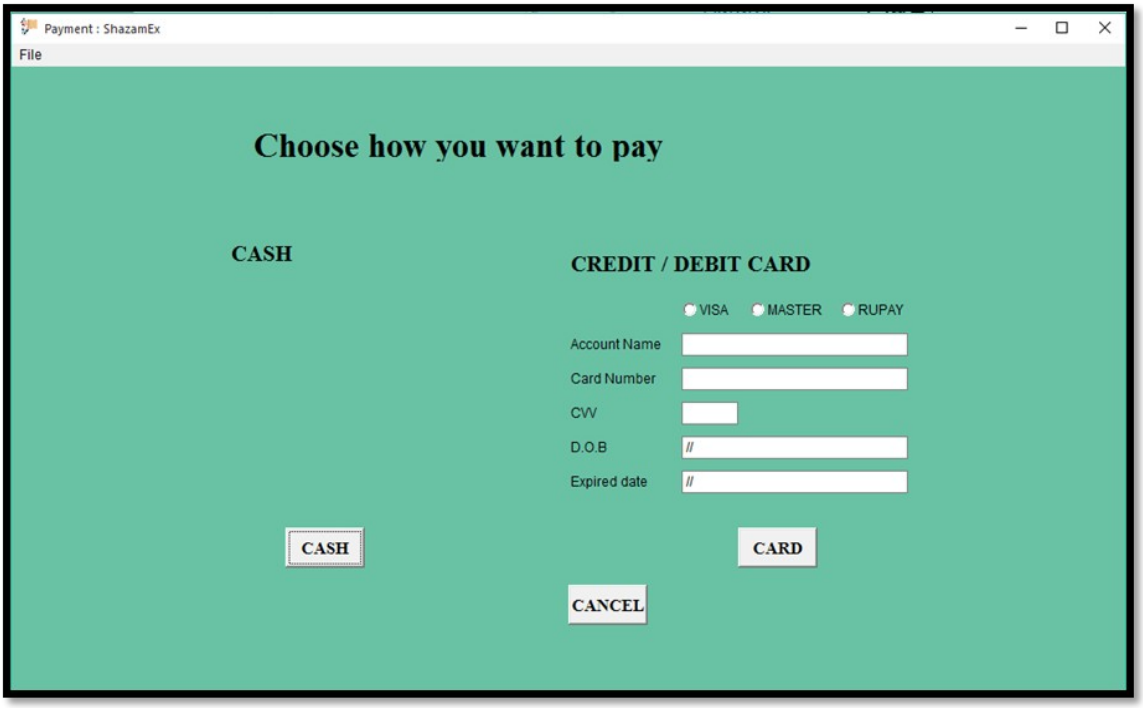
Screen 3 Shipment Info:



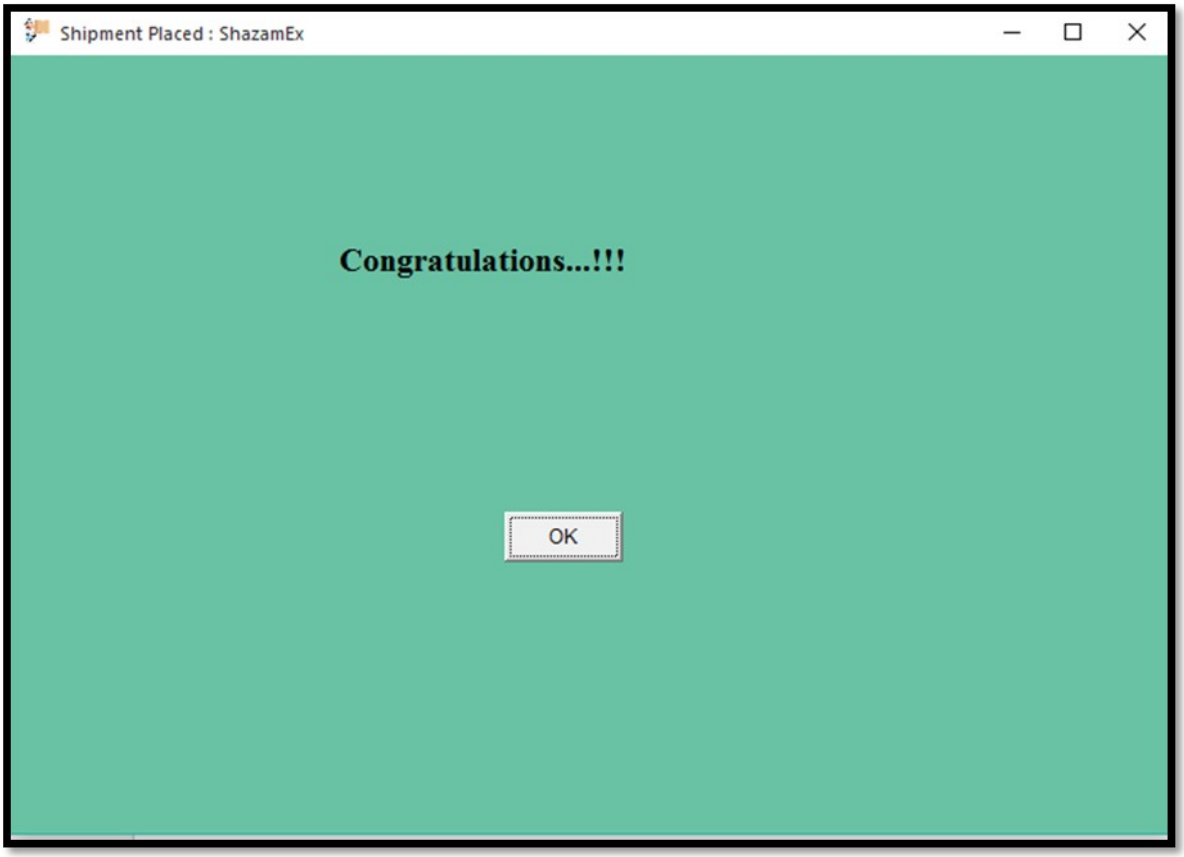
Screen 4 confirm shipment:



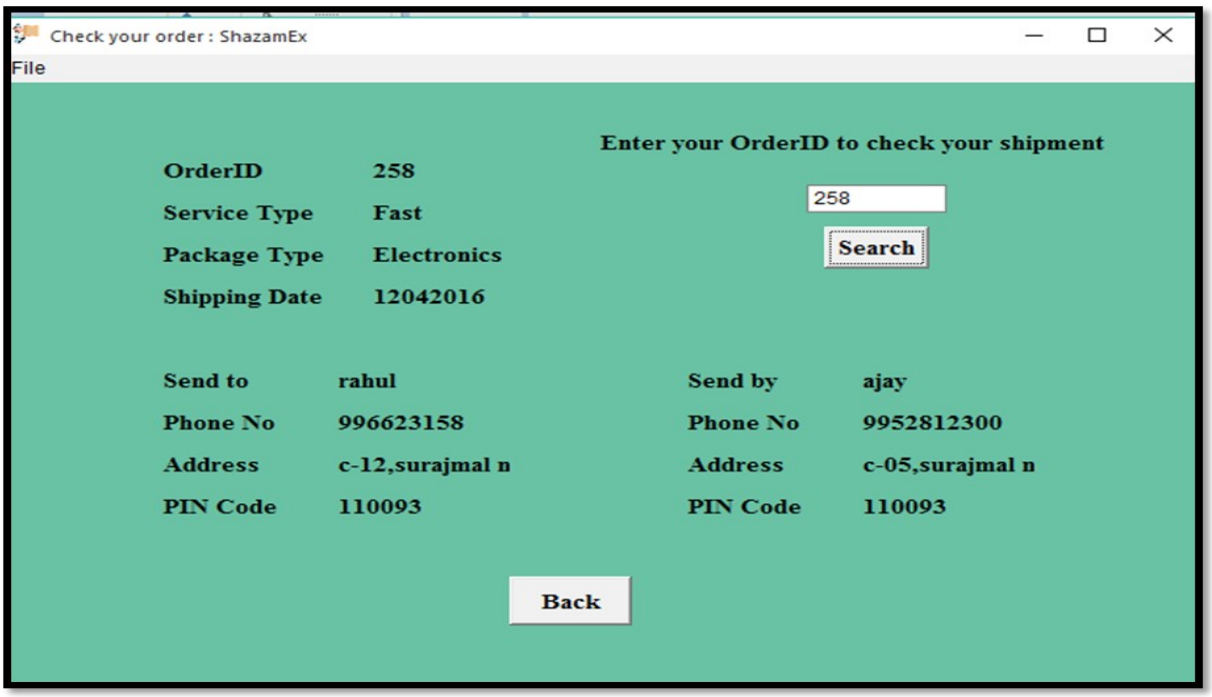
Screen 5 payment:



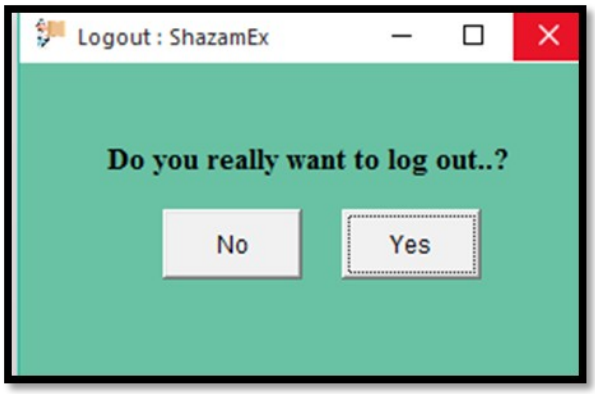
Screen 6 Shipment Placed:



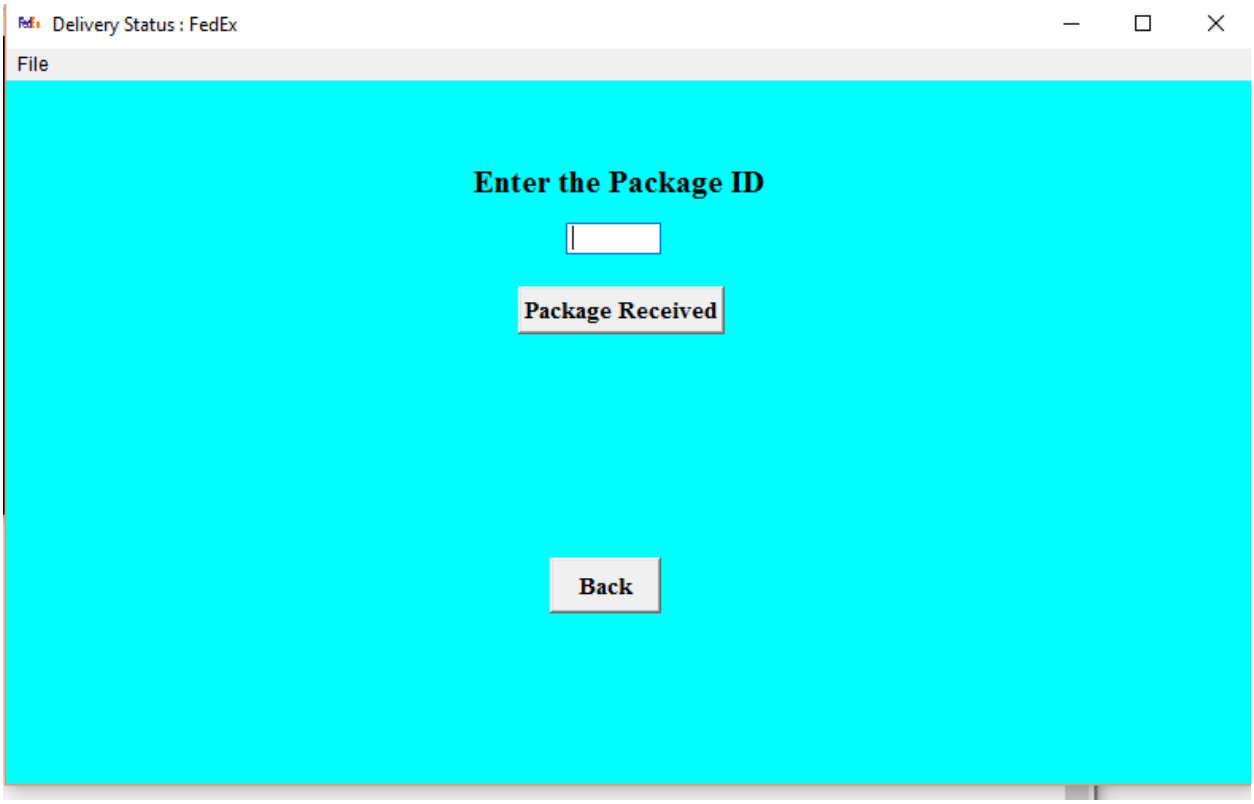
Screen 7 check order:



Screen 8 Logout:



Screen 9 Package ID:



7.2 REPORT DESIGN

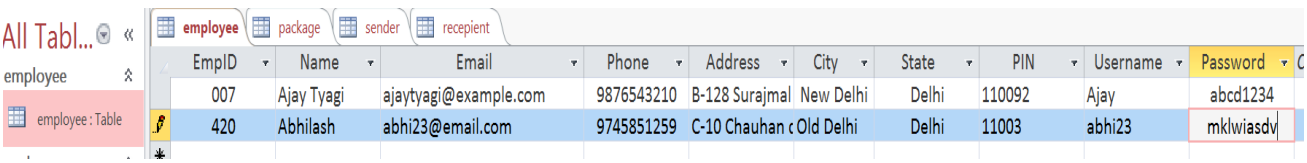
Report Design:

Report design basically deals with the database of the project from where we can extract all the reports which makes our work easier. Here are the some example of reports that we can extract from our data base and are really helpful to the organization. From these report they can improve their services and chances to get new milestones.

The reports are given below

Report 1

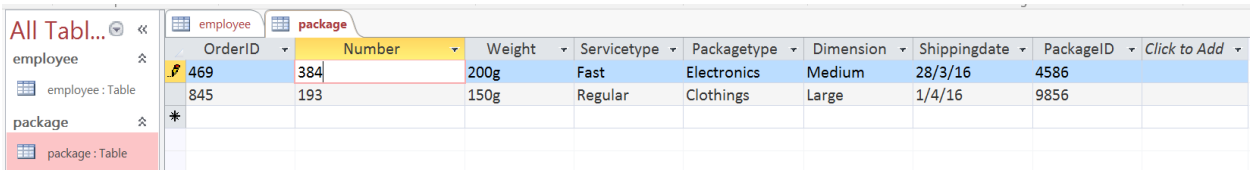
This shows the details of the employee account who are registered.



Report 2

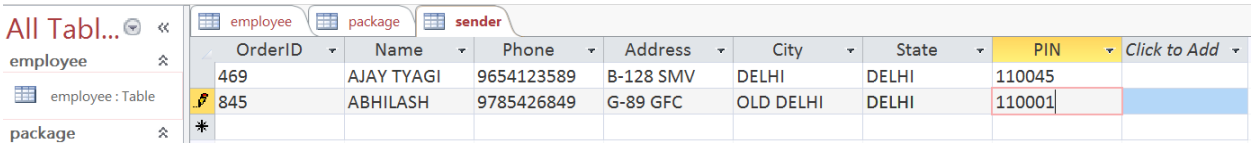
This shows the details of the order with package details.

Package Table:



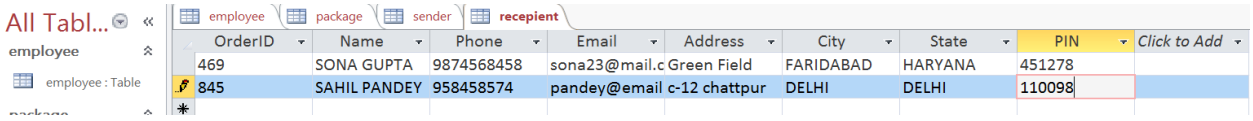
OrderID	Number	Weight	Servicetype	Packagetype	Dimension	Shippingdate	PackageID	Click to Add
469	384	200g	Fast	Electronics	Medium	28/3/16	4586	
845	193	150g	Regular	Clothings	Large	1/4/16	9856	

Sender Table:



OrderID	Name	Phone	Address	City	State	PIN	Click to Add
469	AJAY TYAGI	9654123589	B-128 SMV	DELHI	DELHI	110045	
845	ABHILASH	9785426849	G-89 GFC	OLD DELHI	DELHI	110001	

Recipient Table:



OrderID	Name	Phone	Email	Address	City	State	PIN	Click to Add
469	SONA GUPTA	9874568458	sona23@mail.c	Green Field	FARIDABAD	HARYANA	451278	
845	SAHIL PANDEY	958458574	pandey@email	c-12 chattpur	DELHI	DELHI	110098	

CHAPTER 8

SYSTEM TESTING

8.1 PREPARATION OF TEST DATA

This phase related to the testing of the software after it has been developed. In this phase the testing engineers' carriers out various testing strategies and tools to check whether the software developed by the programmer is following the predefined standard and the quality of the software is up to the level to which it is require. The various techniques used for testing by a testing engineers are white box testing, black box testing, unit testing etc. there are technique are useful in getting rid of the shortcoming or feature which are there on the part of programmer. If certain features are encountered they are informed to the programmers and he has to eliminate those failures from software. This is how the software is developed which is all together free from the bugs and is ready for implementation on the client side.

Before doing the testing of the project we need to clear about some terminologies and gathers the information which helps us to create some good test cases. There are three terminologies are required to understand before doing test cases. Terminologies are

- Input :- Input is one of the important aspect when we working on the test cases or system testing.

- Expected Result :- This shows the output of the given input as per the developer's view point.

- Actual Result :- This shows the actual output of the given input. This may or may not be same as the expected results.

All the testing of the system is done on the mentioned above terminologies and we check the system as much as possible to reduce the correction in the software before deploying.

Software Testing Strategies

Testing is a set of activities that can be planned in advanced and conducted systematically. A strategy for software testing must accommodation low-level tests that are necessary to verify that a small source code segment has been correctly implemented as well as high-level tests that validate major system functions against customer requirements

There are three types of testing strategies

1. Unit test
2. Integration test
3. Performance test

Unit Testing:

Unit testing focuses verification efforts on the smallest unit of software design module. The unit test is always white box oriented. The tests that occur as part of unit testing are testing the module interface, examining the local data structures, testing the boundary conditions, execution all the independent paths and testing error-handling paths.

Integration Testing:

Integration testing is a systematic technique or construction the program structure while at the same time conducting tests to uncover errors associated with interfacing. Scope of testing summarizes the specific functional, performance, and internal design characteristics that are to be tested. It employs top-down testing and bottom-up testing methods for this case.

Performance Testing:

Timing for both read and update transactions should be gathered to determine whether system functions are being performed in an acceptable timeframe.

8.2 TESTING WITH LIVE DATA

Software is give more accurate results when that is tested in the real world environment. In real world testing data is live and the correction /modification in the software are done by minded the results of the real test scenario. So the root knowledge is that the real world test cases/ scenario gives the most of the accurate results which helps the developer to enhance the software at real level.

But for this software we are not going to do testing with live data because as we earlier discussed on this that this software is a dummy software which works on the core functions. Since the software is made with intense in mind that it will work on the basic function of the organization so the live test cases are not possible for it.

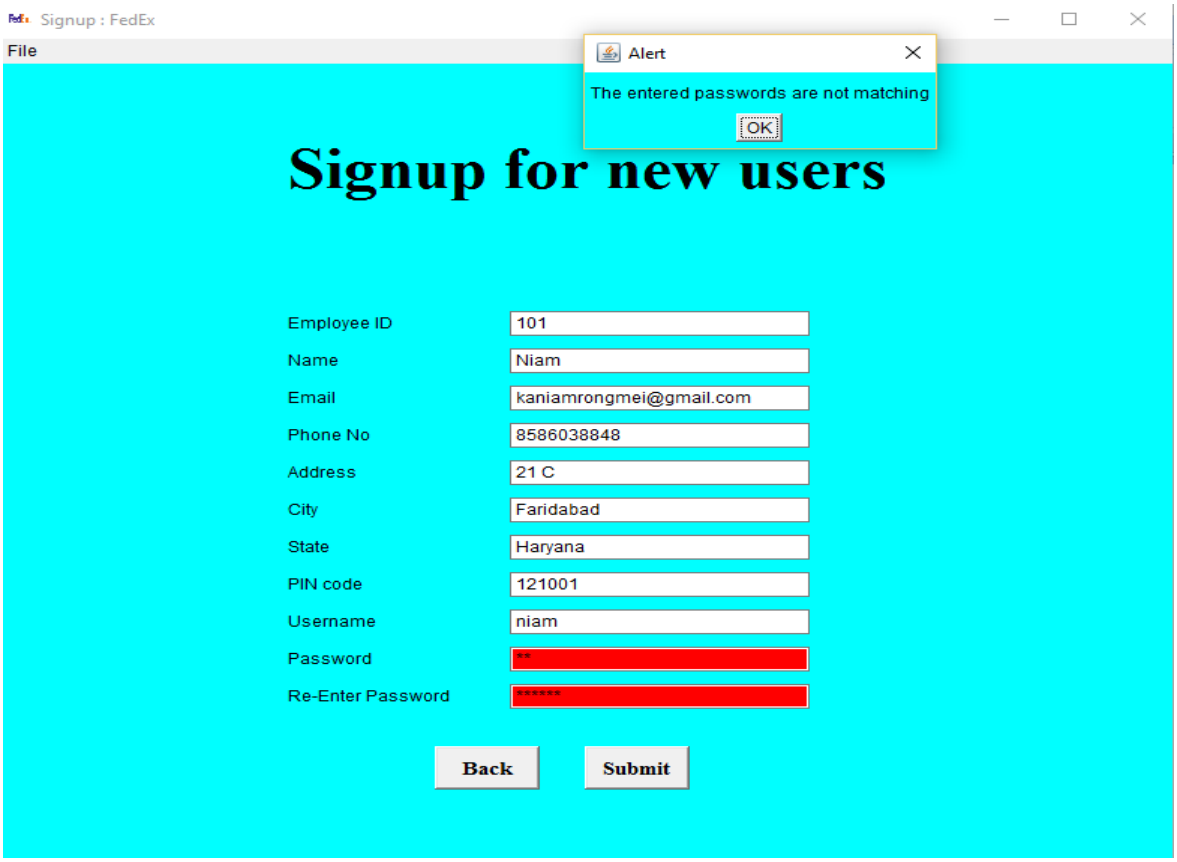
This software is tested on the basis of their basic functions with of all aspects which reduce the possibilities to test this software with the live data or live test cases with some extents.

So we are now ready to test our software with the dummy data or the validation of the software which shows the accuracy of the software.

8.3 TEST CASES WITH RESULTS

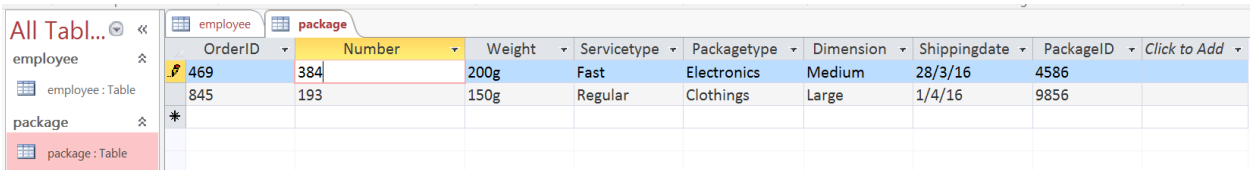
TEST CASE 1:

Input	Entering data into signup form, checking password matching
Expected	Pop up of error with red color field.
Actual result	It shows exactly.



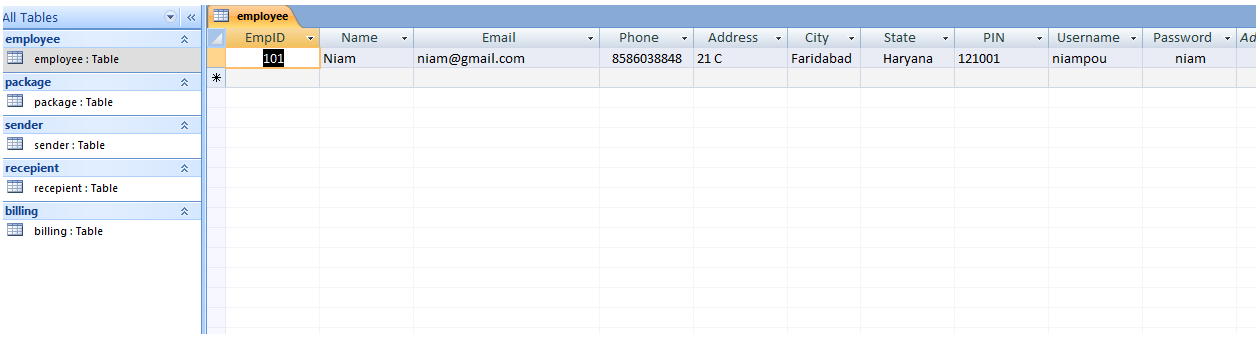
TEST CASE 2:

Input	Setting only numbers and limited digits in OrderID and PIN code field
Expected	Only number is accept.
Actual result	It accept exactly.



TEST CASE 3:

Input	Signup completion.
Expected	If test 1 and 2 is success then insert values to the employee table
Actual result	Data is inserted into the table.

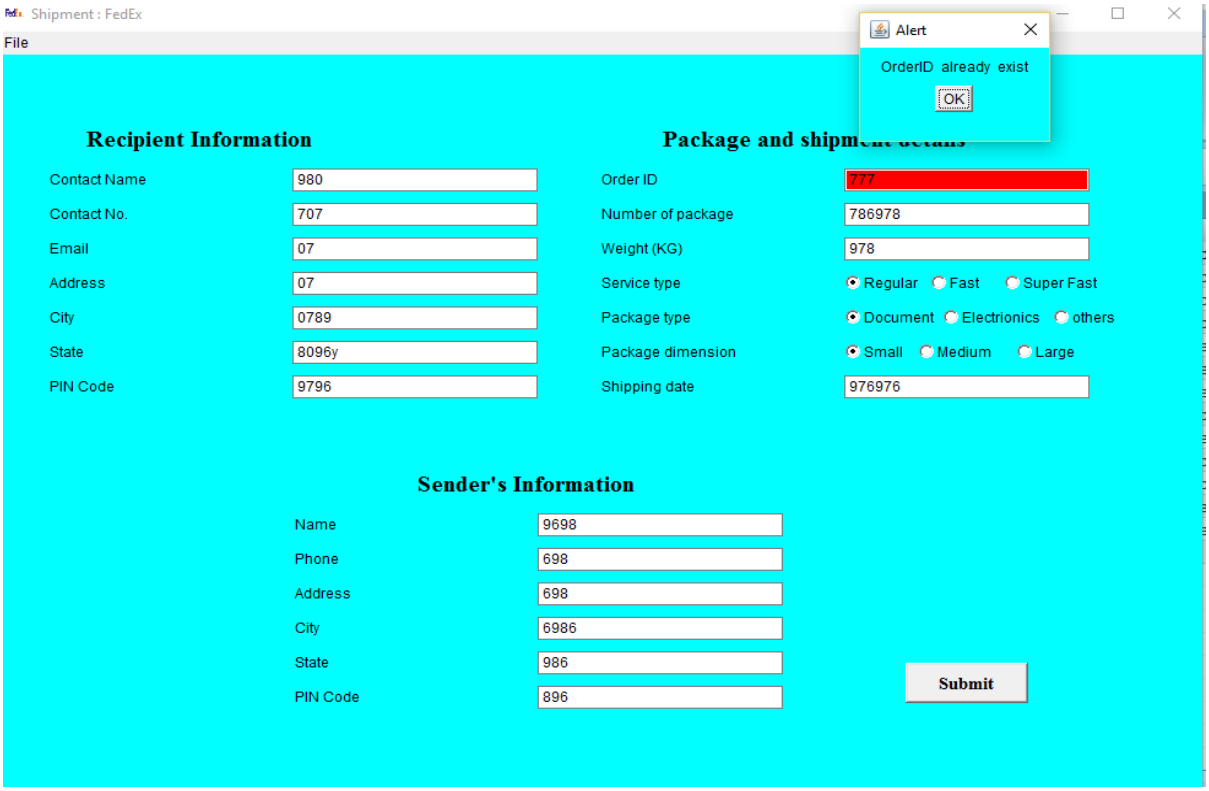


TEST CASE 4:

Input	Checking valid user in login form
Expected	Pop up error with red color field for invalid user entry
Actual result	It shows the error.

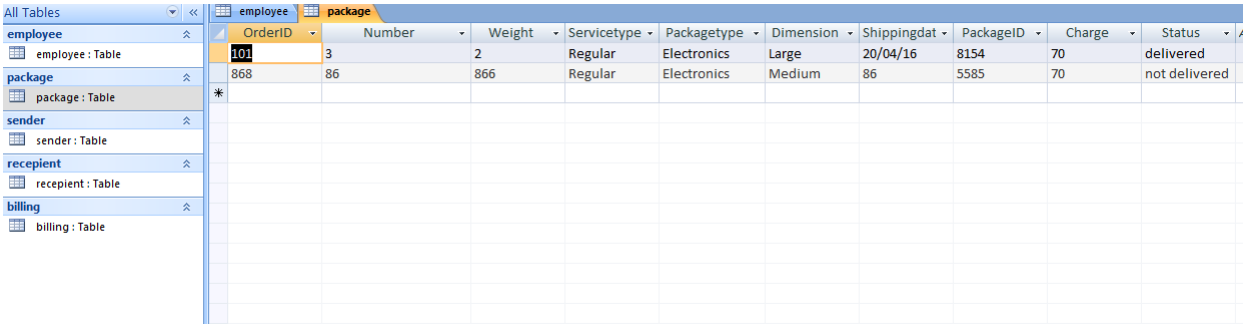
TEST CASE 5:

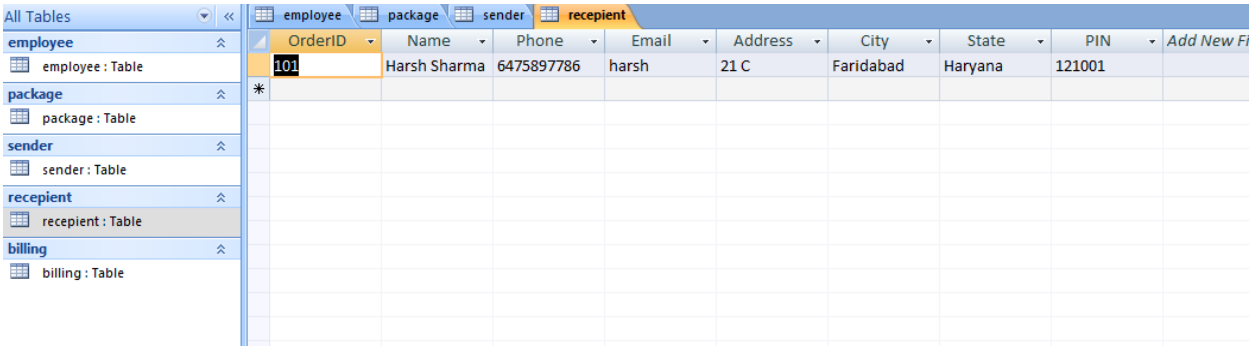
Input	Checking for valid orderID
Expected	Pop up error with red color field for invalid orderID by checking from table
Actual result	It shows the error.

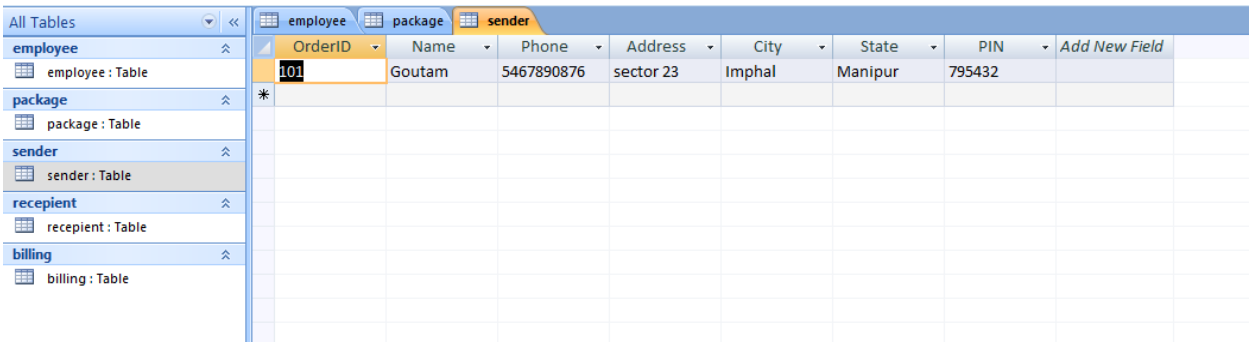

Shipment : FedEx
File
Alert
OrderID already exist
OK
Recipient Information
Contact Name
980
Contact No.
707
Email
07
Address
07
City
0789
State
8096y
PIN Code
9796
Package and shipment details
Order ID
777
Number of package
786978
Weight (KG)
978
Service type
Regular
Fast
Super Fast
Package type
Document
Electronics
others
Package dimension
Small
Medium
Large
Shipping date
976976
Sender's Information
Name
9698
Phone
698
Address
698
City
6986
State
986
PIN Code
896
Submit

TEST CASE 6:

Input	Inserting data from main frame.
Expected	Insert data to tables.
Actual result	Data is successfully entered

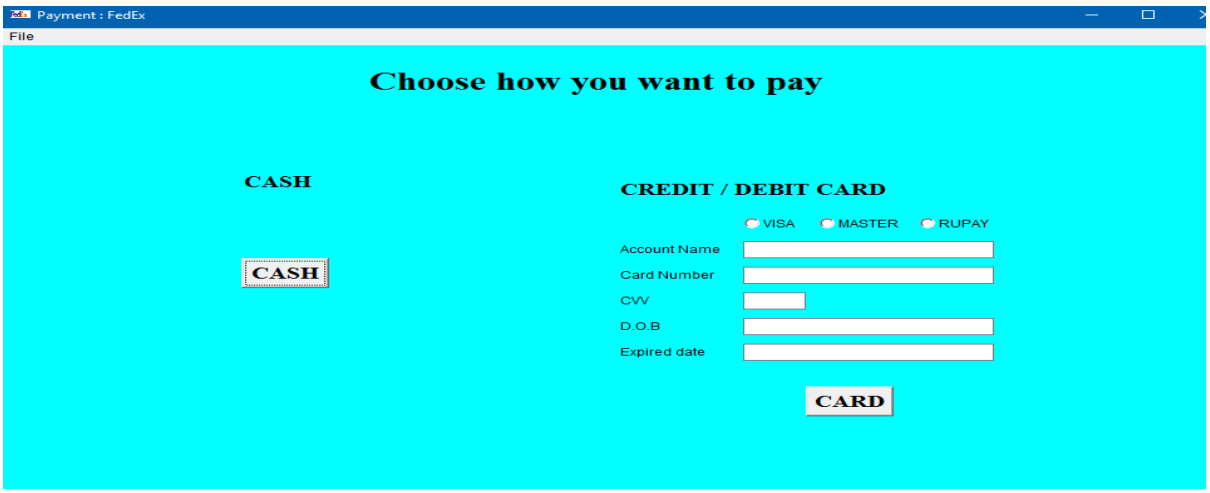


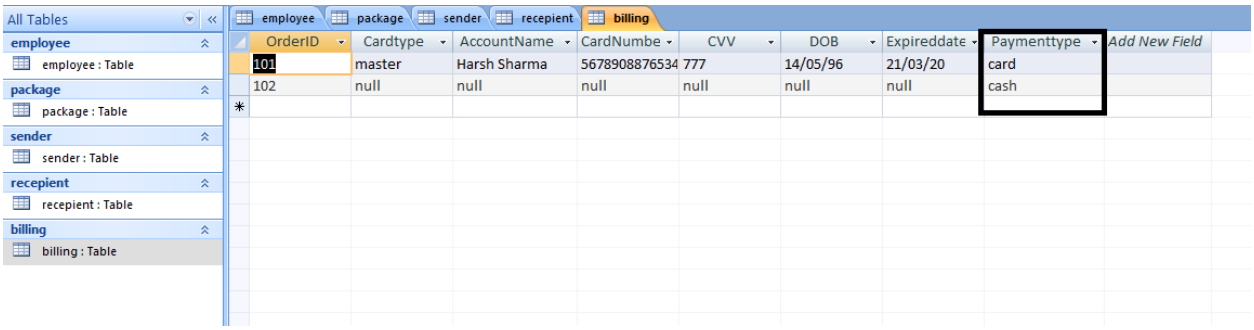




TEST CASE 7:

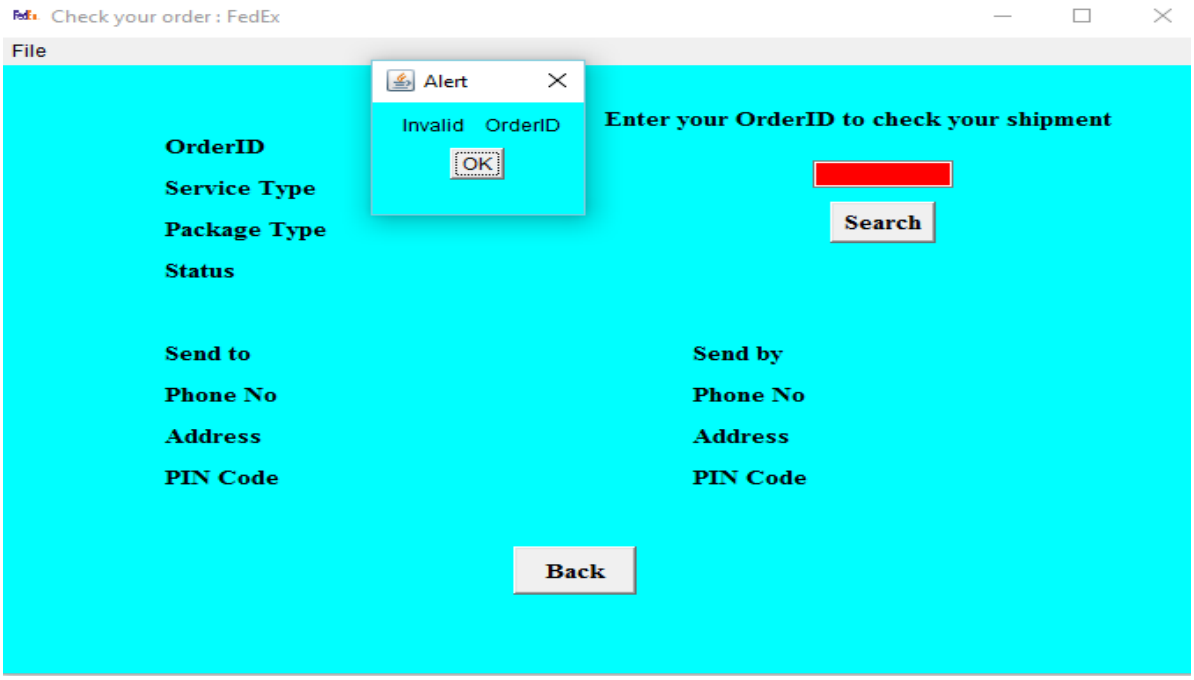
Input	Selecting payment option
Expected	Insert data differently for cash and card payment into the billing table.
Actual result	Successfully inserted.





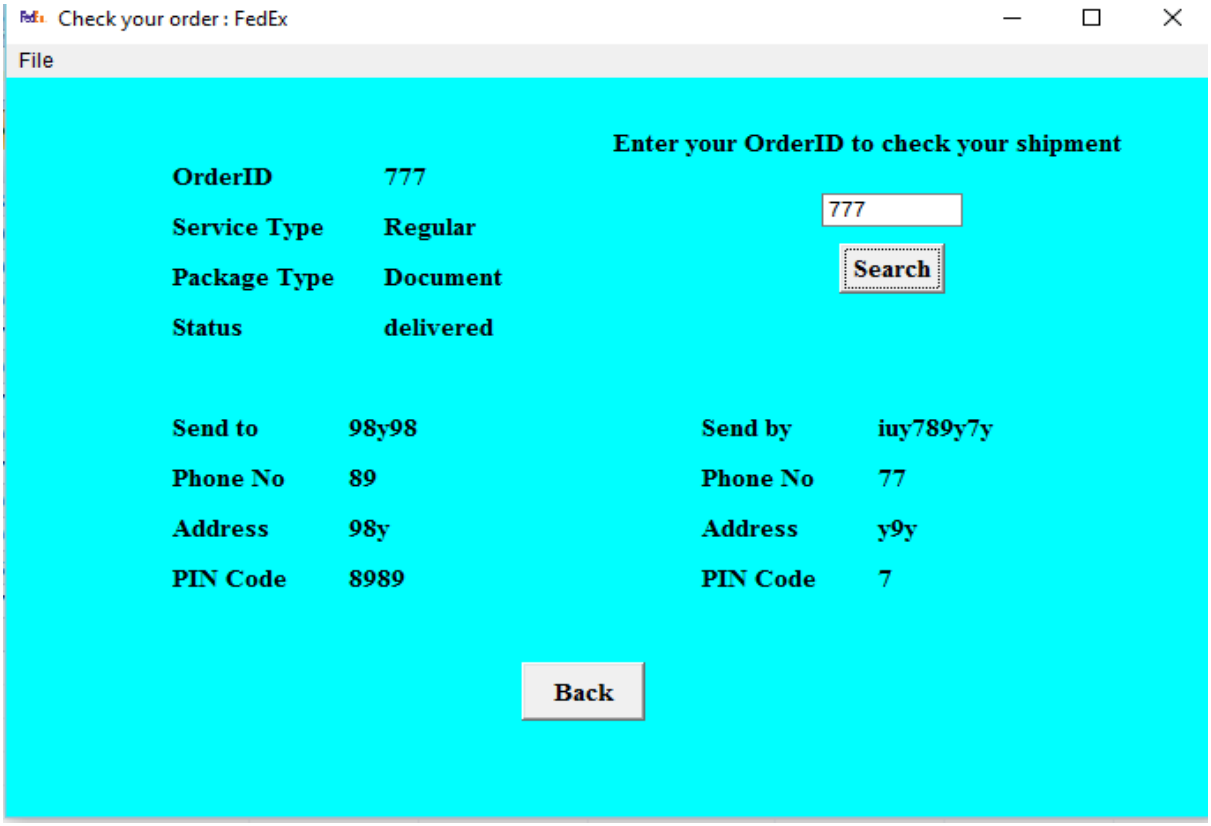
TEST CASE 8:

Input	Checking valid orderID in check form
Expected	Pop up error with red color field for invalid user entry
Actual result	It shows the error.



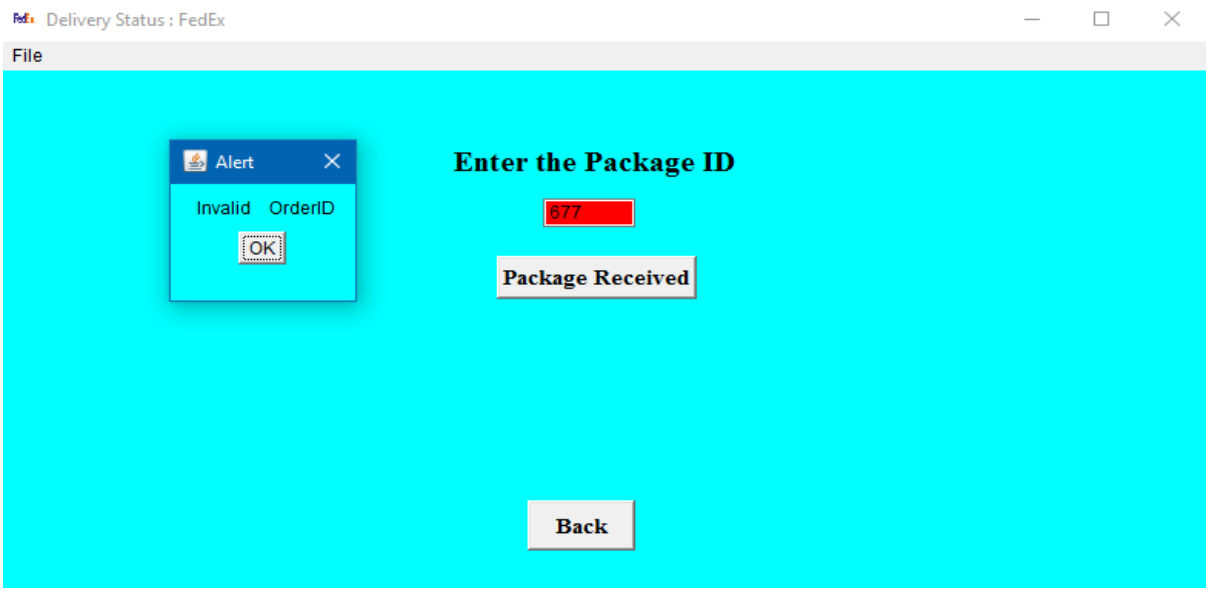
TEST CASE 9:

Input	Checking valid user in login form
Expected	To show details of the entered OrderID
Actual result	It shows the detail.



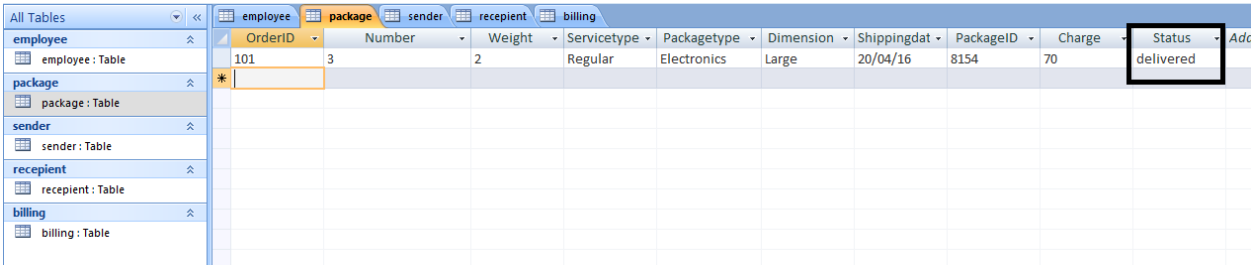
TEST CASE 10:

Input	Checking the package ID
Expected	To show pop up with red color field for invalid package ID
Actual result	Error is shown.



TEST CASE 11:

Input	Changing delivery status.
Expected	To change status value in package table
Actual result	Status has been changed to ‘delivered’.



CHAPTER 9

SYSTEM IMPLEMENTATION

9.1 SYSTEM REQUIRMENTS

Hardware Configuration:

- Central Processing Unit : Intel Haswell microarchitecture
- Clock Speed : 2.5 GHz
- Main Memory : 1024 MB Ram
- Cache Memory : 512 KB
- Hard Disk Capacity : 40 GB
- USB : 2.0-3.0
- Keyboard : Mercury 104 key Keyboard
- Mouse : Optical/Laser Mouse

Software Requirement:

- Operating System : Windows XP/ Vista/ 7/ 8/ 10
- Front End : Java JDK
- Back End : MS-Access, My SQL

Software used for programming:

- Windows 8 Pro.
- Visual studio 2010 Professional.
- My SQL.

JAVA JDK

MS-Access

CHAPTER 10

DOCUMENTATION

USER'S MANUAL

- ✓ Install java development tool (JDK) version 7.

- ✓ Make a file path on the system advance setting on the environment variables by copying the folder path of the java bin folder.

- ✓ Install MS Access (MS Office 32bit).

- ✓ Install ODBC Access Database Engine, 32 bit.

- ✓ Link your database to the ODBC data source 32 bit, in the administrator tool in the control panel.

- ✓ Open command prompt and check whether the java is properly installed by typing 'javac' and press enter.

- ✓ If the java command is accepted, then it is ready to compile and run your .java files.

- ✓ Copy your file to the system memory or use a pen drive and insert it to the system.

- ✓ Got TO command prompt and type 'javac –d . *.java' and enter, it will compile and load the files .

- ✓ Now type 'java ShazamEx' and enter, it will open the login frame.

- ✓ Your project is ready to use.

INSIDE THE PROJECT

- Signup for new user by going to signup form
- Login to the main frame by entering your username and password.
- Enter all the values of the package, sender and recipient and submit.
- Check whether the entered values are the correct values, else click back button to edit the values
- All fields are mandatory and check for some specific entry.
- Confirm the values if it is correct an and navigate to payment form.
- Choose your payment option : cash or card.
- For card your need to fill all the fields and then submit.
- Now you shipment registration process is completed.
- Next go to check order from menu bar of main form.
- Enter orderID and view your shipment details.
- To submit the delivered package, goto delivery status from menu bar of the login form.
- Enter your package and submit, your package will be update as delivered package.

CHAPTER 11

SCOPE OF THE PROJECT

System development is also considered as a process backed by engineering approach. We have tried to incorporate & develop new particles for our education particles have been followed not during the but coding but also during the analysis, design phases & in documentation.

Courier agency is considered as an expansion of business relations. It contributes a lot by providing quick & fast services of sending documents letters (formal & informal both) to business as it enables any business to flourish

Following modification or upgrades can be done in system.

1) More than one company can be integrated through this software.

2) Web services can be used to know exact delivery status of packets.

3) Client can check the repacked delivery status online.

4) Distributed database approach in place of centralized approach

CHAPTER 12

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