Export Import Service (EIS)

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This Report Presented in Partial Fulfillment of the Requirements for the Degree of

M.Sc in Computer Science & Engineering

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APPROVAL

This Project titled **"Export Import Service**", submitted by **MD. Mahabub Hossain** to the Department of Computer Science and Engineering, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of M.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 07th May 2018

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DECLARATION

I hereby declare that, this project has been done by me under the supervision of **Md Zahid Hasan, Assistant Professor,** and Daffodil International University. I also declare that this project or not any part of this has been submitted anywhere for award of any degree.

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ABSTRACT

At the modern age the main challenges is the maximum utilization of time. At our professional life we are engaged with other country. We can do the maximum utilization of time by digitalize our systems. We can provide these supports from our online export import service to the users. Here all users can manage their jobs, maintain their daily calendar, upload and share their necessary documents etc. Users can distribute their tasks properly. It is easy to monitor and follow up the distributed tasks. Team members are able to update their real time working progress. They can also ask for help from co-workers and everything will be stored in database. Management can view every individual contribution of work and assess their performance. It will help to monitor all staffs working performance. To implement online export import service, organizations do not require expensive hardware and software; they only need a computer system and internet connection. Our system uses a centralized database and application that organizations can easily access the system from anywhere by a login system. This is a platform independent system that virtually any user can access from anywhere through a standard internet accessible system.

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CHAPTER1

INTRODUCTION

1.1 Introduction

Export Import Service. This project will handle whole activities of an Export Import office or currier service who export and import. EIS has most of the facilities that a modern office requires to computerize its day- to-day jobs. It provides facilities to keep the records of tasks, document sharing, analytical, Account details, and Auto pricing details etc. It has facilities to generate various types of reports, which are required by them and during full functionality andeffectively. EIS tries to fulfill the common activities within an organization. Now a day's export import system or service is very effectively for this solution. It is very easy to use and more informative. Our file sharing solution is also an effective solution for users who can operate. Users can working their responsibility and can sharing with others hand, department wise and also can archive important documents. It will help all documents from virus attack. Hope EIS system can give comfort to all users and help to manage working files and documents effectively. It will save time and give maximum benefits of time. Office working refers to the one to another computer and software used to digital create, collect, store, manipulate, manifest, delivery chart, posting chart and relay office activates needed for also some basic tasks like as employee and expense sheet.

1.2 Motivation

The client used excel sheet, and maintains their records, however it is not possible them to share the data from multiple system in multi user environment, there is lot of duplicate work, and chance of mistake. When the records are changed they need to update each and every excel file. There is no option to find previous records. There is no security; anybody can access any report and sensitive data, also no reports to summary report. This Export Import Service is used to overcome the entire problem which they are facing currently, and making complete atomization of manual system to computerized system. The staff can easily maintain their works.

Here all users can manage their jobs, maintain their daily reports and update, upload and share their necessary documents which are coming foreign etc. Managers can distribute their tasks

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properly. It is easy to monitor and follow up the tasks. Team members are able to update their real time working progress. They can also ask for help from co-workers and everything will be stored in database.

1.2 Objectives

The main focus of the project was to develop an Export Import Service which is applicable to all type of organizations and to improve the effectiveness of documents its demands. The specific objectives were: To provide a new management methodology for office, managers to improve their management skills.

The objective and scope of Export Import Service is to record the details various activities of user. It will simplify the task and reduce the paper work. Specific support will also be provided at key points within the academic calendar. You will be trained as the new is EIS rolled out to your area of responsibility. The system is very user friendly and it is anticipated that functions of the system will be easily accessed by all kind of users such as administrator, managers, executives, Accounts etc. The key objectives are:

- To manage Import Manifest
- Use Manifest to Delivery Chart
- To Delivery Chart to Posting Chart for accounts department
- Setup the price list for Import Documents , And delivery
- Data management for all suppliers and exports
- Dissemination of Information
- Easy Communication to other users
- Office expense and others information
- Less storage is required to store data.
- Multiple people can update information.

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1.4 Features

- Import Manifest Data
- Manifest to Delivery Chart
- Delivery Chart to Posting for accounts
- Notes for due and monthly amount
- Date Wise Search Reports
- Sample list for delivery product or received
- File categories
- Excel sheet upload for import files and export to excel for export document
- Expense sheet
- Client list setup
- Categories weight and price setup

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CHAPTER 2

BACKGROUND

2.1 Background

At our busy society we are very much busy with our official job. Lot of activities we have to do within a short time, we need to communicate with others such as colleagues, suppliers, service holders etc. for information sharing. Managers need to monitor and follow-up team members activates. As well as document storing, document sharing and archiving is also an important part of an organization. To maintain all of these activities, an organization need a big IT setup with costly hardware resources, reliable networking system, skilled IT people etc. They need to spent lot of money to manage everything. To solve all of these problems we have decided that we will reduce the complexity within an office by making a system that will be very easy to use and it will also a business viable product. And this is the main thinking behind the system being developed. This is a web application and it brings all teams working together, giving everyone a their works on one sheet. It will help user with scaling and still feeling connected to one another across remote offices and remote teams.

2.2 Related Work

A web application typically contains some modules and those are connected with each other to share every data uniquely, and have some other coherent method of navigation. The most important web application has some features that help people to make their regular works easier. To manage a working web application are available in the world. Some are used for managing excel files, some are used for billing structure, and some are used for communication. But there is no common platform to manage whole system for managing their works.

System, the teams with the services, and resources they need to get work done. People around the world use their sheet to bring their teams together, make easiest of their work. System brings all your team's communication together, giving everyone a shared workspace where conversations are organized and accessible. It has work to make more useful with machine learning and putting knowledge in everyone’s hands.

Limitations: System has some limitations also. User cannot get all facilities that are needed within

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an office to perform daily activities. There is no suitable file sharing features are available in Slack. There is no medium to connect the biometric machine with the system. Some other features also absent in Slack.

2.3 Comparative Studies

Frames have been known to cause problems with web accessibility, copyright, navigation, printing and search engine rankings, and are now less often used. Both are allows certain content which appears on many pages, such as page navigation or page headers, to be repeated without duplicating the HTML in many files. CSS3 and JavaScript client-side techniques can also achieve all target and more.

2.4 Scope of the Problem

Usually, Web pages today have very popular and dynamic. Web pages are dynamic, which is generated from the server-side when asked to do so, and then serve the end user. Those web pages are usually doing have not a fixed link, or a fixed address, associated. Today, it can be seen in many popular forums, and online shopping, even on Wikipedia. This practice is designed to reduce the amount of static pages instead of storage with associated information in the database pages. Some search engines may have difficulty in indexing web pages and dynamic web pages, so it can offer static pages in those cases.

The problem currently facing many organizations is the management of jobs. Proper job creation, project management, job distribution and job monitoring is the biggest challenge of the managers. This is so complex task to manage it within a standard way. During implementation of the project we have to face the problem that users are not ready to use the system or the organization is not ready to run the system. Another problem we may face that users are not ready for the system. Either they cannot familiar with the web application system or they have not available resource to operate it.

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2.5 Challenges

The big challenge of the system is to provide data security. Now a days data centers are the first choice oh hackers. Always they try to hack important data and damage it. So data security is the biggest challenge of the system. It can be slow while data volume will increase. To develop the system we have chosen PHP programming language Framework (Codeigniter) in order to be available resource and easy to manage. But this is a scripting language and best of security other programming language. This project is based on any operating system where the programming language is open source which helps to make changes to what it is compatible with any organization. It would have to be the limit on the amount of users that can be accounted for in the free version.

So, as long as an organization falls to run at once huge data or the data length 100k, it can be a fit for as free. When comparing the free version to the paid version, it clear that the upgrading the system is in an increasing numbers of features, custom reports, user access, and flow.

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CHAPTER3

REQUIREMENTS SPECIFICATION

3.1 Business Process Modeling

The study scope of this paper is Export Import Service. With the help of information technology, we reviewed the situation of organization to considered organization's culture and analyze SWOT (Strength, Weakness, Opportunity, and Threat) of organization. I have visited different type of organization to understand their business processes and summarize some features. The initial concurrence was achieved through continuously interviews, communication and discussion. My main concentration was on three imperative factors: cost, time, and quality, I have integrated on the system. In addition, using electronic mails to transmit letters or messages, synchronous management of groups' calendar, and using distributive database management process are all the ways to let different users share information. We applied a process tree to describe the project features.

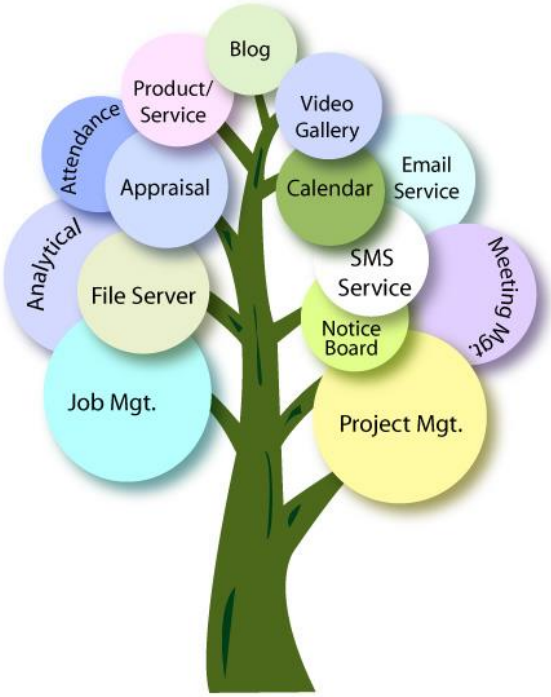

Fig: 3.1Business Process Features

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3.2 Requirement Collection and Analysis

This chapter will provide a full description of the system and its users. Then it depicts the functional and non-functional requirements that have been collected using several methods from brainstorming, interview and e-surveys. After determining the most important requirements, requirementanalysiswasadoptedusingseveraltoolssuchasuse-casediagram, sequence diagram and activity diagram.

Export Import Service(EIS) is a system are serving to all the employees are working within an organization. This electronically where it will be the work of a Web application, the idea of this system enable the employees to manage their jobs, scheduling, email, daily activities etc.

3.2.1Scope of Works

The main objective of the Export Import Service is to keep data of working and control all employees work schedule, accounts, billing. Individual office authority is able to get any kind of information instantly and accurately by using this system. Regarding these information the sub-scopes in this system are defined as below

3.2.1.1 Scopes

- Dash Board
- Upload Import manifest file
- Move to dynamically delivery chart.
- Delivery to product wise posting / accounts service
- File Sharing
- Sample list
- Memo/Notes
- Monthly daily billing and invoice
- Order sample and receive list
- Export import and export to CSV or PDF Files.
- Mailing service
- User module

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3.2.1.2Details of sub-scopes

Details of these sub-scopes are described in bellow

1) Dash Board
    i) Configuration System
    ii) User Module
    iii) Session Login
    iv) Upload Manifest and sample list
    v) Setup client wise billing
    vi) Delivery to posting chart
    vii) Export list insert and download PDF
    viii) Daily & monthly billing by client
    ix) Client list with account number
    x) Weight wise price Fr.Cost
    xi) Custom Payment
    xii) Due List
    xiii) Parcel Lost or important list
    xiv) Expense Sheet & Reports
2) Imports Manifest
    i) Upload
        (a) Upload export file as template design
        (b) Fill up form some required.
        (c) Only some restricted user can upload manifest
        (d) Every user show the manifest
        (e) Select the product type
        (f) Auto convert it into delivery chart for next user
        (g) Anytime change the files as required
    ii) View
        (a) Upload manifest view
        (b) Which file are edited can mark different color.

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(c) Assigned next part to do

(d) Can change the field where need update

(e) Company account no. update

3) Delivery Chart

i) Manifest to delivery chart

ii) Client account number set

iii) Sample wise weight calculate

iv) Country base product order

v) Describe about purpose

4) Posting chart

i) Meeting to posting chart

ii) Product weight wise custom payment

iii) Client wise payment

iv) Wrong billing setup finding

v) Country wise billing

vi) Custom & Fr.cost maintaining

vii) Client list update

5) Billing

i) Daily billing

ii) Client wise billing

iii) Monthly billing

iv) Due billing

v) Area billing

6) Sample List

i) Import file sample list

ii) Lost, Important, Change mark to receive

7) Invoice/Note

i) Billing invoice

ii) Monthly and daily invoice

iii) Sample list note

iv) Billing notes

v) Export billing invoice

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8) Daily Work

   i) Daily manifest and delivery chart logs
   ii) Sample list logs
   iii) Daily billing logs
   iv) Expense sheet
   v) Product receive and logs

3.2.1.3 Input Forms

- Import manifest
- Export manifest
- Client list
- Price list
- Country wise price list
- Expense sheet
- Users sheet
- Sample list sheet
- Memo/Notes
- Delivery / COD Charge price list

3.2.1.4 Reports

- Daily/monthly & date to date manifest reports
- Daily/monthly & date to date Delivery Chart reports
- Daily/monthly & date to date Posting Chart reports
- Daily/monthly & date to date Billing reports
- monthly payment reports (client wise)
- Sample list reports (Lost, Change, Important)
- COD delivery Charge reports

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3.2.2System Requirement

Before creating any web application or a mobile App, it is necessary to visualize the layout, design and all features intended to be incorporated. In addition, how users will interact with each page and icon and how the website/ App should perform (behavior, load time etc.). Requirements are the necessary attributes in the system, a statement that identifies a capability, characteristic or quality factor of the system in order to have value and utility to the users. Once the requirements are set, developer scan initiate the other technical work including system design, development, testing, implementation, and operation.

3.2.3 Functional Requirement

Admin

- Create, edit and delete all files
- Create, edit and delete all documents
- Create, edit and delete users
- View all works and list
- Manage contents for users
- Change user information

Other Users

- Upload files
- Input the exports files
- Configuration the list and data
- Setup the price sheet
- Client list
- Delivery charge
- Keep analytical records
- Keep sample list records
- Keep billing files& notes

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3.2.4 Non-Functional Requirement

Security

The system has an account for its staff and only authorized users and they can access the system with email/userid and password. The passwords are encrypted using md5().

Performance

Easy finding records and updating can be done.

Availability

The system are available to users anytime, anywhere, just need a PC and Internet Connection. Also the system works in multiple web browsers like (Chrome, Mozilla, Opera, and Internet Explorer).

User Friendly

The system has a friendly user interface and the system very interactive.

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3.3 Use Case Modeling and Description

This part contains the use case of Export Import Service

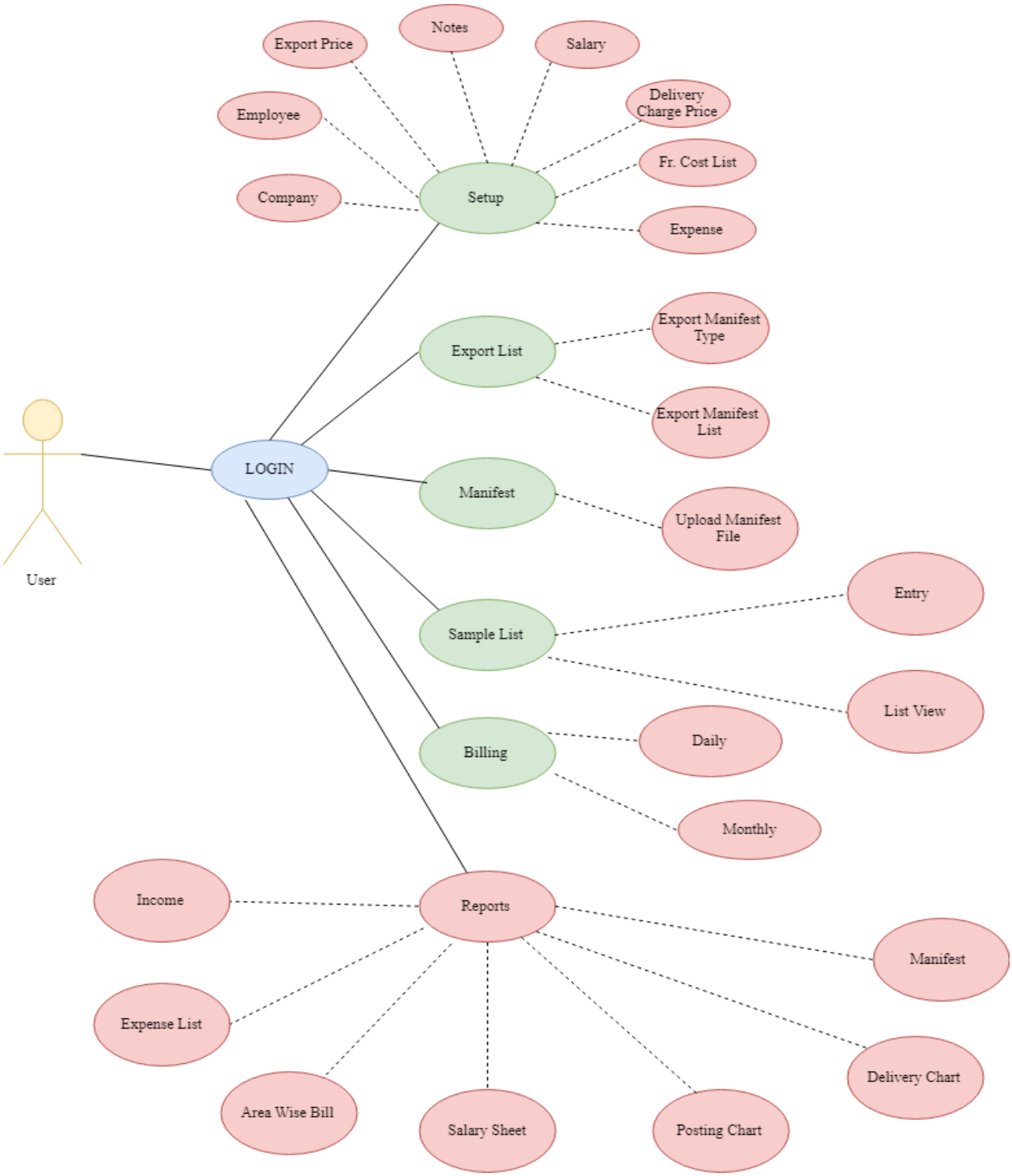

Fig: 3.2 Use-Case Diagrams

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3.4 Use-Case Detail

Brief Description

This is use-case of Export Import Service. Here lots of functionalities are shows bellow

Actors

Registered Office Staffs

Preconditions

1. Need Internet Connection
2. Need computing system such as Desktop, Laptop, TAB etc.
3. Active User

Basic Flow of Events

1. The user will setup necessary needs.
2. The user will upload manifest for working environments.
3. The user will check the delivery chart for creating from the manifest.
4. The user will view reports for every functional.
5. The user will update manifest product and delivery chart
6. The user will share to others which are updated
7. The user will sample list file
8. The user will setup client info
9. The user will Fr. Cost and Custom Cost list
10. The user will set delivery charge bill
11. The user will update export chart list
12. The user will keep area wise working log
13. The user will keep analytical data as note.

Alternative Flows (In case of any error**)**

1. Log out from system when tries by wrong username and password
2. Contact with administrator.

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Key Scenarios (Common Problems**)**

1. Internet connection down
2. Server down
3. Wrong username and password

Post-conditions (Actions After completion of the use case**)**

1. Send confirmation to user

3.5 Programming Tool

The system are developed using web development techniques. The following resources are used to develop it. The resources are:

Programming Language: PHP 5.6+

Visualization: HTML 5/CSS

Scripting: Javascript, JQury 1.9

Database: MySql 5.5

IDE: Net Beans 8.2

Software Architecture: MVC, Codeigniter Framework

3.6 Design Phase

During the design phase, the relationships between classes were designed and analyzed using the class diagram. After that, the database schema was developed to illustrate the mapping of the data.

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3.7 Class Diagram

To illustrate the relationships and source code dependencies among classes, class diagram was developed. In this diagram, the class defines the methods and variables in an object, which is a specific entity or the unit of code representing that entity.

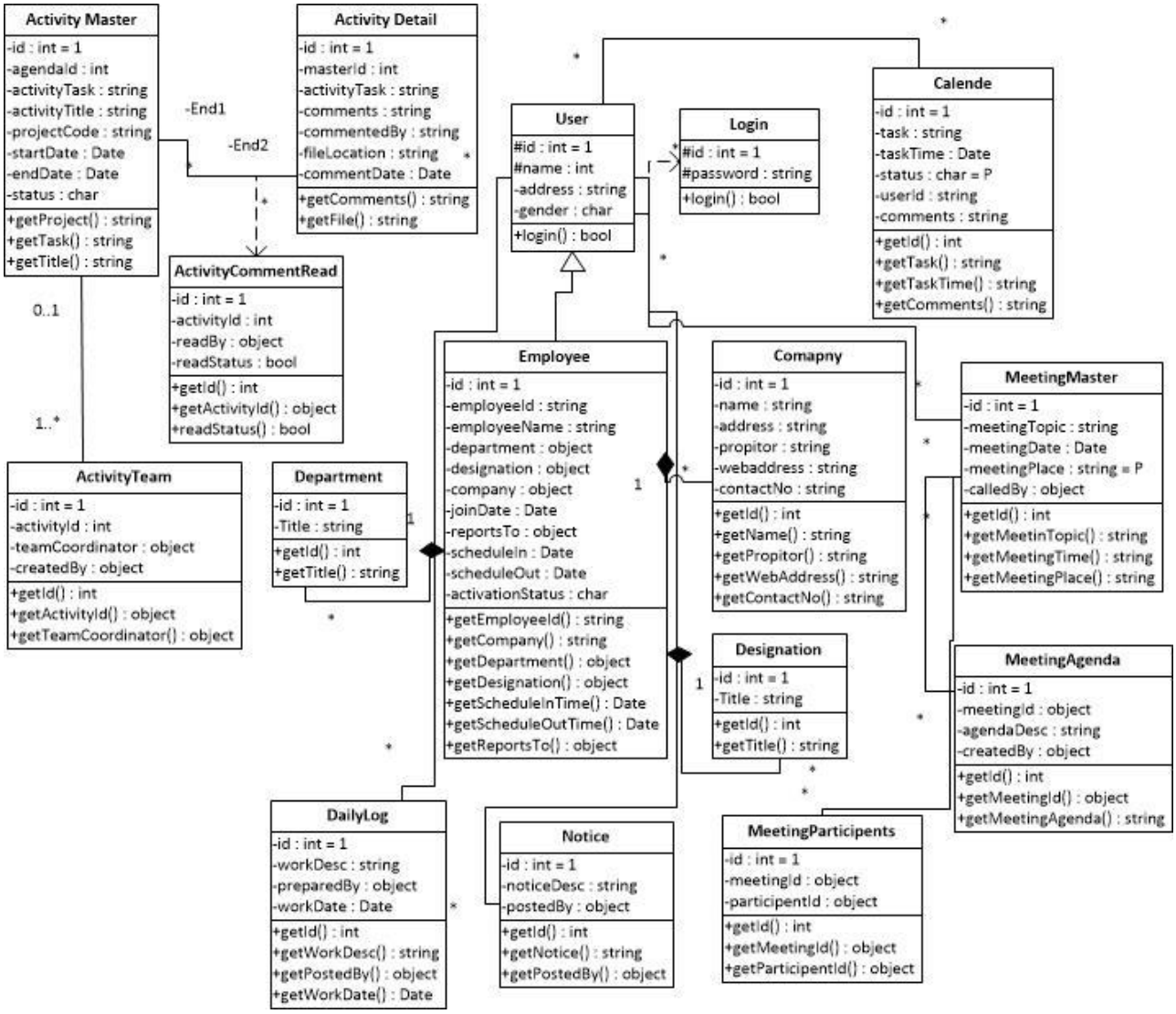

Fig: 3.3 Class Diagram

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3.8 Database Design

A database is simply an organized collection of data; basically it's stored on disk. Databases are not only store data but also specified into system areas. For example, one database may contain Inventory & HRM (Stock and payroll) data; another may contain sales data; another may contain accounting data; and so on. Databases are managed by a DBMS.

3.8.1 Database Knowledge

Most businesses make extensive use of Microsoft Excel and Microsoft Access to manage data. These are powerful and effective tools that sharing data that these tools were not designed to address.

Excel and Access are designed for single user access to entire documents. The minute a second employee tries to access the same document, a message "Open for Read-Only?" pops up. The purpose of this message is to ensure data integrity is maintained. A business doesn't have to grow much before these messages escalate from a mere annoyance to a full-blown crisis. This is what a DBMS, which is more sophisticated, is designed to solve. It controls access at the record level - such as a single row within a document. This lower level of access is technically complex to achieve but ultimately provides huge benefits.

A second issue is that data is often replicated many times in many spreadsheets. Over time these spreadsheets evolve into multiple versions of the truth because they are not all updated as the underlying data changes. For example, when a customer moves, the address change may not be applied to all the affected spreadsheets. Similarly, when a last-minute adjustment to revenue is unevenly applied, it leads to different revenue and net income graphs being produced for the same time period. A DBMS reduces these misleading discrepancies significantly.

3.8.2 Table/Entity

In relational databases, and flat file databases, a table is a set of data elements (values) using a model of vertical columns (identifiable by name) and horizontal rows; the cell is being the unit where a row and column intersect. A table has a specified number of columns, but can have any number of rows.

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3.8.3 Keys

Keys are very important part of database. They are used to successful and identify relation between tables. They also ensure that each record within a table can be uniquely identified by combination of one or more fields within a table [1].

3.8.4 Normalization

Normalization is the process of making a database fit “good database design” rules. We talk about normalization in terms of “normal forms” (NF).

The normal forms are defined as follows:

1. First normal form (1NF) sets the very basic rules for an organized database:

    a. Eliminate duplicative columns from the same table.

2. Second normal form (2NF) addresses the concept of deleting same as data:

    a. Remove subsets of data

    b. Create relationships between tables and their services through the use of foreign keys.

3. Third normal form (3NF) goes one large step further:

    a. Remove columns that are not dependent upon the primary key.

4. Finally, fourth normal form (4NF) has one requirement:

    A relation is in 4NF if it has no multi-valued dependencies [2].

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3.8.5 Database Model Diagram

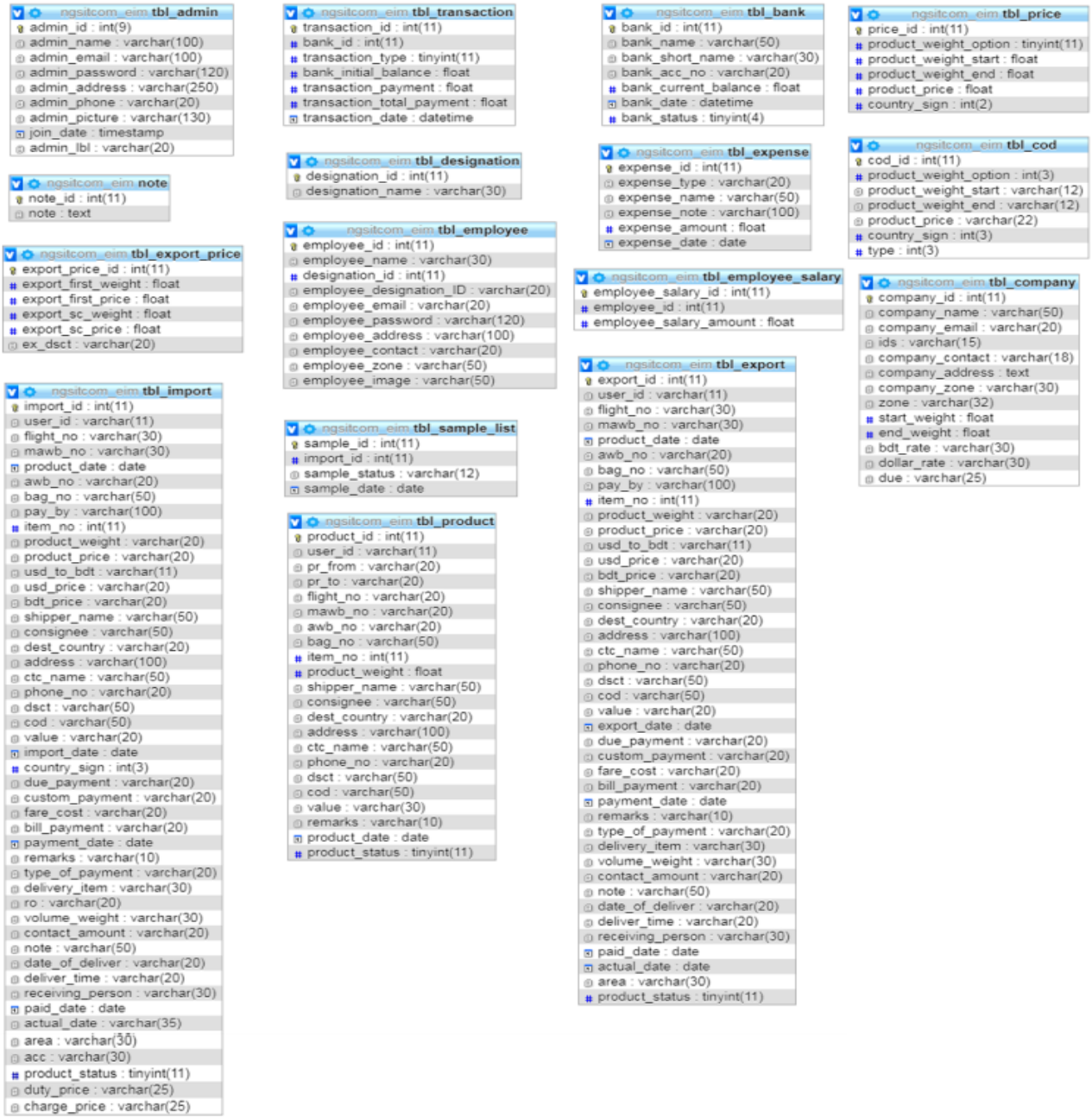

Fig: 3.4 Database Model

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CHAPTER4

SYSTEM DEVELOPMENT PROCESS

4.1 Introduction

A computer system means an automated data-processing system that uses a programmable electronic device to store, retrieve, and process data. This system consists of a set of hardware and software components which processes data in a meaningful way. Here I am discussing about the software. The topics are:

- Software
- Steps of a software development process.

4.2 Software

Software is a component of a computer system that has no physical shape but works together as a heart (life) with the physical hardware system. If we consider humans survive body and a dead body, what is the difference between them? The difference is that the survive body can do everything (i.e. moving, walking, talking, thinking etc.) but the dead body cannot do anything. So the question is what is making this difference? The answer is life. The source of power to doing something by the physical body is Life. Similarly software is the life of computer. Sometimes one can say electricity. But it is wrong because electricity is like human blood. This software projects are responsible for controlling, integrating, and managing the individual activities within an office. This Software project is created with programming languages for example PHP and JAVASCRIPT and related utilities Database connector MySQL. Good software project must be based on good architecture, design and methodology which I have maintained. Knowledge is important for the software to be usable and intuitive.

We have used agile methodology for development

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4.3 Agile

Agile software development describes a set of values and principles for software development under which requirements and solutions evolve through the collaborative.

The term agile (sometimes written Agile) was popularized by the Manifesto for agile software development, which defines those values and principles. Agile software development frameworks continue to evolve, two of the most widely used being Scrum and Kanban.

4.4 The Manifesto for Agile Software Development

Based on their combined experience of developing software and helping others do that, the seventeen signatories to the manifesto proclaimed that they value:

- Individuals and Interactions over processes and tools
- Working Software over comprehensive documentation
- Customer Collaboration over contract negotiation
- Responding to Change over following a plan

That is, while there is value in the items on the right, they value the items on the left more

4.5 Agile software development principles

Principles of Agile Software Development

The Manifesto for Agile Software Development is based on twelve principles

a) Welcome changing requirements, even in late development
b) Working software is delivered frequently
c) Close, daily cooperation between business people and developers
d) Projects are built around motivated individuals, who should be trusted
e) Face-to-face conversation is the best form of communication (co-location)
f) Working software is the primary measure of progress
g) Sustainable development, able to maintain a constant pace

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h) Continuous attention to technical excellence and good design
i) Simplicity the art of maximizing the amount of work not done is essential
j) Best architectures, requirements, and designs emerge from self-organizing teams
k) The team reflects on how to become more effective and adjusts accordingly [3].

4.6 Steps are followed to develop the Software Project

To provide a valid output, Ihave followed the following steps

- Communication
- Requirements Analysis
- Specification
- Design and Architecture
- Coding
- Testing
- Documentation
- Maintenance
- Feedback

4.6.1 Communication

Communication is the initial part for a software builder. By collaborating customer and end-user business requirements for the software are identified in the company. Here software builder and customer should to maintain a better communication. If the communication processes are not satisfied the requirements will not fulfill and something must be go-back. It is harmful to build a software project for the company. Because after finishing it will see that software runs but it does not give the appropriate output.

Some principals we have to follow to communicate with the customer:

- Listening: We should to focus on the speaker's words, rather than formulating our response to those words. And also try to ask for clarification if something is unclear.

- Preparing before our communication: We need to spend time to understand the problem before meet with others.

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- Face to face communication
- Striving for collaboration: Collaboration and consensus occur when the collective knowledge of members of the team is combined to describe product or system functions or features.
- Taking notes and document and document decision: Someone should to participate in the communication should serve as a recorder and write down all important points and decisions.

4.6.2 Requirements Analysis

Extracting the requirements of a desired software product, this company is also performed task in creating software. The requirements analysis should begin with business or organizational requirements and translate those into project requirements. It will be risked for the company.The requirements should be documented, actionable, measurable, testable, traceable, related to identified business needs or opportunities, and defined to a level of detail sufficient for system design [4].

Any discussion of requirements analysis methods will quickly become specific to the type of project effort. Many industry areas have specific, proven techniques for obtaining thorough and accurate definition of requirements. Sometimes it is useful to write a draft user's manual as a way to define requirements. While the methods may differ, the principles remain the same across all types and sizes of projects. The requirements analysis should cover the whole scope of the project.

On large projects, the first formal design review is actually a requirements review. By summarizing the basic points we get:

- Examine the Business Need or Opportunity
- Write a Clear Statement of Project Objectives
- Know the Difference Between Wants and Needs
- Negotiate the Requirements Definition Interactively with the Customer
- Conduct a Thorough and Comprehensive Analysis
- Document the Results Unambiguously in Sufficient Detail
- Put the Requirements Document under Version Control

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4.6.3 Specification

Specification is the mission of stipulating the software to be written, in a mathematically accurate way. So specifications are most important for external interfaces that must remain stable.

4.6.4 Design and Architecture

The most creative and challenging phase is software design. Design and architecture refer to determine how software is to function is a general way without being involved in detail. The term "design" describes a final system and the process by which is developed. It refers to the technical specifications that will be applied in implementing the software.

I determine the system components covering the requirements and the way these components will work together. The software architecture design is logically divided into two parts in the company:

General design: The general design consists of the structural design, development strategy, and system design documentation. Detailed design: When it comes to the detailed design, specification and documentation on each component are developed.

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4.6.5 Coding

Coding is less important part from Design and Architecture. In this software company, Programmer or coder just follow the software design rule and algorithm and then writes program using a programming language PHP and Java script.

The coding principles of the project are:

- Coder should to understand the problem that are going to solve
- Should understand basic design principles and concepts.
- Should to pick a programming language that meets the needs of the software to be built and the environment in which it will operate.
- Should to select a programming environment that provides cools that make his work easier
- Should to create a set of unit test will be applied once the component they code is completed.
- Should to constrain their algorithms by following structured programming practice.
- Should to select data structures that will meet the needs of the design.
- Should to understand the software architecture and create interface that are consistent with it.
- Should to keep conditional logic as simple as possible.
- Should to create nested loops in a way that makes them easily testable.
- Should to select meaningful variable names and follow other local coding standards.
- Should to write code that is self-documenting
- Should to create a visual layout that aids understanding
- Should to conduct a code walkthrough when appropriate.
- Should to perform unit test and correct errors you have uncovered.

4.6.6 Testing

Testing is a set of activities that can be planned in advance and conducted systematically. Test techniques include, but are not limited to, the process of executing a program or application with the intent of finding software bugs [5].

A number of software testing strategies have been used to develop the project. All provide the

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software developer with a template for testing and all have the following generic characteristics:

- To perform effective testing a software team should conduct effective formal technical review. By doing this, many errors will be eliminated before testing commences.
- Testing begins at the component level and works outward toward the integration of the entire computer based system.
- Different testing techniques are appropriate at different points in time.
- Testing is conducted by the developer of the software and an independent test group.
- Testing and debugging are different activities, but debugging must be accommodated in any testing strategy.

A strategy for software testing must accommodate low-level tests that are necessary to verify that small source code segment has been correctly implemented as well as high level tests that validate major system functions against customer requirements. A strategy must provide guidance for the practitioner and a set of milestones for the manager of the company. Because the steps of the steps of the test strategy occur at a time when deadline pressure begins to rise, progress must be measurable and problems must surface as early as possible.

Test strategies for Conventional Software are:

- Unit Test
- Integration Testing
- Regression Testing

System testing consists of the following testing:

- Recovery Testing
- Security Testing
- Performance Testing

Validation Testing consists of the following testing:

- Validation Testing

Alpha and Beta Testing

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4.6.7 Documentation

Documenting is an important task to develop software. The purpose of documenting the internal design of software helps maintenance and enhancement for future. Documentation is most important for external interfaces.

The reality is that increased processes usually result in increased documentation. An improved process produces intermediate work products that represent the elaboration of the product design at each step in the development life cycle. Where possible, documentation should be generated using automated tools, so outputs can contribute to generation of code structures or help generate the code itself.

Software quality, reliability, and maintainability are enhanced by having good documentation for requirements, architecture, interfaces, detailed design, well-commented code, and good test procedures. Requirements documentation practices should facilitate our customer's understanding and review of the real requirements.

4.6.8 Maintenance

Maintenance is actually the implementation of the post implementation review plan. As important as it is, many programmers and analysts are reluctant to perform or identify themselves with the maintenance effort. There are psychological, personality and professional reasons for this. In any case, a first class effort must be made to ensure that software changes are made properly and in time to keep the software tune with user specification.

Maintenance Processes are:

Process models

- Process implementation tasks
    - Develop maintenance plans and procedures
    - Establish procedures for modification requests
    - Implement the CM (configuration management) process
- Problem and modification tasks
    - Perform initial analysis
    - Verify the problem

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    - Develop options for implementing the modification
    - Document the results
    - Obtain approval for modification option
- Modification implementation task
    - Perform detailed analysis
    - Develop, code, and test the modification
- Maintenance Review/Acceptance tasks
    - Conduct reviews
    - Obtain approval for modification
- Migration tasks
    - Develop a migration plan
    - Notify users of migration plan
    - Conduct parallel operations
    - Notify user that migration has started
    - Conduct post-operation review
    - Ensure that old data is accessible
- Software retirement tasks
    - Develop a retirement plan
    - Notify users of retirement plan
    - Conduct parallel operations
    - Notify user that retirement has started
    - Ensure that old data is accessible
- Maintenance activities
- Unique activities
- Supporting activities
- Configuration management
- Quality
- Maintenance planning activity
    - Concept
        - Scope
        - Tailoring of the post delivery process
        - Designation of maintainer

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        - Estimate of life cycle costs
    - Plan

4.6.9 Problems/limitation of developing a software system

Many persons work in many software companies on producing software systems to automated our working system.

The task description and the requirements frequently change even during the program design phase, and continue to change even after the software system has long since been in use.

The major problems encountered in development of large software systems were:

- Correctness
- Efficiency
- Mastery of complexity
- Interface specification
- Reliability
- Flexibility
- Documentation
- Maintainability
- Project organization.

Insufficient theoretical foundation and too few methodological aids were known in both the technical and the organizational realm.

Programmers qualifications did not suffice to adequately solve the problems.

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CHAPTER 5

PROJECT FUNCTIONALITIES

5.1 Introduction

This chapter shows all functionalities with screen shoot. Users also get operational instruction from here. All user interface is good looking and easy to use. It will help to user to quick familiar with these.

5.2 Open the Login Page

Open your web browser (i.e. Firefox, Internet Explorer, Chrome), then type

http://ngs-it.com/eis on your address bars and then presses enter. The following window appears.

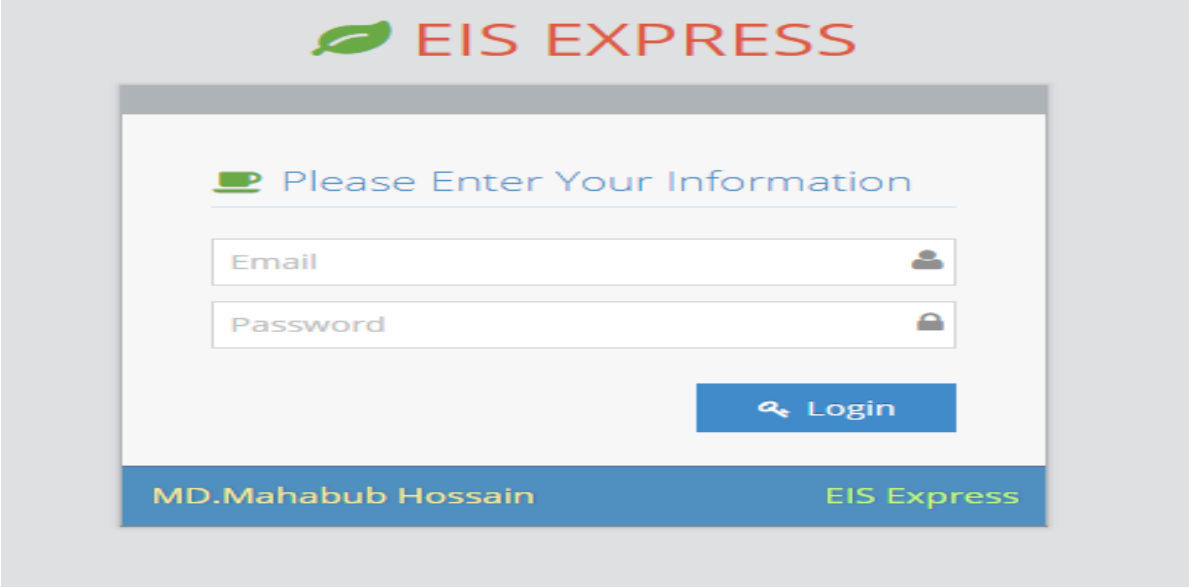

Fig: 5.1 Login Page

Enter User ID to the **User Email**field and password to the **password** field. Click on the **Login** button. After verification, the following Daily Activity **Home (Dashboard)** window appears:

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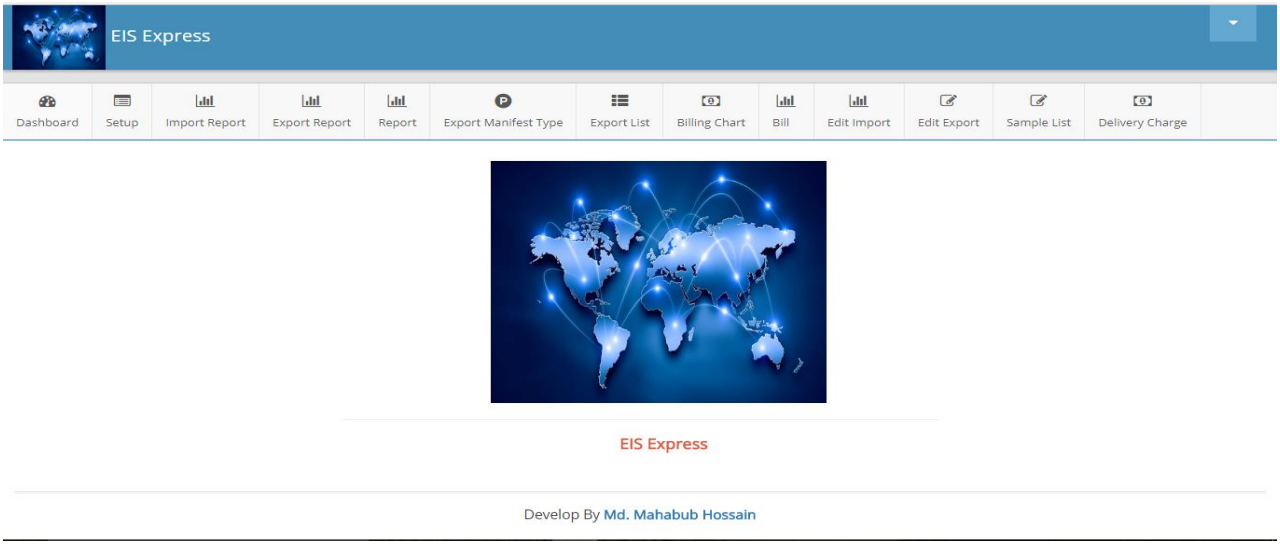

Fig: 5.2 Home Page

The top menus are: Home, Setup, Import Report, Export Report, Report, bill etc.

5.3 Functional Process

User can find all official functionalities from Functional Menu. The processes are shown in bellow.

5.3.1Setup

To call or request for a configuration the user have to press setup> on menu bar like following.

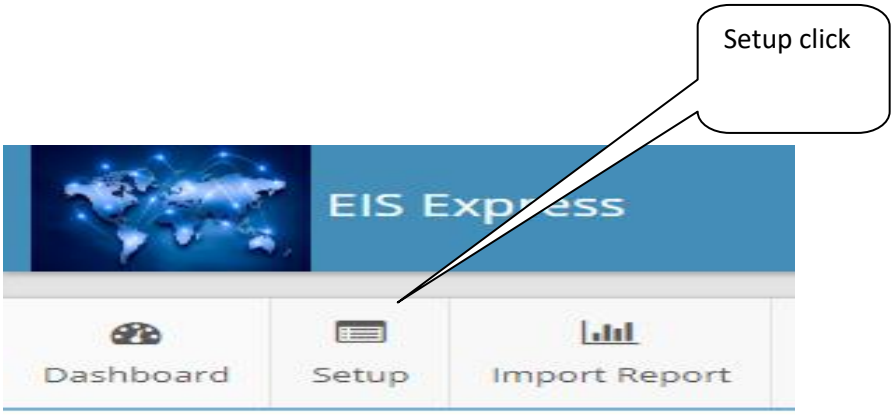

Fig: 5.3 SetupMenu

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After clicking the menu the window will appear like following:

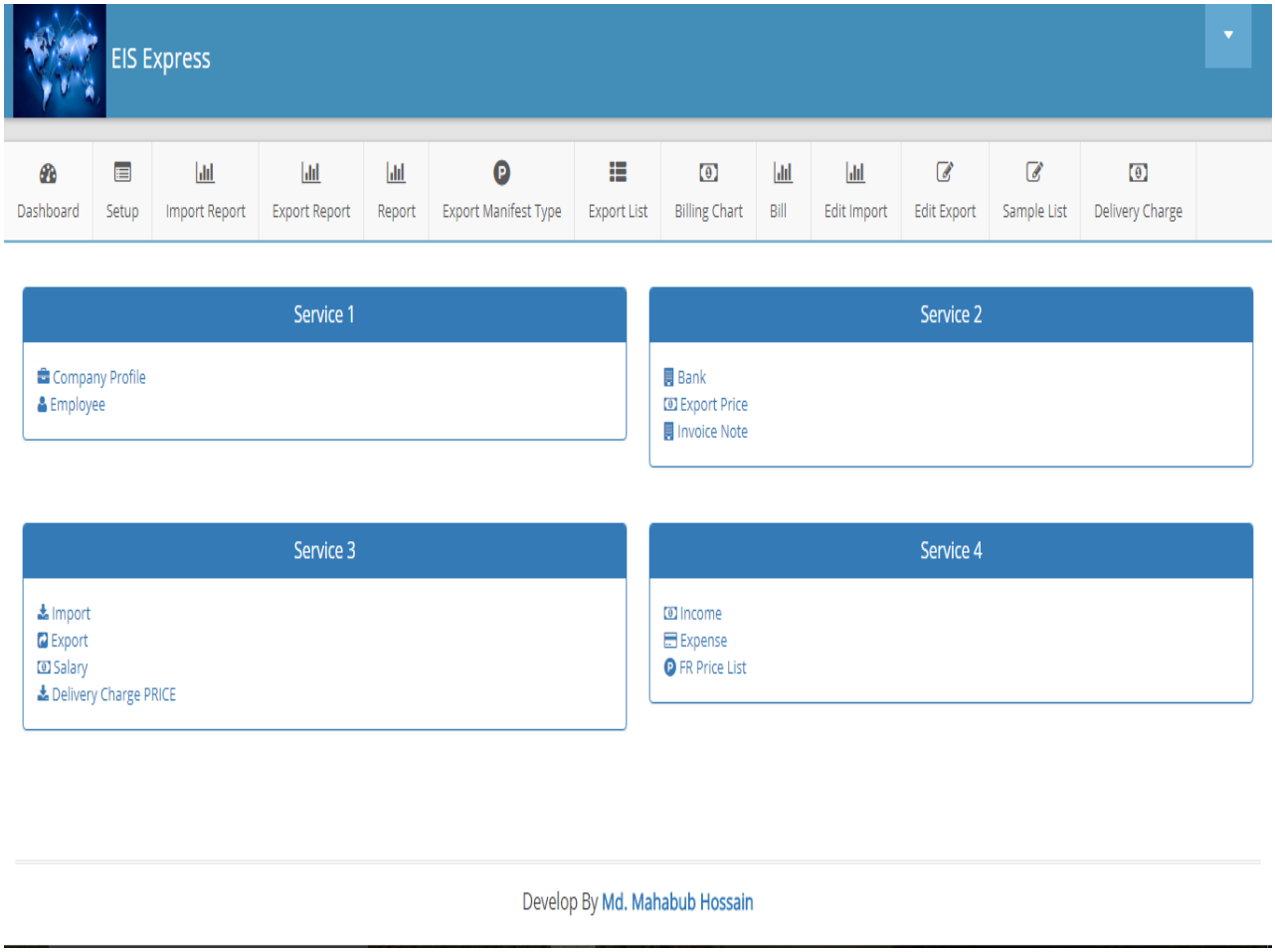

Fig: 5.4 Configuration Page

Steps to fill the Configuration Page:

1. Service Wise File Setup for System Configuration.
2. Price, employee, expense, salary sheet, delivery charge, note, export price, bank, Fr. Cost etc. can be easy to configure.

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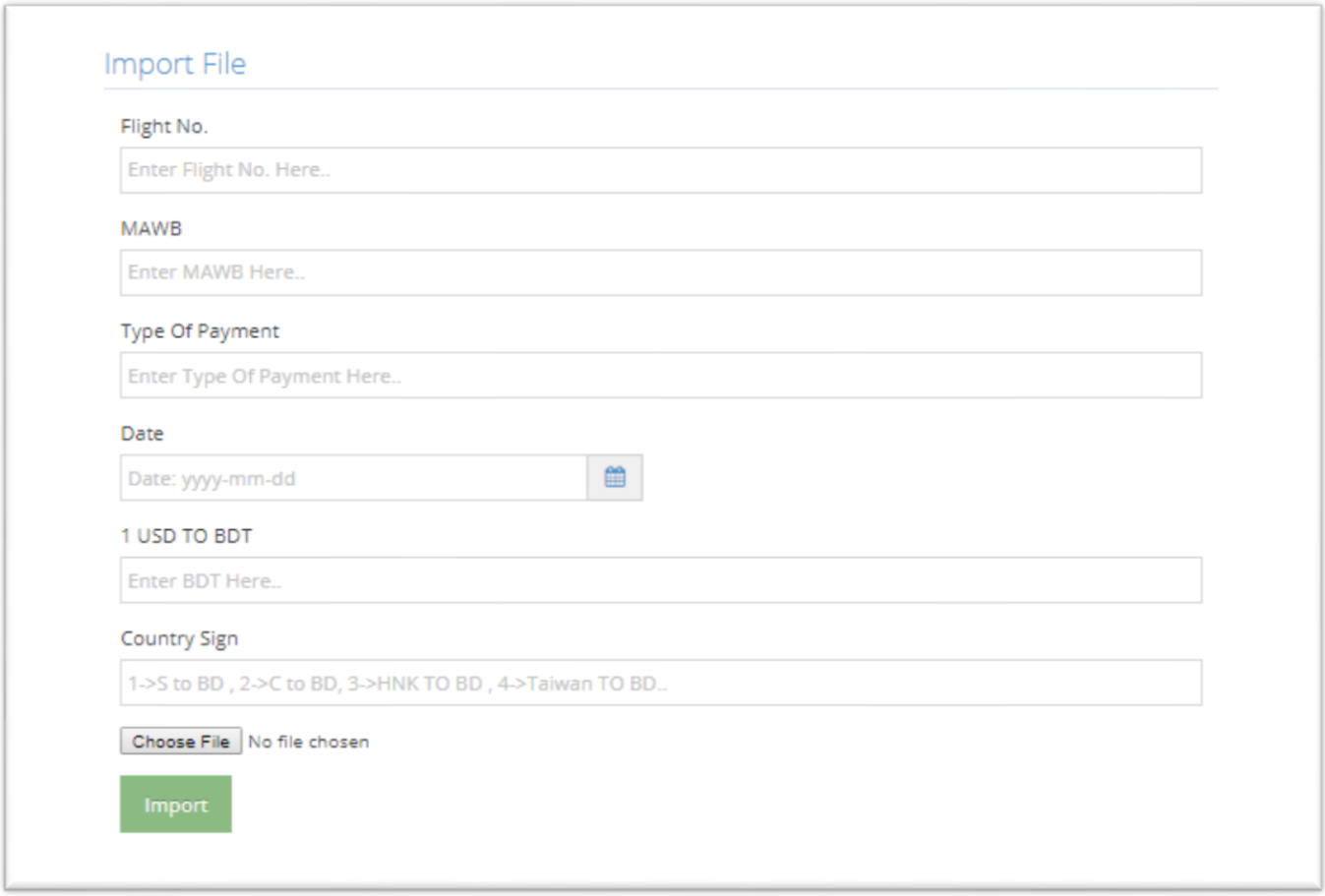

Fig: 5.5 Import Manifest File Upload

Select your desire manifest excels files and fills the required field.

Master no and flight no is desire that is content how you got the manifest files, date the files creating date not a uploaded date. Uploaded date auto configured.

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Customer Profile

Display 10 records

Search:

Serial	Customer Name	Customer Email	Customer Info	Weight	Rate	Action
1	Name: 13 TEXWORK ID: Z-438	N/A Zone: UTTARA	Address: UTTARA Contact: 88028961109 Remarks: D	0 - 1	BDT Rate: 500 Dollar Rate: Due:	
2	Name: 13 TEXWORK ID: Z-438	N/A Zone: UTTARA	Address: UTTARA Contact: 88028961109 Remarks: D	2 - 5	BDT Rate: 400 Dollar Rate: Due:	
3	Name: 4S FASHION ID: Z-439	N/A Zone: UTTARA	Address: UTTARA Contact: 8801811412955 Remarks: D	0 - 1	BDT Rate: 500 Dollar Rate: Due:	
4	Name: 4S FASHION ID: Z-439	N/A Zone: UTTARA	Address: UTTARA Contact: 8801811412955 Remarks: D	2 - 10	BDT Rate: 400 Dollar Rate: Due:	
5	Name: A MSTEL ID: A-203	N/A Zone: UTTARA	Address: UTTARA Contact: 01787667724 Remarks: D	0 - 1	BDT Rate: 500 Dollar Rate: Due:	
6	Name: A MSTEL ID: A-203	Zone: UTTARA	Address: UTTARA Contact: 1787667724 Remarks: D	2 - 5	BDT Rate: 400 Dollar Rate: Due:	
7	Name: A PLUS INDUSTRIES CO LTD ID: A-204	N/A Zone: MIRPUR	Address: MIRPUR Contact: 01620480386 Remarks: D	0 - 1	BDT Rate: 500 Dollar Rate: Due:	
8	Name: A PLUS INDUSTRIES CO LTD ID: A-204	Zone: MIRPUR	Address: MIRPUR Contact: 01620480386 Remarks: D	2 - 3	BDT Rate: 400 Dollar Rate: Due:	
9	Name: AAA CONTROL/ TASKIN SOURCING ID: A-205	N/A Zone: MIRPUR	Address: MIRPUR Contact: 8801711609734 Remarks: D	0 - 1	BDT Rate: 500 Dollar Rate: Due:	

Fig: 5.6 Customer Profile on Setup Page

3. List Of the Customer Profile as account no or IDs

4. Every customer have some default price rate and Fr. Cost is depends on product weight.

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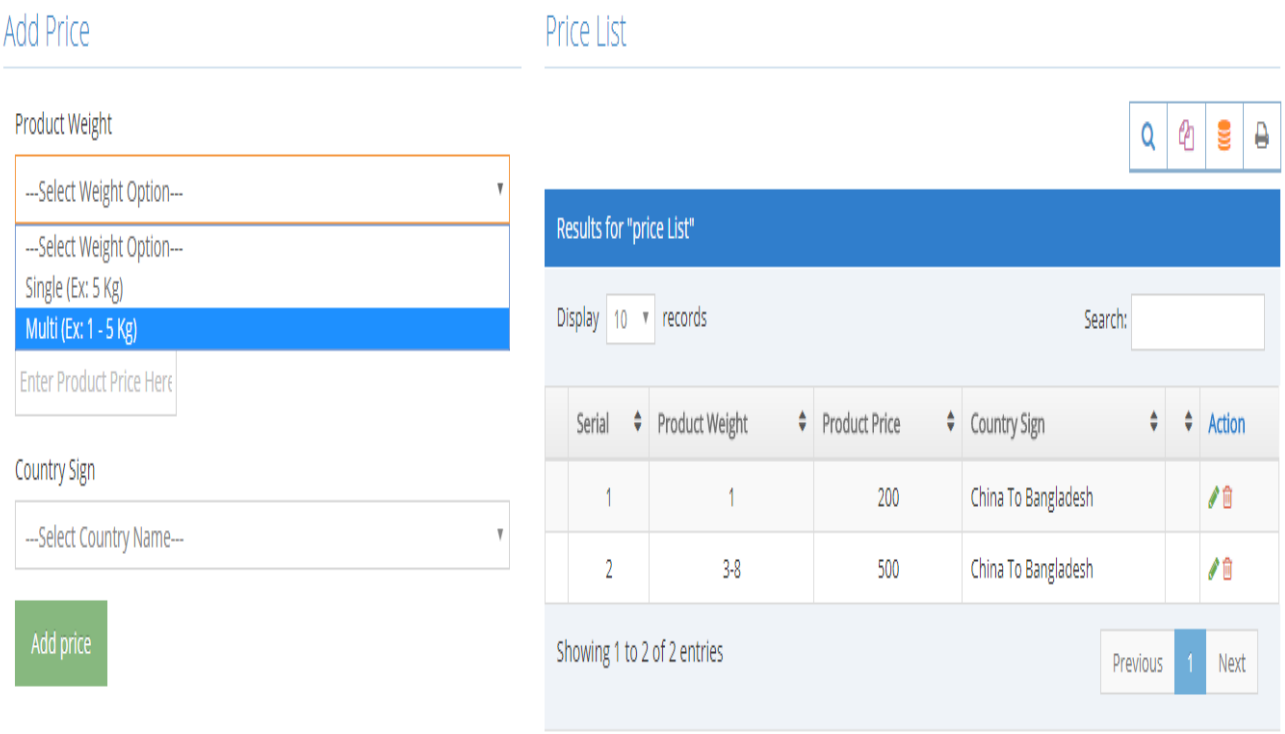

Fig: 5.7 Price List on Setup Page

Just select the name and click done.

5. Assign to : Add price list as single or rage wise. Select the country where the price can be setup for configuration. Can be export it PDF or CSV files

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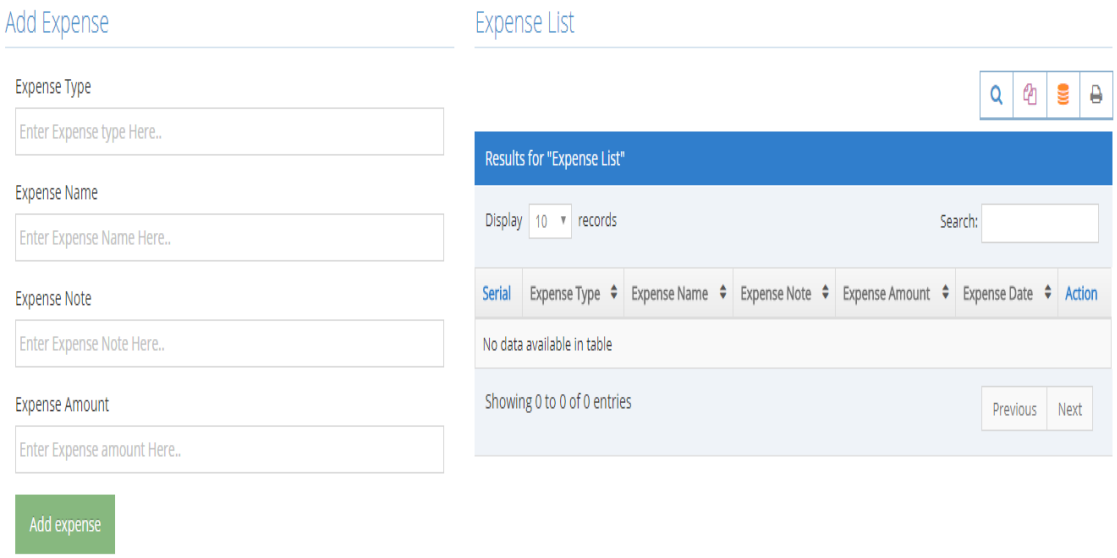
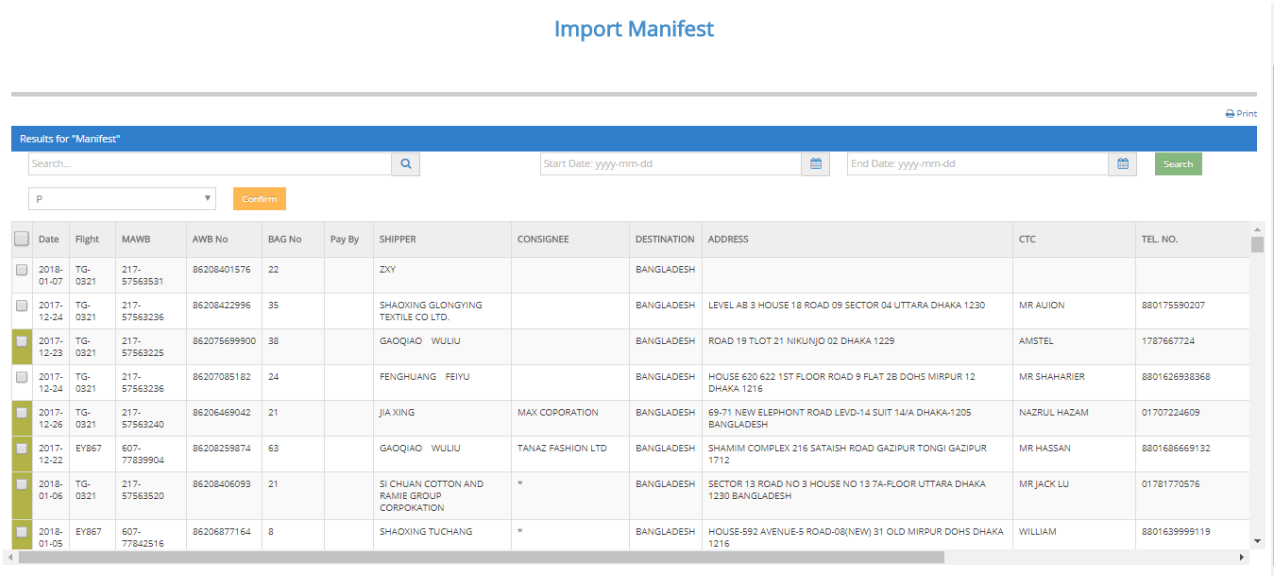


Fig: 5.8 Expense sheet for company purpose.

Here the expense sheet is selected for company purpose. Which are available for admin and account user. Type of name, amount and note what kind of expense this have.

5.3.2Import Files



Date	Flight	MAWB	AWB No	BAG No	Pay By	SHIPPER	CONSIGNEE	DESTINATION	ADDRESS	CTC	TEL. NO.
2018-01-07	TG-0321	217-57563531	86208401576	22		ZXY		BANGLADESH			
2017-12-24	TG-0321	217-57563236	86208422996	35		SHAOXING GLONGYING TEXTILE CO LTD.		BANGLADESH	LEVEL AB 3 HOUSE 18 ROAD 09 SECTOR 04 UTTARA DHAKA 1230	MR AUION	880175590207
2017-12-23	TG-0321	217-57563225	862075699900	38		GAOQIAO WULIU		BANGLADESH	ROAD 19 TLOT 21 NIKUNJO 02 DHAKA 1229	AMSTEL	1787667724
2017-12-24	TG-0321	217-57563236	86207085182	24		FENGHUANG FEIYU		BANGLADESH	HOUSE 620 622 1ST FLOOR ROAD 9 FLAT 2B DOHS MIRPUR 12 DHAKA 1216	MR SHAHARIER	8801626938368
2017-12-26	TG-0321	217-57563240	86206469042	21		JIA XING	MAX COPORATION	BANGLADESH	69-71 NEW ELEPHONT ROAD LEVD-14 SUIT 14/A DHAKA-1205 BANGLADESH	NAZRUL HAZAM	01707224609
2017-12-22	EY867	607-77839904	86208259874	63		GAOQIAO WULIU	TANAZ FASHION LTD	BANGLADESH	SHAMIM COMPLEX 216 SATAISH ROAD GAZIPUR TONGI GAZIPUR 1712	MR HASSAN	8801686669132
2018-01-06	TG-0321	217-57563520	86208406093	21		SI CHUAN COTTON AND RAMIE GROUP CORPOKATION	*	BANGLADESH	SECTOR 13 ROAD NO 3 HOUSE NO 13 7A-FLOOR UTTARA DHAKA 1230 BANGLADESH	MR JACK LU	01781770576
2018-01-05	EY867	607-77842516	86206877164	8		SHAOXING TUCHANG	*	BANGLADESH	HOUSE-592 AVENUE-5 ROAD-08(NEW) 31 OLD MIRPUR DOHS DHAKA 1216	WILLIAM	8801639999119

Fig: 5.9 Import Manifest

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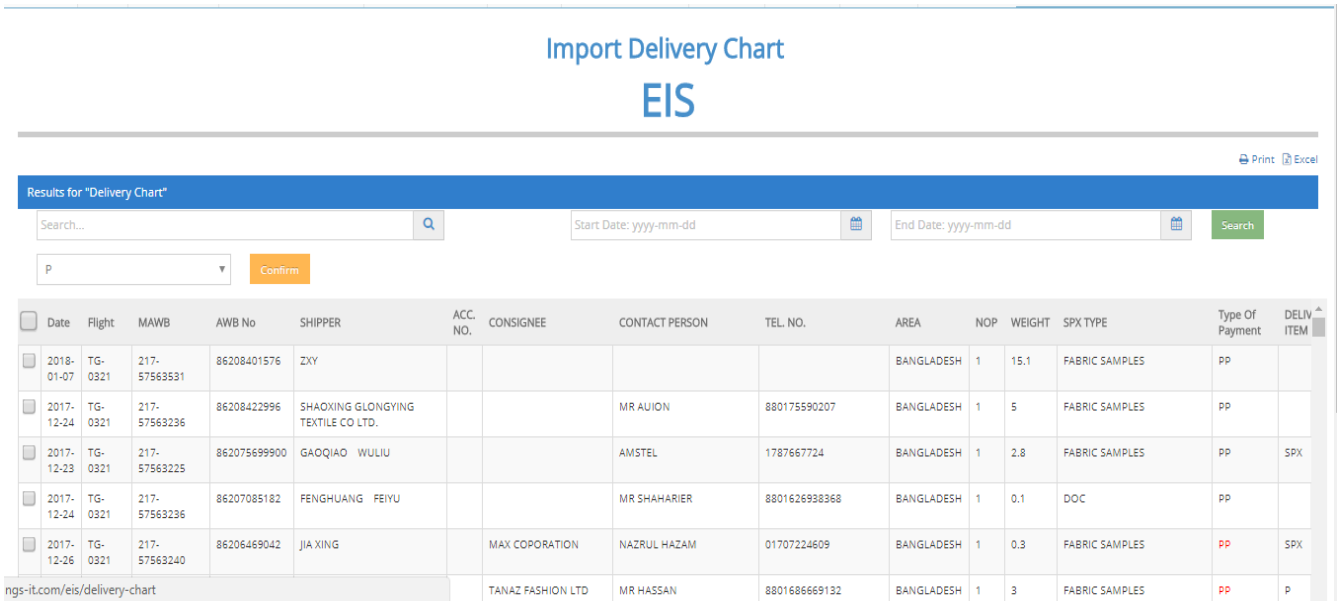
5.3.3Delivery Chart

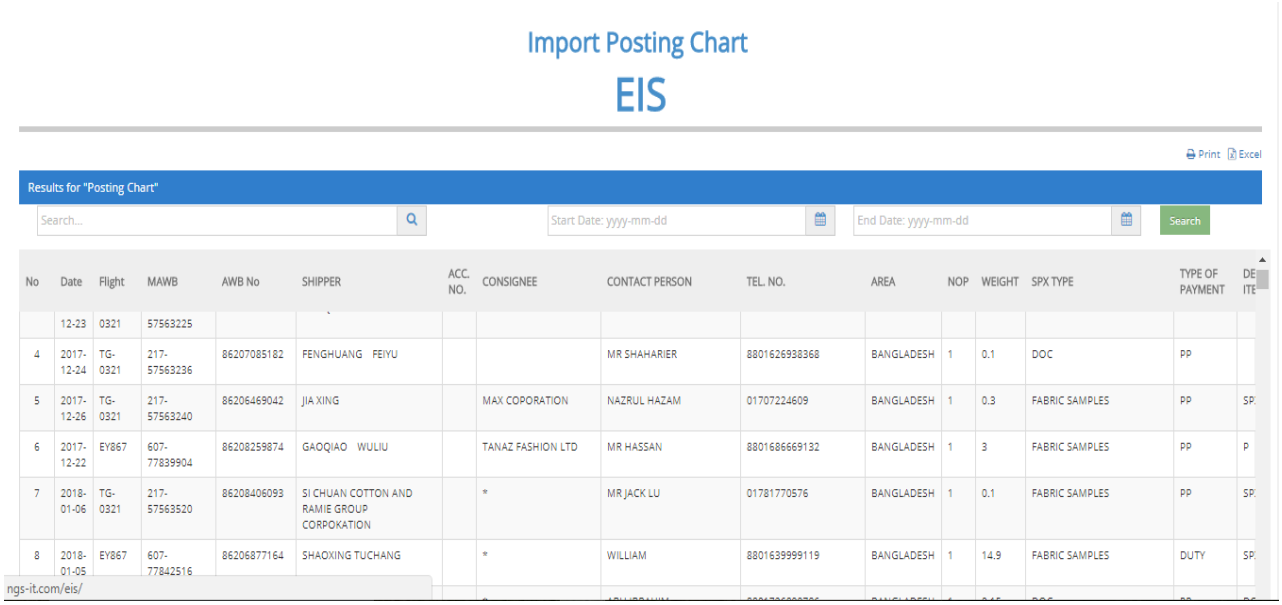


Date	Flight	MAWB	AWB No	SHIPPER	ACC. NO.	CONSIGNEE	CONTACT PERSON	TEL. NO.	AREA	NOP	WEIGHT	SPX TYPE	Type Of Payment	DELIV ITEM
2018-01-07	TG-0321	217-57563531	86208401576	ZXY					BANGLADESH	1	15.1	FABRIC SAMPLES	PP	
2017-12-24	TG-0321	217-57563236	86208422996	SHAOXING GLONGYING TEXTILE CO LTD.			MR AUION	880175590207	BANGLADESH	1	5	FABRIC SAMPLES	PP	
2017-12-23	TG-0321	217-57563225	862075699900	GAOQIAO WULIU			AMSTEL	1787667724	BANGLADESH	1	2.8	FABRIC SAMPLES	PP	SPX
2017-12-24	TG-0321	217-57563236	86207085182	FENGHUANG FEIYU			MR SHAHARIER	8801626938368	BANGLADESH	1	0.1	DOC	PP	
2017-12-26	TG-0321	217-57563240	86206469042	JIA XING		MAX COPORATION	NAZRUL HAZAM	01707224609	BANGLADESH	1	0.3	FABRIC SAMPLES	PP	SPX
						TANAZ FASHION LTD	MR HASSAN	8801686669132	BANGLADESH	1	3	FABRIC SAMPLES	PP	P

Fig: 5.10 Delivery Chart

Search by AWB No. or MAWB No… Also Date To Date Search. Change the Product Type if needed

5.3.4 Posting Chart



No	Date	Flight	MAWB	AWB No	SHIPPER	ACC. NO.	CONSIGNEE	CONTACT PERSON	TEL. NO.	AREA	NOP	WEIGHT	SPX TYPE	TYPE OF PAYMENT	DE ITE
	12-23	0321	57563225												
4	2017-12-24	TG-0321	217-57563236	86207085182	FENGHUANG FEIYU			MR SHAHARIER	8801626938368	BANGLADESH	1	0.1	DOC	PP	
5	2017-12-26	TG-0321	217-57563240	86206469042	JIA XING		MAX COPORATION	NAZRUL HAZAM	01707224609	BANGLADESH	1	0.3	FABRIC SAMPLES	PP	SP
6	2017-12-22	EY867	607-77839904	86208259874	GAOQIAO WULIU		TANAZ FASHION LTD	MR HASSAN	8801686669132	BANGLADESH	1	3	FABRIC SAMPLES	PP	P
7	2018-01-06	TG-0321	217-57563520	86208406093	SI CHUAN COTTON AND RAMIE GROUP CORPOKATION		*	MR JACK LU	01781770576	BANGLADESH	1	0.1	FABRIC SAMPLES	PP	SP
8	2018-01-05	EY867	607-77842516	86206877164	SHAOXING TUCHANG		*	WILLIAM	8801639999119	BANGLADESH	1	14.9	FABRIC SAMPLES	DUTY	SP

Fig: 5.11 Posting Chart (BillingChart)

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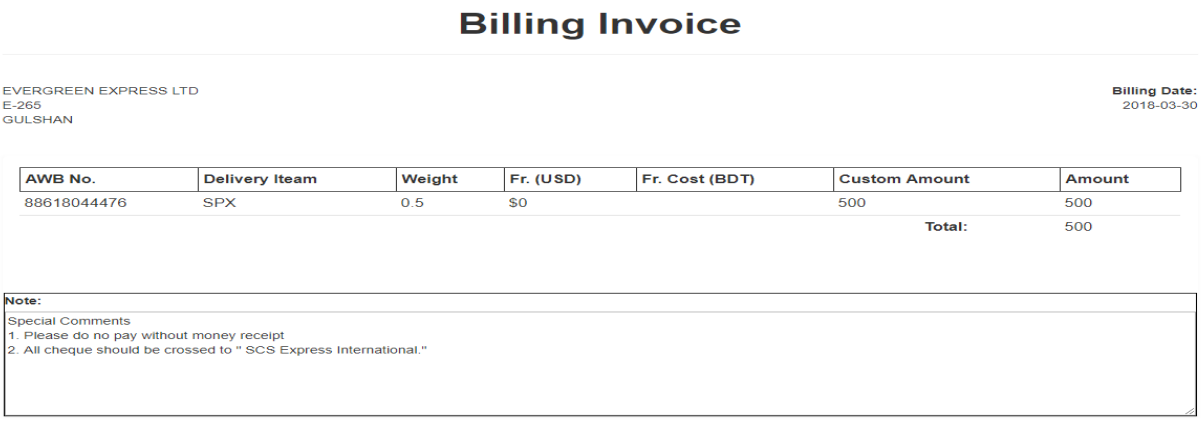
View and see all last report first. Billing, Client wise product and price chart. Accounts user can manage this section.

5.3.5Bill



Billing Invoice

EVERGREEN EXPRESS LTD
E-265
GULSHAN

Billing Date:
2018-03-30

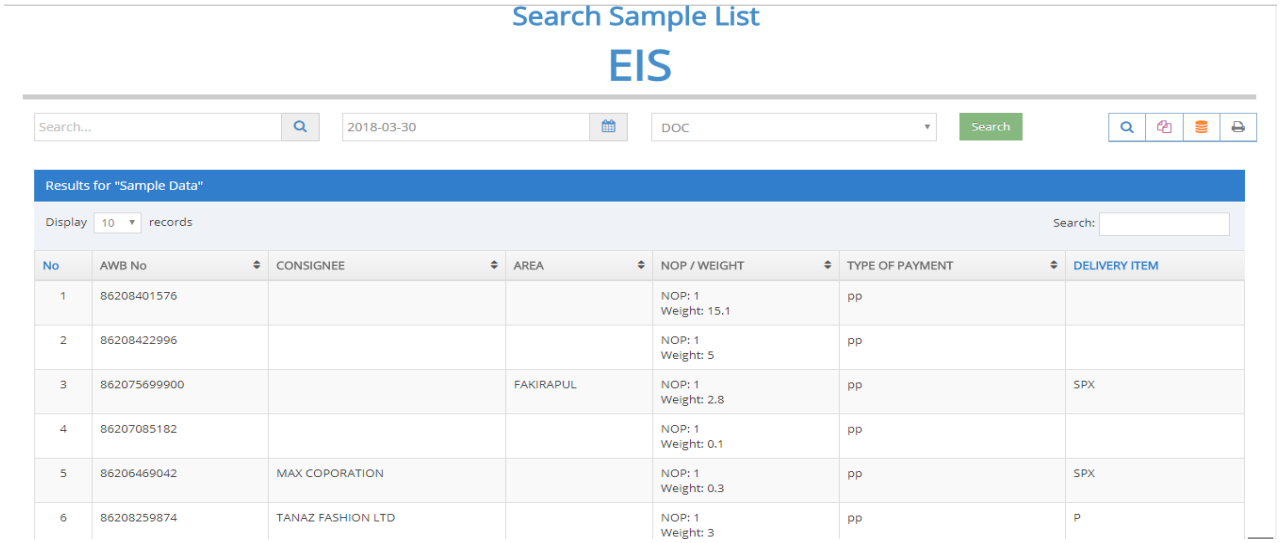
AWB No.	Delivery Iteam	Weight	Fr. (USD)	Fr. Cost (BDT)	Custom Amount	Amount
88618044476	SPX	0.5	$0		500	500
					Total:	500

Note:
Special Comments
1. Please do no pay without money receipt
2. All cheque should be crossed to " SCS Express International."

Fig: 512 Bill Invoice per Client

5.3.6Sample List

To open **Sample list**page**,** you may search by AWB or MWAB No. Can be search date to date and by product wise.



Search Sample List

EIS

Search... | 2018-03-30 | DOC | Search

Results for "Sample Data"

Display 10 records | Search:

No	AWB No	CONSIGNEE	AREA	NOP / WEIGHT	TYPE OF PAYMENT	DELIVERY ITEM
1	86208401576			NOP: 1 Weight: 15.1	pp	
2	86208422996			NOP: 1 Weight: 5	pp	
3	862075699900		FAKIRAPUL	NOP: 1 Weight: 2.8	pp	SPX
4	86207085182			NOP: 1 Weight: 0.1	pp	
5	86206469042	MAX COPORATION		NOP: 1 Weight: 0.3	pp	SPX
6	86208259874	TANAZ FASHION LTD		NOP: 1 Weight: 3	pp	P

Fig: 5.13 Requests for Sample List

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5.4 Log out

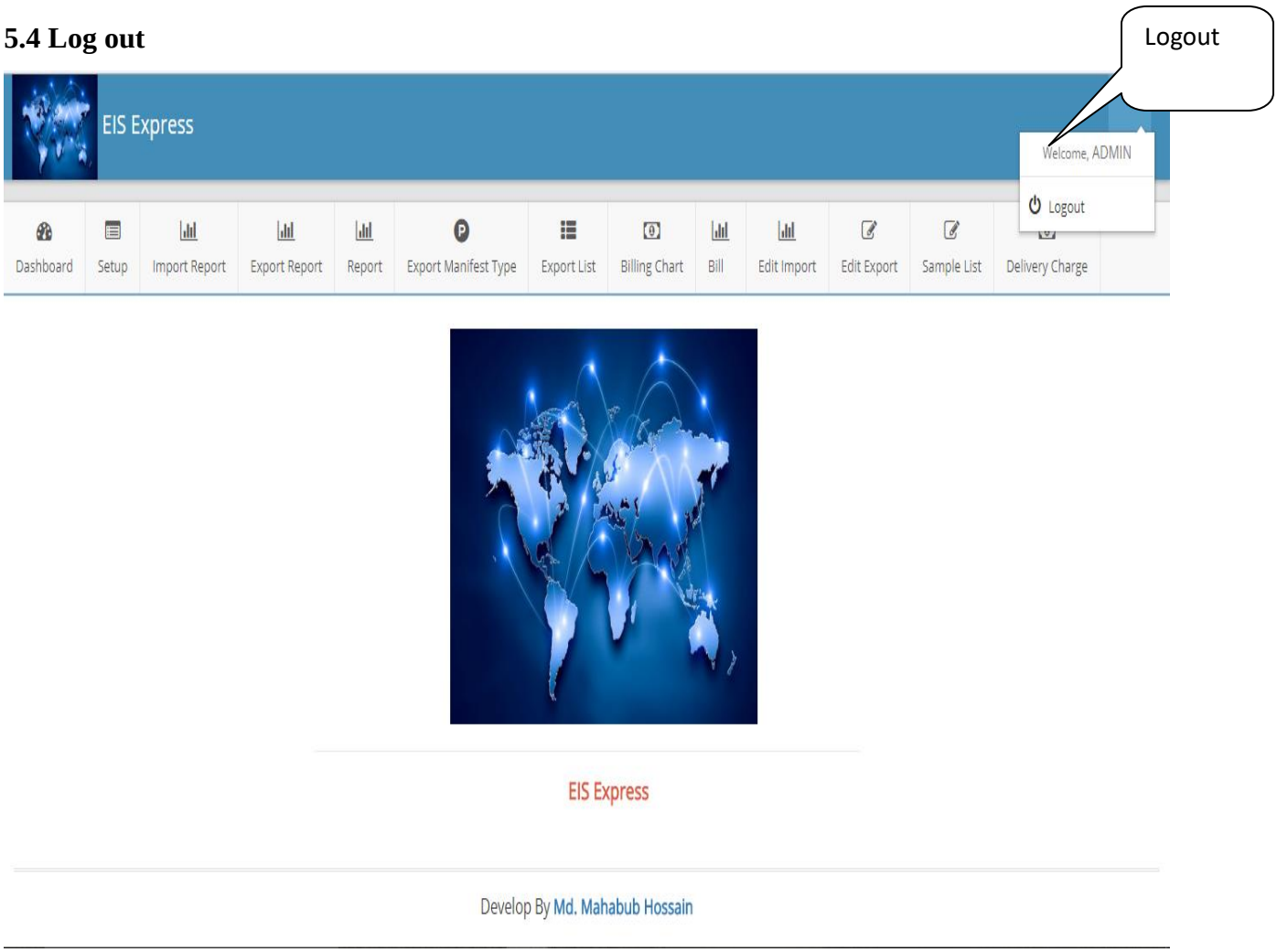

Fig: 5.4 Logout

Click logout button for terminate the software.

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CHAPTER6

IMPLEMENTION AND TESTING

6.1 ImplementationofDatabase

After developing the databases of the system, the implementation phase emerges and through this phase, several activities and techniques. The development of the website starts with designing the website structure using HTML5, and then the style of the website wasdesignedusingCSS3.After that, enhanced user interfaces and dynamic website were developed using JavaScript and JQuery. Later on, the website contents and databases were managed through the use of PHP5.6. Finally, the panorama was incorporated in the website.

6.2 ImplementationofFrontendDesign

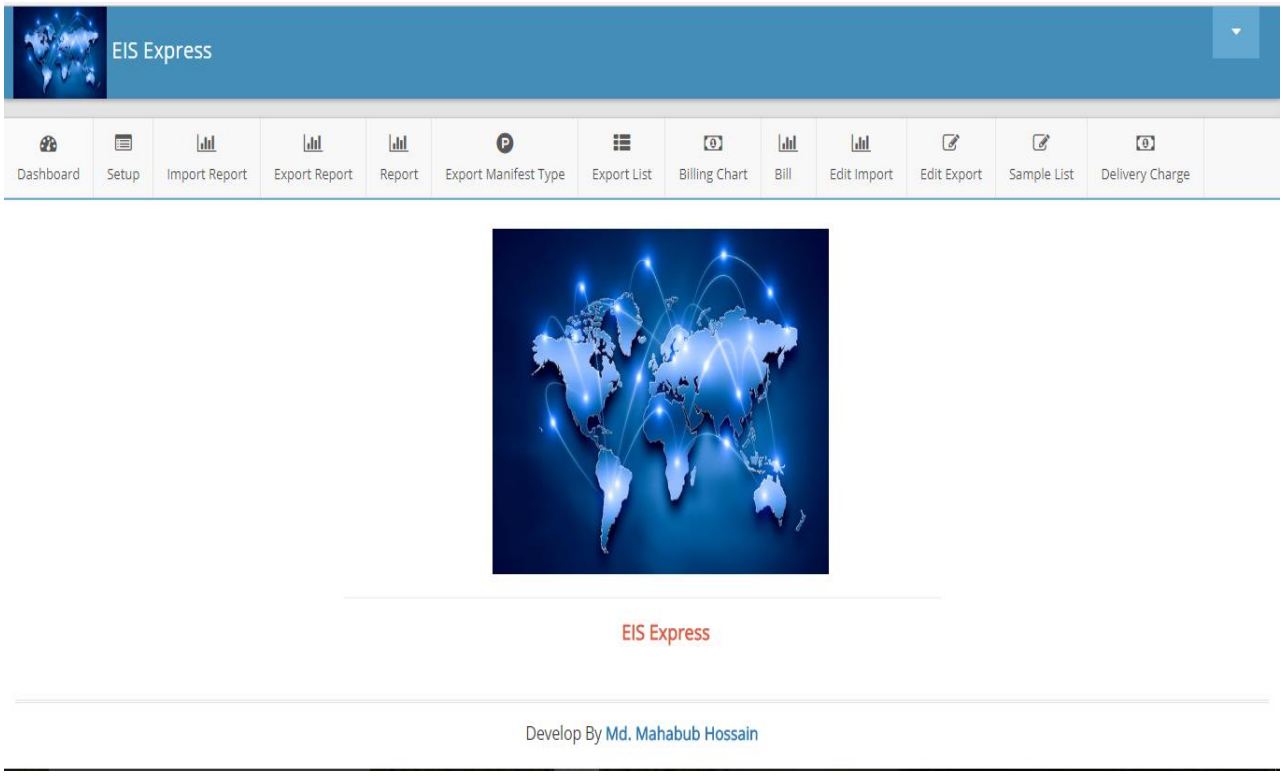

Fig: 6.1 Home Page

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6.3 Testing Implementation

Two types of testing were performed to test the website and how it support mobile working. These tests were mainly performance testing and functionality testing.

6.3.1 PerformanceTesting

The website was tested on Firefox browser using an online tool called GTMetrix, which analyzes web pages according to different rules by giving each rule aweigh, and then evaluates the score of each rule for the website.

6.3.2 Functionality Testing

All functions in the application, database connection, forms used to enter data for submission, editing, getting or deleting information from users were tested. Developers performed the test of the website. Some functionality requirements were tested during the test.

6.3.3Security Testing

Security was tested by pasting internal URL directly into browser address bar without login. SQL injection SQL MAP tool was used to test all pages in website.

6.3.4 DatabaseTesting.

Data consistency is very important. Data integrity and errors while editing, deleting, modifying the forms or do any DB related functionality were checked. Moreover, the entire database queries were checked to be executed correctly, data is retrieved correctly and even updated correctly.

6.4 Test Result andReport

Since the system has four users whose opinion about the system is very important, a sample of executives was consulted to evaluate the website. To evaluate the system based on the users.

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CHAPTER7

CONCLUSION AND FUTURE SCOPE

7.1 DiscussionandConclusion

In recent years, with the pace of technological development, people have become more and more demanding in terms of quality of life, and them an ager sin recent years look to improve a performance in their organizations to get the highest rate of knowledge and experience in their performance. A great system can lead a manual office into a new dimension. In that case if an office already has a better management team and if they can implement this software it will bring them into the world of prosperity. We are ready to give support to all users as their necessity. We are able to provide any types of report for better experience in management.

7.2 ScopeforFutureDevelopments

Some ideas and featurescan beconsideredas afuturework for this project. Thesefeaturescan besummarized in the followingpoints:

- Chain EIS System office can connect to the system
- There are lots of social network in the world. We can provide an official network to the world. It will be unique and we may introduce e-commerce between organizations to organizations

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REFERENCES

[1] Database Keys, Chapter 3.8.3,[Accessed December 09], Link: https://www.studytonight.com/dbms/database-key

[2] Database Normalization, Chapter3.8.4, [Accessed December 09], Link: www.cs.cityu.edu.hk/~helena/cs34622000B/Normalization.pdf

[3] Agile Software Development, Chapter 4.3, [Accessed December 07], Link:https://en.wikipedia.org/wiki/Agile_software_development

[4] Requirement Analysis, Chapter4.6.2, [Accessed December 08], Link:https://en.wikipedia.org/wiki/Requirements_analysis

[5] Introduction to Software Engineering/Testing, Chapter 4.6.6, [Accessed December 08], Link:https://en.wikibooks.org/wiki/Introduction_to_Software_Engineering/Testing

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