

Jute Export Management System

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A Project
in
The Department
of
Computer Science and Engineering



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Approval Certificate

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This is to certify that the work entitled “**Jute Export Management System**” is the outcome of the research carried out by me under the supervision of Prof. Dr. Mohammad Nurul Huda, Director MSCSE, United International University (UIU).

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Abstract

The Jute Export Management System is an inventory system for the local jute export enterprises of Bangladesh. Most of the jute export companies still work manually, from preparing documents to updating different files, paperwork from before and after shipment etc. which takes up a lot of time as well as there remains the possibility of possible errors; errors that could result in catastrophic result. To overcome these problems with the help of new technology, this system is created. The companies can digitalize their working process; meaning less physical papers are wasted. As it is a web based solution, only internet is needed to login to the system from anywhere in the world. Keeping records of different purchased and sold industrial goods, tracking of shipped goods/products, information of different buyers, shippers and their accounts records, and information of other necessary variables needed to run this business. Documents/Reports can be created/generated by providing different certain information.

Acknowledgement

Praise be to Almighty Allah, the Merciful, whose grace has led me to successfully complete this project.

The project entitled “**Jute Export Management System**” has been presented to complete the MSCSE degree. I consider myself most fortunate to have received counselling, cooperation, and valuable advice from various well-wishers.

My amiable appreciation to my supervisor, **Prof. Dr. Mohammad Nurul Huda**, Director, MSCSE, United International University, whose continuous supervision, support, faith, and expert advice has made it possible to put together a well ordered report of the project. Special thanks to the MSCSE officials, whose constant communication has made it easy on my part to submit the report within the given guidelines.

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Chapter 1

Introduction

Jute Export Management System is a local inventory system for small jute exporting companies. The companies will be able to manage their purchased and sold industrial goods, as well as keep record of exported products. They can also keep track of the goods shipped to the buyers and the quality, quantity, price, etc. features of the shipped goods.

Moreover, users can make Advance Sale (selling before having purchased) by generating purchase contract beforehand.

From purchasing jute from local mills to shipping to the buyer end, can be traced and managed through this management system. As this is a web based solution, companies having multiple branches in home or abroad can manage this system just by logging in the system.

Other features of the system are as follows:

- Purchase Records
- Sale Records
- Shipping Records
- Product Quality and Quantity Details
- Supports on Modern Devices
- Authorized Access to Pages

Chapter 2

Background and Literature Review

Jute is a crop from which jute fiber is extracted. Globally it is second most important vegetable fiber that is totally natural bio-gradable and compostable fiber. It is known as “golden fiber” in Bangladesh for its finest quality of jute produced. For centuries, Bangladeshi Jute dominated the world market for its higher quality fibers. Jute fibers are traditionally being used both in packaging of food grade materials and industrial packaging; also used as shopping bags, promotional bags and geo-textiles. The country has maintained a steady growth in exporting jute and jute products, which includes major like the USA, the UK, , the Netherlands, Belgium, Brazil, Canada, China, Germany, Iran, Pakistan, Portugal, Romania, Russia, Saudi Arabia, South Africa Turkey etc..

The 21st Century is the most advanced era of science and technologies. Technologies are being used at almost every aspect of life, specially mass production and manufactures. Internet and Web Applications are massively used to communicate with clients, making businesses, assuring successful transactions of goods and cash, letting people know about the existence of companies etc. Unfortunately, Bangladesh is a 3rd world developing country, are far behind using those technologies at its full potential. Jute fiber is one of the top exported products of Bangladesh for its finest quality. But till now, there exists no software that manages the exported jute products.

The export companies are manually handling the export operations, with a lot of paperwork, hard typing information, manually maintaining the serial number, using excel files to keep an overview of all the separate operations. And the accounting information are accounted with tally software, an accounting software for businesses. Again the data needs to be entered manually and with a conscious note so that there remain no errors. When data is deleted or edited when needed, the numbers needs to be updated as well. So inconsistency and dependency on user input is present which could lead to an incomplete work.

For the first time in Bangladesh we are going to provide a system capable of achieving all the manually typed and paper works into a digital system, ensuring more efficiency, consistency,

and security. The work operation of the system is based on the requirements and suggestions of export companies.

2.1 Proposed System

The proposed system focuses on to overcome the manual maintenance of the business and ensuring a systematic overflow. Thus enabling the work more efficiently, utilizing more time to focus on the business.

The application will focus the below stated features:

- Provide different level of user access to different users.
- Inventory management
- Add buyers, shippers, container size, units, etc.
- 4 main modules – Purchase, Sales, Shipping, ISF
- Generate reports of Purchase Contract, Shipping Instruction, Sales List, Purchase List, Sales Invoice, etc.
- Update purchase/sales depending on the manual feedback from the clients

2.2 Methodology

- Requirement Gathering & Analysis - information to be implemented
- Design - making a design based on the information
- Implementation - implement according to the gathered information
- Deployment - handover the solution
- Maintenance and Improvement - keep track of error and failure
- Report - generate different reports

Chapter 3

Development Software & Tools

3.1 Development Software

- **Microsoft Visual Studio (VS)**

Visual Studio Is an IDE (Integrated Development Environment) from Microsoft Corporation, that allows its users to develop programs, websites, micro services, cross platform apps (Windows, iOS, Android) mobile development.



It is aided by IntelliSense, a context-aware code completion feature allowing the users to get helps and suggestions while coding that accelerates the development procedure and avoids to making common mistakes. The VS supports a number of different programming languages like, C, C#, C++, .Net. Python, Ruby, JavaScript, Typescript, XML, and so on, inbuilt or just needs extended packages ready to be installed.

- **Microsoft SQL Server (MSSQL)**

SQL Server is a RDBMS (Relational Database Management System) introduced by Microsoft Corporation, designed to compete against Oracle Database and MySQL. It supports ANSI SQL (standard SQL language), T-SQL (its own SQL implementations). It also supports Stored Procedure, a set of SQL commands to be executed under an assigned name, which can be reused multiple times. SQL Server Management Studio is the main interface of the MSSQL; a Graphical User Interface (GUI) for the users.



3.2 Languages

- **C#**

C# is a general purpose, modern Object-Oriented Programming (OOP) language, by **Microsoft Corporation. Current Version: 7.2.**

- **HTML**

HTML (Hypertext Markup Language) is used to develop web based application/website. It describes the skeleton of every web page. It is represented by different tags like paragraph, heading, table etc. which has their own unique functionality that increases the productivity of the web page. **Current Version: HTML5.**

- **CSS3**

CSS (Cascading Style Sheet) is a simple design language to beautify the web page and make it presentable to the users. **Current Version: CSS3.**

- **JavaScript**

JavaScript (JS) is a high-level, interpreted programming language; best known for scripting language for websites. JS runs on the client side of the website and is used to control the behavior of the webpages.

- **Structured Query Language (SQL)**

SQL is a language for managing RDBMS. Most frequently used SQL commands such as "Select", "Insert", "Update", "Delete", "Create", and "Drop" can be used to manipulate the database.

3.3 Framework

- **ASP.Net MVC(v 4.5.2)**

A web application framework introduced by Microsoft that implements the MVC architectural pattern to develop powerful web based applications.

- **jQuery**

A lightweight JavaScript library, formed to increase the productivity of the webpages by handling events, calling Ajax functions, etc.

- **Twitter Bootstrap**

A front-end framework based on modern Hyper Text Markup Language (HTML) and Cascading Style Sheet (CSS) for creating websites with pre-defined and customizable components, like forms, buttons, breadcrumbs, links etc.

3.4 Tools

- **Edraw Max**

Edraw Max is all-in-one diagramming software to create professional looking diagrams such as flowcharts, database diagram, class diagram, fashion designs, workflows, electrical engineering diagrams, directional mapping and many more.

- **Crystal Report**

Crystal report is a business intelligence tool that provides reporting service for web applications, developed by SAP SE.

- **Log4Net**

Log4Net is a logging application that allows .NET applications to log output. It is simple, powerful, and extensible.

- **Bit Bucket**

Bitbucket is a system for hosting version control repositories by Atlassian. It helps manage code of a project that changes over time, have access to the previous versions of code if new changes break down the project. This project can also be shared between a numbers of people

- **Source Tree**

Source Tree is a free Mercurial and Git Client for Windows platform. It provides a GUI (Graphical User Interface) for repositories, so that the interaction with the Git repository is easy.

3.5 Regarding ASP.Net MVC Architectural Pattern

- **The MVC (Model-View-Controller) Architecture**

The MVC is a design pattern to develop user interfaces that breaks down the application into three parts – models, views and controllers.

Model

- Consists the Classes that handles the data
- Business logic is implemented here
- Retrieve and store state in database

Controller

- The heart of MVC structure
- Handles the user request and response
- Communicates with the model and view

View

- The User Interface (UI) of the application
- The data is presented in a structured format
- Enables users to interact with the data

- **MVC in ASP.Net**

Microsoft has built the ASP.Net MVC architecture on top of the standard ASP.Net library, which basically follows the standard MVC protocol. The previous frameworks (Standard ASP.Net or Web Forms) needed a number of variables to function properly, without these functionalities the whole application would have fallen apart. However, this framework removes those dependencies, allowing the developers to have more control over the system.

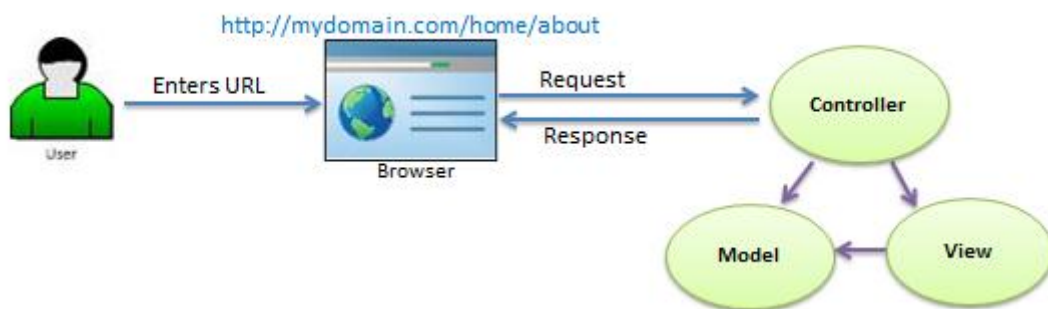


Figure 1: MVC Architectural Layout

Chapter 4

System Synopsis & User Interface

4.1 System Synopsis

The system functions under two principle roles:

- **Admin**
 - Handling Users
 - Managing Employees
 - Grant Permission to Users
 - Control User Functionalities
- **User**
 - **General Settings:** These settings allow users to function easily and properly throughout the entire application.
 - **Purchase Contract (PC):** Contract for buying goods from the seller.
 - **Sales Contract (SC):** Contract of sales of goods to the buyers.
 - **Shipping Instruction (SI):** Shipping Instruction is a document of instructions of how the goods will be shipped, when the goods will reach destination, notes for the destined ports, etc.
 - **Importer Security File (ISF):** A document of information that is needed to be submitted to the US Customs Border Protection (CBP) before the cargo is imported to US.
 - **Reports:** Generate different kinds of reports and update on manual feedback.

4.2 User Interface

- Responsive design
- Device independency
- Easy navigation
- Works on all browsers.

4.3 Unified Modeling Language (UML) Diagrams

4.3.1 Use Case Diagram

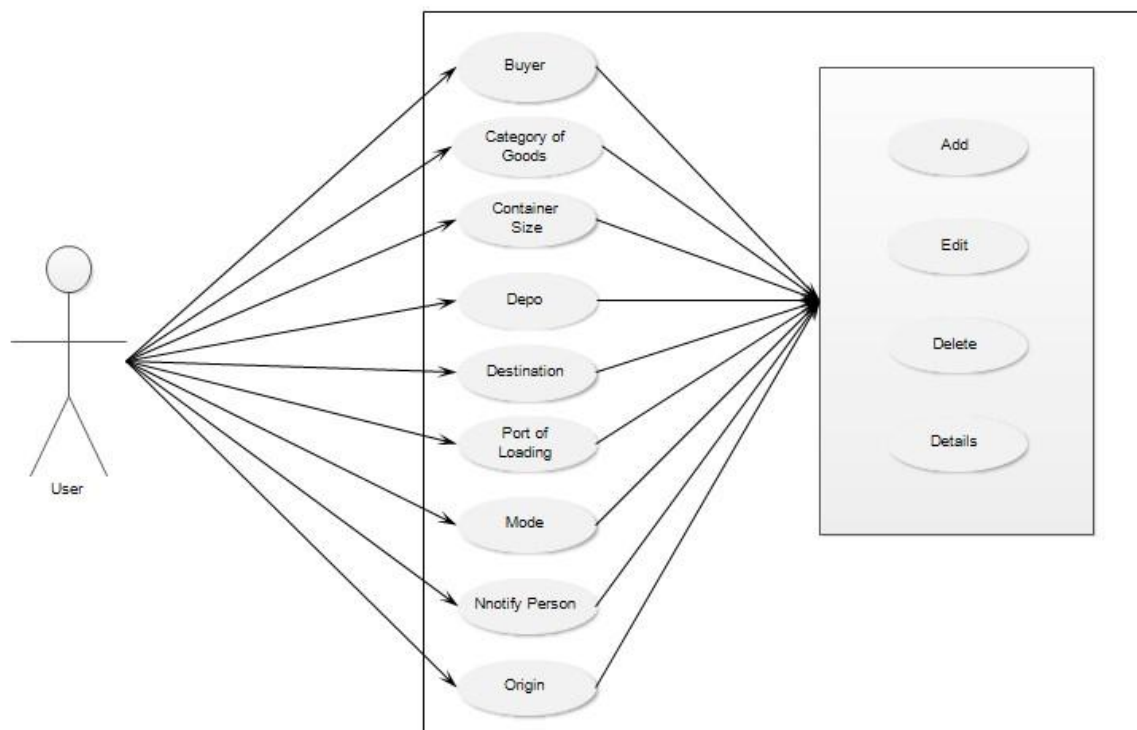


Figure 2: Use-Case: General Settings (Part – 1)

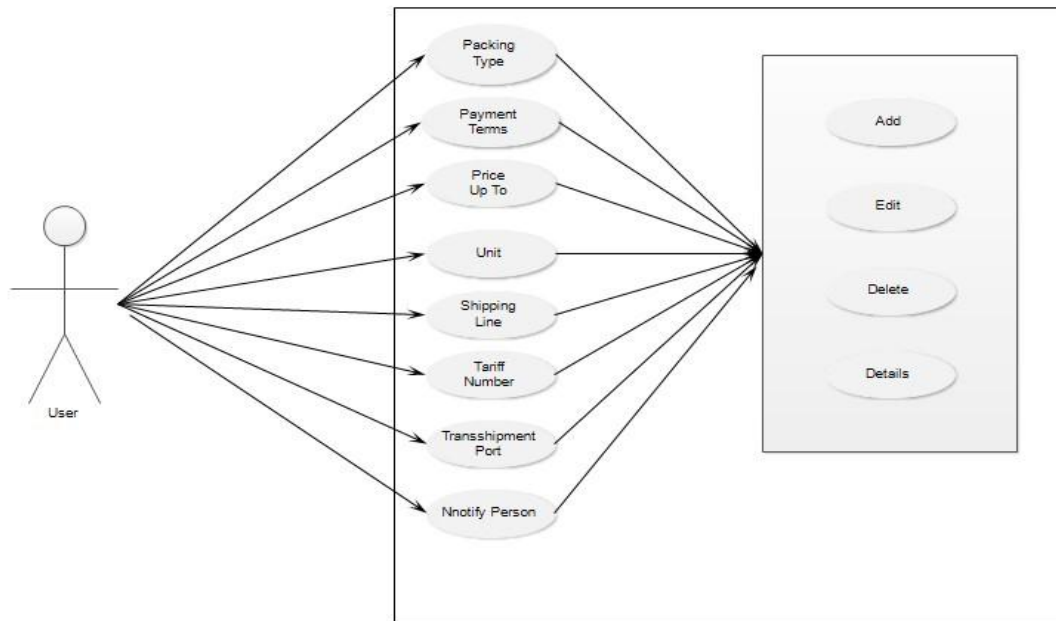


Figure 3: Use-Case: General Settings (Part – 2)

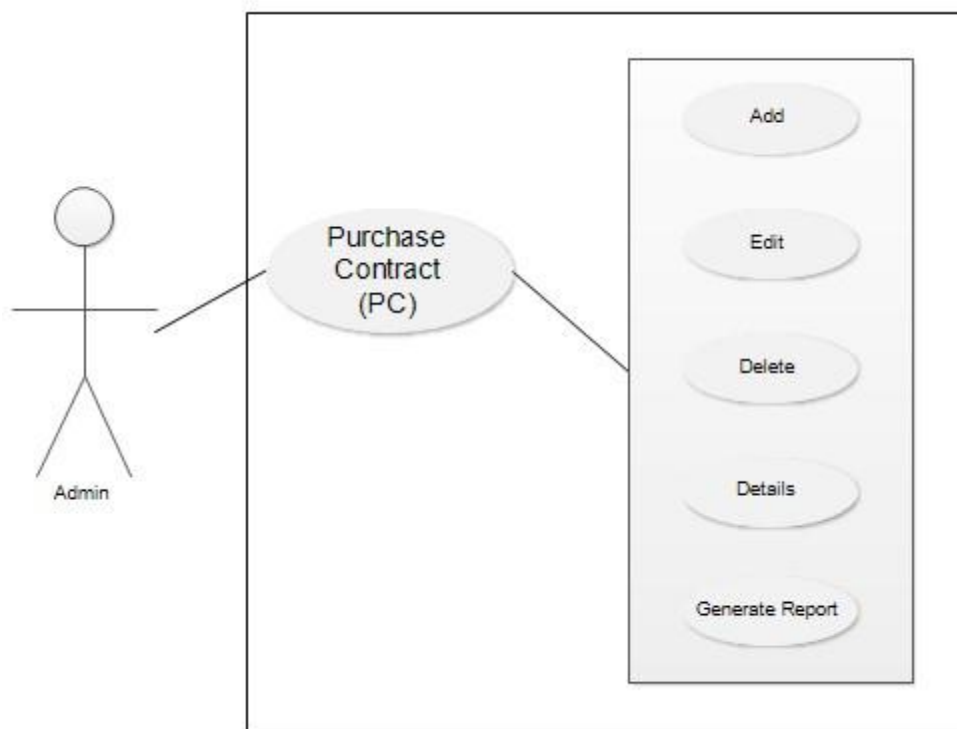


Figure 4: Use-Case: Purchase Contract (PC)

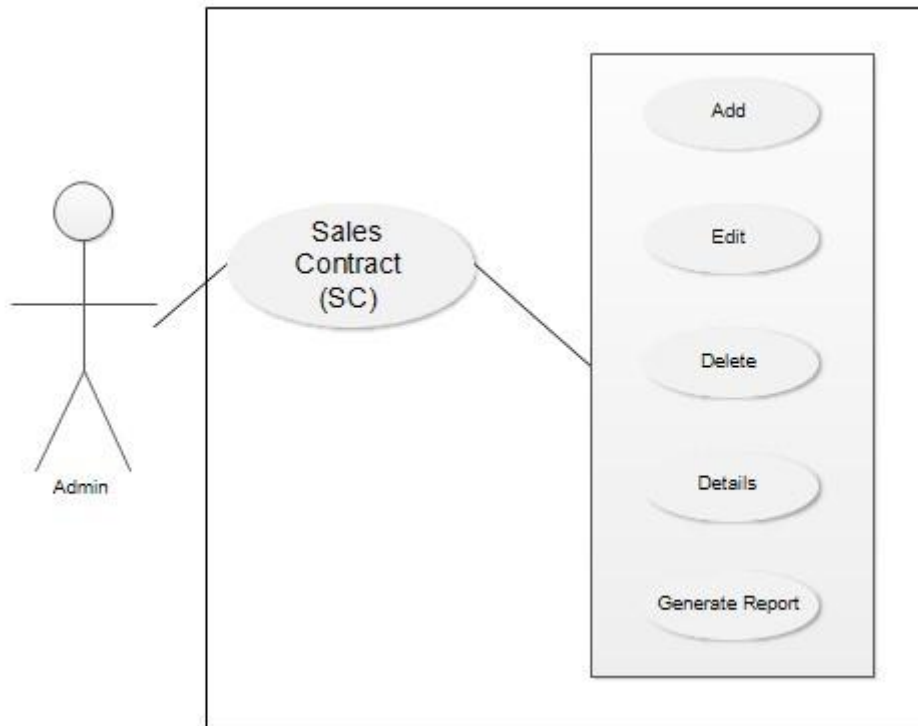


Figure 5: Use-Case: Sales Contract (SC)

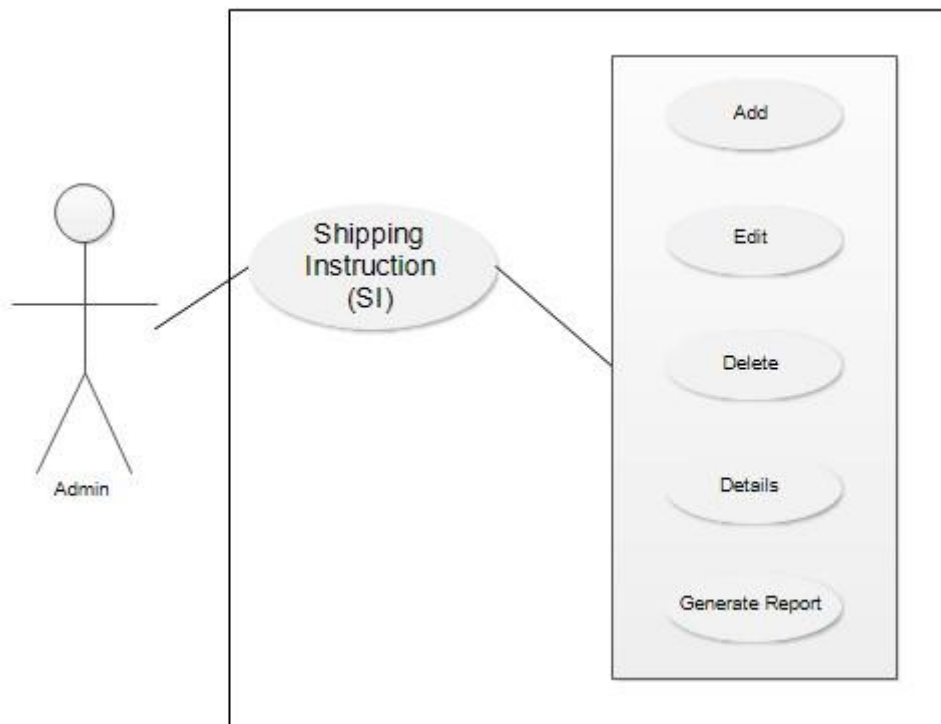


Figure 6: Use-Case: Shipping Instruction (SI)

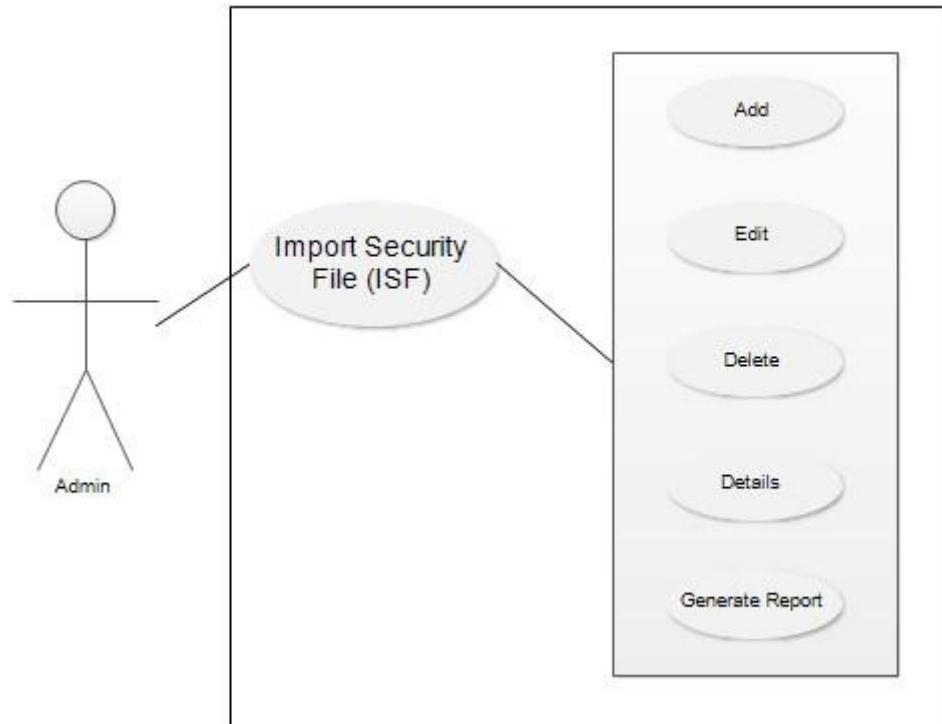


Figure 7: Use-Case: Importer Security File (ISF)

4.3.2 Class Diagram

It is impossible to show the full image of the database design in a single page, so only a handful of tables and their relations, which focuses the core theme of the project. For all the tables and relations go to <https://dbdiagram.io/d/5c484f1d39293b0014441bd1>.

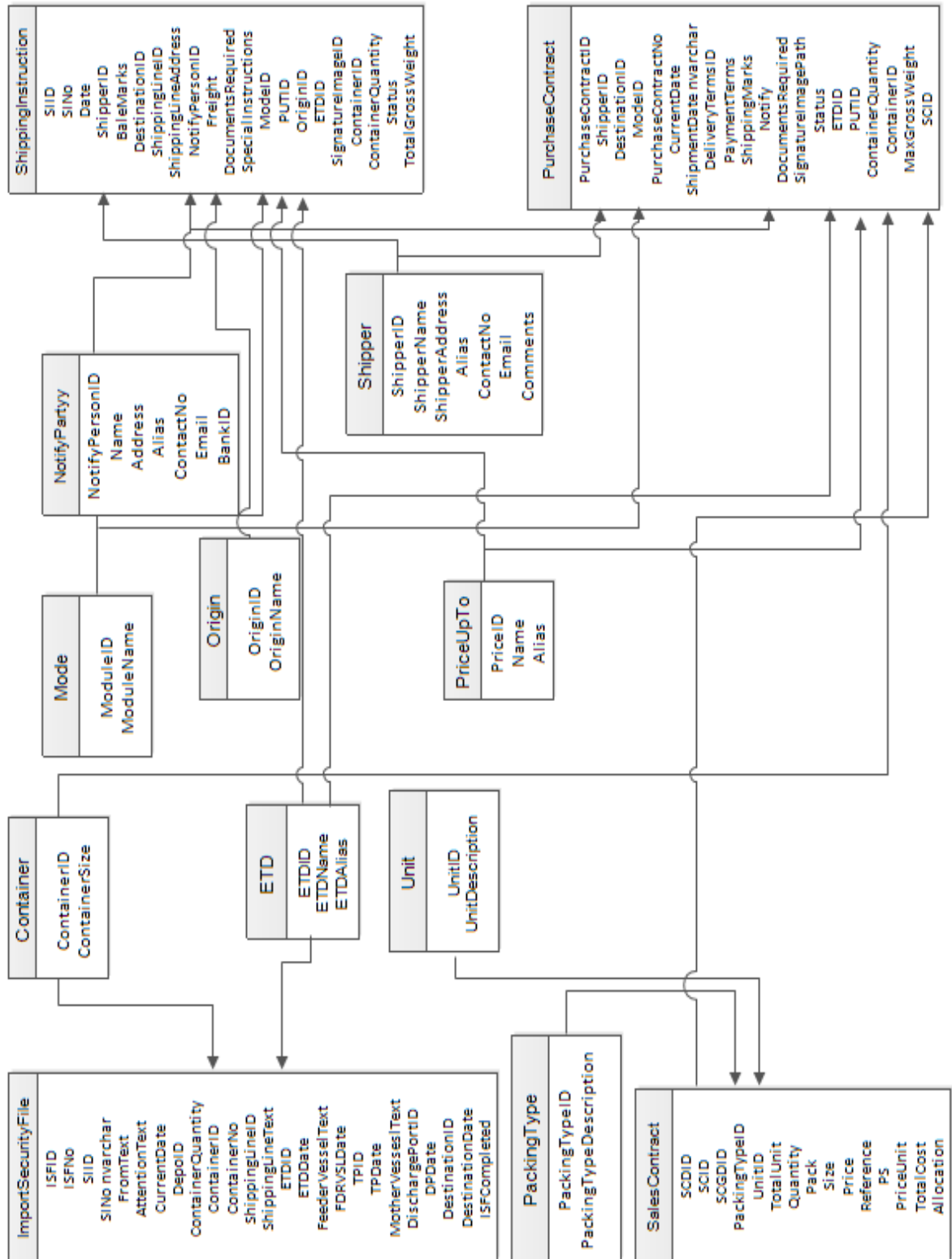


Figure 8: Class Diagram (Partial View)

4.3.3 Data Flow Diagram

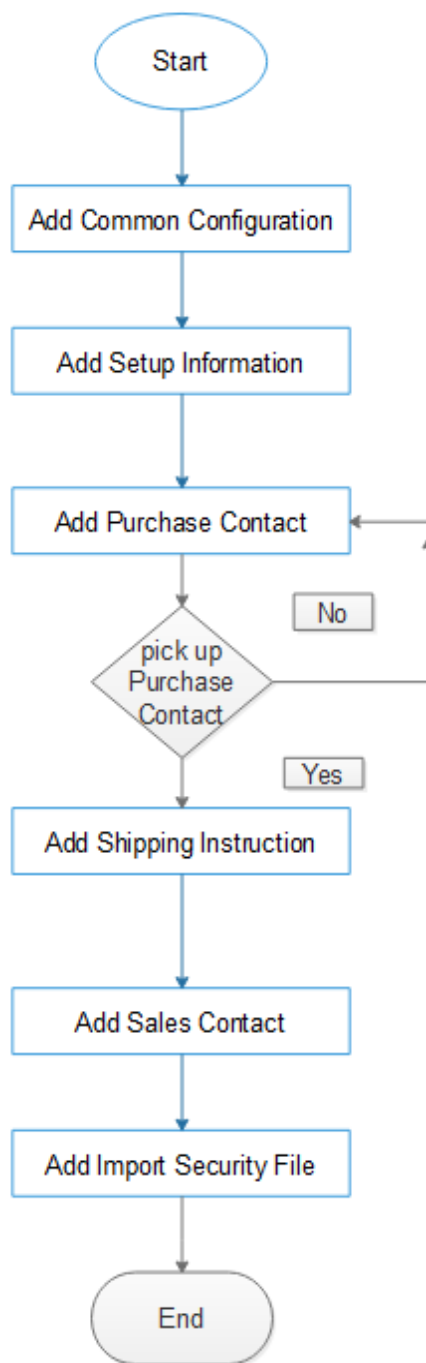


Figure 9: Class Diagram (Partial View)

4.3.4 Sequence Diagram

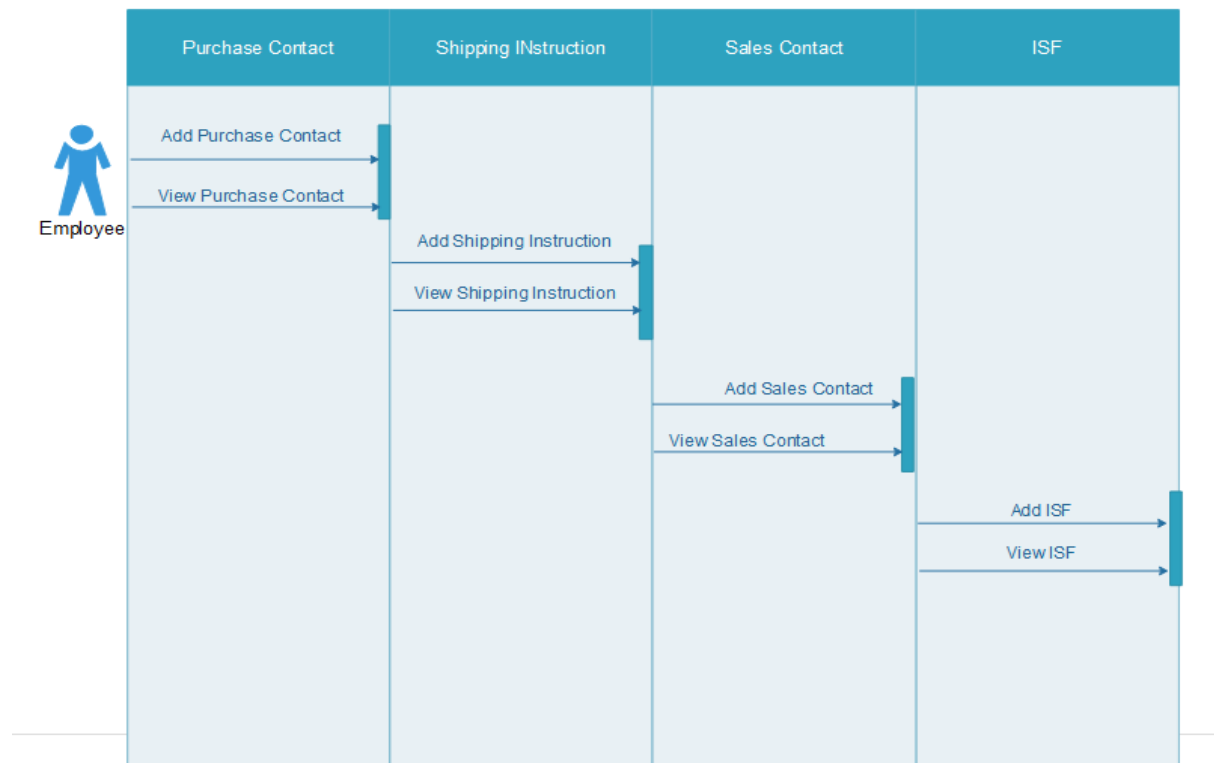


Figure 10: Class Diagram (Partial View)

4.3.5 Project Completion Gantt Chart

Task \ Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Requirement Gathering & Analysis																				
System Development & Maintenance																				
Testing Phase																				
User Acceptance Testing (UAT)																				
Presentation																				

Table 1: Project Completing Gantt chart

4.4 System Operation & Demonstration

4.4.1 System Operation

Step 1: User will create a new purchase contact

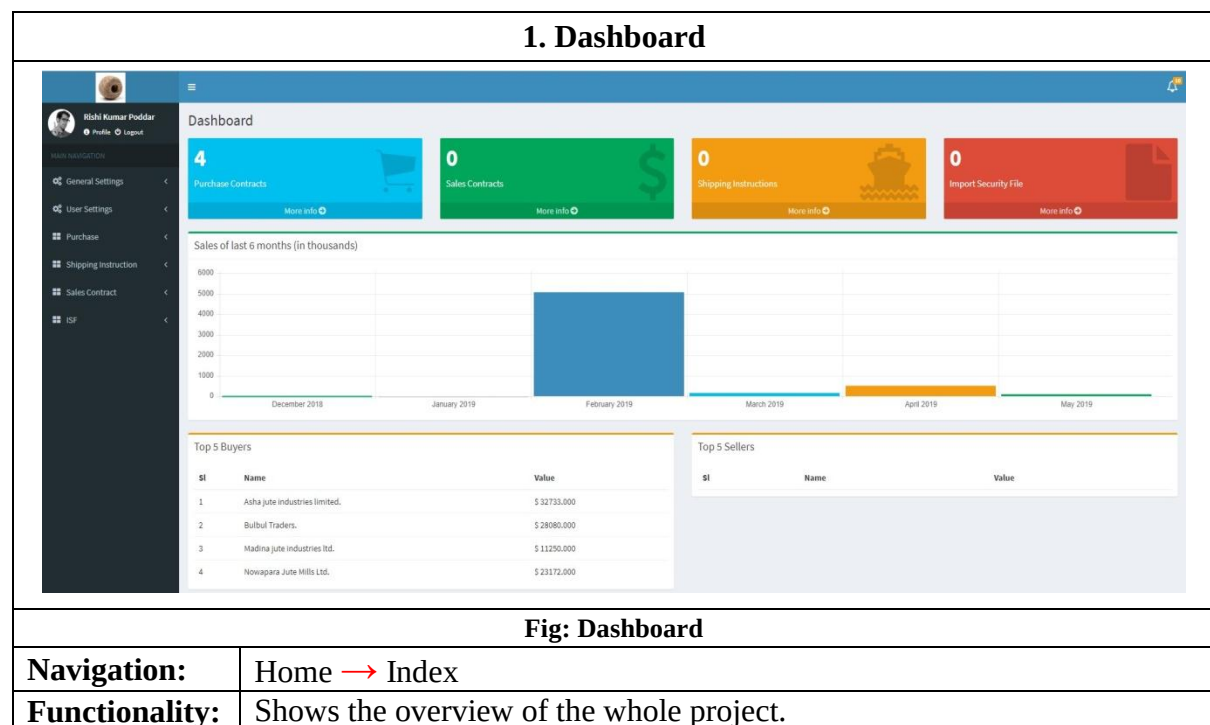
Step 2: User will add a shipping instruction against purchase contact

Step 3: After that user will create a sales contact.

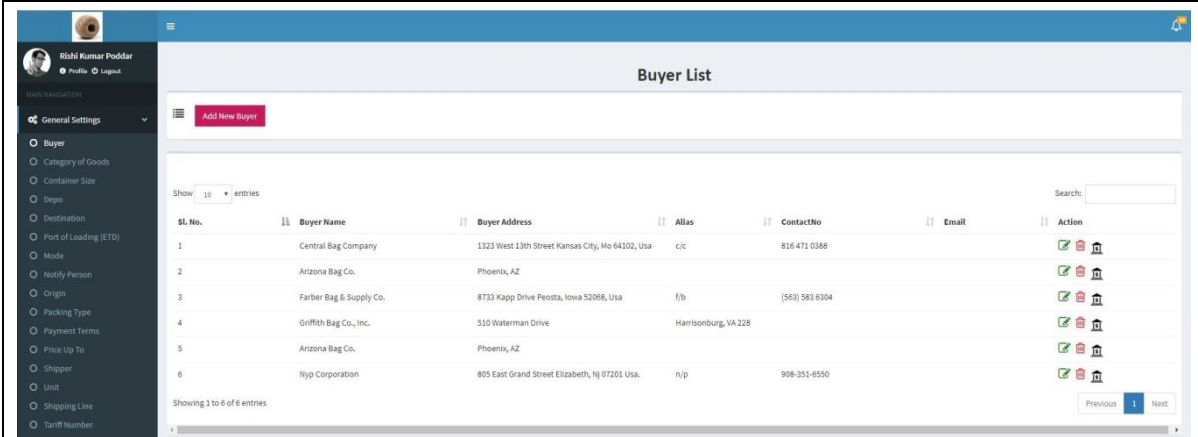
Step 4: To add the security details user will create a new import security file

Step 5: Report.

4.4.2 Demonstration



2. General Settings: Buyer

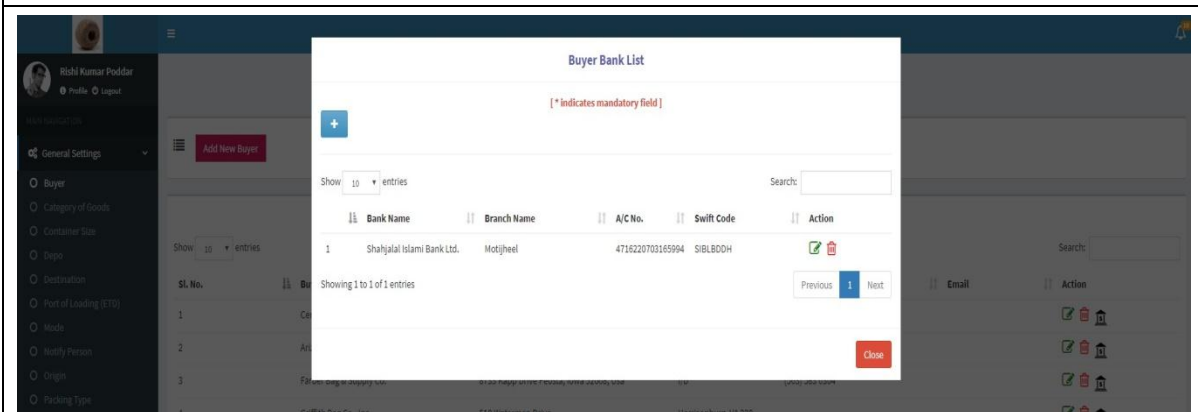


Sl. No.	Buyer Name	Buyer Address	Alias	ContactNo	Email	Action
1	Central Bag Company	1323 West 13th Street Kansas City, Mo 64102, Usa	c/c	816 471 0388		
2	Arizona Bag Co.	Phoenix, AZ				
3	Farber Bag & Supply Co.	8732 Kapp Drive Peosta, Iowa 52068, Usa	f/b	(563) 583 6304		
4	Griffith Bag Co., Inc.	510 Waterman Drive	Harrisonburg, VA 228			
5	Arizona Bag Co.	Phoenix, AZ				
6	Nyp Corporation	805 East Grand Street Elizabeth, NJ 07201 Usa.	n/p	908-351-6550		

Fig: Buyer Settings

Navigation:	General Settings → Buyer
Functionality:	Pre-requisite detailed information of buyer to be used later when generating contracts and reports.

3. General Settings: Buyer Bank List



Bank Name	Branch Name	A/C No.	Swift Code	Action
Shahjalal Islami Bank Ltd.	Motijheel	4716220703165994	SIBLBDDH	

Fig: Buyer's Bank Settings

Navigation:	General Settings → Buyer → Click Bank Icon
Functionality:	Pre-requisite detailed information of buyer's bank account(s) to be used later when generating contracts and reports.

4. General Settings: Category of Goods

Sl. No.	Category of Goods	Comments	Action
1	Cut Jute Fiber		
2	H. Bags		
3	Cut Jute Fiber Mesta C/ Tossa E		
4	Jute Webbing		
5	Hessian Bags (Finished inside mouth)		
6	Gardening Jute Nursery Sheet		
7	Jute Bag	WITH COTTON CLOTH	
8	Cut Jute Fiber Mesta C		
9	Plain Liner With Tags		
10	Geo-Jute Soil Saver		

Fig: Category of Goods Settings

Navigation:	General Settings → Category of Goods
Functionality:	Pre-requisite detailed information of different categories of goods to be used later when generating contracts and reports.

5. General Settings: Container Size

Sl. No.	Container Size	Comments	Action
1	40Ft Hq Part		
2	40Ft Std		
3	40Ft Part		
4	20Ft		
5	20Ft Part		
6	40Ft Hq (Sub)		
7	40Ft Hq		
8	40Ft		

Fig: Container Size Settings

Navigation:	General Settings → Container Size
Functionality:	Pre-requisite detailed information of different sizes of containers to be used later when generating contracts and reports.

6. General Settings: Depo

Rishi Kumar Poddar

Profile Logout

MAIN NAVIGATION

General Settings

Buyer

Category of Goods

Container Size

Depo

Destination

Port of Loading (ETO)

Mode

Notify Person

Origin

Packing Type

Payment Terms

Price Up To

Shipper

Unit

Shipping Line

Tariff Number

Transshipment Port

Depo Information

Add New Depo Information

Show10entries

Search:

Sl. No.	Name	Contact Person	Phone No	Address	Action
1	K & T LOGISTICS	SULTAN	880 31 742103	SACTOR 6/A EPZ SOUTH HALISHSHAR CHITTAGONG, BANGLADESH	
2	GOLDEN CONTAINER YARD	LOADING		CITY GATE, CHITTAGONG.	
3	MONGLA PORT.	N/A	N/A	MONGLA, KHULNA	
4	KDS LOGISTICS LTD.	N/A	880 31 713301 -2	GHORAKHARA, SONAICHARI, SITAKUNDA. CHITTAGONG, BANGLADESH.	
5	ESACK BROTHERS INDUSTRIES LTD. (CONTAINER YARD)	N/A	031 720133-5.	MIDDLE HALISHAHAR, BANDAR, CHITTAGONG, BANGLADESH	
6	SAPL LOGISTICS LTD	LOADING		KATHIGHOR, POTENGA, CHITTAGONG	

Showing 1 to 6 of 6 entries

Previous1Next

Fig: Depo Settings

Navigation:	General Settings → Depo
Functionality:	Pre-requisite detailed information of depo where goods are loaded and un-loaded, to be used later when generating contracts and reports.

7. General Settings: Destination

Rishi Kumar Poddar

[Profile](#) [Logout](#)

Menu

General Settings

Buyer

Category of Goods

Container Size

Depo

Destination

Port of Loading (ETD)

Mode

Notify Person

Origins

Packing Type

Payment Terms

Price Up To

Shipper

Unit

Shipping Line

Tariff Number

Transshipment Port

User Settings

Purchase

Destination Information

Add New Destination Information

Show 10 entries

Search

Sl. No.	Name	Alias	Comments	Action
1	Will Advise	W/D		
2	New York, Usa	NYK		
3	Charleston, Usa	CHRL		
4	Toronto, Canada			
5	Vancouver, Canada			
6	Los Angeles, Usa	LAX		
7	Portland, Usa			
8	Chicago, IL, Usa			
9	Oakland, Usa			
10	Houston, Tx			

Showing 1 to 10 of 11 entries

Previous

12

Next

Fig: Destination Settings

Navigation:	General Settings → Destination
Functionality:	Pre-requisite information of different destinations the goods will be sent to, to be used later when generating contracts and reports.

8. General Settings: Port of Loading (ETD)

Sl. No.	Name	ETD Alias	Comments	Action
1	Chattogram, Bangladesh.	CTG	BANGLADESH	
2	Mongla, Bangladesh.	MGL		
3	Kolkata, India.	KOL		

Fig: Port of Loading (ETD) Settings

Navigation:	General Settings → Port of Loading (ETD)
Functionality:	Pre-requisite detailed information of loading ports, to be used later when generating contracts and reports.

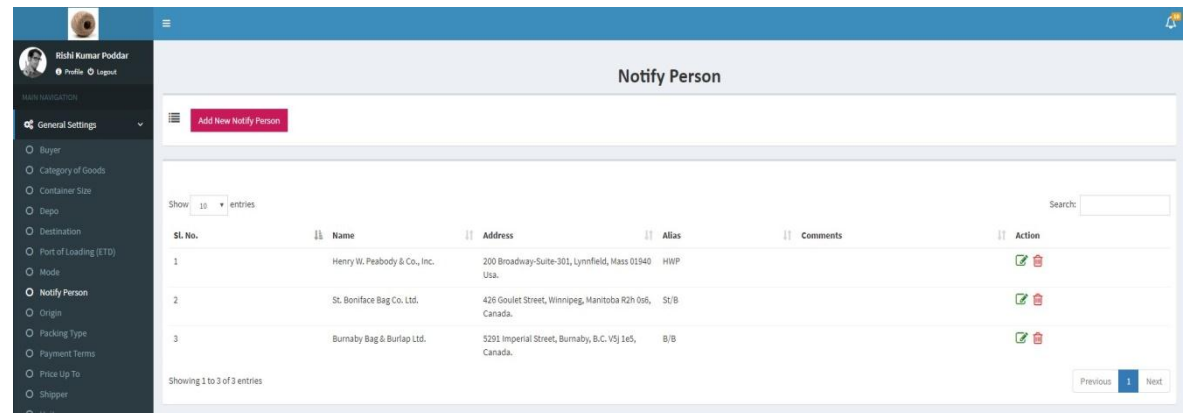
9. General Settings: Mode

Sl. No.	Name	Comments	Action
1	Will Advise	NO COMMENTS	
2	CY	NO COMMENTS	
3	RAMP	NO COMMENTS	
4	PORT		
5	TRUCK		
6	'Reports'		

Fig: Mode Settings

Navigation:	General Settings → Mode
Functionality:	Pre-requisite detailed information of different modes, to be used later when generating contracts and reports.

10. General Settings: Notify Person

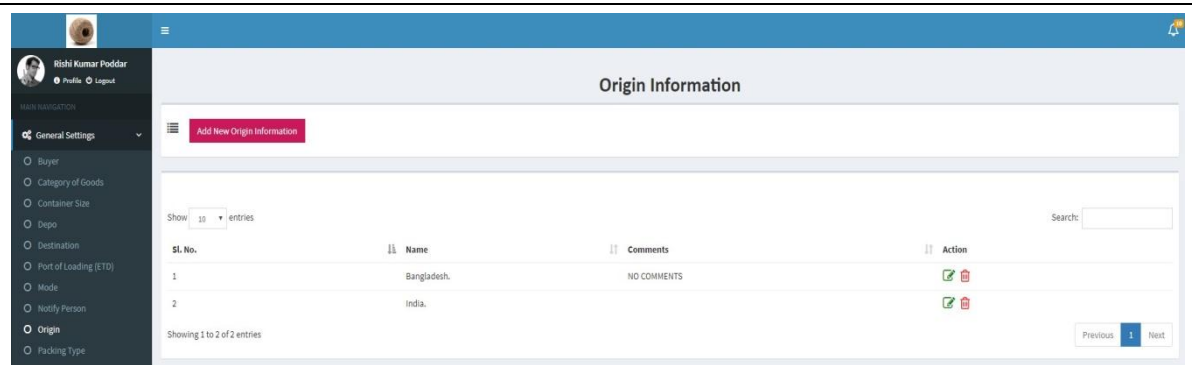


Sl. No.	Name	Address	Alias	Comments	Action
1	Henry W. Peabody & Co., Inc.	200 Broadway-Suite-301, Lynnfield, Mass 01940 Usa.	HWP		
2	St. Boniface Bag Co. Ltd.	426 Goulet Street, Winnipeg, Manitoba R2H 0S6, Canada.	St/B		
3	Burnaby Bag & Burlap Ltd.	5291 Imperial Street, Burnaby, B.C. V5J 1e5, Canada.	B/B		

Fig: Notify Person Settings

Navigation:	General Settings → Notify Person
Functionality:	Pre-requisite detailed information of different notify persons whom are going to be notified when the contracts takes place, to be used later when generating contracts and reports.

11. General Settings: Origin



Sl. No.	Name	Comments	Action
1	Bangladesh.	NO COMMENTS	
2	India.		

Fig: Origin Settings

Navigation:	General Settings → Origin
Functionality:	Pre-requisite detailed information of origin of goods, to be used later when generating contracts and reports.

12. General Settings: Packing Type

Sl. No.	Packing Type	Comments	Action
1	B		
2	Crt		
3	Bs		
4	Bale		
5	Carton	NO COMMENTS	
6	Yds		
7	Bales	NO COMMENTS	
8	Reels		
9	Pallet		
10	Rolls		

Fig: Packing Type Settings

Navigation:	General Settings → Packing Type
Functionality:	Pre-requisite information of different packing types, to be used later when generating contracts and reports.

13. General Settings: Payment Terms

Sl. No.	Payment Terms	Action
1	15 Days.	
2	30 Days.	
3	60 Days.	
4	Cash Against Documents (CAD).	
5	90 Days.	
6	Cash Against Documents (CAD) / Advance TT.	
7	Advance TT.	
8	CAD.	

Fig: Payment Terms Settings

Navigation:	General Settings → Payment Terms
Functionality:	Pre-requisite information of payment terms, to be used later when generating contracts and reports.

14. General Settings: Price Up To

Rishi Kumar Poddar

Profile

Logout

MAIN NAVIGATION

General Settings

Buyer

Category of Goods

Container Size

Depo

Destination

Port of Loading (ETD)

Mode

Notify Person

Origin

Packing Type

Payment Terms

Price Up To

Shipper

Unit

Price Up To

Add New Price Up To

Show10entries

Search:

Sl. No.	Name	Alias	Comments	Action
1	Fob Chattogram.	FOB-CTG	First priority	
2	Fob Mongla.			
3	Fob Kolkata.			
4	Fot Benapole.			
5	Fot Petrapole.			

Showing 1 to 5 of 5 entries

Previous

1

Next

Fig: Price UpTo Settings

Navigation:	General Settings → Price Up To
Functionality:	Pre-requisite information of price up to, to be used later when generating contracts and reports.

15. General Settings: Shipper

Profile

Logout

MAIN NAVIGATION

General Settings

Buyer

Category of Goods

Container Size

Depo

Destination

Port of Loading (ETD)

Mode

Notify Person

Origin

Packing Type

Payment Terms

Price Up To

Shipper

Unit

Shipping Line

Tariff Number

Transshipment Port

User Settings

Purchase

Shipping Instruction

Sales Contract

ISF

Shipper

Add New Shipper

Show10entries

Search:

Sl. No.	Shipper Name	Shipper Address	Alias	ContactNo	Email	Comments	Action
1	Amin Jute Mills Ltd.	Sattar Chamber, 99 Agrabad C/A, Chittagong, Bangladesh.	Amin	khayrul shb: 01912782124, Utpal: 01818007554.	aminjute@tdg@yahoo.com		 
2	Asha jute industries limited.	Amin court(1st floor) 62-63 Motjheel C A Dhaka-1000, Bangladesh.	ASHA	MORSHED SHB- 01711869052, BADOL SHB- 01814779652	ushajute@gmail.com, ushajute@bdmail.net		 
3	Bangladesh Jute Mills Ltd. c/o B.J.M.C.	99, Motjheel C/A Dhaka 1000, Bangladesh.	BD jute	Telephone: 9550294			 
4	Bulbul Traders.	47 Dilkusha C/A Dhaka, Bangladesh.	Bulbul	Bulbul: 01717744633, Barchu shb: 01919244507, Haque: 01732966005	bulbultrader.zacavi@gmail.com, bulbultraders@yahoo.com		 
5	Fiber n Fibre.	PLANNERS TOWER, ROOM 14 (15TH FLOOR) ,13/A MYMENSINGH (SONARGAON) ROAD,Dhaka, Bangladesh.	FNF	TELEPHONE- 9612790, BELAL SHB- 01811156045, ALAMGIR SHB- 01712501012	commercial.fiberfibre@gmail.com		 
6	Gul Ahmed Jute Mills Ltd.	Sattar Chamber, 99 Agrabad C/A, Chittagong, Bangladesh.	GUL	Telephone: 021-724826, Mahabub shb: 01911581695	gajm.export@gmail.com		 
7	Jatio Jute Mills Ltd. C/o B.J.M.C.	115/120, Adamjee court (3rd floor), Motjheel C/A Dhaka, Bangladesh.	Jatio	Telephone: 9588050,	qaumi.export@gmail.com		 
8	Jobaida Karim Jute Mills Ltd.	Chandrahila Suvasita Tower (4th Floor), 69/1, Pantha Path, Green Road, Dhaka, Bangladesh.	JOBADA	MURAD SHB- 015111103014, ALAM SHB- 01735522210, MIZAN SHB- 0178077554, AKHTARUZZAMAN- 01713488160	doc.jute@karimgroup.com		 
9	Jute & Bag Export corporation.	99 Motjheel, C/A Dhaka, Bangladesh.	Jute & Bags	Telephone: 9557210, Babu: 01713331340, Enam shb: 01713462184.	jute.bags@gmail.com		 
10	Kamaphuli Jute Mills Ltd.	Sattar Chamber, 99 Agrabad C/A, Chittagong, Bangladesh.	KFD	Telephone: 031-723523, Gopi Babu: 01814450504	kfdctg@gmail.com, kfdexport@hotmail.com		 

Showing 1 to 10 of 18 entries

Previous

1

2

Next

Fig: Shipper Settings

Navigation:	General Settings → Shipper
Functionality:	Pre-requisite detailed information of shippers, to be used later when generating contracts and reports.

16. General Settings: Shipper Bank List

The screenshot shows a web application interface for managing shipper bank information. A modal titled "Add/Edit Buyer Bank Information" is open, displaying a table with one entry for "Agrani Bank Ltd." in "Bijoyagar, Dhaka". The table columns are "Bank Name", "Branch Name", "A/C No.", "Swift Code", and "Action". The "Action" column contains icons for edit and delete. The modal also includes a search bar, a "Close" button, and a "Previous/Next" navigation bar. The background shows a sidebar with "Add New Shipper" and a list of shipper entries.

Fig: Shippe's Bank Settings

Navigation:	General Settings → Shipper → Click Bank Icon
Functionality:	Pre-requisite detailed information of shipper's different bank accounts, to be used later when generating contracts and reports.

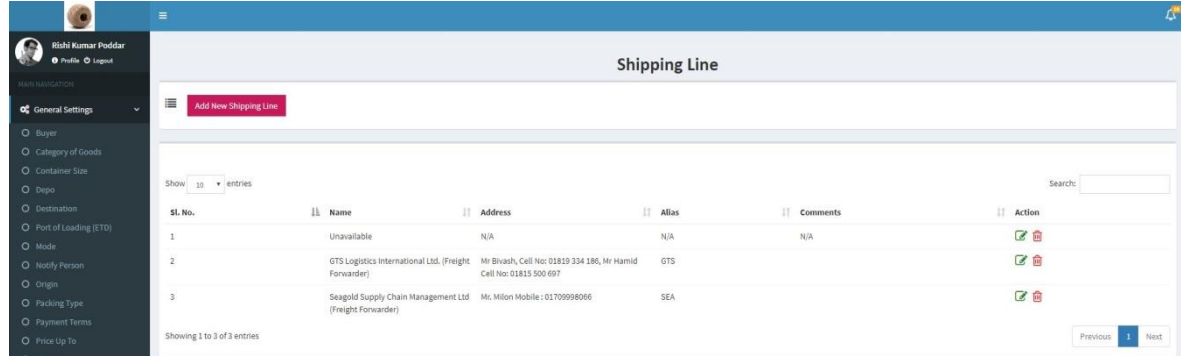
17. General Settings: Unit

The screenshot shows a web application interface for managing units. The "Unit List" table displays seven entries with columns for "SL No.", "Unit", "Comments", and "Action". The units listed are Kgs, Ys, Yds, Rolls, Ton, Pcs, and Pc. The "Action" column contains icons for edit and delete. The interface includes a sidebar with "General Settings" and a list of settings categories, a search bar, and a "Previous/Next" navigation bar.

Fig: Unit Settings

Navigation:	General Settings → Unit
Functionality:	Pre-requisite information of different units, to be used later when generating contracts and reports.

18. General Settings: Shipping Line



The screenshot displays the 'Shipping Line' management interface. It includes a sidebar with navigation options like Buyer, Category of Goods, Container Size, Depot, Destination, Port of Loading (ETD), Mode, Notify Person, Origin, Packing Type, Payment Terms, Price Up To, and Shipper. The main content area has a header 'Shipping Line' and a button 'Add New Shipping Line'. Below this is a table with 3 entries. Each entry has a 'Show' button and a search bar. The table columns are Sl. No., Name, Address, Alias, Comments, and Action. The entries are: 1. Unavailable, 2. GTS Logistics International Ltd. (Freight Forwarder), and 3. Seagold Supply Chain Management Ltd (Freight Forwarder). The bottom of the table shows 'Showing 1 to 3 of 3 entries' and pagination controls.

Sl. No.	Name	Address	Alias	Comments	Action
1	Unavailable	N/A	N/A	N/A	[Edit] [Delete]
2	GTS Logistics International Ltd. (Freight Forwarder)	Mr Bhavish, Cell No: 01819 334 186, Mr Hamid Cell No: 01815 500 697	GTS		[Edit] [Delete]
3	Seagold Supply Chain Management Ltd (Freight Forwarder)	Mr. Milon Mobile : 01709998066	SEA		[Edit] [Delete]

Fig: Shipping Line Settings

Navigation:	General Settings → Shipping Line
Functionality:	Pre-requisite detailed information of different shipping lines, to be used later when generating contracts and reports.

19. General Settings: Tariff Number



The screenshot displays the 'Tariff Number' management interface. It includes a sidebar with navigation options like Buyer, Category of Goods, Container Size, Depot, Destination, Port of Loading (ETD), Mode, Notify Person, Origin, Packing Type, Payment Terms, and Shipper. The main content area has a header 'Tariff Number' and a button 'Add New Tariff Number'. Below this is a table with 3 entries. Each entry has a 'Show' button and a search bar. The table columns are Sl. No., Tariff Number, Comments, and Action. The entries are: 1. 5310.10.0020, 2. 6305.10.0000, and 3. 5303.10.0000. The bottom of the table shows 'Showing 1 to 3 of 3 entries' and pagination controls.

Sl. No.	Tariff Number	Comments	Action
1	5310.10.0020	cloth, sheet	[Edit] [Delete]
2	6305.10.0000	bag, liner, squares with hd	[Edit] [Delete]
3	5303.10.0000	cut jute	[Edit] [Delete]

Fig: Tariff Number Settings

Navigation:	General Settings → Tariff Number
Functionality:	Pre-requisite information of tariff numbers, to be used later when generating contracts and reports.

20. General Settings: Transshipment Port

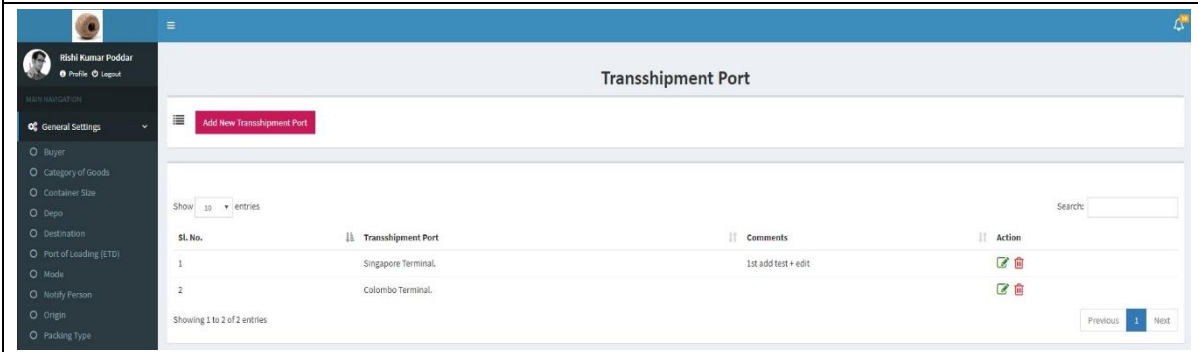


Fig: Transshipment Port Settings

Navigation:	General Settings → Transshipment Port
Functionality:	Pre-requisite information of transshipment ports, to be used later when generating contracts and reports.

21. User: Access Form

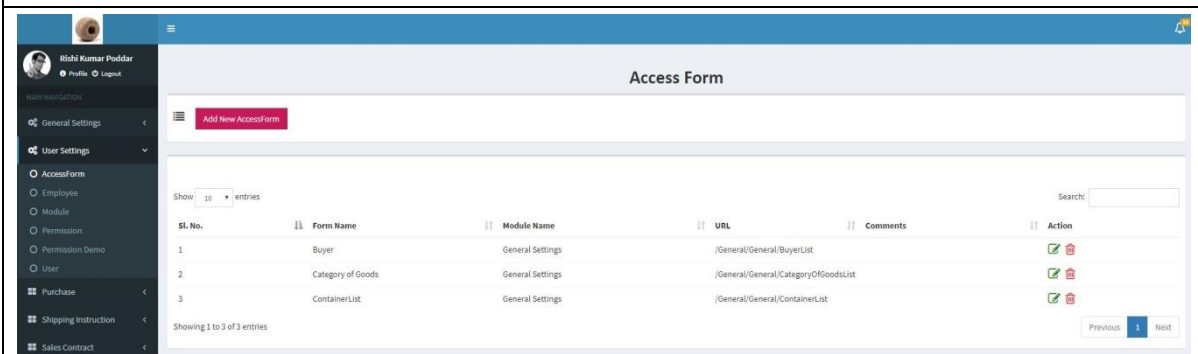


Fig: Access Form Settings

Navigation:	User Settings → Access Form
Functionality:	Name and path of different pages of the project, to be added to provide security.

22. User: Employee

Sl. No.	Code	Employee Name	Address	Contact No	Email	Comments	Action
1	496-86	Adolph C. Watkins	2309 Harvest Lane Boonville, MO 62233	660-882-0651	AdolphCWatkins@dayrep.com	ACW	
2	539-15	Jessica J. Dodgen	3433 Ryder Avenue Kent, WA 98032	425-293-2848	Jessica.J.Dodgen@armyspy.com	JJD	
3	451-50	Jesus S. Peters	2620 Hilltop Drive Amarillo, TX 79101	806-345-7034	JesusSPeters@armyspy.com		
4	404-51	Laura O. Beavers	1771 Straford Park Lexington, KY 40507	606-698-9958	LauraOBeavers@armyspy.com	LOB	
5	001	Rishi Kumar Poddar	Akram Tower, Room# 3, 8th Floor, 15/5 Bijoynagar, Dhaka - 1000, Bangladesh	01712 534421, 0088-02-9356349	deurpoddar@gmail.com	... RKP	

Fig: Employee Settings

Navigation:	User Settings → Employee
Functionality:	Detailed information of employees.

23. User: Module

Sl. No.	Module Name	Comments	Action
1	General Settings		
2	User Settings		
3	Purchase Contract		
4	Shipping Instruction		
5	Sales Contract		
6	Import Security File		

Fig: Module Settings

Navigation:	User Settings → Module
Functionality:	Information of all the parts of the projects.

24. User: Permission

Sl. No.	Module Name	Access Form Name	Status	Actions
1	General Settings	Buyer	Access Granted	
2	General Settings	Category of Goods	Access Denied	
3	General Settings	ContainerList	Access Denied	

Fig: Permission Settings

Navigation:	User Settings → Permission
Functionality:	Select each user and provide page-by-page access.

25. User: Users

Sl. No.	Employee Code	User	User Name	Status	Action
1	496-86	Adolph C. Watkins	acwatkins	Inactive	
2	453-50	Jesus S. Peters	jspeters	Pending	
3	404-51	Laura O. Beavers	lobeavers	Active	
4	001	Rishi Kumar Poddar	rkpoddar	Active	

Fig: Users Settings

Navigation:	User Settings → User
Functionality:	Select non-user employees as users. Change the status of the employee by clicking the Edit button. ‘Active’ – user can be able to access and perform actions to the system, ‘Deactive’ – user is totally forbidden to access the system and perform any operations, ‘Pending’ – user is awaiting admin approval to and or currently suspended from the system.

26. User: User Profile

The screenshot displays the 'User Profile' page for a user named Rishi Kumar Poddar. The page is divided into several sections:

- Header:** Shows the user's name 'Rishi Kumar Poddar' and a profile picture placeholder.
- General Information:** Includes 'Employee Code' (001), 'Address' (Akram Tower, Room 3, 8th Floor, 15/5 Bijoy Nagar, Dhaka - 1000, Bangladesh), 'Contact No.' (01712 534421, 0088-02-9356249), and 'Email' (dev.poddar@gmail.com).
- Login Information:** Shows 'User Name' (r.poddar) and 'Account Status' (Active).
- Change Password:** A section with a note '[* indicates mandatory field(s).]' and two input fields for 'Current Password' and 'New Password', followed by a 'Submit' button.
- Navigation Sidebar:** Located on the left, it includes links for 'General Settings', 'User Settings', 'Access Form', 'Employee', 'Module', 'Permission', 'Permission Demo', 'User', 'Purchase', 'Shipping Instruction', 'Sales Contract', and 'ISF'.

Fig: User Profile

Navigation:	Click Profile
Functionality:	User's profile containing their detailed information. User can change their password from here. For changing any detailed information, user has to contact the administrator.

27. Purchase Contract (PC): New Purchase Contract

- General Settings
- User Settings
- Purchase
 - Purchase List
 - New Purchase
 - Shipping Instruction
 - Sales Contract
 - ISF

New Purchase Contract

Add New Shipper
Add New Origin
Add New Destination
Add New Mode
Add New Container Size
Add Shipment Port/ETD
Add Price Up To
PER ROLL

Purchase Contract No. P-0005
Current Date (MM/dd/yyyy) 06/19/2019

Shipper * - Select Shipper -

Container Quantity Container Quantity
Container Size --- Select Container Size ---

Maximum Gross Weight Maximum Gross Weight

+

Select Category of Goods & Description

SL	Category of Goods	Description	Actions
No data available in table			

Showing 0 to 0 of 0 entries
Previous Next

Shipment Date *

Origin * --- Select Origin ---

Destination Will Advise Will Advise

Port of Shipment Chattogram, Bangladesh

Price Up To * --- Select Price Up To ---

Payment Terms * --- Select Payment Term ---

Notify * Henry W. Peabody & Co., Inc., 200 Broadway, Lynnfield, Mass. 01940, USA

Documents Required *
Commercial Invoice (1+2)
Bills of Lading (3+1)
Mills Specification (1+1)

Nota Bene (NB)

+

SL	Description	Actions
No data available in table		

Showing 0 to 0 of 0 entries
Previous Next

ACCEPTED

Signature Upload
Choose File No file chosen
Signature Upload

Link with Sales Contract

Select Sales Contract No.

Create Purchase Contract

Fig: New Purchase Contract

Navigation:	Purchase Contract → New PC
Functionality:	Creation of purchase contract, contract to buy/purchase goods from local mills with necessary information like container quantity, destination, origin, shipment date, required documents, etc.

28. Purchase Contract (PC): Category of Goods, Description & Details

New Purchase Details
[* Indicates mandatory field]

Add New Category of Goods

Category of Goods: --- Select Goods Category ---

Description:

Purchase Contract Details

SL	Quantity	Type	Packing	Unit	Total Unit	Size	P&S	P. Price	Price Unit	Total Cost	Ref.	Allocation	Actions
No data available in table													

Showing 0 to 0 of 0 entries

Add New Packing Type **Add New Unit**

Quantity *

Type * --- Select Type ---

Packing *

Unit * --- Select Unit ---

Size *

Price *

Price Unit * --- Select Price Unit ---

Reference/Comments *

Allocation *

Close **Add**

Fig: Purchase Contract Details

Navigation:	Purchase Contract → New PC → Click 'Plus (+)' Icon(s)
Functionality:	Details of Purchase Contract (PC), multiple details can be under a single Category of Goods and Description.

29. Purchase Contract (PC): Purchase Contract List

Sl. No.	Purchase Contract No.	Shipment Date	Shipper	Action
1	P-0001	June 2019	MADINA	[Icons]
2	P-0002	June 2019	Bulbul	[Icons]
3	P-0003	JULY, 2019	Nowapara	[Icons]
4	P-0004	JULY 2019	ASHA	[Icons]

Fig: Purchase Contract List

Navigation: Purchase Contract → PC List

Functionality: List of PC. Verified users can View, Edit, Delete, Generate Report from the Action column on the right hand side.

30. Shipping Instruction (SI): Shipping Instruction Details

Shipping Instruction Details

[* Indicates mandatory field]

Shipping Instruction No.* SI-0011

Select Purchase Contract No.* P-0002

Select From Purchase Details

Sl.	Quantity	Type	Packing	Unit	Size	P. Price	Ref.	Allocation	Actions
1	85	CARTON	30	ROLLS	3ftx12ft	1.52			[Icons]

Showing 1 to 1 of 1 entries

Selected Items

Actions	PCNo	Quantity	Type	Packing	Size	P. Price	Ref.	Issued	Balance	New Quantity	Net Weight	Gross Weight
[Icons]	P-0002	85	CARTON	30	3ftx12ft	1.52		70	26	5		120Kgs
[Icons]	P-0003	77	BALES	77	77	77	77	30	47	30		
[Icons]	P-0003	77	ROLL	77	77	77	77	20	57	20		
[Icons]	P-0011	2	BALES	4	rtv	4		1	1	1		

Showing 1 to 4 of 4 entries

Save

Fig: Shipping Instruction Details

Navigation: Shipping Instruction → New SI

Functionality: Details of goods in the stock to be shipped with quantity, net weight, gross weight, etc. by selecting PC.

31. Shipping Instruction (SI): New Shipping Instruction

New Shipping Instruction (SI)

☰

Add New Shipper
Add New Container Size
Add New Destination
Add New Mode
Add Shipping Line
Add Notify Person

Shipping Instruction No. *

SI-0011

Date

06/19/2019

Shipper *

STAR JUTE MILLS LTD

Container Quantity

Container Quantity

Container Size

--- Select Container Size ---

Selected Items

Show

10

 entries

Search:

Sl.	PCNo	Quantity	Type	Packing	Size	PS	P. Price	Allocation	Net Weight	Gross Weight
1	P-0002	5	CARTON	30	3ftx12ft	7x7	1.52			120kgs
2	P-0003	30	BALES	77	77	77	77	77		
3	P-0003	20	ROLL	77	77	77	77	77		
4	P-0011	1	BALES	4	rtv		4			

Showing 1 to 4 of 4 entries

Previous

1

Next

[* Indicates mandatory field]

Bale Marks

+

Show

10

 entries

Search:

Sl.	Description	Actions
1	testin phanse 2	

Total Gross Weight *

Total Gross Weight

Origin *

BANGLADESH

Destination *

NEWWORK

--- Select Mode ---

Port of Shipment *

WILL ADVISE

Price Up To *

FOB Chittagang

Shipping Line *

--- Select Shipping Line ---

Shipping Line Address *

Shipping Line Address

Notify Party *

--- Select Notify Person ---

Freight *

Payable at destination.

Documents Required *

(A) C/Invoice: 1 Orig+2 Cys.
(B) Bill of lading: 3 Orig + 2 Cys.
(C) Mills Spec: 1 Orig + 2 Cys.
(D) Single Count: 1 Orig + 1 Cys.

Special Instructions *

(A) "SHIPPED ON BOARD" should appear in B/L duly sealed & signed by Steamer Co/Agent WITH date.
(B) Weight of packing list and B/L must be same.
(C) Containers should be dry & clean in case of container shipment.
(D) (none) set copy documents should be sent to HENRY N/PEABODY & CO, INC, DHAKA OFFICE directly within 5 days from the date of shipment.

Signature Upload

Choose File

No file chosen

Signature Upload

Comments/ALias

Comments/ALias

Create SI

Fig: New Shipping Instruction

Navigation:	Shipping Instruction → New SI → Fill up details → Click ‘Save’
Functionality:	Creation of shipping instruction, contract to ship goods from local stock with necessary information like container quantity, destination, origin, gross weight, special instructions, etc.

32. Shipping Instruction (SI): Shipping Instruction List



Rishi Kumar Poddar
Profile Logout

Main Navigation

- General Settings
- User Settings
- Purchase
- Shipping Instruction
 - Shipping Instruction List
 - New Shipping Instruction
- Sales Contract
- ISF

Shipping Instruction List

Show 10 entries

Sl. No.	SI No.	Date	Shipper Name	Destination Name	Comments	Action
1	SI-0001	9/9/2018	STAR JUTE MILLS LTD	VANCOUVER		View Edit Delete
2	SI-0002	9/9/2018	UMC JUTE MILLS LTD	NEWYORK		View Edit Delete
3	SI-0003	3/10/2018	UMC JUTE MILLS LTD	NEWYORK		View Edit Delete
4	SI-0004	3/10/2018	UMC JUTE MILLS LTD	NEWYORK		View Edit Delete
5	SI-0005	5/10/2018	BANGLADESH JUTE MILLS LTD	WILL ADVISE		View Edit Delete
6	SI-0006	13/11/2018	BANGLADESH JUTE MILLS LTD	WILL ADVISE		View Edit Delete
7	SI-0007	22/11/2018	BANGLADESH JUTE MILLS LTD	NEWYORK		View Edit Delete
8	SI-0008	22/11/2018	BANGLADESH JUTE MILLS LTD	WILL ADVISE		View Edit Delete
9	SI-0009	13/1/2019	STAR JUTE MILLS LTD	CHARLESTON	None found !!	View Edit Delete
10	SI-0010	20/1/2019	STAR JUTE MILLS LTD	CHARLESTON		View Edit Delete

Showing 1 to 10 of 10 entries

Fig: Shipping Instruction List

Navigation:	Shipping Instruction → SI List
Functionality:	List of SI. Verified users can View, Edit, Delete, Generate Report from the Action column on the right hand side.

33. Sales Contract (SC): New Sales Contract

Rishi Kumar Poddar

Route Logout

NEW NAVIGATION

- General Settings
- User Settings
- Purchase
- Shipping Instructions
- Sales Contract
 - Sales Contract List
 - New Sales Contract
- LSP

New Sales Contract

Add New BuyerAdd New OriginAdd New DestinationAdd New Container SizeAdd New Mode

Sales Contract No.

SC-0005

IDC *

PCR

Current Date(MM/DD/YYYY)

06/13/2019

Buyer *

Select Buyer ...

Container Quantity

Container Quantity

Container Size

Select Container Size ...

+

Select Category of Goods & Description

SL	Category of Goods	Description	Actions
[* Indicates mandatory field]			
Origin *	Select Origin ...		
Payment *	Select Payment Term ...		
Destination	WILL ADVISE WILL ADVISE		
ETA *	06/19/2019		
Remarks *	Remarks		

ACCEPTED

Signature Upload

Choose File

No file chosen

Signature Upload

Link with Purchase Contract

Select Purchase Contract No.

Create Sales Contract

Fig: New Sales Contract

Navigation:	Sales Contract → New SC
Functionality:	Creation of sales contract, contract to sell goods to the buyers with necessary information like buyer name, container quantity, destination, origin, etc.

34. Sales Contract (SC): Category of Goods, Description & Details

New Goods Description & Sales Details
[* Indicates mandatory field]

Add New Category of Goods:

Category of Goods: --- Select Goods Category ---

Description: Description

Sales Contract Details

SL	Quantity	Type	Packing	Unit	Total Unit	Size	P. Price	Price Unit	Total Cost	Ref.	Actions

Origin: --- Select Origin ---

Payment: --- Select Payment Term ---

Destination: WILL ADVISE

ETA: 06/20/2019

Remarks: Remarks

Add Sales Details

Add New Packing Type **Add New Unit**

Quantity: Quantity

Type: --- Select Type ---

Packing: Packing

Unit: --- Select Unit ---

Size: Size

Price: \$ Price

Price Unit: --- Select Price Unit ---

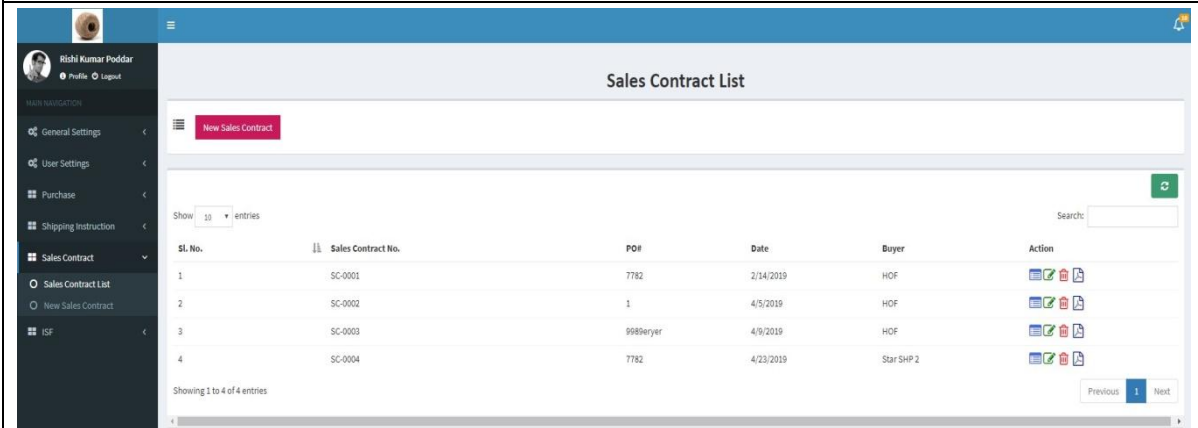
Reference/Comments: Reference/Comments

Close Add

Fig: Sales Contract Details

Navigation:	Sales Contract → New SC → Click 'Plus (+)' Icon(s)
Functionality:	Details of Sales Contract (SC), multiple details can be under a single Category of Goods and Description.

35. Sales Contract (SC): Sales Contract List



Sl. No.	Sales Contract No.	PO#	Date	Buyer	Action
1	SC-0001	7782	2/14/2019	HOF	[Icons]
2	SC-0002	1	4/5/2019	HOF	[Icons]
3	SC-0003	9989eryer	4/9/2019	HOF	[Icons]
4	SC-0004	7782	4/23/2019	Star SHP 2	[Icons]

Fig: Sales Contract List

Navigation:	Sales Contract → SC List
Functionality:	List of SC. Verified users can View, Edit, Delete, Generate Report from the Action column on the right hand side.

36. Import Security File (ISF): New Import Security File

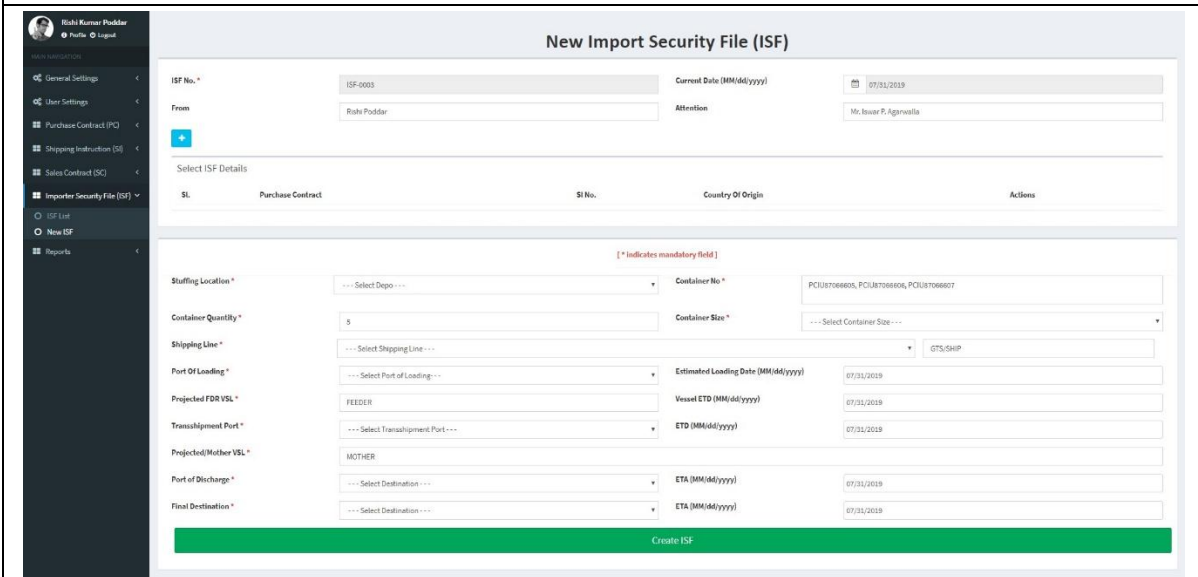


Fig: New ISF

Navigation:	Importer Security File → New ISF
Functionality:	Creation of ISF, document to be submitted to US Customs Border Protection (CBP) for importing shipped goods. with necessary information like port of loading, stuffing location, transshipment port, port of discharge, etc.

37. Import Security File (ISF): ISF List

Fig: ISF Details

Navigation:	Importer Security File → ISF List
Functionality:	List of ISF. Verified users can View, Edit, Delete, Generate Report from the Action column on the right hand side.

37. Import Security File (ISF): Details

Fig: ISF List

Navigation:	Importer Security File → New ISF → Click 'Plus (+)' Icon(s)
Functionality:	Details information of ISF.

4.4.3 Limitations

- No tracking system of products shipped to the buyer.
- Buyers cannot issue request for quotation or order through this system.

4.4.4 Future Works

- Accounts management
- Advance email integration

Chapter 5

Conclusion

Bangladesh is second in the top 10 jute exporting countries of the world; because of its soil, climate and season is so much suitable for this crop to grow. This suitability has encouraged the local exporters to export jute and different jute based products throughout the world. Demand of jute products has increased over time for its degradability and eco-friendly to the nature. As Bangladesh contributes an approximate of 42% of global production, the number of jute mills and exported has also increased. This is the era of new technologies and the world have merged the technologies with their businesses to progress further even more. Only a few companies left aside, the jute exporters of Bangladesh are still stuck to the manual processes of documentation and paperwork and yet to embrace these newest technologies.

The Jute Export Management System is just the first step for all the local jute exporters to not only embrace themselves with the newest technologies, but also to use the technology to ease their way of work. It aims to overcome the manual maintenance of the work, increase work efficiency, with less time consumption. This system ensures data safety to prepare documents and reports with accurate data.

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- [6] <https://unilearning.uow.edu.au/report/3biv.html>
- [7] <http://www.tutorialsteacher.com/Content/images/mvc/request-handling-in-mvc.png>
- [8] [www. world-famous-top-10-list/world/largest-jute-producing-countries-world-states/6861/](http://www.world-famous-top-10-list/world/largest-jute-producing-countries-world-states/6861/)