Internship Report On Landen Technology

Submitted by

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This internship report has been submitted in fulfillment of the requirements for the Degree of Bachelor of Science in Software Engineering.

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Approval

This internship titled on “Internship on Landen Technology”, submitted by Md. Ashiqur Rahaman, ID:172-35-2149 to the Department of Software Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfilment of the requirements for the degree of Bachelor of Science in Software Engineering and approval as to its style and contents.

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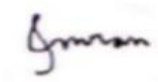

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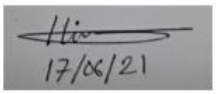

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Declaration

I hereby declare that, this internship has been done by me under the supervision of Mr. Md. Shohel Arman, Lecturer (Senior Scale), Department of SWE Daffodil International University. I also declare that neither this internship nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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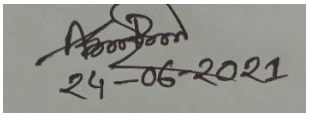

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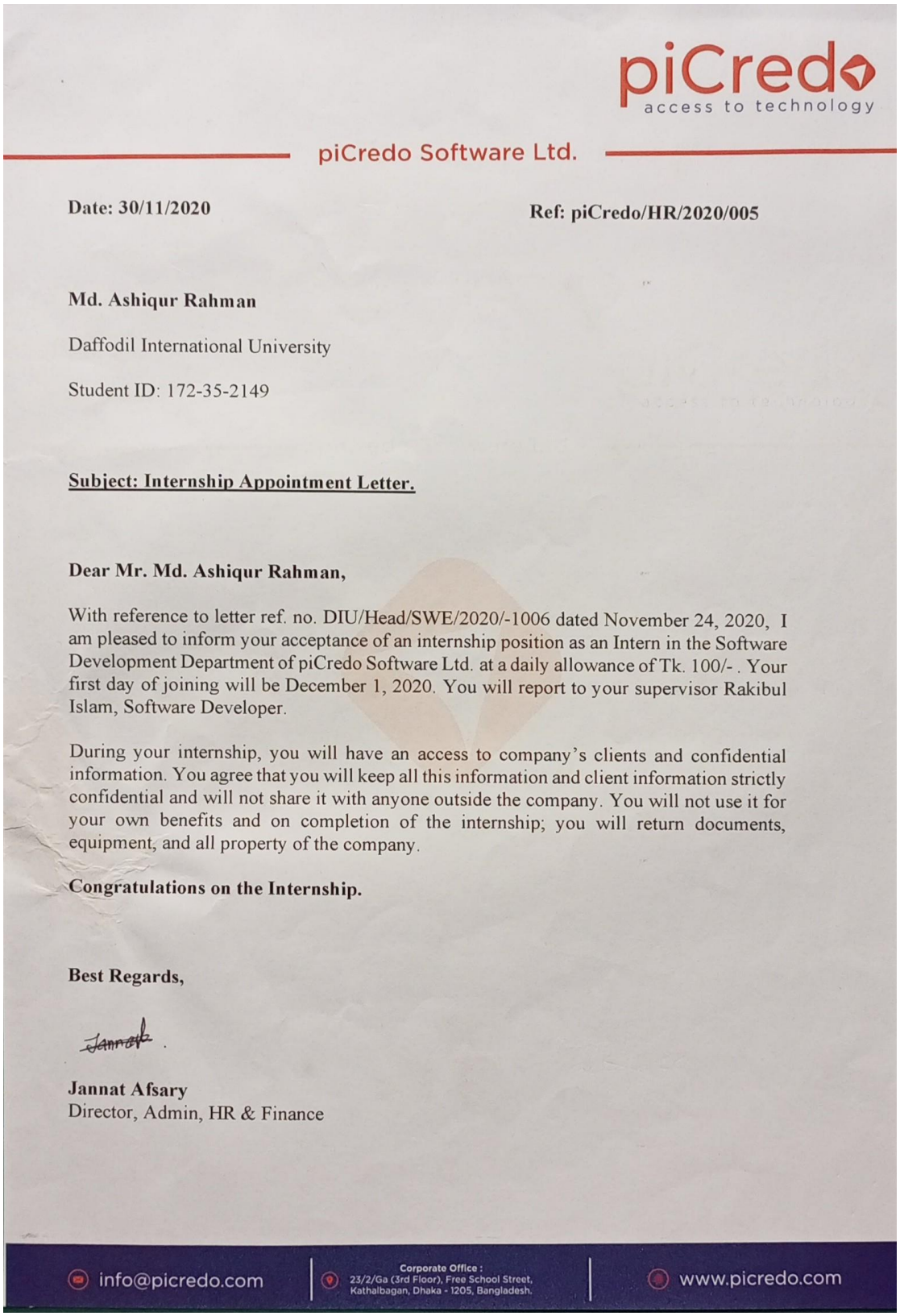
Appointment Letter



piCredo
access to technology

piCredo Software Ltd.

Date: 30/11/2020 **Ref: piCredo/HR/2020/005**

Md. Ashiqur Rahman

Daffodil International University

Student ID: 172-35-2149

Subject: Internship Appointment Letter.

Dear Mr. Md. Ashiqur Rahman,

With reference to letter ref. no. DIU/Head/SWE/2020/-1006 dated November 24, 2020, I am pleased to inform your acceptance of an internship position as an Intern in the Software Development Department of piCredo Software Ltd. at a daily allowance of Tk. 100/- . Your first day of joining will be December 1, 2020. You will report to your supervisor Rakibul Islam, Software Developer.

During your internship, you will have an access to company's clients and confidential information. You agree that you will keep all this information and client information strictly confidential and will not share it with anyone outside the company. You will not use it for your own benefits and on completion of the internship; you will return documents, equipment, and all property of the company.

Congratulations on the Internship.

Best Regards,

Jannat Afsary
Director, Admin, HR & Finance

info@picredo.com | Corporate Office : 23/2/Ga (3rd Floor), Free School Street, Kathalbagan, Dhaka - 1205, Bangladesh. | www.picredo.com

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1. Introduction

1.1 Company Overview

My company's name is piCredo Software Ltd. Technology and innovation are at the heart of piCredo Software Ltd.'s narrative. They began their journey in January 2020, with the goal of providing the best technology and customer service possible. They have a strong technical team that can provide high-quality services to its customers.

The vision at piCredo Software, is to reach across the globe with technological innovation that will have positive impact on people's life. Their mission is to empower people with technology and innovation.

1.2 My Responsibilities

My designation for the following organization was software development intern. I started as a Junior Software Engineer last month. I worked as an intern for about four-month. My responsibilities in the internship period were full-stack web development. I developed multiple single-page projects but I developed a full web-based project named landen. An android app is also available in the google play store for the same name. I converted the web version to full of functionality.

1.3 Technology I Learned

Here are some tools and techniques I learned during my internship period:

1. **Firebase Implementation:** I implemented google firebase in vanilla JavaScript. Where I use a real-time database that is available for (pay you to use to go) mode. Users authenticate using firebase authentication. They can perform CRUD operations.
2. **Bangla Invoice Generation:** I learned Bangla invoice generation using canvas drawing in JavaScript.
3. **Payment Gateway Integration:** I learned payment gateway integration. I'm now able to send an HTTP response using the necessary parameters and also can make an API request.

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4. **Delivery Channel Integration:** I learned delivery channel integration. Where I can send HTTP post requests and get the individual cities, Thana, area, etc. And also learned how to track an order.
5. **Ecommerce Site Development:** Recently I also completed a full e-commerce website using laravel framework.

1.4 Project Overview

Landen (www.landen.com.bd) is the first invoicing fintech application in Bangladesh. This Application allows small businesses, such as F-commerce, E-commerce, and micro-merchants, to conveniently keep track of their daily transactions and generate sales invoices. Micro-merchants and F-commerce firms will also be allowed to accept payment via online and deliver their products.

1.5 Project Purpose

Small company owners, such as Facebook, e-commerce, and micro merchants, can use this software to simply establish daily business accounts and sales receipts. By using this application, small business owners can easily understand the real picture of their business at a glance.

1.6 Stakeholders

- Users (Micro-merchant Owners).
- Clients.

1.7 Gantt chart

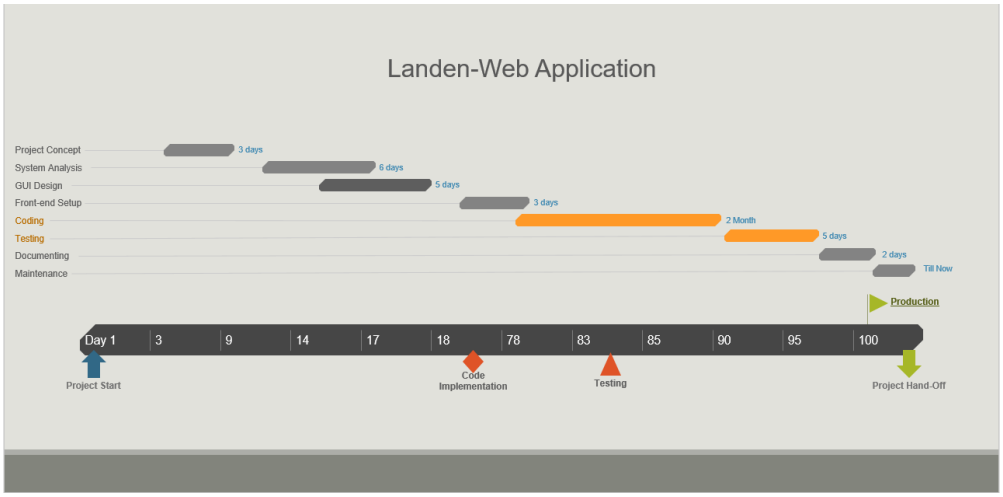

Fig 1.0:- Gantt chart

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2. System Analysis

2.1 Functional Requirements

2.1.1 Users

Requirement ID	**UF**R1.01.01
Title	Registration
Description	The option is for User to register in this system.
Priority	High

Requirement ID	**UF**R1.01.02
Title	Login
Description	The option is for Users to Login in this system.
Priority	High

Requirement ID	**UF**R1.01.03
Title	User Profile
Description	The option is for Users to update users Profile.
Priority	Medium

Requirement ID	**UF**R1.01.04
Title	Add Products
Description	The option is for Users to Add Products.
Priority	High

Requirement ID	**UF**R1.01.05
Title	Add Clients
Description	The option allows the Users to add their clients.
Priority	High

Requirement ID	**UF**R1.01.06
Title	Add Daily Invest
Description	This option allows the Users to add daily invest.
Priority	Medium

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Requirement ID	**UF**R1.01.07
Title	Add Monthly Invest
Description	This option allows the Users to add their monthly invest.
Priority	Medium

Requirement ID	**UF**R1.01.08
Title	View Clients List
Description	This option allows the Users to view/delete/update clients.
Priority	Low

Requirement ID	**UF**R1.01.09
Title	View Products List
Description	This option allows the Users to view/delete/update products.
Priority	Low

Requirement ID	**UF**R1.01.10
Title	Generate Invoice
Description	This option allows the Users to Generate Invoice.
Priority	Medium

Requirement ID	**UF**R1.01.11
Title	View Invoice List
Description	This option allows the Users to view list of invoices.
Priority	Low

Requirement ID	**UF**R1.01.12
Title	Generate Payment URL
Description	This option allows the Users to generate payment url for clients to pay their due amount through online.
Priority	Medium

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Requirement ID	**UF**R1.01.13
Title	Make Parcel Delivery
Description	This option allows the Users to make parcel for delivery.
Priority	Medium

Requirement ID	**UF**R1.01.14
Title	Track Delivery
Description	The option is for Users to view delivery list and track their delivery.
Priority	Medium

Requirement ID	**CF**R1.01.15
Title	Logout
Description	The option is for Users to Logout in this system.
Priority	Low

2.1.2 Admin

Requirement ID	**AF**R1. 02.01
Title	Login
Description	The option is for Admin to login in this system.
Priority	High

Requirement ID	**AF**R1.02.02
Title	View Delivery List
Description	The option is for Admin to view all delivery list.
Priority	Medium

Requirement ID	**AF**R1.02.03
Title	Track Individual Delivery
Description	The option is for Admin to track individual delivery.
Priority	Medium

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Requirement ID	**AF**R1.02.04
Title	View Payment List
Description	The option is for Admin to view payment list.
Priority	Medium

Requirement ID	**AF**R1.02.05
Title	Excel Export
Description	The option is for Agent to export delivery table or payment table.

Requirement ID	**AF**R1.02.07
Title	Logout
Description	The option is for Agent to Logout in this system.
Priority	Low

2.2 Non-Functional Requirements

- Right now registration process for web applications is off for some reason. Users must use mobile apps for the registration process. After completing user able to log in through the web.
- Users will be able to send OTP to registered mobile numbers up to 6 times in a row consecutively while login. After the 6th attempt user will get blocked for that phone number. And will unblock after 3-4 hours.
- For every operation user must need to wait 5-10 (based on internet speed) seconds until loading from the firebase database.
- After creating the invoice, the user will not be able to delete this or the sales info.
- Payment URL will available in the invoice when users choose online payment while generating invoices.

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2.3 Use Case

2.3.1 Use Case Diagram for Users

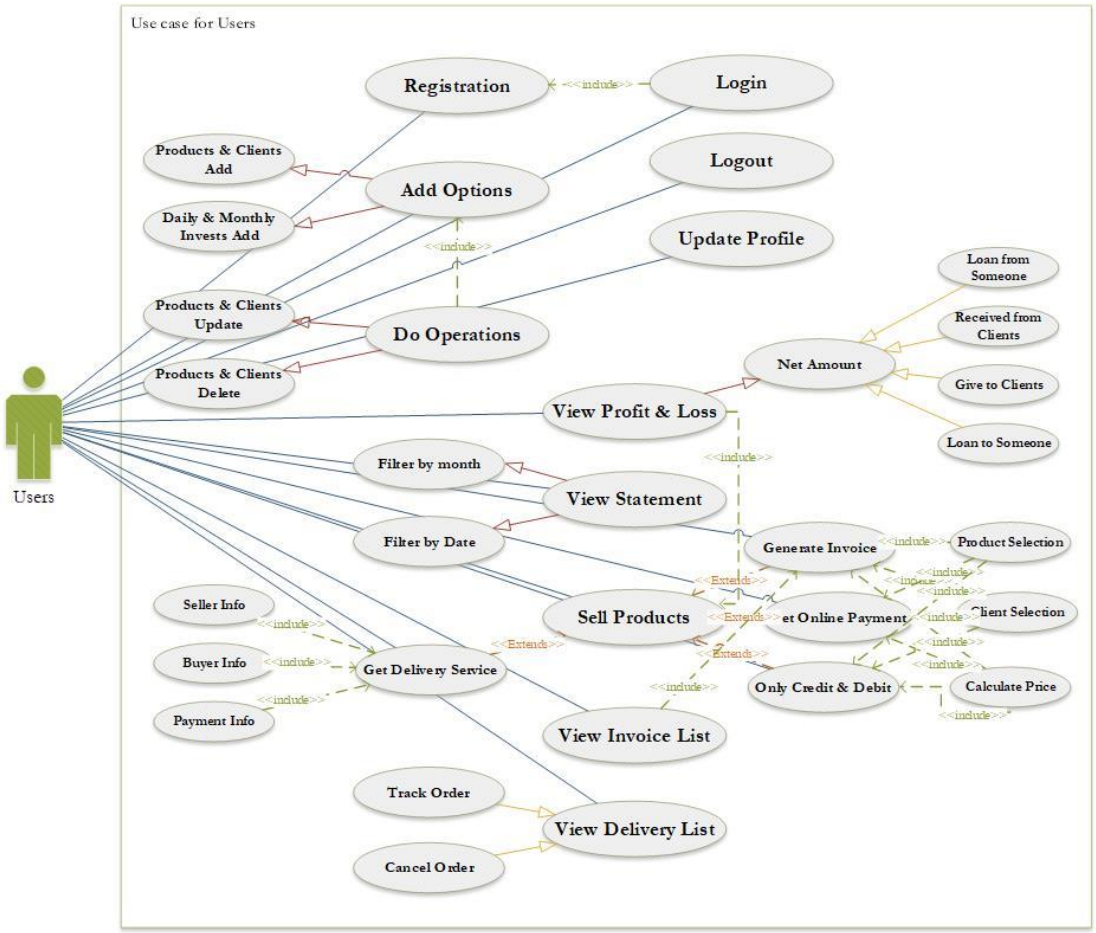

Fig 1.1:- User Use Case Diagram

2.3.2 Use Case Description (Users)

Use Case No.	1.1
Use Case Name	Registration
Actor	Users
Description	Allowing users to create account for the system.
Precondition	User should remain in the registration page
Trigger	Click the “Sign Up” Link
Flow of Events	➢ Several text fields to give input of the name, phone, email, company name and page name respectively. ➢ Fill all the field and click the sign up button.
Post Condition	User registered the system.

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Use Case No.	1.2
Use Case Name	Login
Actor	Users
Description	Allowing users to login to the system.
Precondition	User should remain in the login page
Trigger	Click the "Send OTP" Link
Flow of Events	➢ One text field and re-captcha container first appear in login screen. After confirming OTP user able to login the system. ➢ Write the phone number and solve re-captcha and then fill the right OTP and click the login button.
Post Condition	User logged into the system

Use Case No.	1.3
Use Case Name	Update Profile
Actor	Users
Description	Allowing users to update their profile.
Precondition	User should remain in the update profile page
Trigger	Click the "User Profile" Link from right top bar.
Flow of Events	➢ All the field will appear in user profile page. Upload company logo and sign will be there. ➢ Update any field which users want to.
Post Condition	An alert arise after successful update.

Use Case No.	1.4.1
Use Case Name	Add Options (Add Products)
Actor	Users
Description	Allowing users to Add products into the system.
Precondition	A modal popped up from top and remain in dashboard screen.
Trigger	Click the "Add" button in product add card.
Flow of Events	➢ Several text fields to give input of the product name, price, quantity etc. ➢ Click "Add Product" button to add products.
Post Condition	An alert arise after successful addition.

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Use Case No.	1.4.2
Use Case Name	Add Options (Add Client)
Actor	Users
Description	Allowing users to Add clients into the system.
Precondition	A modal popped up from top and remain in dashboard screen.
Trigger	Click the "Add" button in client add card.
Flow of Events	➢ Several text fields to give input of the client name, phone, email, address etc. ➢ Click "Add Client" button to add clients.
Post Condition	An alert arise after successful addition.

Use Case No.	1.4.3
Use Case Name	Add Options (Add Daily Invest)
Actor	Users
Description	Allowing users to Add Daily Invest into the system.
Precondition	A modal popped up from top and remain in dashboard screen.
Trigger	Click the "Add" button in Daily Invest card.
Flow of Events	➢ Several text fields to give input of the transport cost, daily cost, others cost, with date etc. ➢ Click "Add Daily Invest" button to add Daily Invest.
Post Condition	An alert arise after successful addition.

Use Case No.	1.4.4
Use Case Name	Add Options (Add Monthly Cost)
Actor	Users
Description	Allowing users to Add Monthly Cost into the system.
Precondition	A modal popped up from top and remain in dashboard screen.
Trigger	Click the "Add" button in Add Monthly Cost card.
Flow of Events	➢ First need to select month name and year name from select box. Then there will be some text fields for input of salary, rent, electricity, etc. ➢ Click "Add Monthly Cost" button to add Monthly Cost.
Post Condition	An alert arise after successful addition.

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Use Case No.	1.5.1
Use Case Name	Do Operation (View/Update/Delete Products)
Actor	Users
Description	Allowing users to View/Update/Delete products.
Precondition	User will remain in product details page.
Trigger	Click the "Edit" icon button from product listing page and do operations.
Flow of Events	➢ User able to update from specific field or delete products. ➢ Click "Update" button to update products.
Post Condition	An alert arise after successful update.

Use Case No.	1.5.2
Use Case Name	Do Operation (View/Update/Delete Clients)
Actor	Users
Description	Allowing users to View/Update/Delete clients.
Precondition	User will remain in client details page.
Trigger	Click the "Edit" icon button from client listing page and do operations.
Flow of Events	➢ User able to update from specific field or delete clients. ➢ Click "Update" button to update clients.
Post Condition	An alert arise after successful update.

Use Case No.	1.6
Use Case Name	View Profit & Loss
Actor	Users
Description	Allowing users to view total net amount.
Precondition	User should remain in the due calculation page.
Trigger	Click the "See" button in due amount card.
Flow of Events	➢ Users can see four option loan from someone, loan to someone, received from client, give to clients and add or update fields. ➢ Select "Date Range" to see the net balance and details.
Post Condition	An alert arise after successful update or addition.

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Use Case No.	1.7
Use Case Name	View Statement
Actor	Users
Description	Allowing users to view statement for activities in monthly or date wise.
Precondition	User should remain in statement page.
Trigger	Select month name from select box or date range from date field.
Flow of Events	➢ After selecting date range user able to see total cost. ➢ After selecting last field system automatically show the amount.
Post Condition	User able to show the amount.

Use Case No.	1.8
Use Case Name	Sell Product
Actor	Users
Description	In this section user can generate invoice, make payment online and make parcel for delivery.
Precondition	User should remain in invoice creation page.
Trigger	Create invoice by clicking “Click” button link from invoice card.
Flow of Events	➢ First users need to select client’s info, then product info and quantity, after calculating subtotal users able to perform next options. ➢ There will be thee checkbox (make pdf invoice, online payment, delivery service). Select one or more and make invoice using create invoice button
Post Condition	An alert arise after successful creation.

Use Case No.	1.9
Use Case Name	View Invoice List
Actor	Users
Description	Allowing users to view invoice list.
Precondition	A modal popped up from top and remain in dashboard screen.
Trigger	View invoice list by clicking “View” button link from invoice list card.
Flow of Events	➢ In the popup modal, there will be a table where all the invoice list is displayed. ➢ Users can close that modal.
Post Condition	Users can close that modal.

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Use Case No.	1.10
Use Case Name	View/Track Delivery List
Actor	Users
Description	Allowing users to view delivery list and track delivery.
Precondition	User should remain in delivery listing page.
Trigger	Track delivery list by clicking "Order details" button link from delivery list table.
Flow of Events	➢ In the delivery listing page, there will be a table where all the delivery list is displayed. ➢ When user click specific order from that list a tracking status and others information displayed.
Post Condition	Users can close that modal.

Use Case No.	1.11
Use Case Name	Logout.
Actor	Users
Description	Allowing users to Logout from the system.
Precondition	Users should remain in authenticate page.
Trigger	Click the "Logout" Link from right top bar.
Flow of Events	➢ All the session for the specific account has been dismissed.
Post Condition	An alert arise after successful logged out in homepage.

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2.3.3 Use Case Diagram for Admin

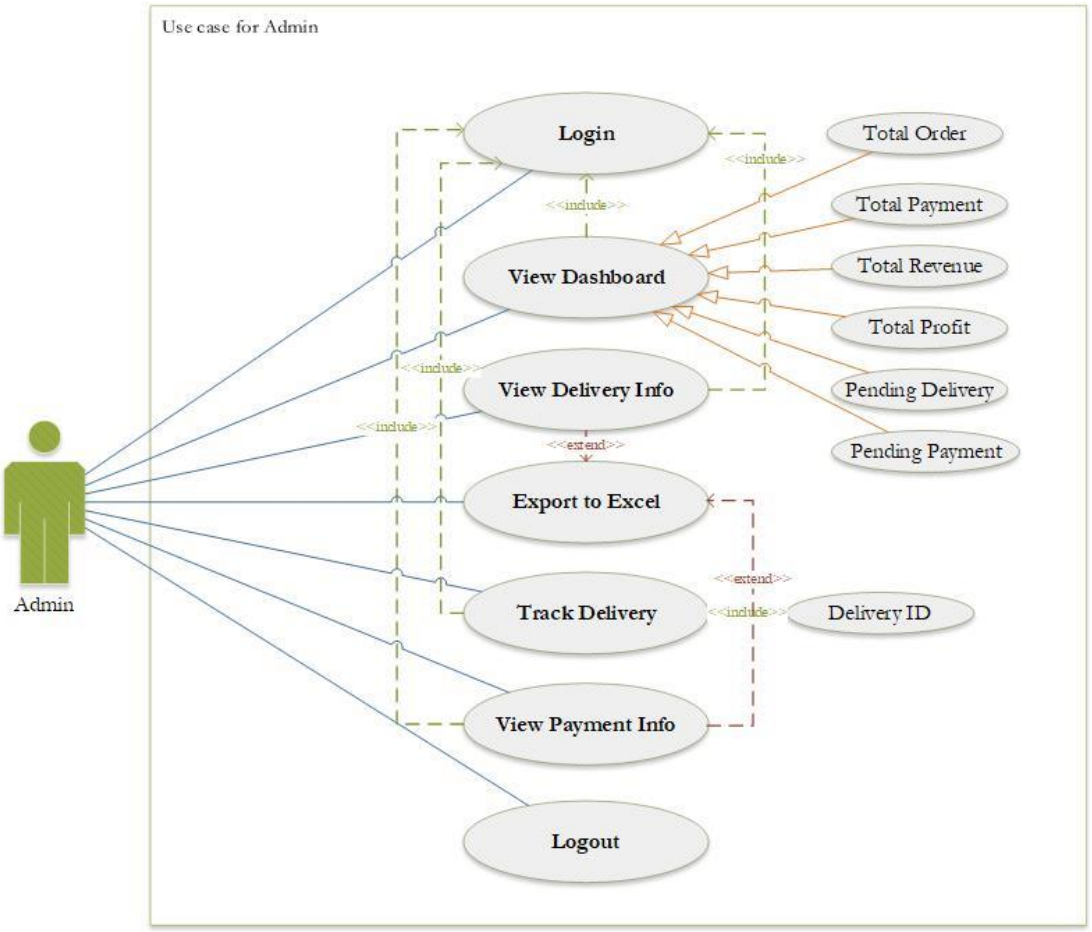

Fig 1.2:- Admin Use Case Diagram

2.3.4 Use Case Description (Admin)

Use Case No.	2.1
Use Case Name	Login
Actor	Admin
Description	Allowing Admin to login to the system
Precondition	Admin should remain in the login page
Trigger	Click the "Login" Link.
Flow of Events	➢ Two text fields to give input of the username and password respectively ➢ Write the username and password on that field and click the login button.
Post Condition	Admin able to see admin panel.

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Use Case No.	1.2
Use Case Name	View Dashboard
Actor	Admin
Description	Allowing to Admin to view total order count, total payment count, total revenue count, pending delivery count, pending payment count.
Precondition	Admin should remain in the admin dashboard page.
Trigger	No trigger need to apply.
Flow of Events	➢ Admin can view total order count, total payment count, total revenue count, pending delivery count, and pending payment count.
Post Condition	Admin can see main table in dashboard page.

Use Case No.	1.3
Use Case Name	View delivery info
Actor	Admin
Description	Allowing to Admin to view all delivery info ad export to excel.
Precondition	Download as excel file.
Trigger	Click the “Export to excel” Link.
Flow of Events	➢ Admin can view all the delivery list ➢ Download excel file.
Post Condition	Download notification appeared and start to download.

Use Case No.	1.4
Use Case Name	Track Delivery
Actor	Admin
Description	Allowing Admin to track download for individual users parcel.
Precondition	Click and show delivery status.
Trigger	Click the “Track” Link.
Flow of Events	➢ Agent can view all the delivery list and track the delivery by using delivery id.
Post Condition	Know the delivery state.

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Use Case No.	1.5
Use Case Name	View Payment info
Actor	Admin
Description	Allowing to Admin to view all payment info ad export to excel.
Precondition	Download as excel file.
Trigger	Click the “Export to excel” Link.
Flow of Events	➢ Agent can view all the payment list ➢ Download excel file.
Post Condition	Download notification appeared and start to download.

Use Case No.	1.7
Use Case Name	Logout.
Actor	Admin
Description	Allowing to Admin to Logout from the system
Precondition	Agent should remain in the authenticate page.
Trigger	Click the “Logout” Link.
Flow of Events	➢ All the session for admin has been dismissed.
Post Condition	Admin Logout Successfully.

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3. System Design

3.1 Activity Diagram

3.1.1 Activity Diagram (Admin)

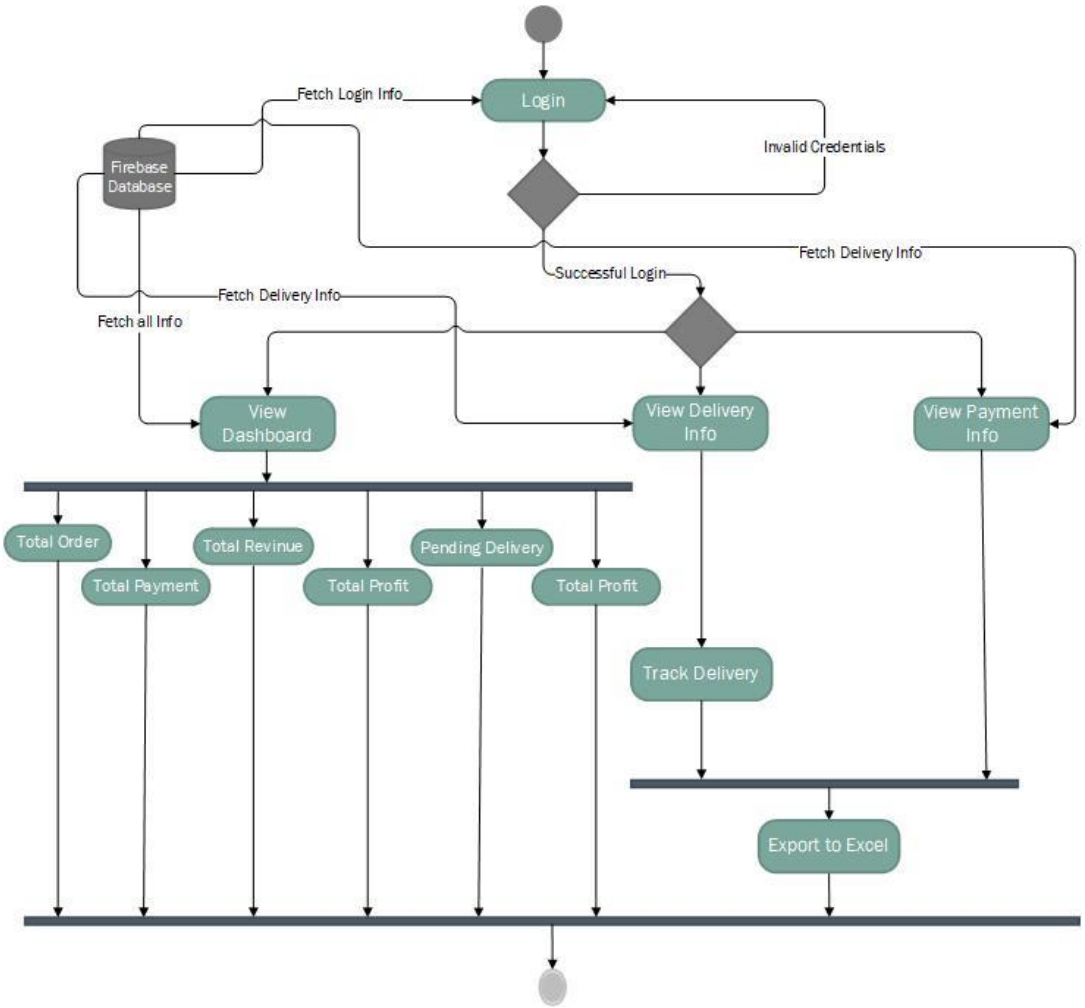

Fig 2.1:- Admin Activity Diagram

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3.1.2 Activity Diagram (Users)

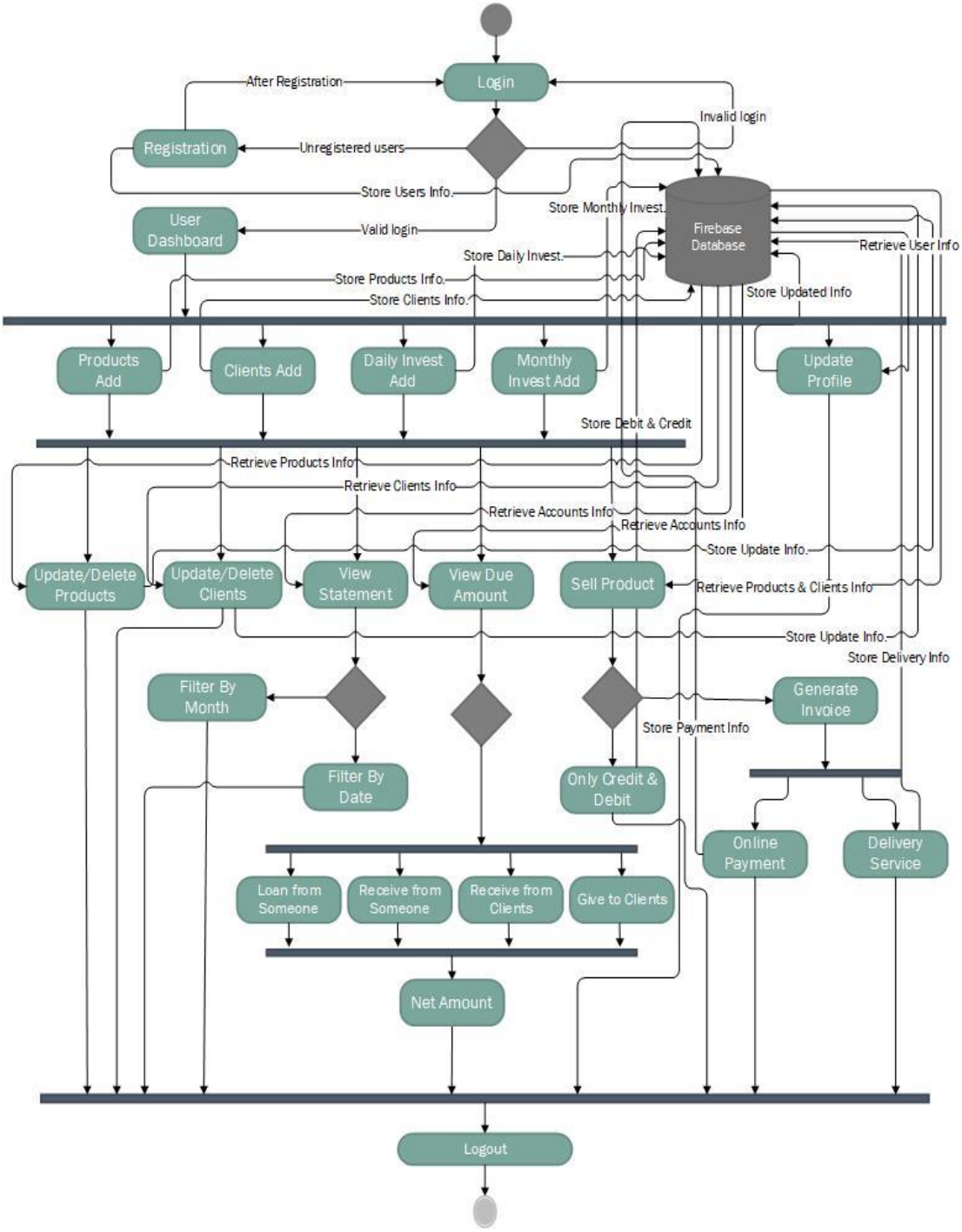

Fig 2.2:- Users Activity Diagram

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3.2 Entity Relationship (ER) Diagram

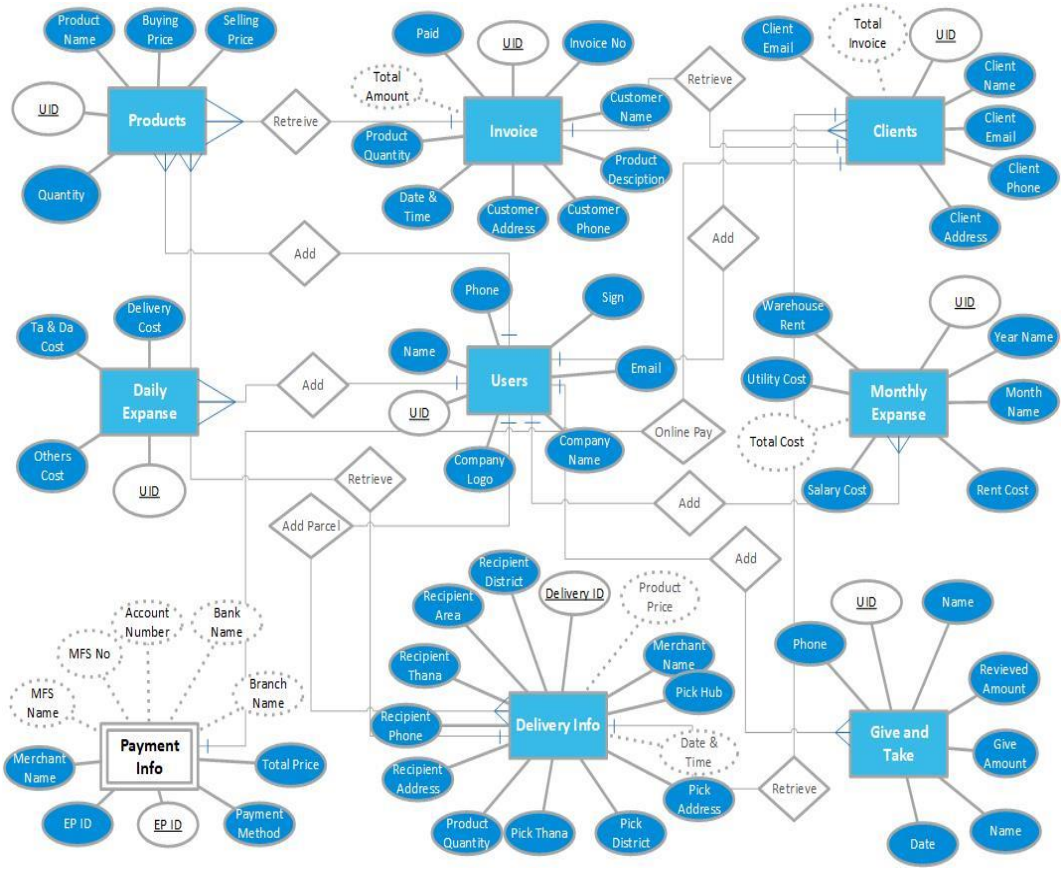

Fig 3.0:- ER Diagram

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4. System Test & Development

4.1 Introduction of System Testing

System testing is a type of testing that verifies a software product's completeness and integration. A system test is used to evaluate the end-to-end specifications of a system. System testing is a collection of tests whose main objective is to put a computer-based system through its paces.

4.2 Features to be tested

1. Registration
2. Login (OTP sending process)
3. Create/Read Operation.
4. Update/Delete Operation
5. Payment Process
6. Delivery Process
7. Invoice generation
8. Credit & Debit

4.3 Testing Approach

1. The full system will be tested manually and step by step.
2. Check all the validation criteria.
3. Check all messages and alert.

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4.4 Testing Case Table

Test ID	Test Case	Description	Expected Output	Actual Output
TCID-1	Registration	Enter data in all fields	Successfully Registered	Successfully Registered
TCID-2	Login	Send OTP in provided number.	Successfully send OTP	Successfully send OTP
TCID-3	CRUD Operation	Product add, client add, monthly, daily invest add to input all the required field.	Operation Successful	Operation Successful
TCID-4	Online Payment	Checking hash value and send http response then generate payment URL.	Payment link generated	Payment link generated
TCID-5	Invoice Generation	Showing all products indo and clients info in a canvas and make pdf.	Pdf generation complete.	Pdf generation complete
TCID-5	Delivery Service	Place order http request to courier marketplace and get delivery service.	Order Successful	Order Successful

4.5 Tools & Technology

1. **Client Side:**
   - HTML5
   - CSS3
   - Vanilla JavaScript
   - Bootstrap4
   - Jquery-3.2.1
   - Ajax
2. **Server Side:**
   - Django
   - Python
3. **Database:**
   - Google Firebase Real-time Database.
4. **IDE:**
   - Pycharm Professional (Student Licenced)
   - VS Code
5. **Git**
   - GitHub(Private Repository)

4.6 Deployment

This web application is deployed in Linux-based shared host Cpanel. And live by using the domain of www.landen.com.bd

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5. User Interface

5.1 Home Page

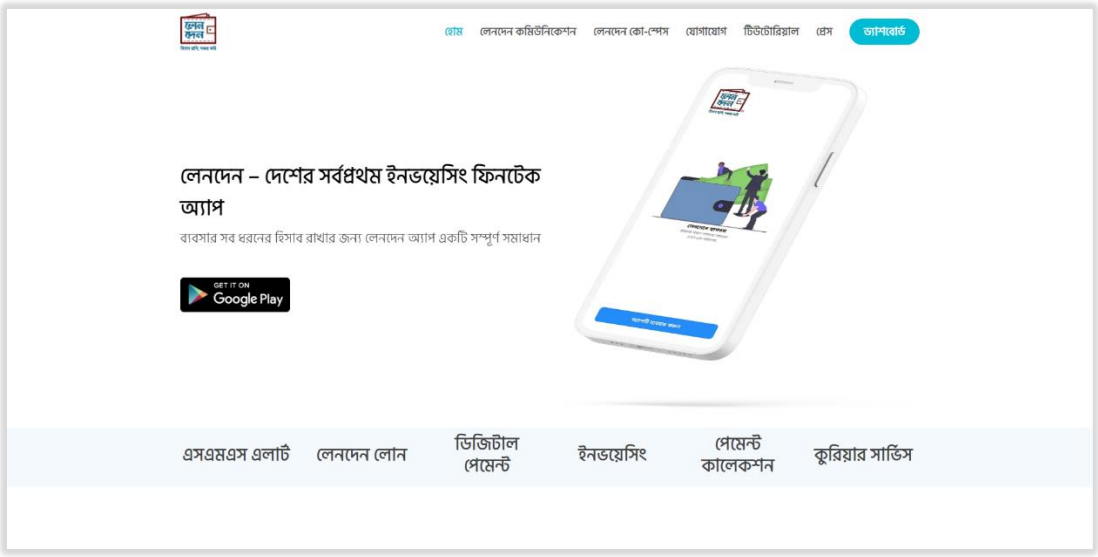

Fig 4.0:- Homepage

5.2 Registration Page

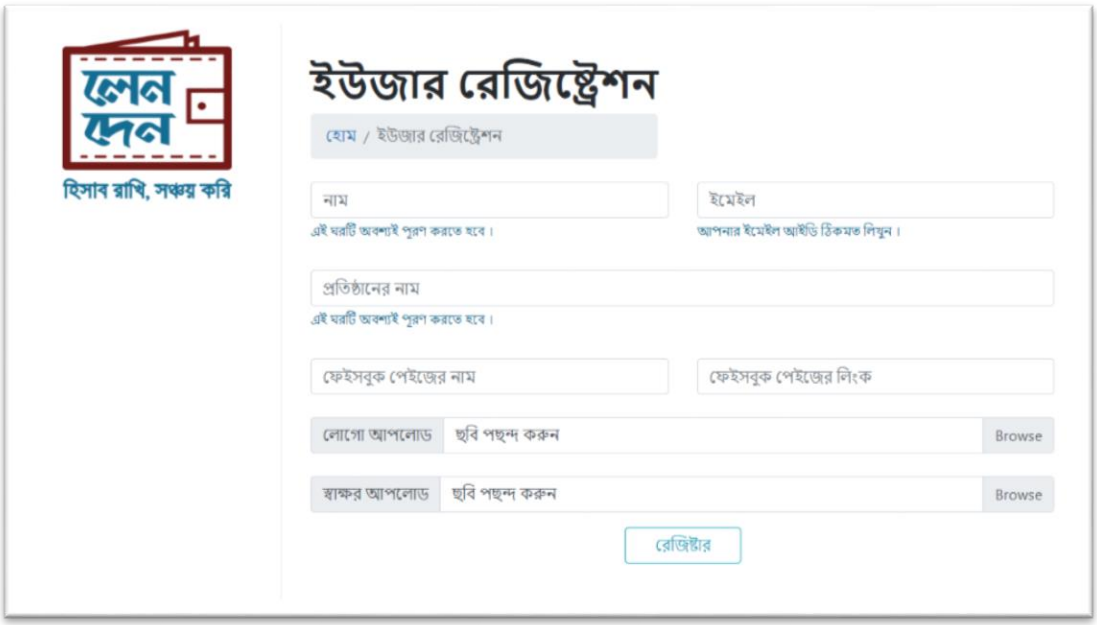

Fig 4.1:- Registration

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5.3 Login Page

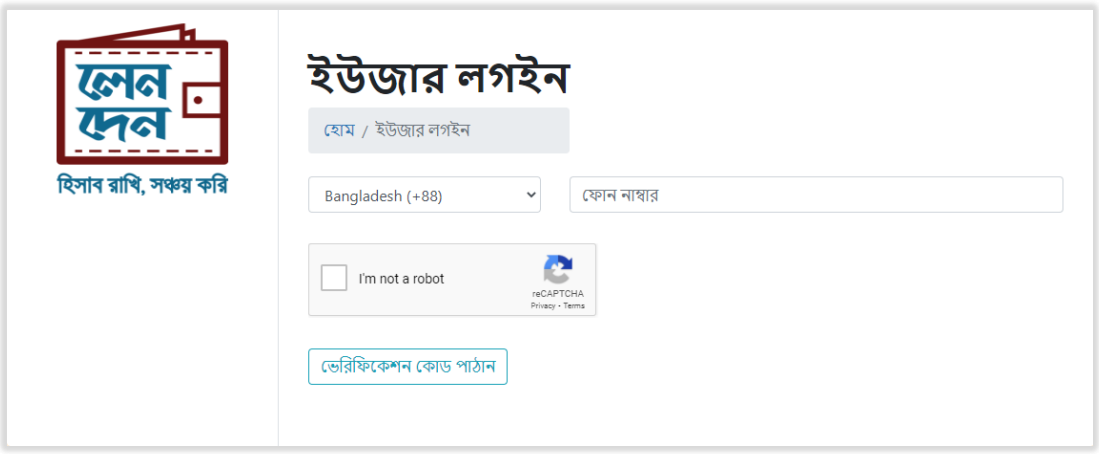

Fig 4.2.1:- Login-1

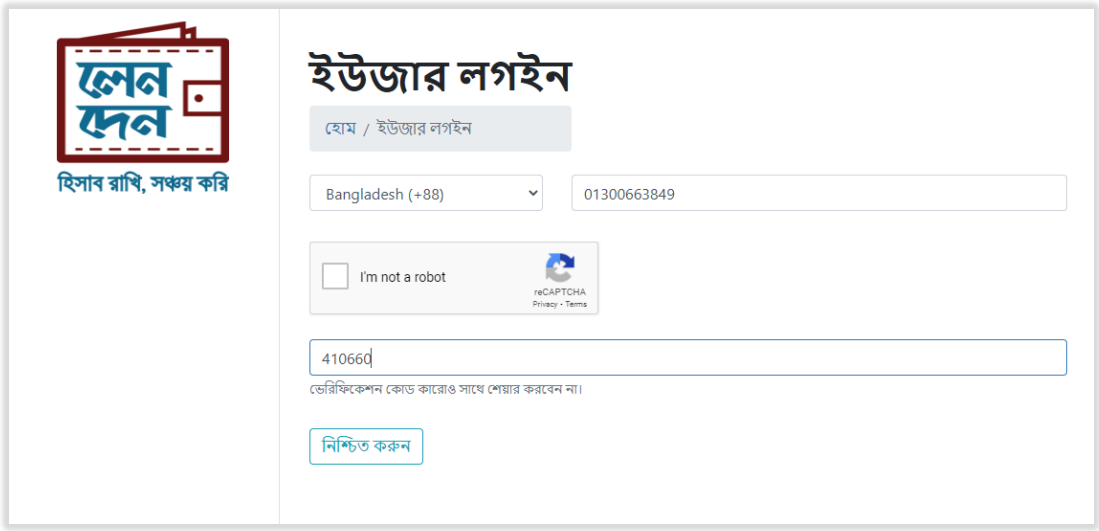

Fig 4.2.2:- Login-2

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5.4 User Profile Page

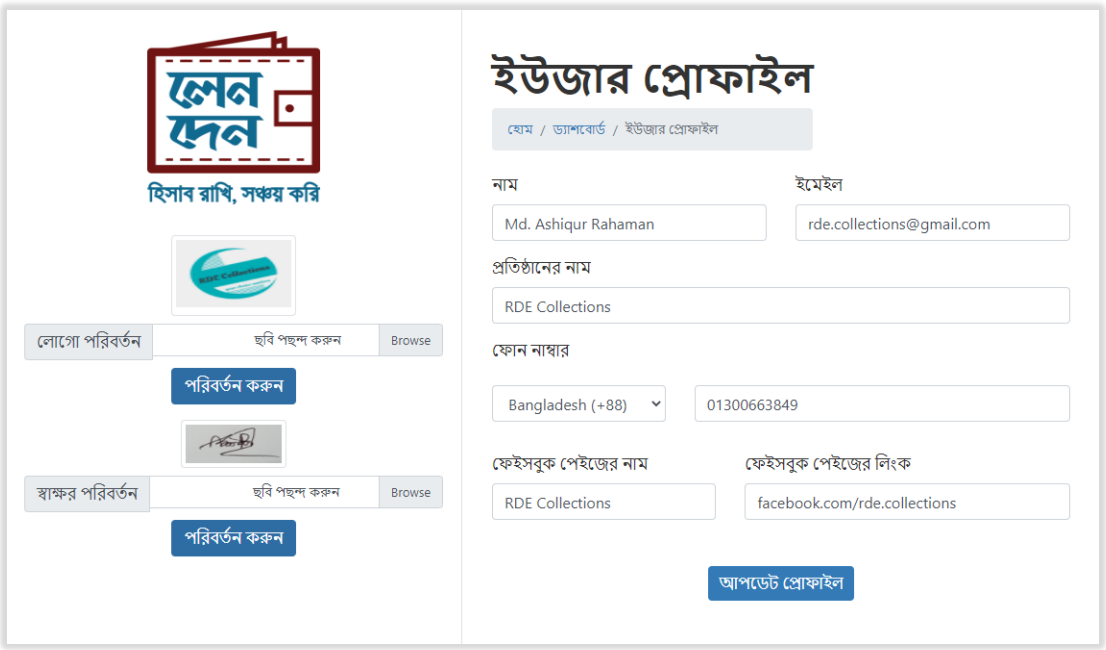

Fig 4.3.1:- User Profile

5.5 Dashboard Page

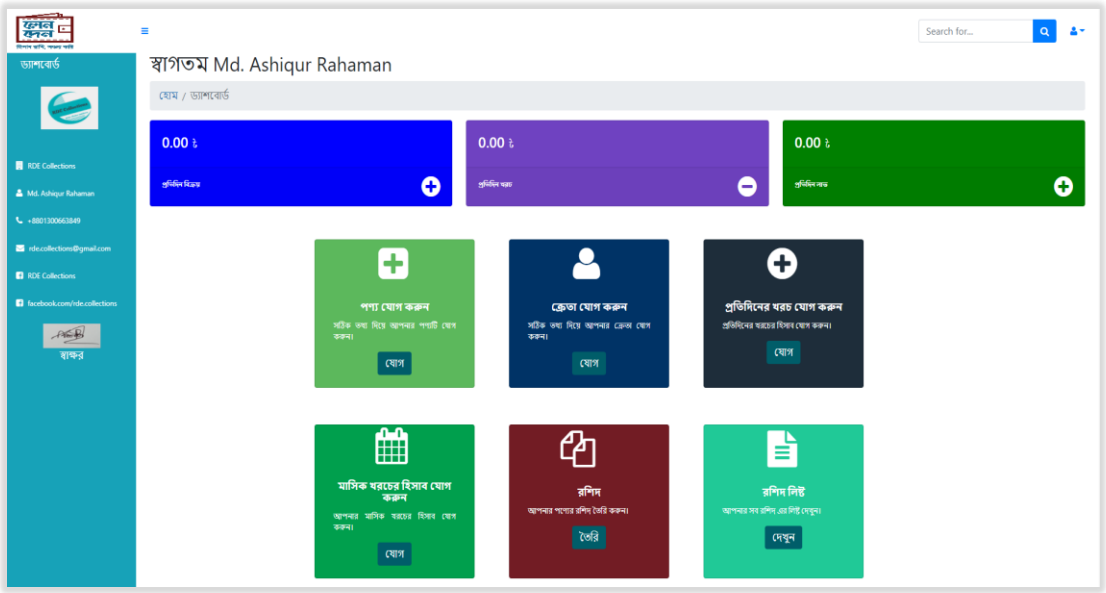

Fig 4.3.2:- Dashboard

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5.6 Product Add Modal

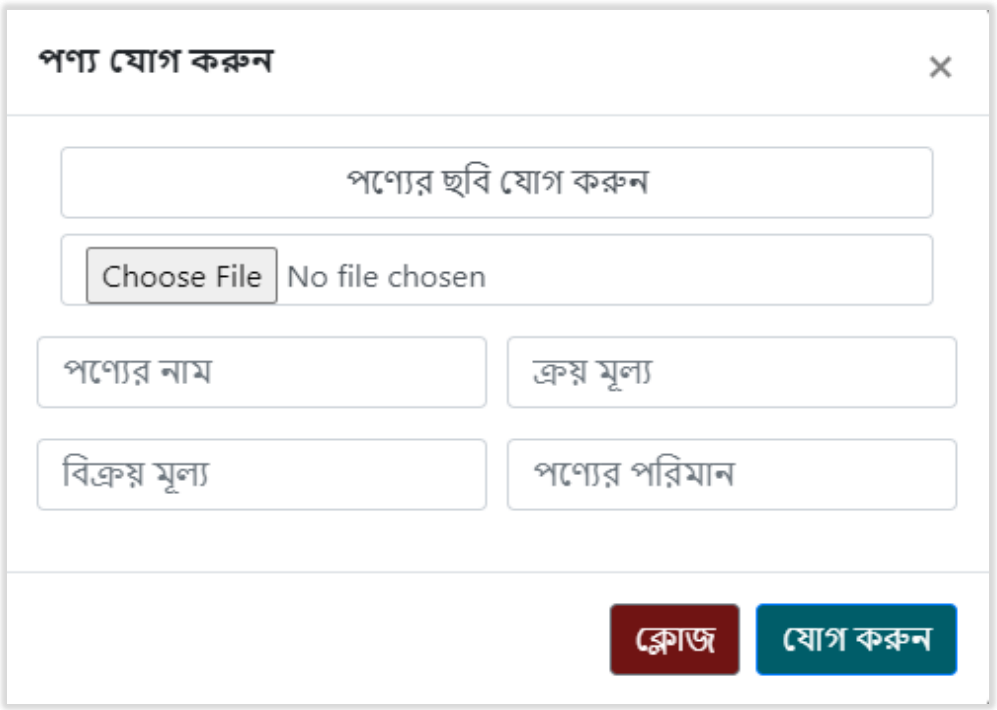

Fig 4.4:- Products Add

5.7 Clients Add Modal

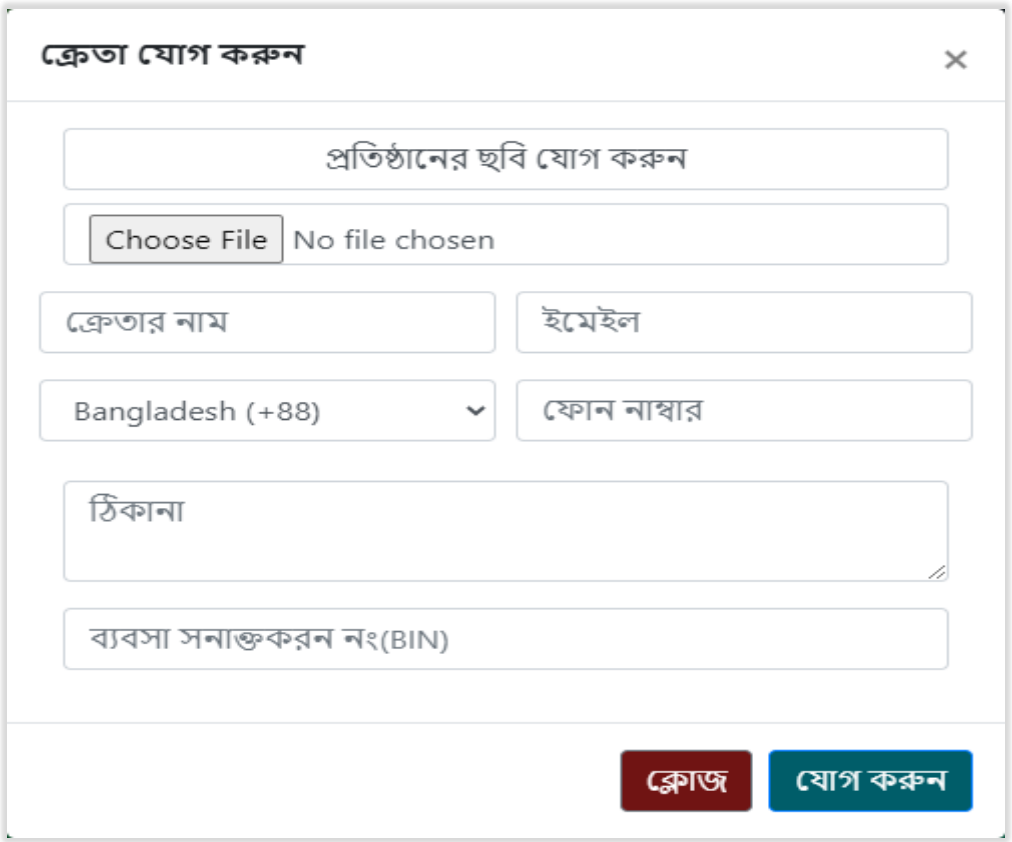

Fig 4.5:- Clients Add

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5.8 Daily Invest Add Modal

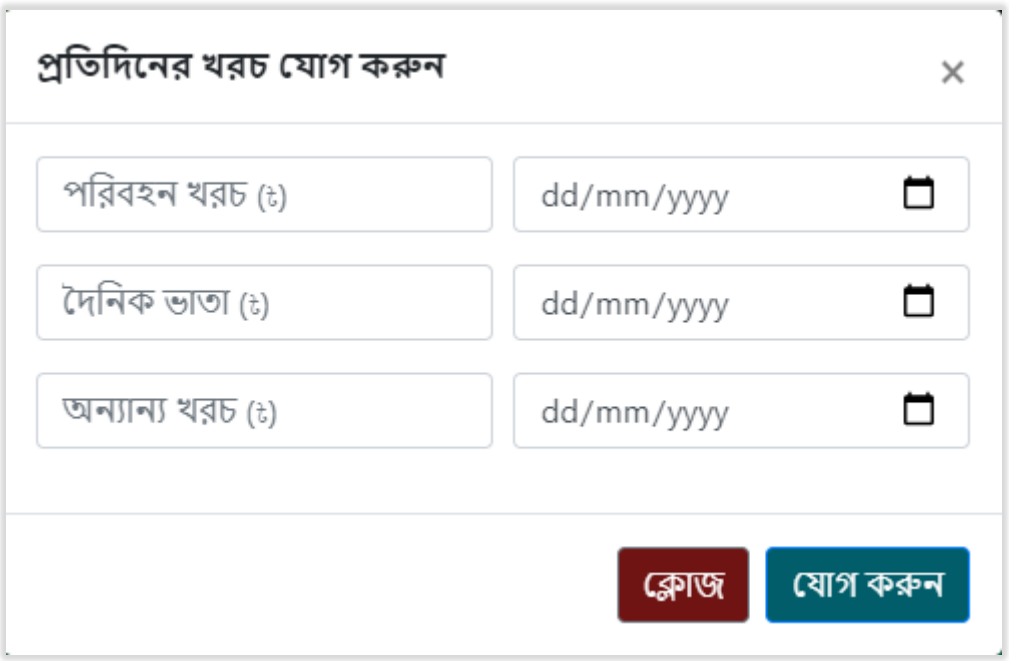

Fig 4.6:- Daily Invest Add

5.9 Monthly Invest Add Modal

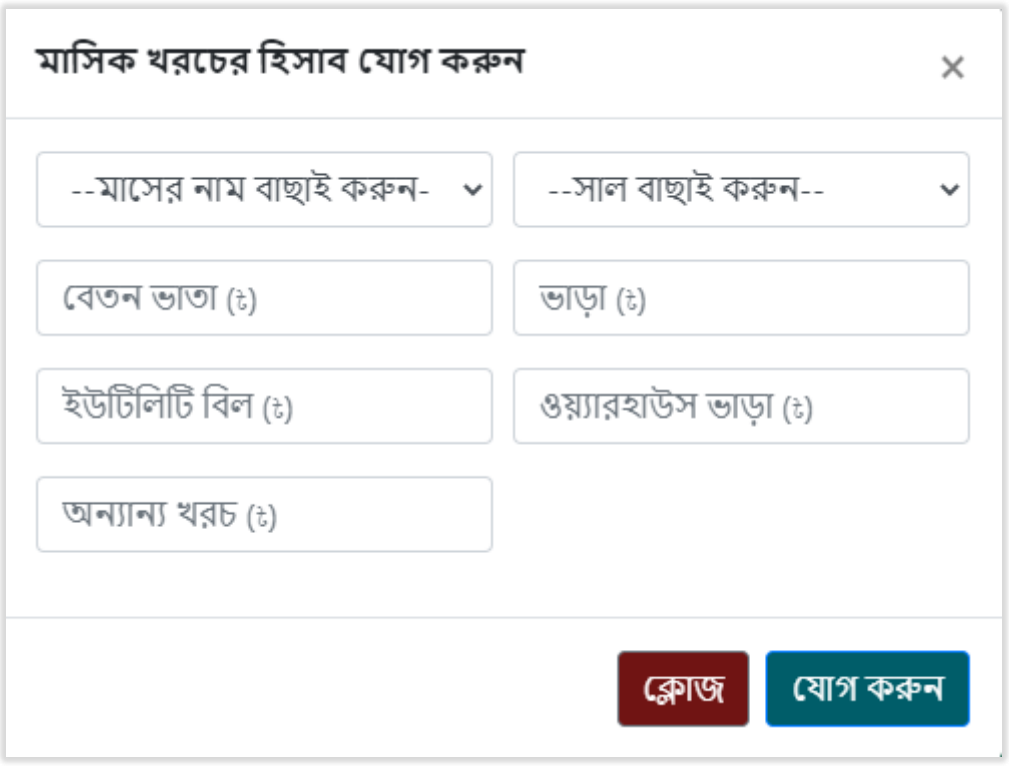

Fig 4.7:- Monthly Invest Add

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5.10 Client List Page

Fig 4.8.1:- Clients List

5.11 Client Edit

Fig 4.8.2:- Clients Edit Modal

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5.12 Products List

Fig 4.9.1:- Products List

5.13 Product Edit

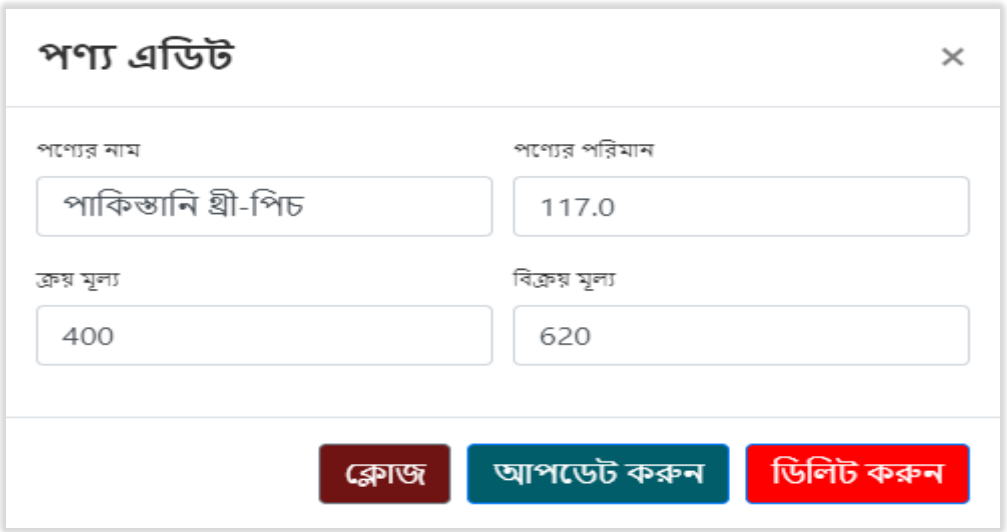

Fig 4.9.2:- Product Edit Modal

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5.14 Invoice Page

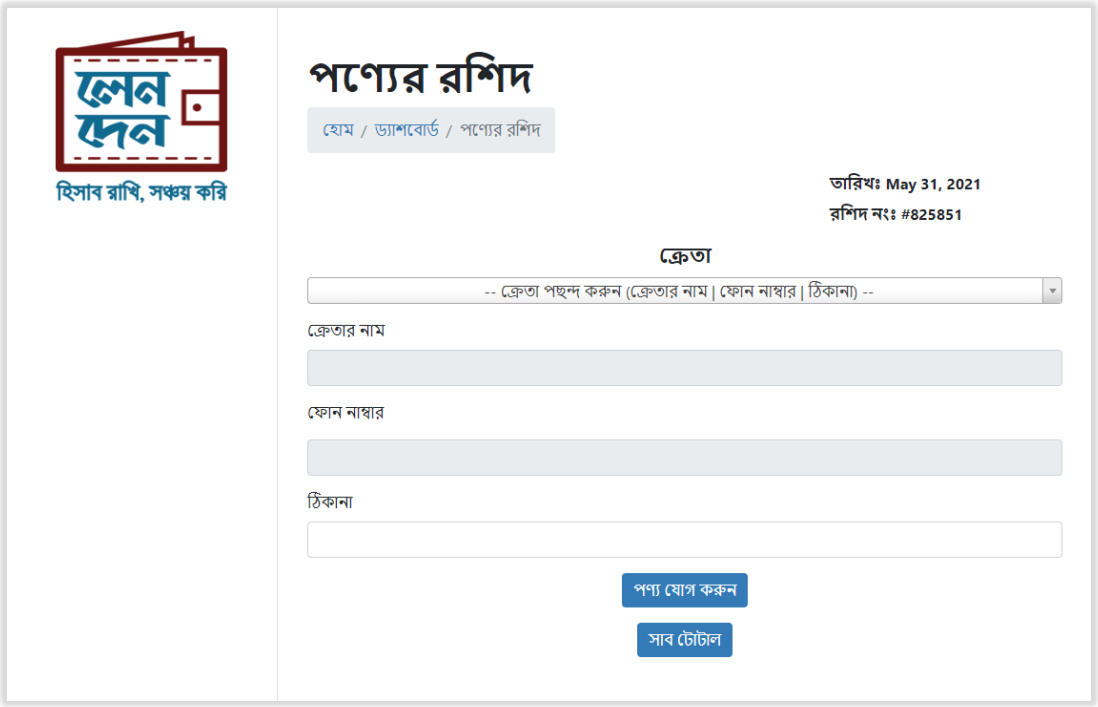

Fig 4.10.1:- Invoice

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5.15 Delivery Service

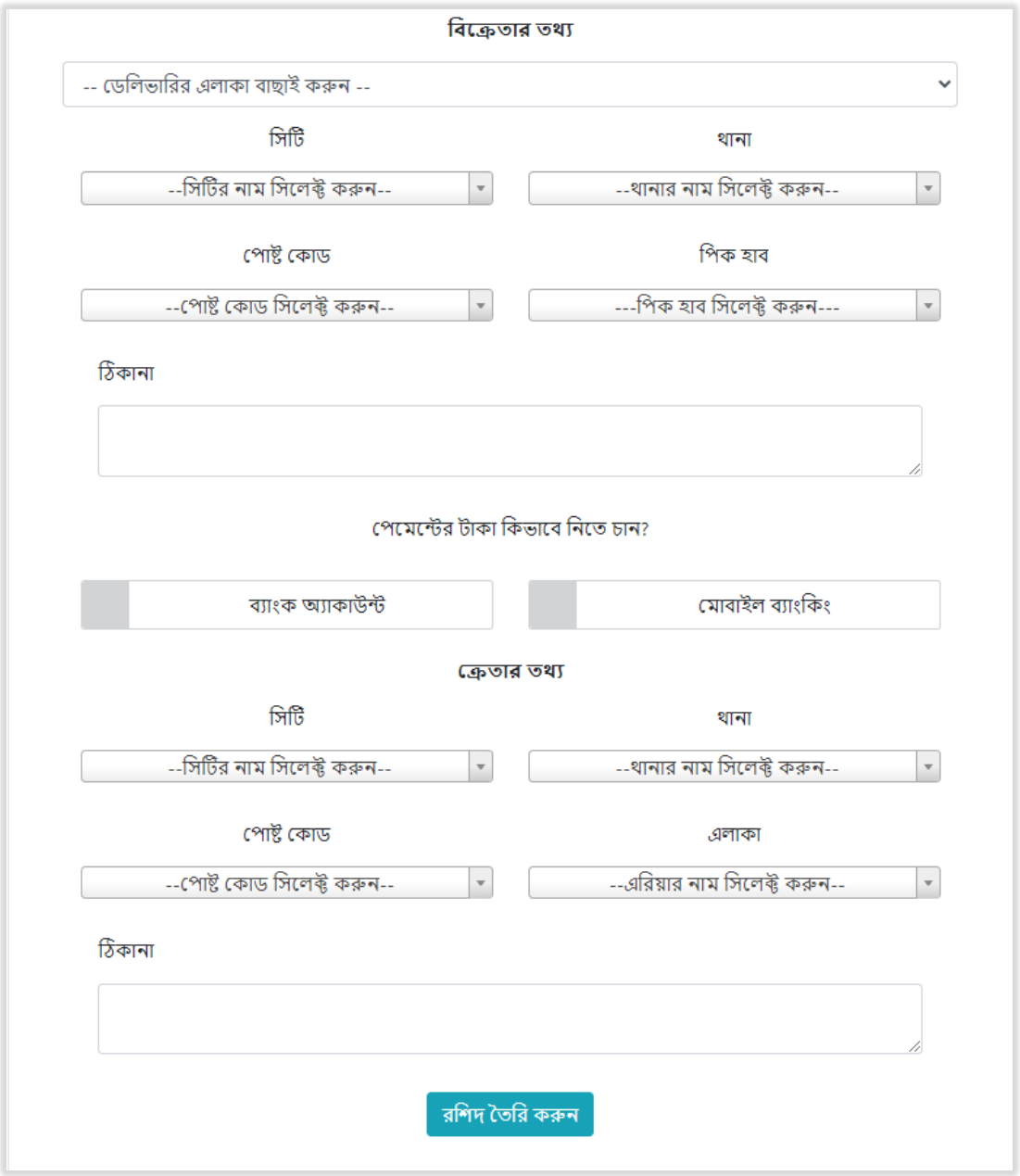

Fig 4.10.2:- Delivery Service

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5.16 Invoice List

Fig 4.11:- Invoice List Modal

5.17 Delivery List

Fig 4.12.1:- Delivery List

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5.18 Delivery Tracking

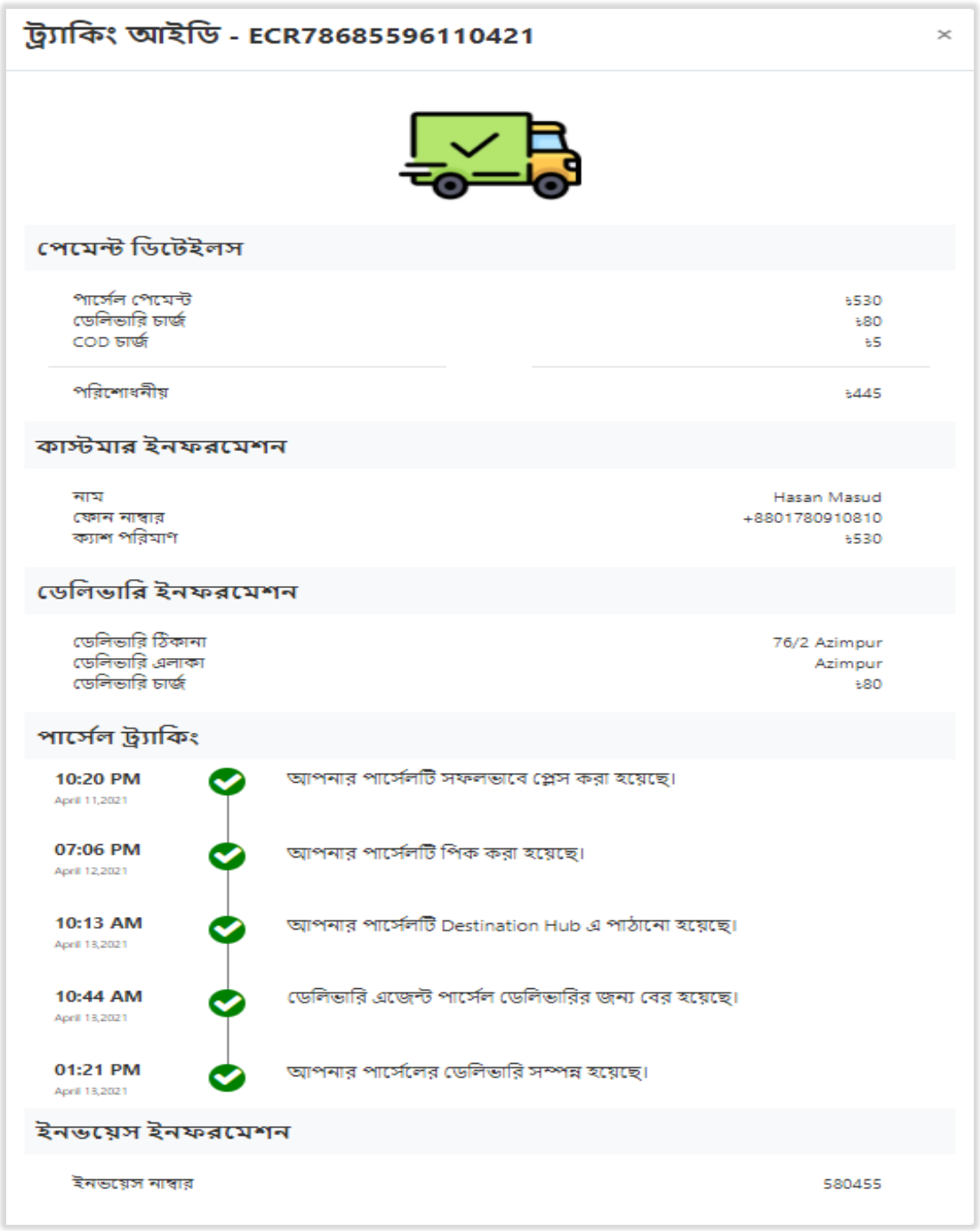

Fig 4.12.2:- Delivery Tracking

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5.19 Statement Page

Fig 4.13:- Statement

5.20 Due Amount Page

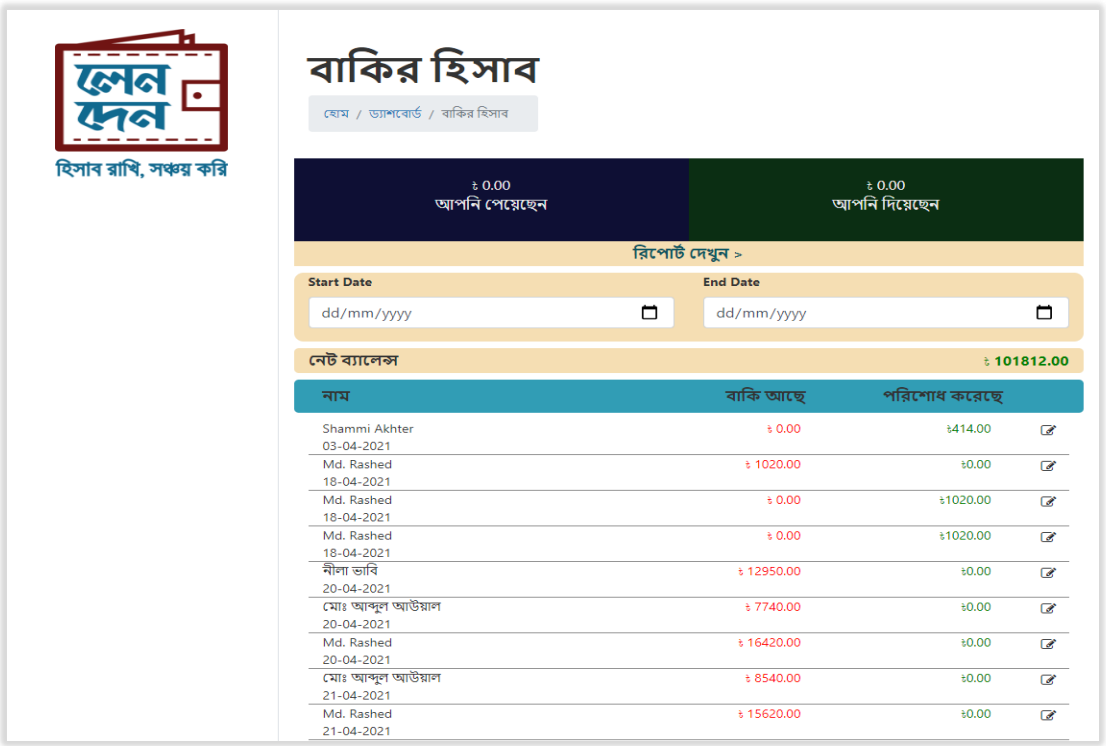

Fig 4.14.1:- Due Amount

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5.21 New Credit Add

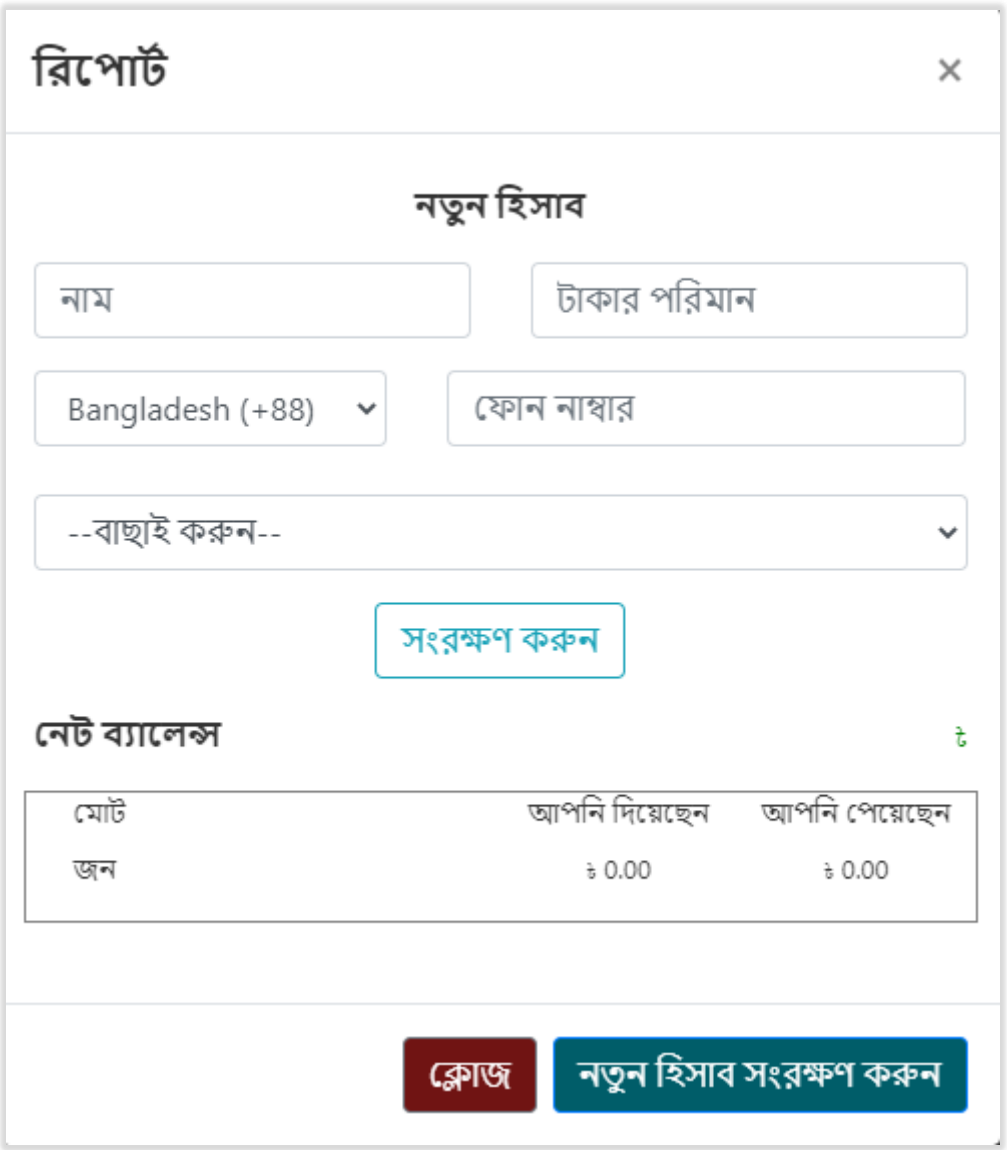

Fig 4.14.2:- Credit Add Modal

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6. Conclusion

6.1 Project summery

As I mentioned before that, landen is the first invoicing fintech app in Bangladesh. Landen Technologies promises to keep their features up to date in response to consumer demand. They are also devoted to providing a single point of contact for all financial issues faced by underserved micro, small, and digital enterprises, allowing them to participate in digital financial inclusion.

6.2 GitHub Link

As per my company role I can’t not share my GitHub repository link.

6.3 Future Scope

They want to be their customers' one-stop shop for financial solutions, and they want to do so in the most cost-effective and simple way possible. Nonetheless, they are working on a sustainable business that has a beneficial social impact alongside users. They also want to maximize shareholder benefit and create a win-win situation for all of their stakeholders.

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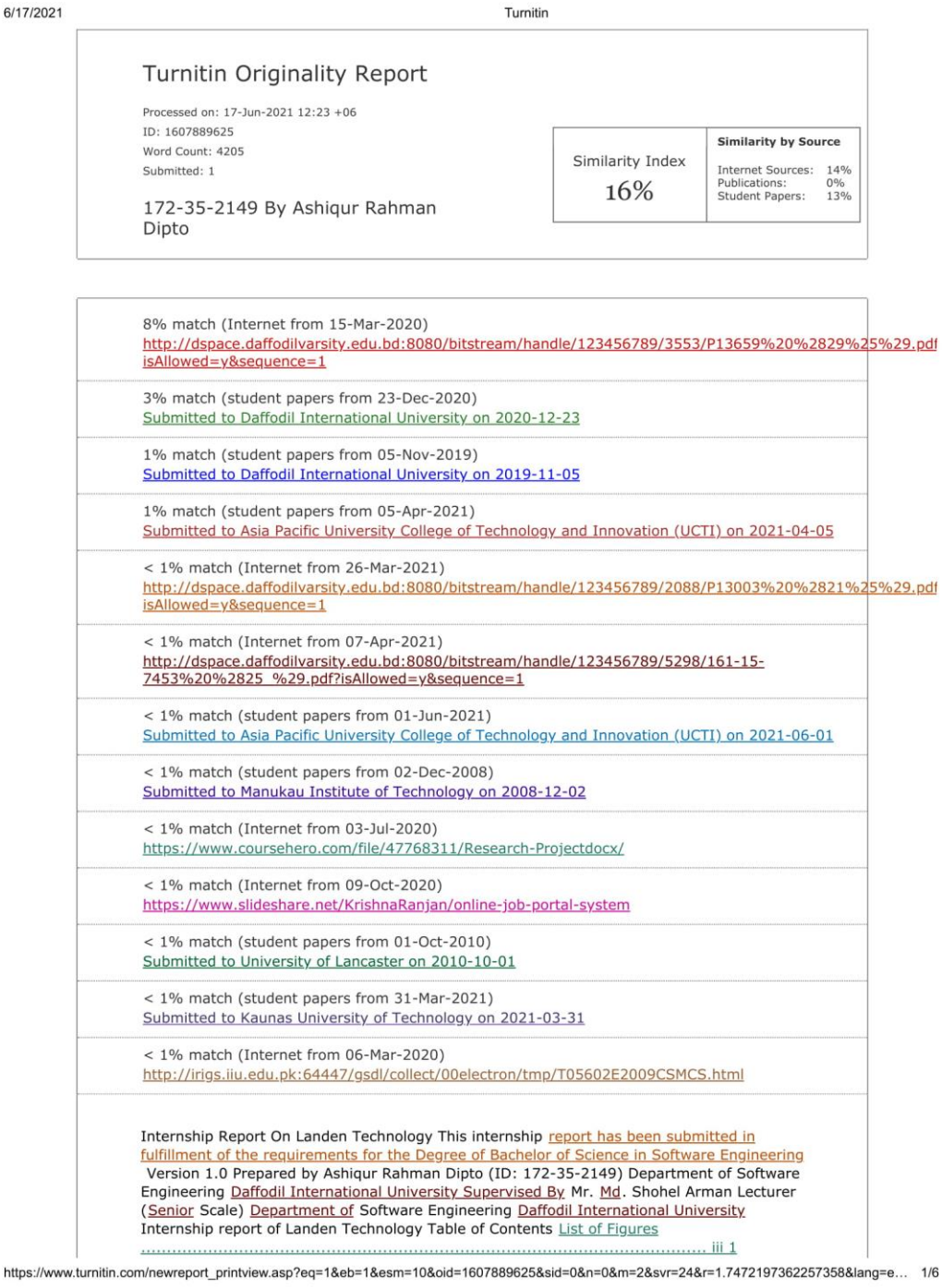

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New Credit Add ..... 33 iii © Daffodil International University Internship report of Landen Technology Appointment Letter iv © Daffodil International University Internship report of Landen Technology 1. Introduction 1.1 Company Overview My company's name is piCredo Software Ltd. Technology and innovation are at the heart of piCredo Software Ltd.'s narrative. They began their journey in January 2020, with the goal of providing the best technology and customer service possible. They have a strong technical team that can provide high-quality services to its customers. The vision at piCredo Software, is to reach across the globe with technological innovation that will have positive impact on people's life. Their mission is to empower people with technology and innovation. 1.2 My Responsibilities My designation for the following organization was software development intern. I started as a Junior Software Engineer last month. I worked as an intern for about four- month. My responsibilities in the internship period were full-stack web development. I developed multiple single-page projects but I developed a full web-based project named landen. An android app is also available in the google play store for the same name. I converted the web version to full of functionality. 1.3 Technology I Learned Here are some tools and techniques I learned during my internship period: 1. Firebase Implementation: I implemented google firebase in vanilla JavaScript. Where I use a real-time database that is available for (pay you to use to go) mode. Users authenticate using firebase authentication. They can perform CRUD operations. 2. Bangla Invoice Generation: I learned Bangla invoice generation using canvas drawing in JavaScript. 3. Payment Gateway Integration: I learned payment gateway integration. I'm now able to send an HTTP response using the necessary parameters and also can make an API request. 1 © Daffodil International University Internship report of Landen Technology 4. Delivery Channel Integration: I learned delivery channel integration. Where I can send HTTP post requests and get the individual cities, Thana, area, etc. And also learned how to track an order. 5. Ecommerce Site Development: Recently I also completed a full e-commerce website using laravel framework. 1.4 Project Overview Landen (www.landen.com.bd) is the first invoicing fintech application in Bangladesh. This Application allows small businesses, such as F-commerce, E-commerce, and micro-merchants, to conveniently keep track of their daily transactions and generate sales invoices. Micro-merchants and F-commerce firms will also be allowed to accept payment via online and deliver their products. 1.5 Project Purpose Small company owners, such as Facebook, e-commerce, and micro merchants, can use this software to simply establish daily business accounts and sales receipts. By using this application, small business owners can easily understand the real picture of their business at a glance. 1.6 Stakeholders ? Users (Micro-merchant Owners). ? Clients. 1.7 Gantt chart Fig 1.0:- Gantt chart 2 © Daffodil International University Internship report of Landen Technology HASH(0x7f7763e01550) Users Requirement ID UFR1.01.01 Title Registration Description The option is for User to register in this system. Priority High Requirement ID Title Description Priority UFR1.01.02 Login The option is for Users to Login in this system. High Requirement ID Title Description Priority UFR1.01.03 User Profile The option is for Users to update users Profile. Medium Requirement ID Title Description Priority UFR1.01.04 Add Products The option is for Users to Add Products. High Requirement ID Title Description Priority UFR1.01.05 Add Clients The option allows the Users to add their clients. High Requirement ID UFR1.01.06 Title Add Daily Invest Description This option allows the Users to add daily invest. Priority Medium 3 © Daffodil International University Internship report of Landen Technology Requirement ID Title Description Priority UFR1.01.07 Add Monthly Invest This option allows the Users to add their monthly invest. Medium Requirement ID Title Description Priority UFR1.01.08 View Clients List This option allows the Users to view/delete/update clients. Low Requirement ID Title Description Priority UFR1.01.09 View Products List This option allows the Users to view/delete/update products. Low Requirement ID Title Description Priority UFR1.01.10 Generate Invoice This option allows the Users to Generate Invoice. Medium Requirement ID Title Description Priority UFR1.01.11 View Invoice List This option allows the Users to view list of invoices. Low Requirement ID Title Description UFR1.01.12 Generate Payment URL This option allows the Users to generate payment url for clients to pay their due amount through online. Priority Medium 4 © Daffodil

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International University Internship report of Landen Technology Requirement ID Title Description Priority UFR1.01.13 Make Parcel Delivery This option allows the Users to make parcel for delivery. Medium Requirement ID Title Description Priority UFR1.01.14 Track Delivery The option is for Users to view delivery list and track their delivery. Medium Requirement ID Title Description Priority CFR1.01.15 Logout The option is for Users to Logout in this system. Low 2.1.2 Admin Requirement ID Title Description Priority AFR1. 02.01 Login The option is for Admin to login in this system. High Requirement ID Title Description Priority AFR1.02.02 View Delivery List The option is for Admin to view all delivery list. Medium Requirement ID AFR1.02.03 Title Track Individual Delivery Description The option is for Admin to track individual delivery. Priority Medium 5 © Daffodil International University Internship report of Landen Technology Requirement ID Title Description Priority AFR1.02.04 View Payment List The option is for Admin to view payment list. Medium Requirement ID Title Description payment table. AFR1.02.05 Excel Export The option is for Agent to export delivery table or Requirement ID Title Description Priority AFR1.02.07 Logout The option is for Agent to Logout in this system. Low 2.2 Non-Functional Requirements ‣ Right now registration process for web applications is off for some reason. Users must use mobile apps for the registration process. After completing user able to log in through the web. ‣ Users will be able to send OTP to registered mobile numbers up to 6 times in a row consecutively while login. After the 6th attempt user will get blocked for that phone number. And will unblock after 3-4 hours. ‣ For every operation user must need to wait 5-10 (based on internet speed) seconds until loading from the firebase database. ‣ After creating the invoice, the user will not be able to delete this or the sales info. ‣ Payment URL will available in the invoice when users choose online payment while generating invoices. 6 © Daffodil International University Internship report of Landen Technology 2.3 Use Case 2.3.1 Use Case Diagram for Users Fig 1.1:- User Use Case Diagram 2.3.2 Use Case Description (Users) HASH(0x7f7763e11728) name, phone, email, company name and page name respectively. ‣ Fill all the HASH(0x7f7763e13208). 7 © Daffodil International University Internship report of Landen Technology HASH(0x7f7763e05568) field and re-captcha container first appear in login screen. After confirming OTP user able to login the system. ‣ Write the phone number and solve re-captcha and then fill the right OTP HASH(0x7f7763e03138)HASH(0x7f7763e033c0) from right top bar. Flow of Events ‣ All the field will appear in user profile page. Upload company logo and sign will be there. ‣ Update any field which users want to. Post Condition An alert arise after successful update. Use Case No. 1.4.1 Use Case Name Add Options (Add Products) Actor Users Description Allowing users to Add products into the system. Precondition A modal popped up from top and remain in dashboard screen. Trigger Click the "Add" button in product add card. HASH(0x7f7763e039c0) product name, price, quantity etc. ‣ Click "Add Product" button to add products. Post Condition An alert arise after successful addition. 8 © Daffodil International University Internship report of Landen Technology Use Case No. 1.4.2 Use Case Name Add Options (Add Client) Actor Users Description Allowing users to Add clients into the system. Precondition A modal popped up from top and remain in dashboard screen. Trigger Click the "Add" button in client add card. HASH(0x7f7763e037c8), address etc. ‣ Click "Add Client" button to add clients. Post Condition An alert arise after successful addition. Use Case No. 1.4.3 Use Case Name Add Options (Add Daily Invest) Actor Users Description Allowing users to Add Daily Invest into the system. Precondition A modal popped up from top and remain in dashboard screen. Trigger Click the "Add" button in Daily Invest card. HASH(0x7f7763e03df8) transport cost, daily cost, others cost, with date etc. ‣ Click "Add Daily Invest" button to add Daily Invest. Post Condition An alert arise after successful addition. Use Case No. 1.4.4 Use Case Name Add Options (Add Monthly Cost) Actor Users Description Allowing users to Add Monthly Cost into the system. Precondition A modal popped up from top and remain in dashboard screen. Trigger Click the "Add" button in Add Monthly Cost card. Flow of Events ‣ First need to select month name and year name from select box. Then there will be some text fields for input of salary, rent, electricity, etc. ‣ Click "Add Monthly Cost" button to add Monthly Cost. Post Condition An alert arise after successful addition. 9 © Daffodil International University Internship report of Landen Technology Use Case No. 1.5.1 Use Case Name Do Operation (View/Update/Delete Products) Actor Users Description Allowing users to View/Update/Delete products. HASH(0x7f7763e08ad8) "Edit" icon button from product listing page and do operations. Flow of Events ‣ User able to update from specific field or delete products. ‣ Click "Update" button to update products. Post Condition An alert arise after successful update. Use Case No. 1.5.2 Use Case Name Do Operation (View/Update/Delete Clients) Actor Users Description Allowing users to View/Update/Delete clients. HASH(0x7f7763e092a0) "Edit" icon button from client listing page and do operations. Flow of Events ‣ User able to update from specific field or delete clients. ‣ Click "Update" button to update clients. Post Condition An alert arise after successful update. HASH(0x7f7763e093f0) view total net amount. HASH(0x7f7763e09910) "See" button in due amount card. Flow of Events ‣ Users can see

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four option loan from someone, loan to someone, received from client, give to clients and add or update fields. ‣ Select "Date Range" to see the net balance and details. Post Condition An alert arise after successful update or addition. 10 © Daffodil International University Internship report of Landen Technology HASH(0x7f7763e09c28) view statement for activities in monthly or date wise. Precondition User should remain in statement page. Trigger Select month name from select box or date range from date field. Flow of Events ‣ After selecting date range user able to see total cost. ‣ After selecting last field system automatically show the amount. Post Condition User able to show the amount. HASH(0x7f7763e0a240) In this section user can generate invoice, make payment online and make parcel for delivery. Precondition User should remain in invoice creation page. Trigger Create invoice by clicking "Click" button link from invoice card. Flow of Events ‣ First users need to select client's info, then product info and quantity, after calculating subtotal users able to perform next options. ‣ There will be thee checkbox (make pdf invoice, online payment, delivery service). Select one or more and make invoice using create invoice button Post Condition An alert arise after successful creation. HASH(0x7f7763e0a000) view invoice list. Precondition A modal popped up from top and remain in dashboard screen. Trigger View invoice list by clicking "View" button link from invoice list card. Flow of Events ‣ In the popup modal, there will be a table where all the invoice list is displayed. ‣ Users can close that modal. Post Condition Users can close that modal. 11 © Daffodil International University Internship report of Landen Technology Use Case No. 1.10 Use Case Name View/Track Delivery List Actor Users Description Allowing users to view delivery list and track delivery. Precondition User should remain in delivery listing page. Trigger Track delivery list by clicking "Order details" button link from delivery list table. Flow of Events ‣ In the delivery listing page, there will be a table where all the delivery list is displayed. ‣ When user click specific order from that list a tracking status and others information displayed. Post Condition Users can close that modal. HASH(0x7f7763e0a5a0) from right top bar. Flow of Events ‣ All the session for the specific account has been dismissed. Post Condition An alert arise after successful logged out in homepage. 12 © Daffodil International University Internship report of Landen Technology 2.3.3 Use Case Diagram for Admin Fig 1.2:- Admin Use Case Diagram 2.3.4 Use Case Description (Admin) HASH(0x7f7763e0c800) able to see admin panel. 13 © Daffodil International University Internship report of Landen Technology HASH(0x7f7763e0d238) view total order count, total payment count, total revenue count, pending delivery count, pending payment count. HASH(0x7f7763e0d5b0) No trigger need to apply. Flow of Events ‣ Admin can view total order count, total payment count, total revenue count, pending delivery count, and pending payment count. Post Condition Admin can see main table in dashboard page. HASH(0x7f7763e0e508) view all delivery info ad export to excel. Precondition Download as excel file. Trigger Click the "Export to excel" Link. Flow of Events ‣ Admin can view all the delivery list ‣ Download excel file. Post Condition Download notification appeared and start to download. HASH(0x7f7763e0d160) track download for individual users parcel. Precondition Click and show delivery status. Trigger Click the "Track" Link. Flow of Events ‣ Agent can view all the delivery list and track the delivery by using delivery id. Post Condition Know the delivery state. 14 © Daffodil International University Internship report of Landen Technology HASH(0x7f7763e13298) view all payment info ad export to excel. Precondition Download as excel file. Trigger Click the "Export to excel" Link. Flow of Events ‣ Agent can view all the payment list ‣ Download excel file. Post Condition Download notification appeared and start to download. HASH(0x7f7763e13688) ‣ All the session for admin has been dismissed. Post Condition Admin Logout Successfully. 15 © Daffodil International University Internship report of Landen Technology 3. System Design 3.1 Activity Diagram 3.1.1 Activity Diagram (Admin) Fig 2.1:- Admin Activity Diagram 16 © Daffodil International University Internship report of Landen Technology 3.1.2 Activity Diagram (Users) Fig 2.2:- Users Activity Diagram 17 © Daffodil International University Internship report of Landen Technology 3.2 Entity Relationship (ER) Diagram Fig 3.0:- ER Diagram 18 © Daffodil International University Internship report of Landen Technology 4. System Test & Development 4.1 Introduction HASH(0x7f7763e13f70)HASH(0x7f7763e16fb0). 4.2 Features to be tested 1. Registration 2. Login (OTP sending process) 3. Create/Read Operation. 4. Update/Delete Operation 5. Payment Process 6. Delivery Process 7. Invoice generation 8. Credit & Debit 4.3 Testing Approach 1. The full system will be tested manually and step by step. 2. Check all the validation criteria. 3. Check all messages and alert. 19 © Daffodil International University Internship report of Landen Technology 4.4 Testing Case Table Test ID Test Case Description Expected Output Actual Output TCID-1 Registration Enter data in all fields Successfully Registered Successfully Registered TCID-2 Login Send OTP in provided number. Successfully send OTP Successfully send OTP TCID-3 CRUD Operation Product add, client add, monthly, daily invest add to input all the required field. Operation Successful Operation Successful TCID-4 Online Payment Checking hash value and send http response then generate payment URL. Payment link generated Payment link generated TCID-5 Invoice

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Generation Showing all products indo and clients info in a canvas and make pdf. Pdf generation complete. Pdf generation complete TCID-5 Delivery Service Place order http request to courier marketplace and get delivery service. Order Successful Order Successful 4.5 Tools & Technology 1. Client Side: ? HTML5 ? CSS3 ? Vanilla JavaScript ? Bootstrap4 ? Jquery-3.2.1 ? Ajax 2. Server Side: ? Django ? Python 3. Database: ? Google Firebase Real-time Database. 4. IDE: ? Pycharm Professional (Student Licenced) ? VS Code 5. Git ? GitHub(Private Repository) 4.6 Deployment This web application is deployed in Linux-based shared host Cpanel. And live by using the domain of www.landen.com.bd 20 © Daffodil International University Internship report of Landen Technology 5. User Interface 5.1 Home Page Fig 4.0:- Homepage 5.2 Registration Page Fig 4.1:- Registration 21 © Daffodil International University Internship report of Landen Technology 5.3 Login Page Fig 4.2.1:- Login-1 Fig 4.2.2:- Login-2 22 © Daffodil International University Internship report of Landen Technology 5.4 User Profile Page Fig 4.3.1:- User Profile 5.5 Dashboard Page Fig 4.3.2:- Dashboard 23 © Daffodil International University Internship report of Landen Technology 5.6 Product Add Modal Fig 4.4:- Products Add 5.7 Clients Add Modal Fig 4.5:- Clients Add 24 © Daffodil International University Internship report of Landen Technology 5.8 Daily Invest Add Modal Fig 4.6:- Daily Invest Add 5.9 Monthly Invest Add Modal Fig 4.7:- Monthly Invest Add 25 © Daffodil International University Internship report of Landen Technology 5.10 Client List Page Fig 4.8.1:- Clients List 5.11 Client Edit Fig 4.8.2:- Clients Edit Modal 26 © Daffodil International University Internship report of Landen Technology 5.12 Products List Fig 4.9.1:- Products List 5.13 Product Edit Fig 4.9.2:- Product Edit Modal 27 © Daffodil International University Internship report of Landen Technology 5.14 Invoice Page Fig 4.10.1:- Invoice 28 © Daffodil International University Internship report of Landen Technology 5.15 Delivery Service Fig 4.10.2:- Delivery Service 29 © Daffodil International University Internship report of Landen Technology 5.16 Invoice List Fig 4.11:- Invoice List Modal 5.17 Delivery List Fig 4.12.1:- Delivery List 30 © Daffodil International University Internship report of Landen Technology 5.18 Delivery Tracking Fig 4.12.2:- Delivery Tracking 31 © Daffodil International University Internship report of Landen Technology 5.19 Statement Page Fig 4.13:- Statement 5.20 Due Amount Page Fig 4.14.1:- Due Amount 32 © Daffodil International University Internship report of Landen Technology 5.21 New Credit Add Fig 4.14.2:- Credit Add Modal 33 © Daffodil International University Internship report of Landen Technology 6. Conclusion 6.1 Project summery As I mentioned before that, landen is the first invoicing fintech app in Bangladesh. Landen Technologies promises to keep their features up to date in response to consumer demand. They are also devoted to providing a single point of contact for all financial issues faced by underserved micro, small, and digital enterprises, allowing them to participate in digital financial inclusion. 6.2 GitHub Link As per my company role I can't not share my GitHub repository link. 6.3 Future Scope They want to be their customers' one-stop shop for financial solutions, and they want to do so in the most cost-effective and simple way possible. Nonetheless, they are working on a sustainable business that has a beneficial social impact alongside users. They also want to maximize shareholder benefit and create a win-win situation for all of their stakeholders. 34 © Daffodil International University

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