

# Highlander Industries Employee & Contract Tracker

Employee & Contract web application (User Guide)

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## Table of Contents

1 Introduction .....	2
1.1 Application Users .....	2
1.2 Guide Use .....	2
2 Features .....	3
2.1 Admin Features .....	3
2.2 Manager Features .....	4
2.3 Regular User Features .....	5
3 Admin Users – Tour & Use .....	6
Admin Login .....	6
Homepage .....	8
Manage Users .....	9
Manage Contracts .....	10
Logout .....	11
4 Managers– Tour & Use .....	12
Home Page & Login .....	12
Manage Profile and Contract Update .....	12
Logout .....	16
5 Regular Users – Tour & Use .....	17
Home Page, Login and Registration .....	17
Logout .....	23

# 1 Introduction

## 1.1 Application Users

This application manages employees and contracts for Highlander Contracting Services LLC <sup>™</sup>. This application will have three different user views separated from the Admin, Manager, and Regular User. All these user configurations alter the database tables allowing modification and shift.

Highlander contracting service will have a system like retailers, where a contract is made, and a new user is registered. Consultants and Admins have access to contract creation and user monitoring. This application will help for long term planning and database organization.

This applications system will provide an interface hierarchy where Admins have the most, followed by managers, and finished by regular users. There will be a registration and user creation tab, where regular users may sign up for regular use.

## 1.2 Guide Use

This guide is intended for beginners and users of the Highlander Database System.

- Regular User – regular users will learn how to log in to account, manage contracts (create, delete, modify), and view database information. Modification on allowed tabs will be fully accessible.
- Admin – administrators will learn how to log in to account, create contracts, and manage members. All modifications are accessible.
- Manager – managers will learn how to login to account, create contracts, and modify contract types. This will overall specify manager requirements.

(Use case images will be further provided later in this user guide)

## 2 Features

### 2.1 Admin Features

- Login / Logout of the system
- Access Admin System Management
- Create User Account (Required: First Name, Last Name, Password, Re-Enter Password, Username, Phone Number, and User Type (Manager, Member))
- To create an Admin Account, database must be modified
- Access Manager View (Add New Contract, Contract Update, Contract Delete, Paid List, and Unpaid List)
- To Add Contract (Order ID is automatically made), (Contact, Type, Price, Payment needs to be specified)
- Contract Update access will be available as admin
- Contract Delete to remove unwanted contracts
- Paid list to display all contract paid lists
- Unpaid list to display all contract unpaid lists
- Access View Contracts View (Access given to admin to view all contracts and modify all its contents)
- Access User List View displays all users in the system, available for modification.
- Admin will not have access to user passwords stored in database

## 2.2 Manager Features

- Login / Logout of the system
- Access Manager System Management
- To create a Manager Account, database must be modified
- Access Manager View (Add New Contract, Contract Update, Contract Delete, Paid List, and Unpaid List)
- To Add Contract (Order ID is automatically made), (Contact, Type, Price, Payment needs to be specified)
- Contract Update access will be available as manager
- Contract Delete to remove unwanted contracts
- Paid list to display all contract paid lists
- Unpaid list to display all contract unpaid lists
- All manager views will have an option to export data as a pdf list for ease of access.

## 2.3 Regular User Features

- Login / Logout of the system
- Access User Management
- Has a contracts view lookup (contracts of that specific user)
- Has Contract Lookup, and contract type
- Can fill up contract details (ID, Contract, Type, Material Source, Price, Crew Amount, and Annual Crew Quantity)
- User can add made contract to cart and checkout.

### 3 Admin Users – Tour & Use

#### Admin Login

Upon launching application, the user is greeted with the view below (Fig. 1). This view shows the login page in which admin can input data (username and password) for login. However, admins cannot register an account, as their account needs to be made from database data itself.

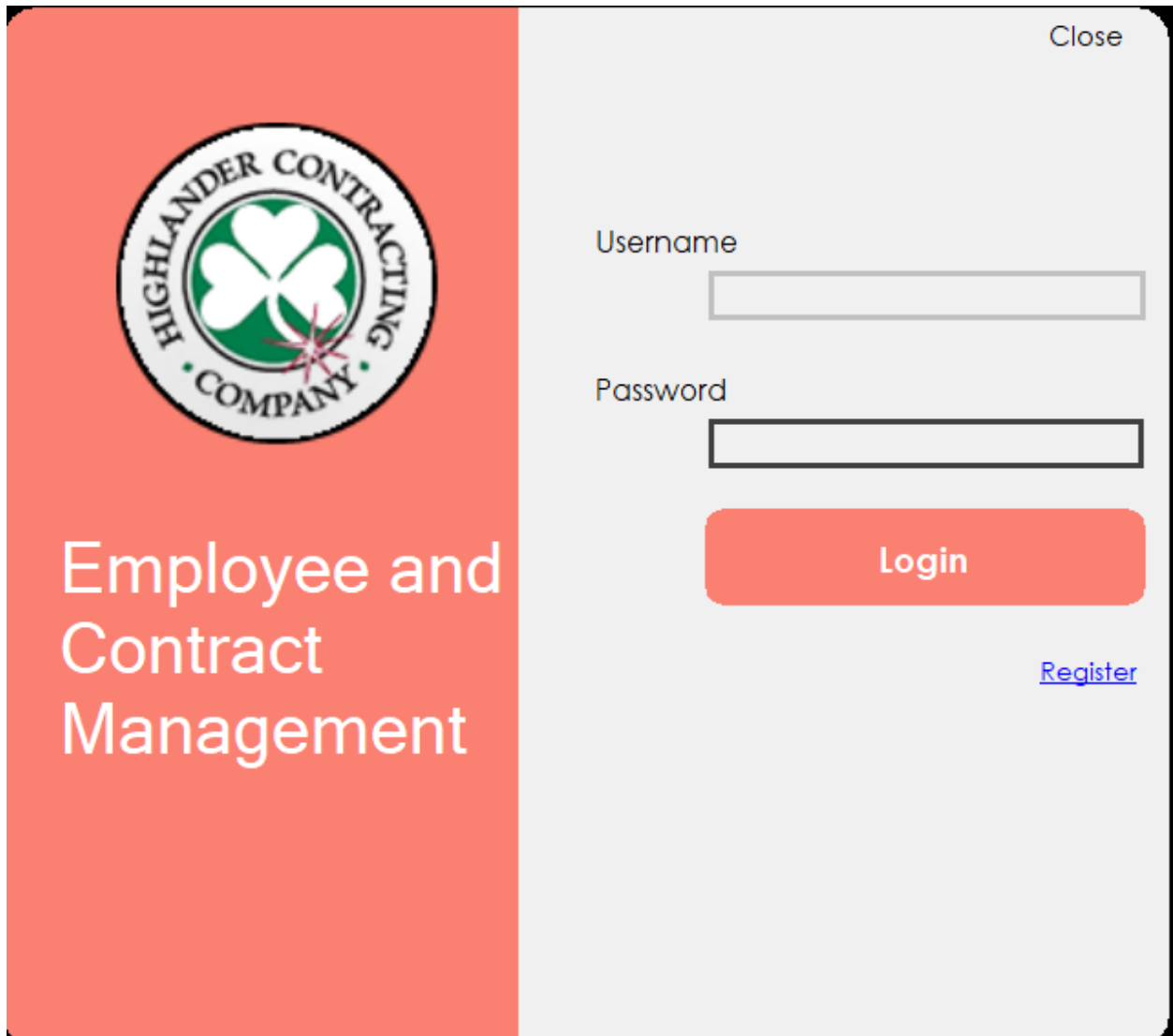
The image shows a mobile application login screen. On the left, there is a red vertical banner. At the top of the banner is a circular logo for 'HIGHLANDER CONTRACTING COMPANY' featuring a green shamrock. Below the logo, the text 'Employee and Contract Management' is written in white. On the right, a light gray panel contains a 'Close' button at the top right. Below it are two input fields: 'Username' and 'Password'. Under the password field is a salmon-colored 'Login' button. At the bottom right of the gray panel is a blue underlined link that says 'Register'.

Fig. 1

When username and password are given, Admin user may login by pressing the “Login” button colored in salmon.

If user gives the wrong login and password, prompt will be given (Fig. 2) of invalid password or login ID. This prompt will tell the user that the password or user ID is invalid.

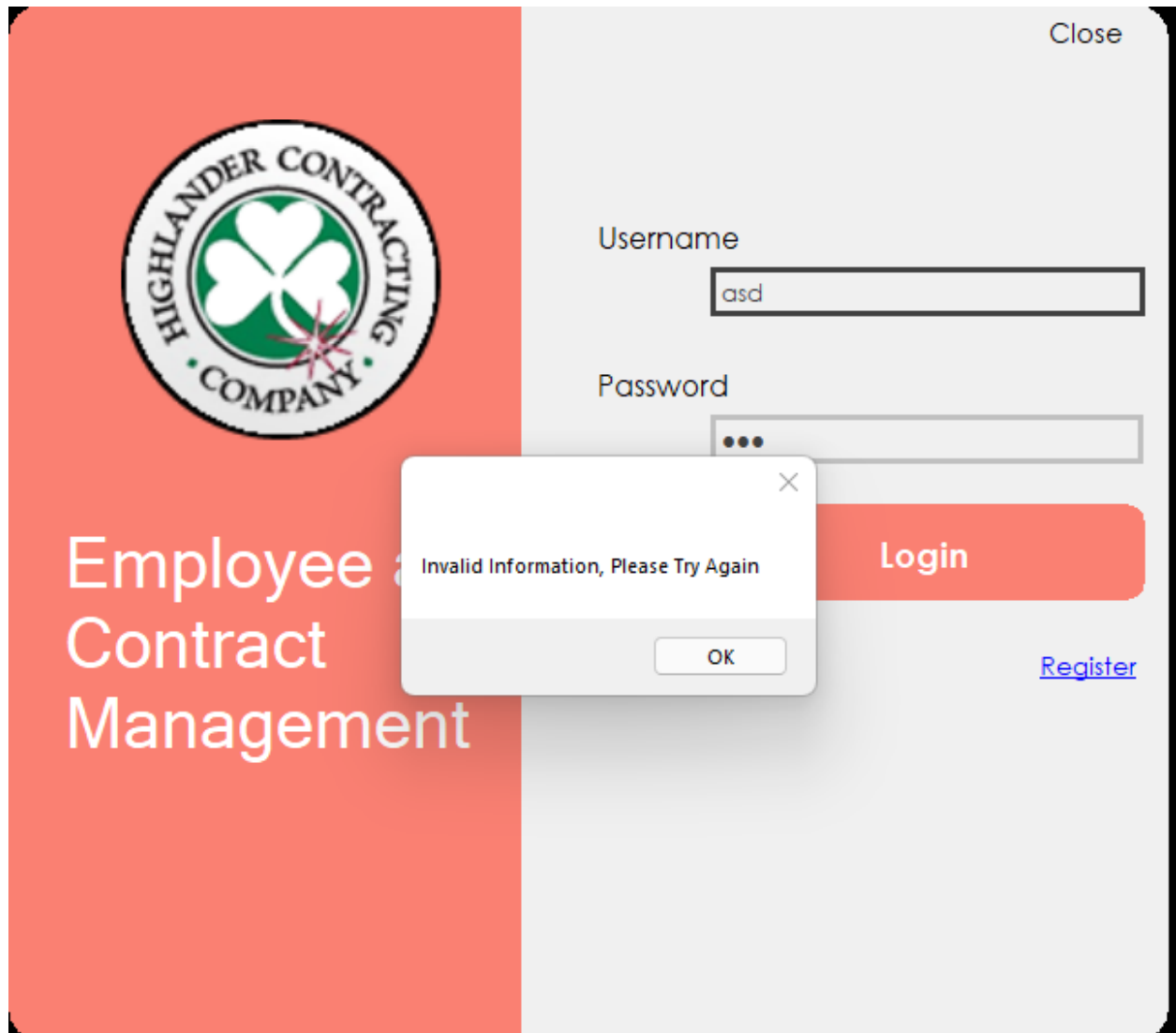


Fig. 2



## Homepage

Upon Successful login, user is greeted with Admin management view. Admin will have access to the console with tabs (Modify User, Modify Manager, View Contracts, View Orders) (Fig. 3). Admin will also see Account creation section on the other side of the page, to where Details need to be paced for account creation (Fig. 4).

The screenshot displays the 'Admin System Management' interface. On the left is a red sidebar with 'Admin' at the top, followed by 'Home' (highlighted in yellow), 'Create User', and 'User List'. The main content area has a title 'Admin System Management' and a 'Close' button. Below the title is a 'Console' section with four categories: 'Modify User:' with a 'User Home' button, 'Modify Manager:' with a 'Manger Home' button, 'View Contracts:' with a 'Contracts' button, and 'View Orders:' with an 'Orders' button. To the right of the console is the 'Create Account' form, which includes input fields for 'First Name', 'Last Name', 'Password', 'Re-enter Password', 'User Name', and 'Phone Number', a 'User Type' dropdown menu, and a green 'Create Account' button with a checkmark icon. A 'Sign Out' link is located in the top right corner.

Fig. 3

This screenshot is identical to the one in Fig. 3, showing the 'Admin System Management' interface. The 'Create Account' form is highlighted with a blue border, emphasizing its location and components: 'First Name', 'Last Name', 'Password', 'Re-enter Password', 'User Name', 'Phone Number', 'User Type' dropdown, and the 'Create Account' button. The sidebar and console sections remain the same.

Fig. 4

With this homepage view, Admin will also have access to other tabs on the left-hand side of the screen

Along with the Create User and Home view, Admin will be able to click on User list view. This view allows the admin to view the user list (Regular, Manager, and Admin) (Fig. 5).

Admin

Close

Sign Out

### Admin System Management

Console

Modify User:

User Home

Modify Manager:

Manger Home

View Contracts:

Contracts

View Orders:

Orders

Create Account

First Name :

Last Name :

Password :

Re-enter Password :

User Name :

Phone Number :

User Type

Create Account

Fig. 5

## Manage Users

When prompted to go to User List view, Admin will see User page with all user details and information. Seen in Fig. 6 (System Users List). Figure 6 also allows the admin to delete user data from the database.

### System Users List

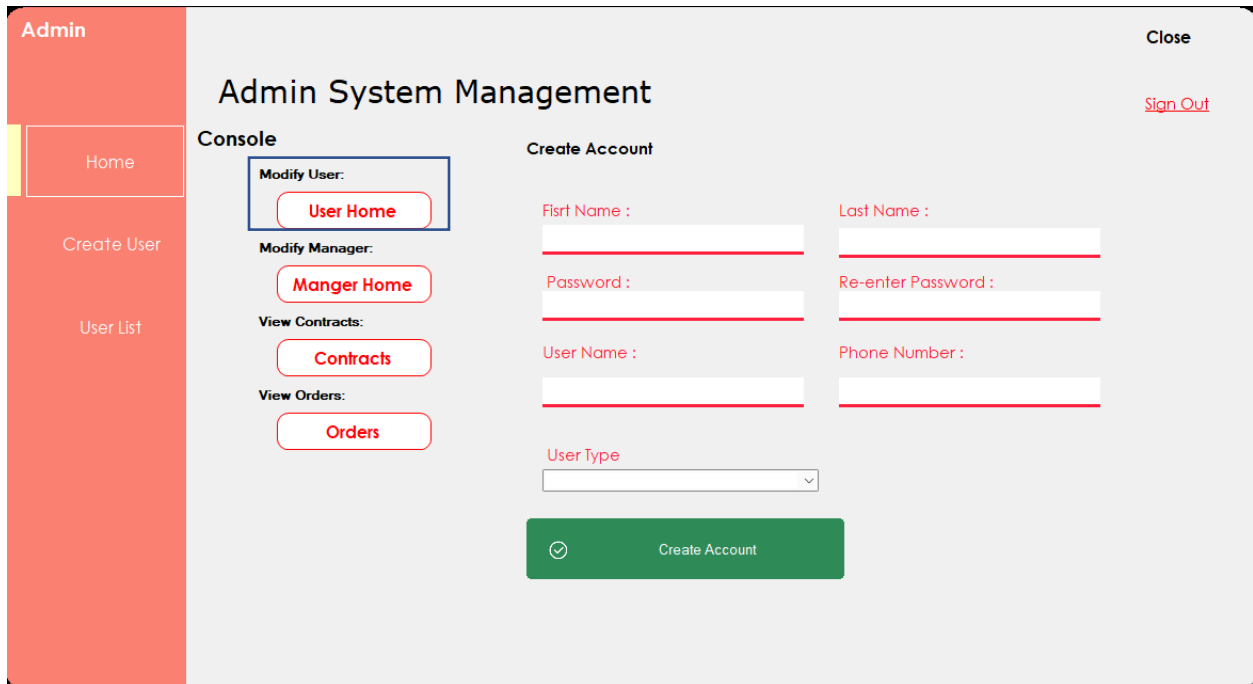
Back

	first	last	username	phone	usertype
▶	Liam	Moore	admin	1470001011	admin
	Neil	Labio	nlabio1	4437917165	member
	Mike	Wallace	manager	443-929-30	manager
•					

Fig. 6

## Manage Contracts

For Admin to access manager control view for Manager home and contract addition, Admin needs to click on User Home button prompt, leading them to admin contract creation page (Fig. 7) – (Fig 8).



The interface is titled "Admin System Management" and includes a sidebar with "Admin", "Home", "Create User", and "User List". The main area has a "Console" section with buttons for "User Home", "Manger Home", "Contracts", and "Orders". A "Create Account" form is also present with fields for First Name, Last Name, Password, Re-enter Password, User Name, and Phone Number, along with a "User Type" dropdown and a "Create Account" button.

Admin

Close

### Admin System Management

[Sign Out](#)

Home

Create User

User List

**Console**

Modify User:

[User Home](#)

Modify Manager:

[Manger Home](#)

View Contracts:

[Contracts](#)

View Orders:

[Orders](#)

Create Account

First Name :

Last Name :

Password :

Re-enter Password :

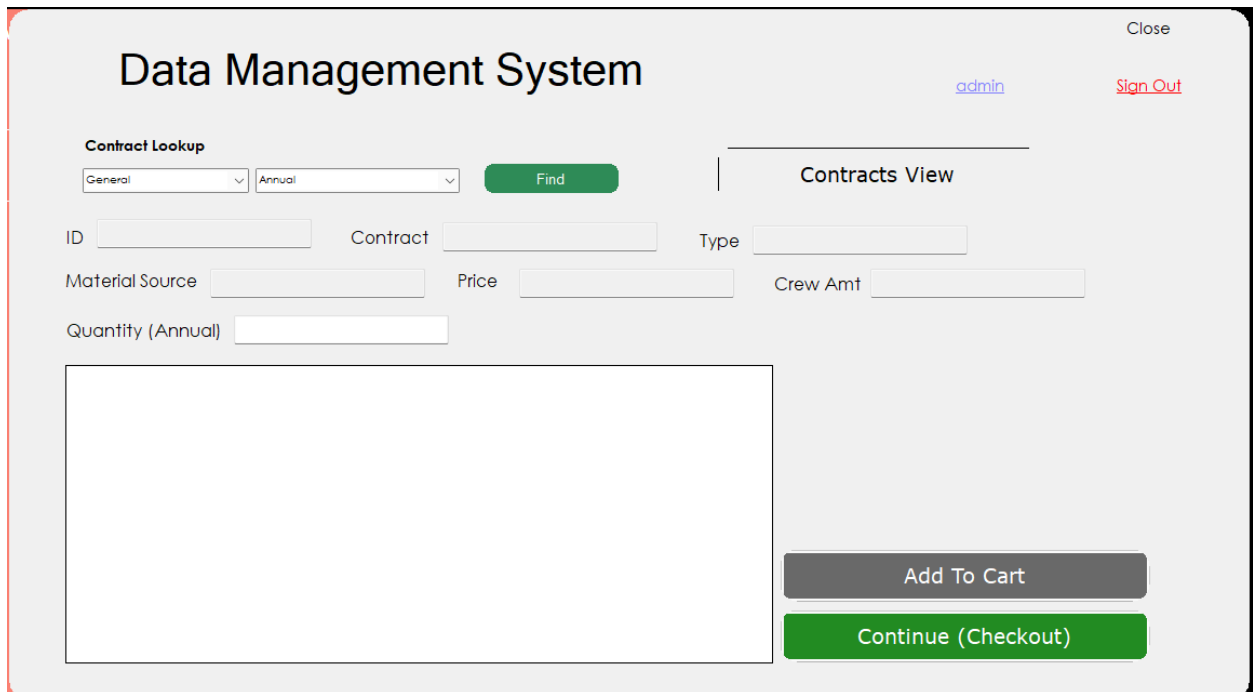
User Name :

Phone Number :

User Type

Create Account

Fig. 7



The interface is titled "Data Management System" and includes a sidebar with "Contract Lookup" and "Contracts View". The main area has a "Contract Lookup" section with dropdowns for "General" and "Annual", a "Find" button, and input fields for "ID", "Contract", "Type", "Material Source", "Price", "Crew Amt", and "Quantity (Annual)". A "Contracts View" section is also present with "Add To Cart" and "Continue (Checkout)" buttons.

Close

### Data Management System

[admin](#) [Sign Out](#)

Contract Lookup

General Annual Find

Contracts View

ID Contract Type

Material Source Price Crew Amt

Quantity (Annual)

Add To Cart

Continue (Checkout)

Fig.8

Figure 8 shows the data management system page to view admin contracts and to make new admin contracts.

Clicking on the Manager Home button allows the admin to access the manager page, to where the manager can add new contracts, update contracts, delete contracts, view paid contracts, view unpaid contracts (Fig. 9).

id	model	type1	materials	price	crewamount
3	General	Annual	imported	216,000	11
4	Electrical	Monthly	manufactured	511,300	22
5	HVAC	Monthly	imported	339,000	16
8	Data	Annual	imported	88,000	6
12	Fire Alarm	Annual	manufactured	8,000	2

Fig. 9

## Logout

To logout admin can click the sign out prompt on the top-left of the application tab, returning the user back to Figure 1. (Fig 10)

Fig. 10

## 4 Managers– Tour & Use

### Home Page & Login

Like all users, managers are greeted with the home page (Fig. 1), where they are prompted to login.

Managers cannot register for their own accounts, and if needed Amin must create an account for them.

### Manage Profile and Contract Update

When successfully signed in, manager view will show System Management, where they can modify and change contract details.

The first view shows the add new contract view, where manager has the option to create a contract based on given constraints (Fig. 11)

The screenshot displays the 'System Management' interface. On the left is a red sidebar with navigation links: 'Add New', 'Contract Update', 'Contract Delete', 'Paid List', and 'Unpaid List'. At the bottom of the sidebar is the Highlander Contracting Company logo. The main content area has a title 'System Management' with a 'Close' link. Below the title, it says 'Manager' followed by a 'Sign Out' link. The 'Add Contract' section contains form fields for 'ID' (with a hint 'Id Auto Number'), 'Contract', 'Type', 'Materials' (a dropdown), 'Price', and 'Crew Amount'. Below these fields is a table with 7 columns: id, model, type1, materials, price, and crewamount. The table contains 5 rows of data. At the bottom of the main area are two buttons: 'Add' and 'List'.

id	model	type1	materials	price	crewamount
3	General	Annual	imported	216,000	10
4	Electrical	Monthly	manufactured	511,300	22
5	HVAC	Monthly	imported	339,000	16
8	Data	Annual	imported	88,000	6
12	Fire Alarm	Annual	manufactured	8,000	2

Fig. 11

Each view will also have a list export option, where the user has the option to export the data to a pdf when needed. (Fig. 12)

**System Management** Close

Manager [Sign Out](#)

**Add Contract**

ID  Contract  Type

Materials  Price  Crew Amount

id	model	type1	materials	price	crewamount
3	General	Annual	imported	216,000	10
4	Electrical	Monthly	manufactured	511,300	22
5	HVAC	Monthly	imported	339,000	16
8	Data	Annual	imported	88,000	6
12	Fire Alarm	Annual	manufactured	8,000	2

**Add** **List**

Fig. 12

The contract Update view allows the manager to edit and modify contract availabilities and crew amounts with specific constraints, the manager may then update the data when pressed “Update” (Fig. 13).

**System Management** Close

Manager [Sign Out](#)

**Update Form**

ID  Edit-Contract  Edit-Type

Change-Material Source  Edit-Price  Edit-Crew Amount

id	model	type1	materials	price	crewamount
3	General	Annual	imported	216,000	10
4	Electrical	Monthly	manufactured	511,300	22
5	HVAC	Monthly	imported	339,000	16
8	Data	Annual	imported	88,000	6
12	Fire Alarm	Annual	manufactured	8,000	2
*					

**Update**

Fig. 13

Manager will also have the option to Update already present contract data from the database. Clicking on a contract will autofill the information, and manager must edit each tab (Fig. 14).

**System Management** Close

Manager [Sign Out](#)

**Update Form**

ID  Id Auto Number Edit-Contract  Edit-Type

Change-Material Source  Edit-Price  Edit-Crew Amount

id	model	type1	materials	price	crewamount
3	General	Annual	imported	216,000	10
4	Electrical	Monthly	manufactured	511,300	22
5	HVAC	Monthly	imported	339,000	16
8	Data	Annual	imported	88,000	6
12	Fire Alarm	Annual	manufactured	8,000	2

**Update**

Fig. 14

Manager will also have the option to Delete already present contract data from the database. Clicking on a contract will autofill the information, and manager must press delete to complete request (Fig. 15).

**System Management** Close

Manager [Sign Out](#)

**Delete Form**

ID  Id Auto Number Contract  Type

Material Source  Price  Crew Amount

id	model	type1	materials	price	crewamount
3	General	Annual	imported	216,000	10
4	Electrical	Monthly	manufactured	511,300	22
5	HVAC	Monthly	imported	339,000	16
8	Data	Annual	imported	88,000	6
12	Fire Alarm	Annual	manufactured	8,000	2

**Delete**

Fig. 15

A paid view is also added to show managers if contract order is available and paid. This paid list has 2 buttons to mark contract as unpaid or delete the existing contract (Fig. 16). Managers can specify the contract details by filling in the information within the requested tabs.

**System Management** Close

Manager [Sign Out](#)

Order Id  Contract  Type

Price  Payment (Yes/No)

id	user	model	price	paid
18	rlabio1	General Annual i...	216000	yes

**Mark Unpaid** **Delete** **Paid List**

Fig. 16

At the end of the managers view, an unpaid list can be seen with all the unpaid contract orders. Managers will then have the option to make that contract paid or delete it from the database (Fig. 17).

**System Management** Close

Manager [Sign Out](#)

Unpaid Form ID  Contract  Type

Price  Paid (Yes/No)

id	user	model	price	paid
19	rlabio1	General Annual i...	216000	no

**Paid** **Delete** **List**

Fig. 17



## Logout

For the Manager to logout, like the manager and admin, there is an application button located in the top right of the application (Fig. 18), and when interacted with, will send the user back to application home page (Fig. 1).


Add New

Contract Update

Contract Delete

Paid List

Unpaid List



# System Management

Close

Manager [Sign Out](#)

**Add Contract**

ID  Contract  Type

Materials  Price  Crew Amount

	id	model	type1	materials	price	crewamount
▶	3	General	Annual	imported	216,000	10
	4	Electrical	Monthly	manufactured	511,300	22
	5	HVAC	Monthly	imported	339,000	16
	8	Data	Annual	imported	88,000	6
	12	Fire Alarm	Annual	manufactured	8,000	2

Add

List

Fig. 18

## 5 Regular Users – Tour & Use

### Home Page, Login and Registration

Regular Users will be prompted the same home page when application is running (like admin and manager). With this instance, user can input valid identification and press login (Fig. 1) to enter application. If failed prompt will show of login failure (Fig. 2). With Regular User, they have an option to register for an account. By pressing register on the home page (Fig. 19), they will be directed to register view.

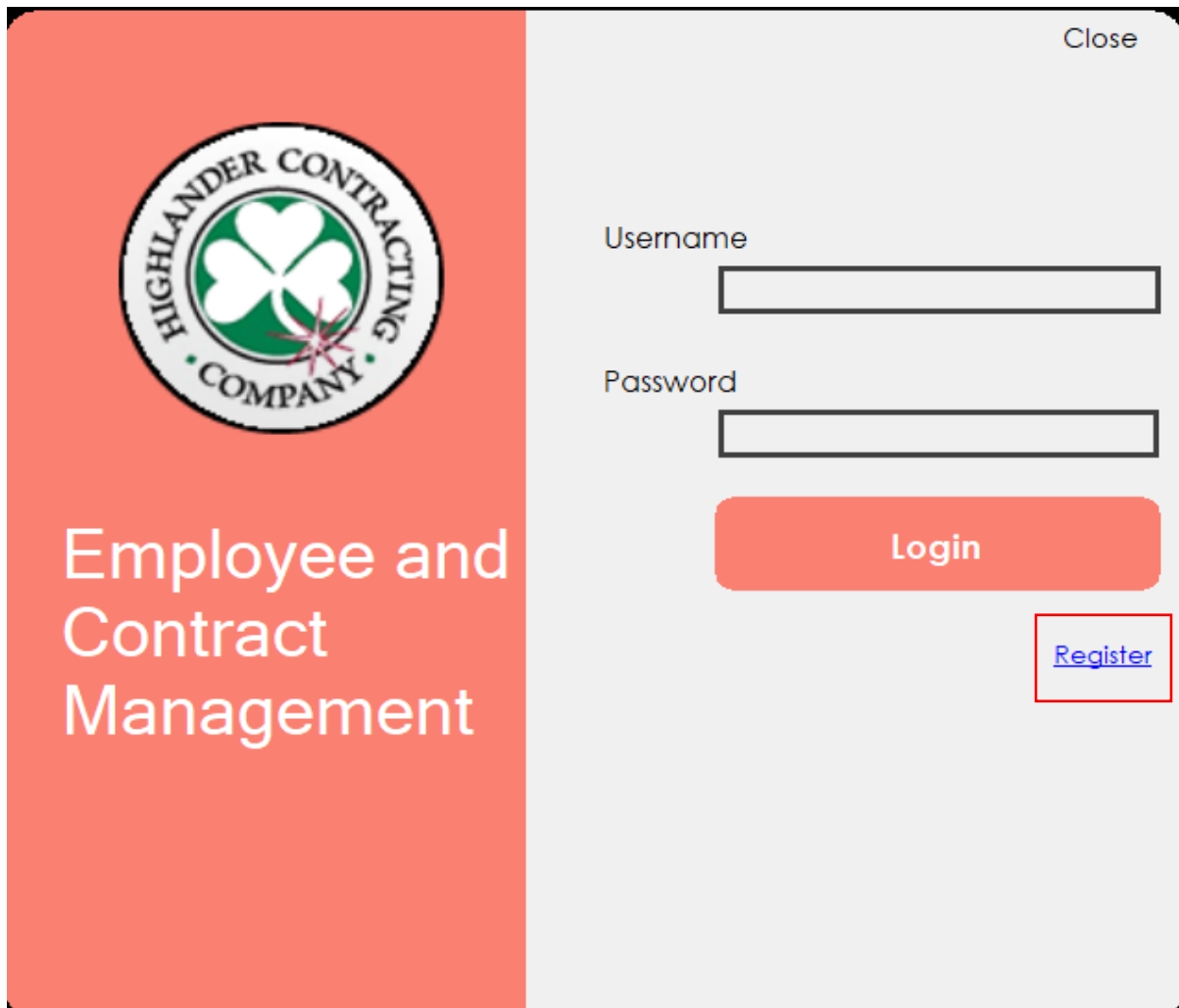
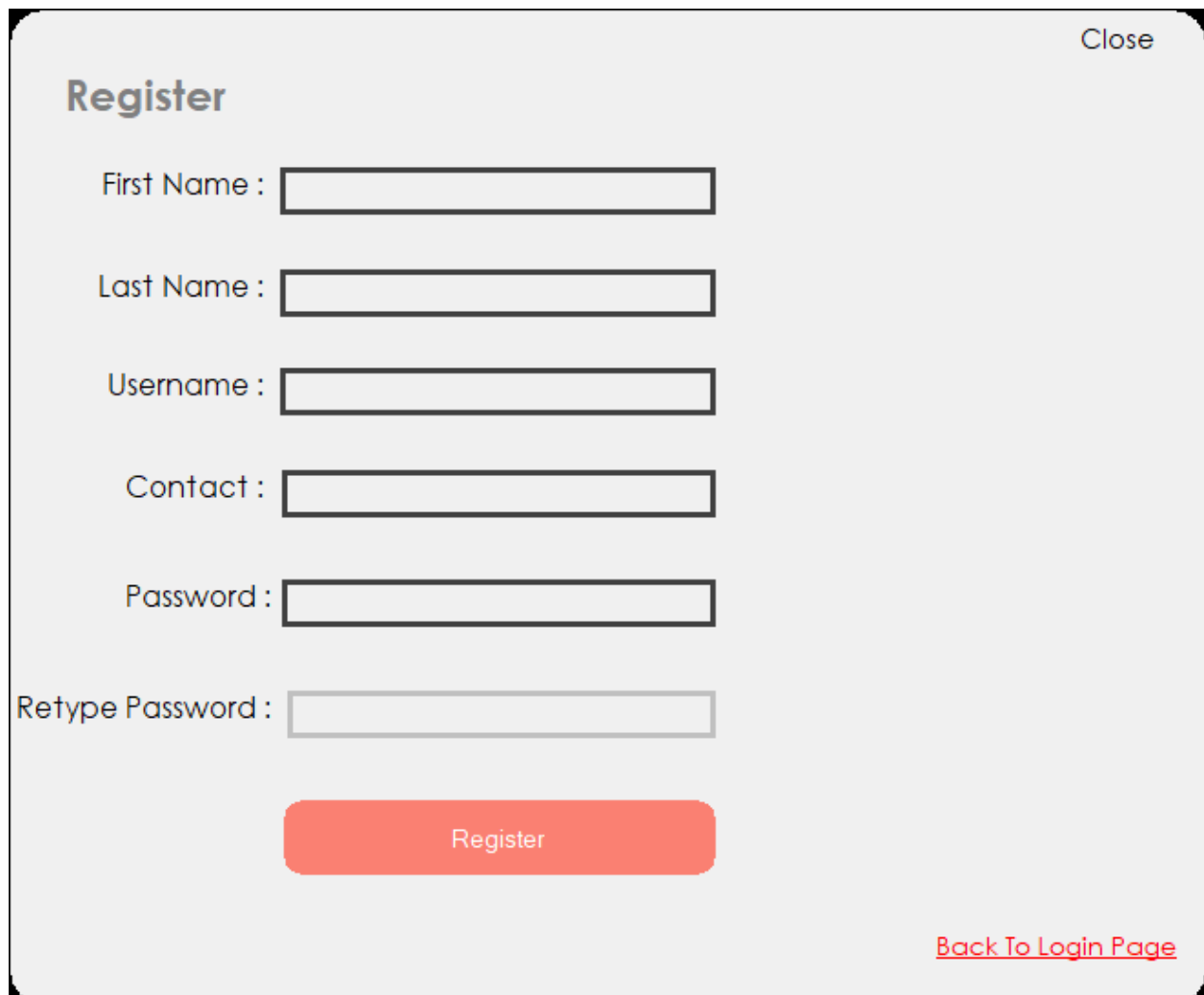
The image shows a mobile application interface for Highlander Contracting Company. On the left, there is a red vertical banner with the company's logo at the top, which is a circular emblem containing a green shamrock and the text 'HIGHLANDER CONTRACTING COMPANY'. Below the logo, the text 'Employee and Contract Management' is written in white. On the right, there is a light gray panel with a 'Close' button in the top right corner. This panel contains two input fields: 'Username' and 'Password'. Below these fields is a red 'Login' button. At the bottom right of the gray panel, there is a blue 'Register' link, which is highlighted by a red rectangular box.

Fig. 19

The register view shown below (Fig. 20), prompts the regular user to input their first name, last name, wanted username, contact information (number), password, and password validation. If all registration information is valid, then the account is made. If registration is invalid, then a prompt will be given to notify the user (Fig. 21a, 21b).

A screenshot of a web application's registration form. The form is titled "Register" in a bold, dark font at the top left. In the top right corner, there is a "Close" link. The form contains six input fields, each preceded by a label: "First Name :", "Last Name :", "Username :", "Contact :", "Password :", and "Retype Password :". Each label is followed by a rectangular text input box. Below the input fields is a large, rounded rectangular button with a red-to-orange gradient, labeled "Register". In the bottom right corner of the form, there is a red text link that says "Back To Login Page".

Close

**Register**

First Name :

Last Name :

Username :

Contact :

Password :

Retype Password :

Register

[Back To Login Page](#)

Fig. 20

Figure 21a and 21b will show the successful and incomplete regular user registration, when making a new account for the database application. When making an account fails, it is not stored into the database, but is still modifiable.

The registration form is titled "Register" and includes a "Close" button in the top right corner. It contains the following fields: "First Name" (filled with "Mike"), "Last Name" (filled with "Deloo"), "Username" (filled with "user"), "Contact" (filled with "443-665-7865"), "Password" (filled with dots), and "Retype Password" (filled with dots). A red "Register" button is at the bottom center. A red link "Back To Login Page" is at the bottom right. A white modal box with a close button (X) is overlaid on the form, displaying the message "Success" and an "OK" button.

Fig. 21a (Successful Registration)

The registration form is titled "Register" and includes a "Close" button in the top right corner. It contains the following fields: "First Name" (filled with "Mike"), "Last Name" (empty), "Username" (empty), "Contact" (empty), "Password" (filled with two dots), and "Retype Password" (empty). A red "Register" button is at the bottom center. A red link "Back To Login Page" is at the bottom right. A white modal box with a close button (X) is overlaid on the form, displaying the message "Fill all fields" and an "OK" button.

Fig. 21b (Failed Registration)

When logged in user sees the Data Management System View, where user can lookup contracts and add contracts to cart and checkout (Fig. 22a) – (Fig. 22b).

The screenshot shows the 'Data Management System' interface. At the top right, there is a 'Close' button, a user link 'nlabio.1', and a 'Sign Out' link. The main section is divided into two tabs: 'Contract Lookup' and 'Contracts View'. The 'Contract Lookup' tab is active, showing two dropdown menus for 'General' and 'Annual', a green 'Find' button, and several input fields for 'ID', 'Contract', 'Type', 'Material Source', 'Price', 'Crew Amt', and 'Quantity (Annual)'. The 'Contracts View' tab is inactive. At the bottom right, there are two buttons: 'Add To Cart' (grey) and 'Continue (Checkout)' (green).

Fig. 22a

The screenshot shows the 'Data Management System' interface with the 'Contract Lookup' tab active. The input fields are now filled: 'ID' is '3', 'Contract' is 'General', 'Type' is 'Annual', 'Material Source' is 'imported', 'Price' is '216,000', 'Crew Amt' is '11', and 'Quantity (Annual)' is '1'. A table with 5 columns (id, model, type1, materials) and 1 row (3, General, Annual, imported) is displayed. A confirmation dialog box is open in the center, showing the text '3 General Annual imported\*1 Added to Cart' and an 'OK' button. The 'Contracts View' tab is inactive. At the bottom right, there are two buttons: 'Add To Cart' (grey) and 'Continue (Checkout)' (green).

Fig. 22b

After user specifies the type of contract they need and checks out (Cancel or Confirm) (Fig 23a), afterwards they can view their purchase with the following screen (Fig 23b).

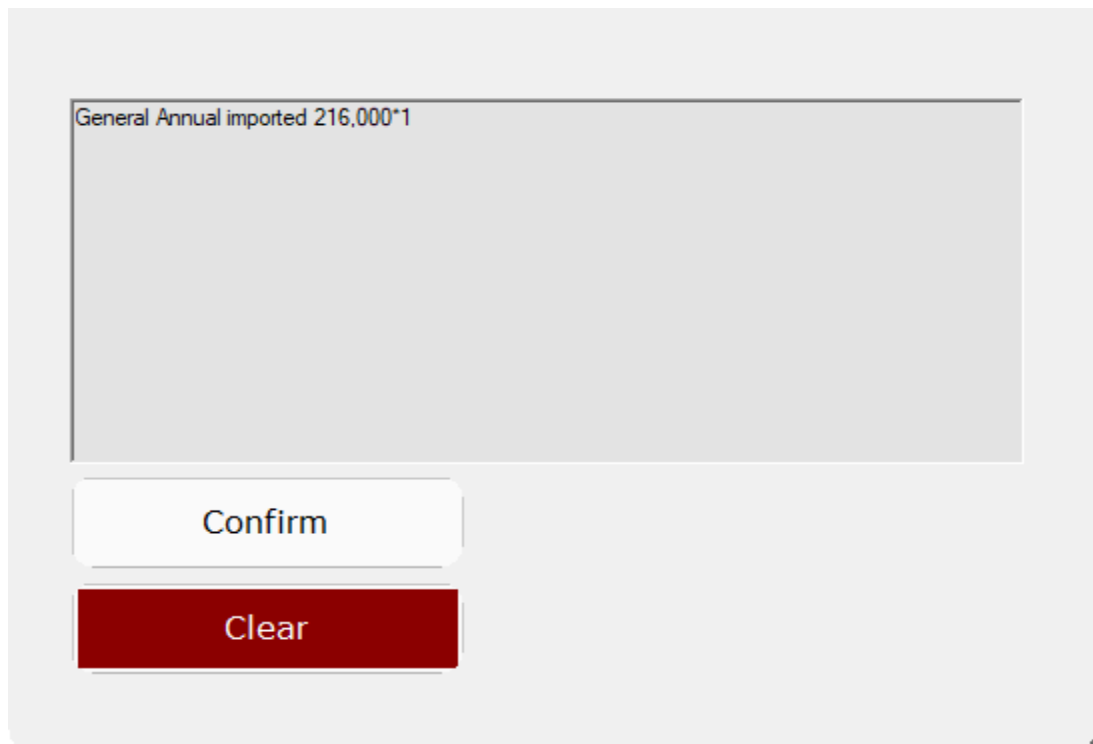


Fig. 23a

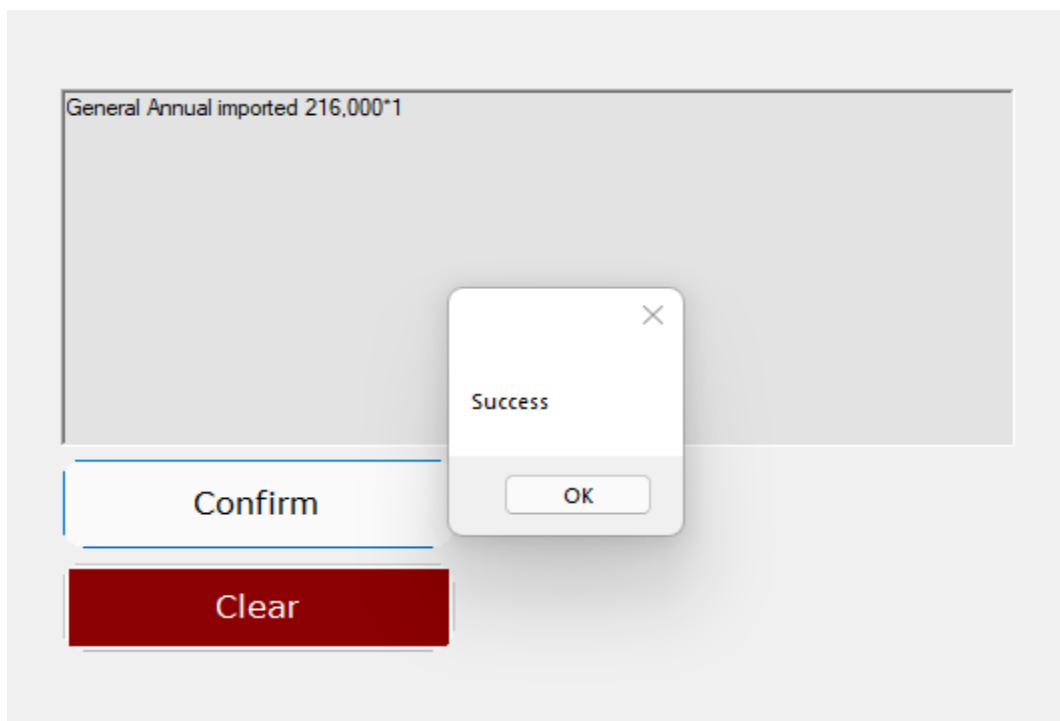


Fig 23b

User will also have the option to view all contracts in this tab, by clicking on Contracts View button located on the top right of the screen (Fig. 24a), where they will have the option to create another contract or delete existing ones. (Fig. 24b).

The screenshot shows the 'Data Management System' interface. At the top right, there is a 'Close' button. Below the title, there is a 'Contract Lookup' section with two dropdown menus (one set to 'General' and the other to 'Annual') and a green 'Find' button. To the right of this section, a blue box highlights a button labeled 'Contracts View'. Below the lookup section, there are input fields for 'ID', 'Contract', 'Type', 'Material Source', 'Price', 'Crew Amt', and 'Quantity (Annual)'. At the bottom right, there are two buttons: 'Add To Cart' (grey) and 'Continue (Checkout)' (green).

Fig. 24a

The screenshot shows the 'Contracts' view interface. At the top right, there is a 'Close' button. Below the title, it says 'Signed in as user: nlabio1'. To the right of the title is a button labeled 'New Contract'. Below this is a table with the following data:

	id	model	price	paid
▶	18	General Annual imported 216,000*1	216000	yes
	19	General Annual imported 216,000*1	216000	no

Below the table is a large grey rectangular area. At the bottom right, there is a red button labeled 'Delete'. At the bottom left, there is a 'userid' label and a 'Logout' button.

Fig. 24b

## Logout

For the User to logout, like the manager and admin, there is an application button located in the top right of the application (Fig. 25), and when interacted with, will send the user back to application home page (Fig. 1).

The screenshot displays the 'Data Management System' interface. At the top right, there is a 'Close' link and a 'Sign Out' button, which is highlighted with a red rectangular box. Below the title, there is a 'Contract Lookup' section with two dropdown menus (one set to 'General' and the other to 'Annual') and a green 'Find' button. To the right of this is a 'Contracts View' section. Below these sections are several input fields: 'ID', 'Contract', 'Type', 'Material Source', 'Price', 'Crew Amt', and 'Quantity (Annual)'. A large empty rectangular box is positioned below the input fields. At the bottom right, there are two buttons: a grey 'Add To Cart' button and a green 'Continue (Checkout)' button.

Fig. 25