



**IT 6L – FUNDAMENTALS OF DATABASE SYSTEM (6219)**

**PROPOSAL: REQUIREMENTS FOR Balutan Inventory Management System**

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**March 2023**

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## 1. EXECUTIVE SUMMARY

This section provides general information of the Balutan Inventory Management System for the target industry and specific users and describes the features/functions of the proposed system indicating the transactions being automated.

Our proposed project aims to help minor and major business holders especially those who are just starting their business. The target industry of this project is a food industry and the specific user for this project are the owners of the said business. The system of this project will be able to handle basic fundamentals of mathematical calculation and also will be able to perform error handling methods. Some of the features of this project are login form, CRUD operation, database and storage capabilities. The main purpose of this project is to avoid data losses and also to help the user to manage their products an easy way.

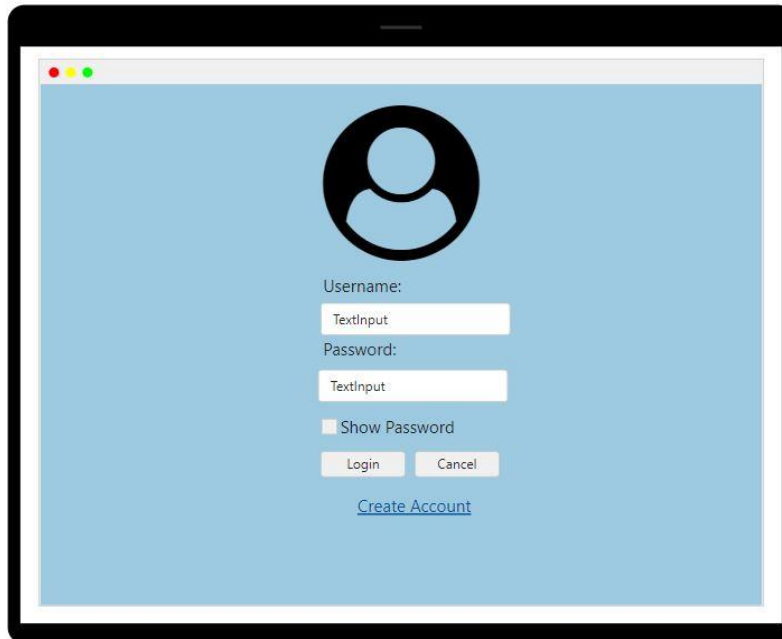
## 2. DEVELOPMENT TEAM

The following individuals comprised the software development team. They are responsible for the analysis and development of the Balutan Inventory Management System.

Role	Tasks Assigned and Modules	Name
Team Leader/Programmer/ Database Designer/System Analyst	Manages and provide support to project team. Develop the User Login form and Main Solution template. Develop User and Audit Logs form design. Develop Product form design. Design and analyze database. Analyze the flow of the Inventory Management System.	Jumilla, Jeb C.
Project Manager/UI Designer	Manages and provide support to project team. Collects data from the target industries and users. Develop prototypes for the proposed system. Designs the main template.	Bacus, Lyle John M.

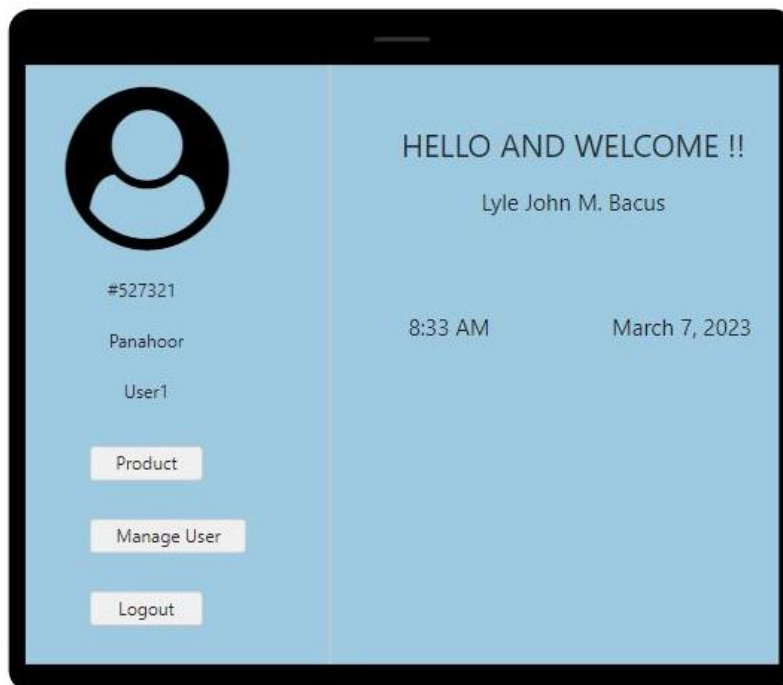
### 3. Prototypes

#### 3.1. User Login Form



A prototype of a user login form displayed within a window frame. The form has a light blue background and features a large black circular icon representing a user profile at the top center. Below the icon, the text "Username:" is followed by a white text input field labeled "TextInput". Underneath, the text "Password:" is followed by another white text input field labeled "TextInput". A checkbox labeled "Show Password" is positioned below the password field. At the bottom of the form, there are two buttons: "Login" and "Cancel", and a blue hyperlink labeled "Create Account".

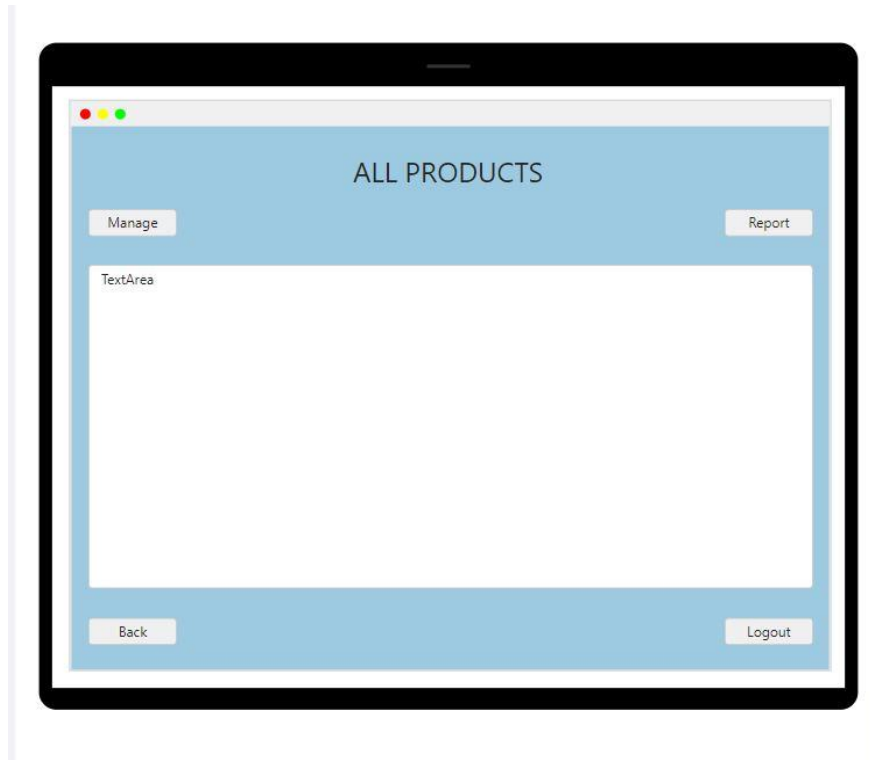
#### 3.2. Main Form



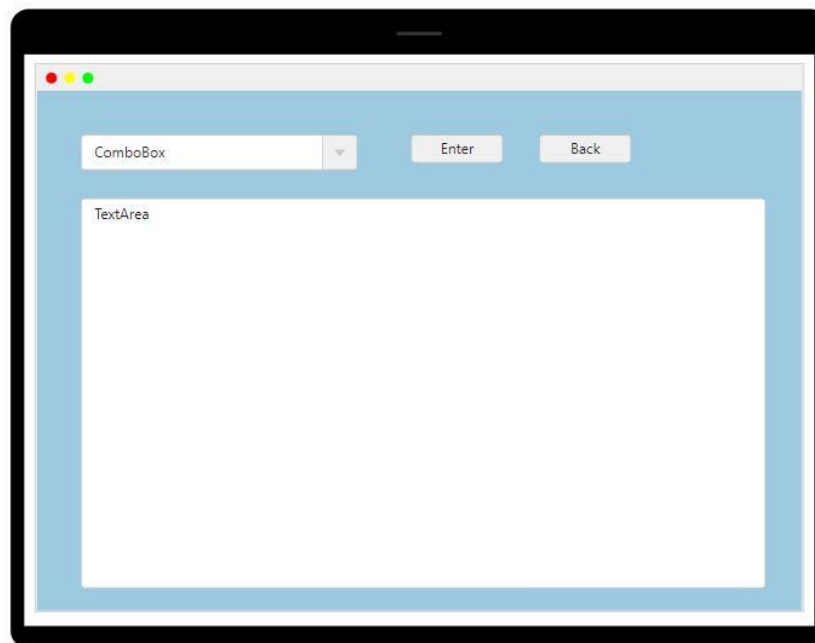
A prototype of a main form displayed within a window frame. The form is split into two main sections. The left section has a light blue background and contains a large black circular icon representing a user profile at the top. Below the icon, the text "#527321" is displayed, followed by "Panahoor" and "User1". At the bottom of this section, there are three buttons: "Product", "Manage User", and "Logout". The right section has a light blue background and contains the text "HELLO AND WELCOME !!" at the top, followed by "Lyle John M. Bacus". Below this, the time "8:33 AM" and the date "March 7, 2023" are displayed.

### 3.3. Manage Product

#### 3.3.1. Products



#### 3.3.2. Report



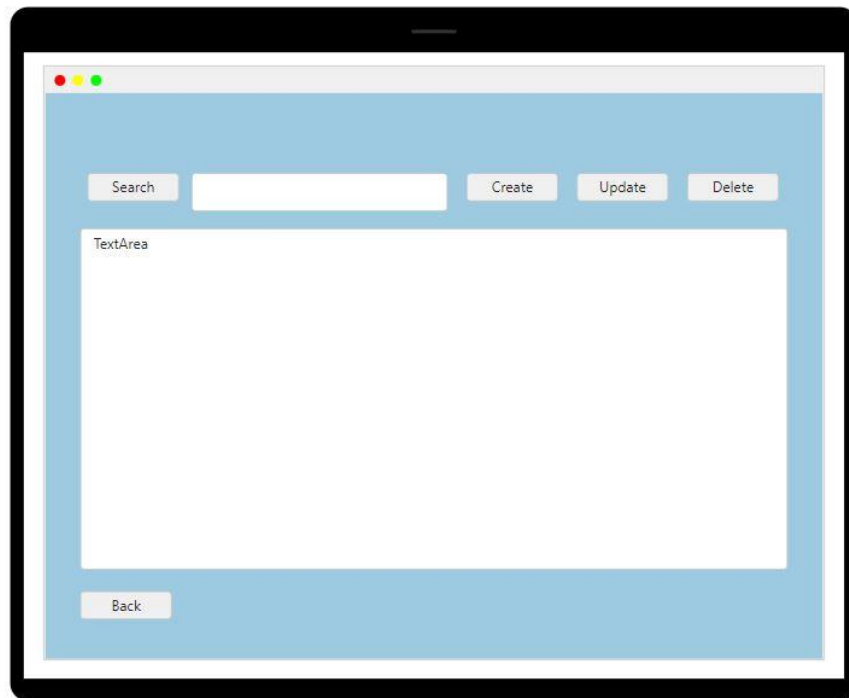
### 3.3.3. Manage Data

A screenshot of a web application window titled "Manage Data". The interface has a light blue background. At the top, there is a search bar with a "Search" button to its left. To the right of the search bar are three buttons: "Create", "Update", and "Delete". Below these is a large white text area labeled "TextArea". At the bottom left, there is a "View All" button, and at the bottom right, there is a "Logout" button.

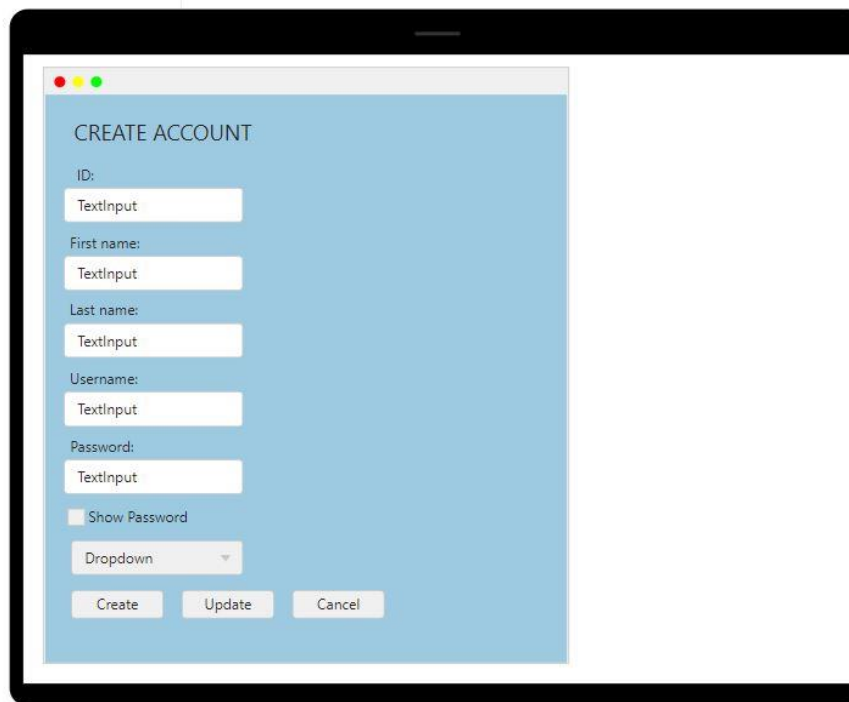
### 3.3.4. Insert and Update Data

A screenshot of a web application window titled "Insert and Update Data". The interface has a light blue background. It features two columns of input fields. The left column contains: "User ID:" with a "TextInput" field, "Product ID:" with a "TextInput" field, "Product Name:" with a "TextInput" field, "Category:" with a "Dropdown" menu, "Inventory Type:" with a "Dropdown" menu, and "Status:" with a "Dropdown" menu. The right column contains: "Description:" with a "TextInput" field, "SKU:" with a "TextInput" field, "Selling Price:" with a "TextInput" field, and "Cost:" with a "TextInput" field. At the bottom, there are three buttons: "Button", "Update", and "Cancel".

### 3.4 Manage User



A screenshot of a web application interface for managing users. The interface is displayed within a window with a light blue background. At the top, there is a search bar with a "Search" button to its left. To the right of the search bar are three buttons: "Create", "Update", and "Delete". Below these buttons is a large, empty text area labeled "TextArea". At the bottom left of the interface is a "Back" button.



A screenshot of a "CREATE ACCOUNT" form. The form is displayed within a window with a light blue background. The title "CREATE ACCOUNT" is at the top. Below the title are several input fields: "ID:" with a "TextInput" field, "First name:" with a "TextInput" field, "Last name:" with a "TextInput" field, "Username:" with a "TextInput" field, and "Password:" with a "TextInput" field. Below the password field is a checkbox labeled "Show Password". Below the checkbox is a "Dropdown" menu. At the bottom of the form are three buttons: "Create", "Update", and "Cancel".

### 3.4. User\_Mod

### 3.5 Prod\_Mod

## 4. Database Design

This section presents the data dictionary (table structure) design of the proposed system.

Table name: user\_tbl

Field Name	Data Type	Is Unique?	Is Auto Inc?	Is PK?	Is FK?	Ref Table	Comments
user_id	Integer		Yes	Yes			
username	Text	Yes					Username cannot be change as it is unique.
password	Text						Password can be hidden and shown in the system.
fname	Text						
lname	Text						
usertype_id	Integer				Yes	usertype_tbl	

Table name: usertype\_tbl

Field Name	Data Type	Is Unique?	Is Auto Inc?	Is PK?	Is FK?	Ref Table	Comments
usertype_id	Integer		Yes	Yes			
type	Text						Admin and Warehouse User are the only available types.



Table name: product\_tbl

Field Name	Data Type	Is Unique?	Is Auto Inc?	Is PK?	Is FK?	Ref Table	Comments
product_id	Integer		Yes	Yes			
pname	Text						
des	Text						Product description.
sku	Text	Yes					Cannot be change as it is unique.
price	Double						
cost	Double						
category	Text						
type	Text						
status	Text						Which are the 2 types (Admin and Warehouse User).
user_id	Integer				Yes	user_tbl	

## 5. ERD

This section presents the overall ERD design of the proposed system.

