



DOCUMENTATION REPORT

Principal Logistics Technologies

Roisin Burke
roisin.burke@principalsystems.com



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1. Introduction

1.1. System Outline

The principal systems website is a system that enables clientele and warehouse staff to easily view the current stock held in the warehouses. The general requirements of this system are user login, management of the user database, user permissions system and a grid display of live stock information.

Clients can view current stock, receipts, deliveries, transfers, and reports. There are two types of admins; site and system. The site admins are responsible for updating the stock information. The system admins are responsible for making changes to the system and keeping the user database up to date.

1.2. Documenting Tools

Tools utilised in this report are user stories and a selection of UML diagrams. Unified modelling language (UML) is a modelling language that allows us to visualize the design of a system. The types of UML diagrams used are;

- Class diagrams
- Sequence diagrams
- Use case diagrams and textual descriptions

2. User Interaction Scenarios

2.1. User stories

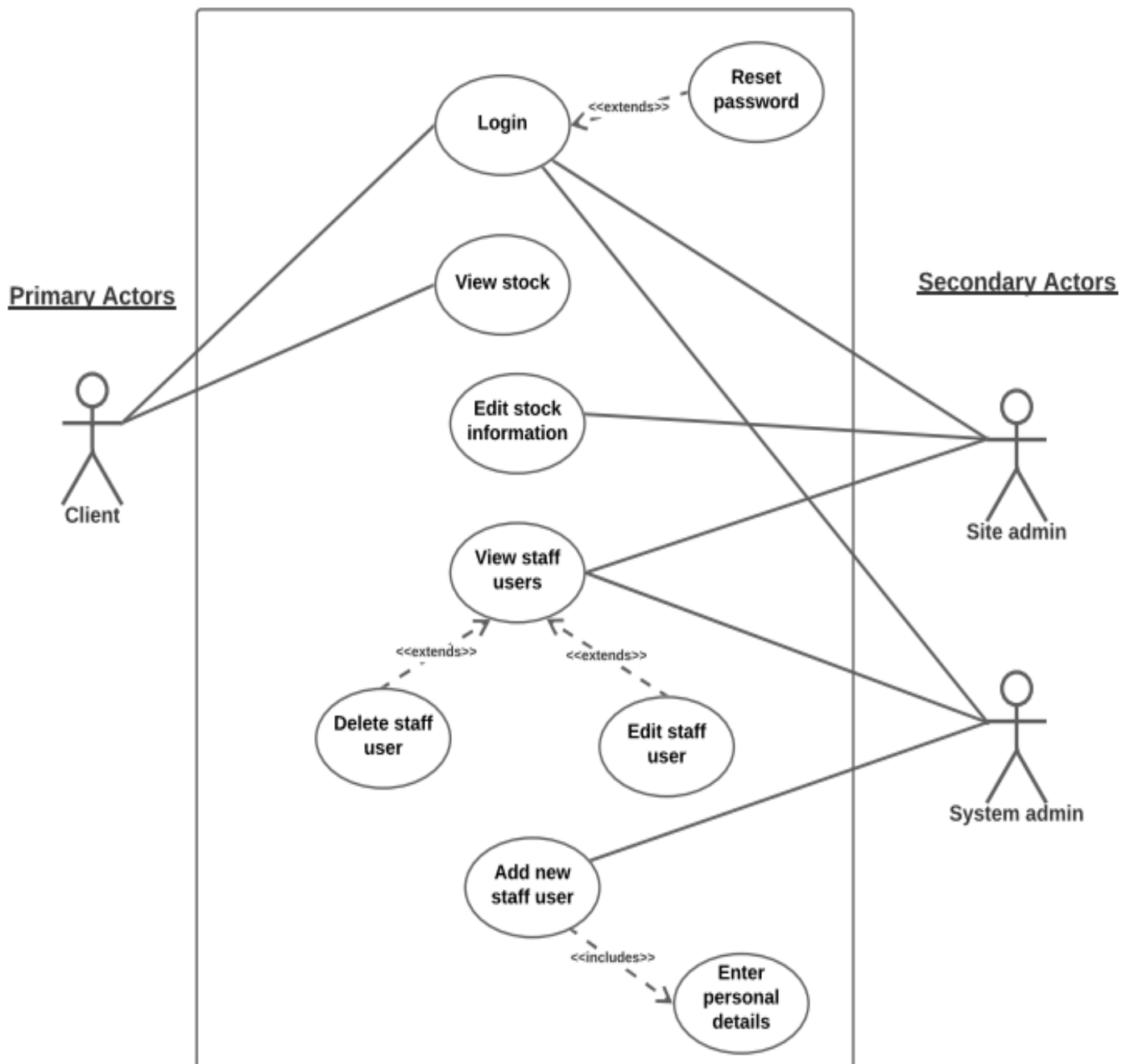
User stories are short, simple descriptions of a feature told from the perspective of the person who desires the new capability, usually a user or customer of the system. Simply outlines the general functions of a system from the point of view of its users. They are told from the perspective of the person who desires the new capability.

The following are a minimised version of the SAFe Requirements Model to define user stories: <https://www.scaledagileframework.com/safe-requirements-model/>

- As a participant of principal systems, I want to be able to log in so that I can utilise the service.
- As a client of principal systems, I want to be able to view my current stock, receipts, deliveries, transfers, and reports.
- As a site admin of principal systems, I want to be able to add and update the stock information as to keep the site up to date for the client.
- As a system admin of principal systems, I want to be able to add warehouse staff members and also edit and delete existing ones as to maintain control over my userbase.
- As a system admin, I want to be able to reset my password so that I can continue to use my account if I forget my password.

2.2. Use Case Diagram

This use case diagram outlines the functional overview of the system and the users that interact with it. The client is the primary actor of this system because the primary actor, by definition, interacts with a system to achieve a goal. The secondary actors are the site and system admin because both enable the customer to achieve their goal.

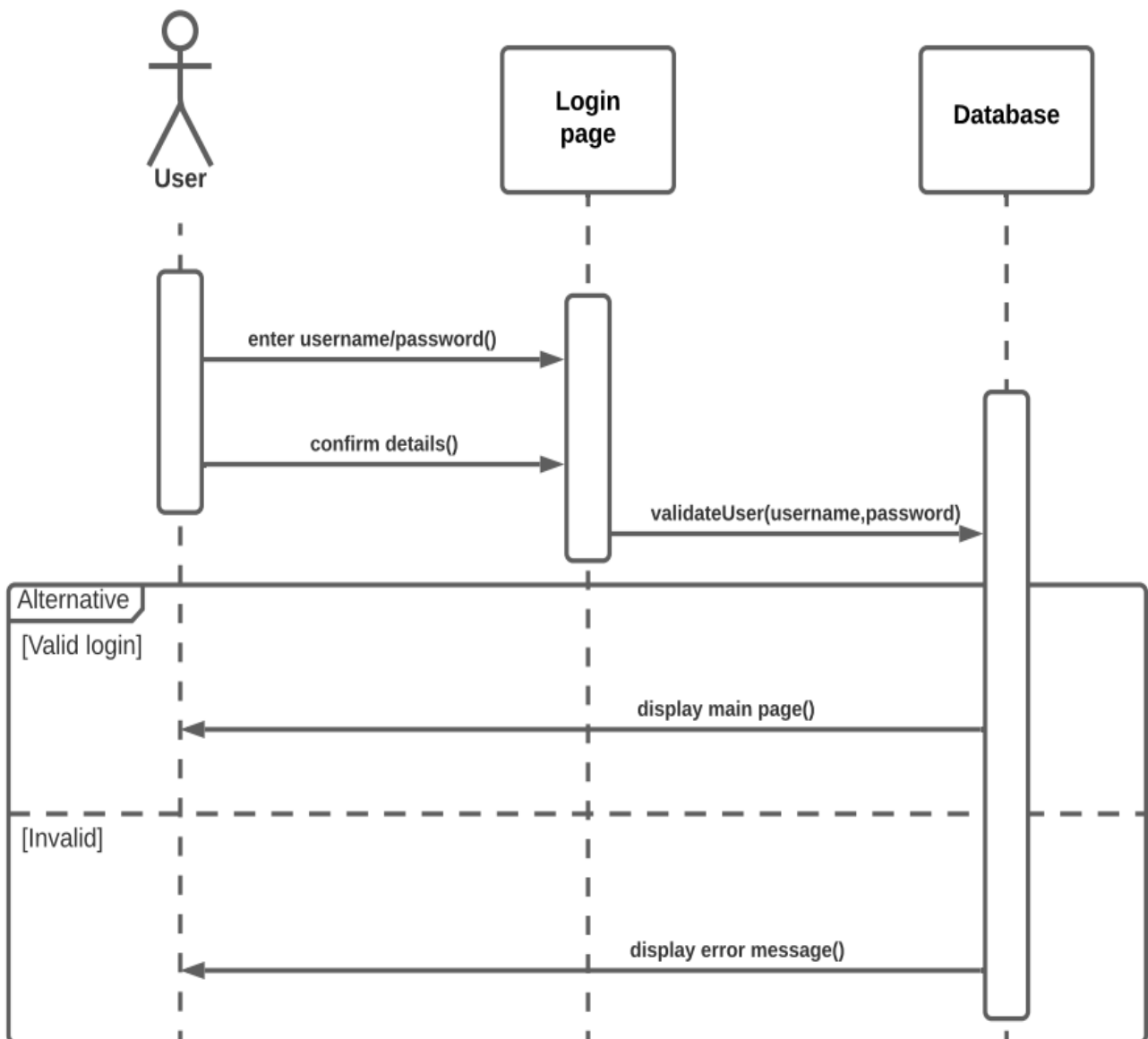


(Textual description on page 7)

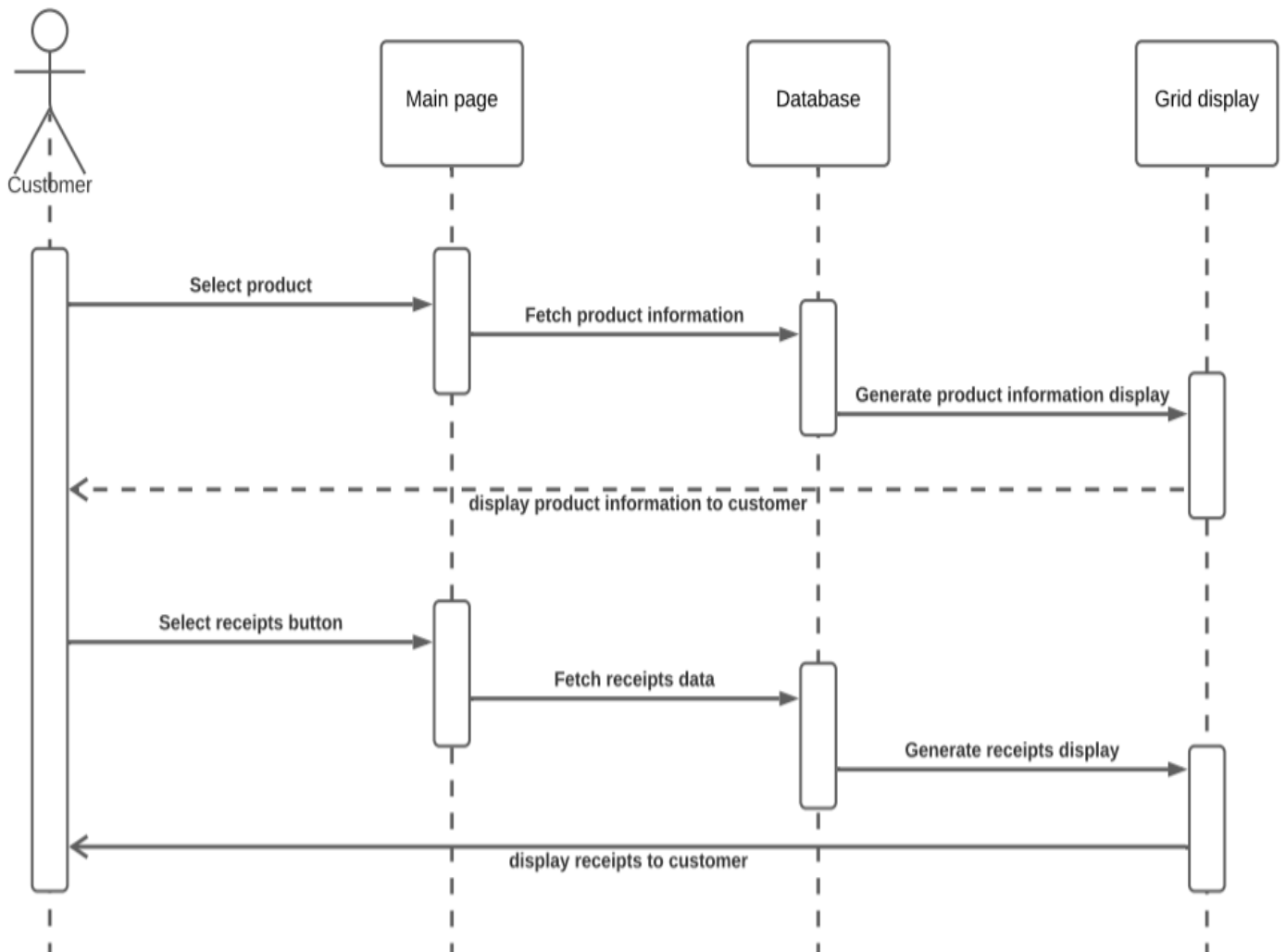
2.3. Sequence Diagrams

A sequence diagram shows object interactions arranged in time sequence. It depicts the objects and classes involved in the scenario and the sequence of operations and return that occur between the objects.

- **Login Sequence Diagram:**



- **Displaying receipts to customer:**

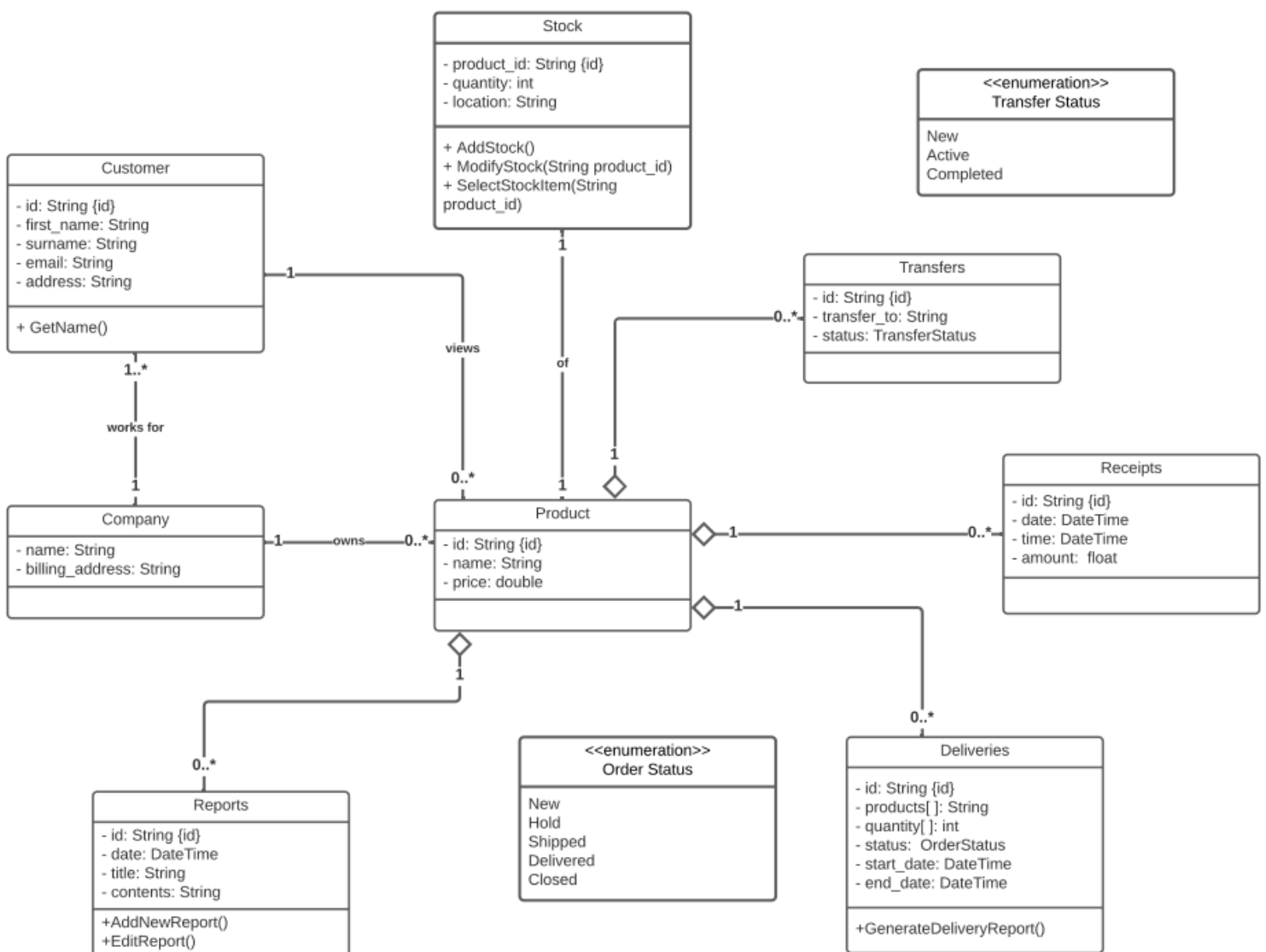


2.4. Class Diagram

A class diagram is a type of static structure diagram that describes the structure of a system by showing the system's classes, their attributes, operations, and the relationships among objects. This class diagram models the classes involved in a customer's interaction with this system.

This model includes:

- Attributes and operations such as 'id' or 'GetName()'
- Cardinality e.g. one customer to zero or many products
- Association e.g. customer views product



3. Use Case Textual Descriptions

Use Case Name	Login
Use Case Type	Association between actor and use case.
Primary Actor	Client, Site admin or System admin
Description	This use case describes the actions of the user logging into the website. Once the action is completed the user will be notified.
Trigger	The user selects to log in
Typical Course of Events	1. The login page is displayed to the actor 2. The actor enters their username and password 3. The actor presses the login button or the enter key
Conclusion	The use case concludes when the actor is granted access to the website
Assumptions	The actor has a valid login. The actor enters the correct information.

Use Case Name	Reset Password
Use Case Type	Extend Relationship Between Two Use Cases.
Primary Actor	Client, Site admin or System admin
Description	This use case describes the action of the Client, Site admin or System admin resetting their login password.
Trigger	The actor selects to reset their password
Typical Course of Events	1. The actor selects to reset their password 2. The actor enters their old password and their new password 3. The actor confirms the password by entering it again 4. The actor is notified that the password has been changed
Conclusion	The use case concludes when the actor's password has been reset
Assumptions	The actor has a valid login.

Use Case Name	View Stock
Use Case Type	Association between actor and use case.
Primary Actor	Client
Description	This use case describes the actions of the client when viewing the stock information.
Trigger	The client selects to view stock information.
Typical Course of Events	1. The client selects the piece of stock. 2. The live stock information is displayed
Conclusion	The client locates the required stock information
Assumptions	The stock information is up to date.

Use Case Name	Edit stock information
Use Case Type	Association between actor and use case.
Primary Actor	Site admin
Description	This use case describes the actions of the site admin updating the current stock information.
Trigger	The site admin selects to edit stock information
Typical Course of Events	<ol style="list-style-type: none"> 1. The site admin selects to update the stock information 2. The site admin makes the necessary changes 3. The site admin saves the changes and the system is updated
Conclusion	The use case concludes when the stock information has been updated and the site admin has been notified
Assumptions	The site admin has the necessary permissions to implement changes on the site.

Use Case Name	View staff users
Use Case Type	Association between actor and use case.
Primary Actor	Site admin or System admin
Description	This use case describes the actions of the actor viewing the list of staff members that can access the site.
Trigger	The actor selects staff user tab
Typical Course of Events	<ol style="list-style-type: none"> 1. The actor filters the staff users by first and/or surname.
Conclusion	The use case concludes when the actor locates the required staff member.
Assumptions	The actor has the necessary permissions.

Use Case Name	Delete staff users
Use Case Type	Extend Relationship Between Two Use Cases.
Primary Actor	Site admin or System admin
Description	This use case describes the removal of a staff member from the database.
Trigger	The admin selects to remove a staff member
Typical Course of Events	<ol style="list-style-type: none"> 1. The admin selects the staff member they wish to remove 2. The admin selects the delete option beside the staff members' name 3. The admin is asked to confirm this action from a pop-up box 4. The admin confirms the action
Conclusion	The use case concludes when the staff member has been removed.
Assumptions	The admin knows which staff member they want to remove.

Use Case Name	Edit staff user
Use Case Type	Extend Relationship Between Two Use Cases.
Primary Actor	Site admin or System admin
Description	This use case outlines the changing of account details.
Trigger	The admin selects to edit a staff user
Typical Course of Events	<ol style="list-style-type: none"> 1. The admin selects the account they wish to edit 2. The admin changes the account information 3. The admin saves the changes.
Conclusion	The use case concludes when the account details are updated, and the admin is notified that the changes have been implemented.
Assumptions	The admin has the necessary permissions.

Use Case Name	Add new staff user
Use Case Type	Association between actor and use case.
Primary Actor	System admin
Description	This use case describes the actions of the system admin adding a staff user to the database. Once the action is completed the system admin will be notified and the new staff member will have access to the website.
Trigger	The system admin selects the action 'add new staff user'.
Typical Course of Events	<ol style="list-style-type: none"> 1. The system admin selects add new user. 2. The system admin inputs the personal details of the new user including first name, last name, username and password etc. 3. The system admin saves the user details. 4. The system admin is notified.
Conclusion	The use case concludes when the system admin is notified of the new user being successfully added.
Assumptions	The system admin has the necessary permissions to implement changes on the site