**Loan Management System Use Case Diagram**

In this blog post, we will explore the importance and benefits of using a LMS Use Case Diagram in the development of a loan management system. From improving communication between stakeholders to enhancing the testing process, we will discuss how a LMS Use Case Diagram can help to ensure that the final product meets the needs of all stakeholders. This article is a valuable resource for anyone who is interested in understanding the role of use case diagrams in loan management system development and how they can help to improve the efficiency and effectiveness of loan management processes.

**About the Project**

The capstone project entitled “**Loan Management System with SMS**” is an online platform that allows members to apply and request loan. In addition, they can also monitor their balance in their respective dashboard. Management of cooperative will review first the application for approval or disapproval of the request. Notification will be send through the SMS or short messaging service feature of the system. The Use Case Diagram is a crucial tool for software engineers and stakeholders when it comes to developing a comprehensive and effective loan management solution. This type of diagram provides a visual representation of the interactions between different actors and the system being developed, making it easier to understand the different use cases, or scenarios, that the system will need to support. Whether you are a loan officer, a business owner, or a software developer, understanding the role of a LMS Use Case Diagram in the development of a loan management system is important.

**What is Use Case Diagram?**

A Use Case Diagram is a visual representation of the interactions between actors and a system being developed. In the context of research and capstone projects, actors might include the system's users, administrators, or stakeholders. The Use Case Diagram outlines the different use cases, or scenarios, that the system will need to support, such as login, data input, and data retrieval.

The importance of a Use Case Diagram in research and capstone projects lies in its ability to clearly and effectively communicate the functionalities of the system being developed. It helps to ensure that all stakeholders have a clear understanding of the system's capabilities, which can be particularly beneficial in the early stages of development. This makes it easier for researchers and capstone project teams to identify areas where the system may need to be improved, and to determine which functionalities need to be implemented.

In addition, a Use Case Diagram provides a useful tool for testing the system. By outlining the different use cases, or scenarios, that the system will need to support, researchers and capstone project teams can more easily determine which tests need to be performed, and which interactions and transactions need to be evaluated. This helps to ensure that the final product is both efficient and effective.

**Use Case Diagram**

Member

Dashboard

Member Info

Loan Application

Loan Amortization

Loan Payment

Admin



SMS

User Management

Reports

Database Backup

The admin can access the entire core modules of the system while the members can access the Loan Application, Loan Amortization, Loan Payment, and SMS modules.

**Use Cases**

The following are the discussions that describe how a user uses a system to accomplish a particular goal.

**Use Case:** Dashboard

**Actor(s):** Admin

**Description:**

This feature is used to manage the details displayed in the dashboard.

**Successful Completion:**

1. The admin can search, add, update and remove dashboard details.

**Alternative:** The admin can access all dashboard details

**Precondition:** The admin will login to access and manage the dashboard

**Post Condition:** updated dashboard details

**Use Case:** Member Info

**Actor(s):** Admin

**Description:**

This feature is used to manage the profile of the members registered in the system.

**Successful Completion:**

1. The admin can search, add, update and remove members information.

**Alternative:** The admin can access all members information

**Precondition:** New members for registration, existing members for updating

**Post Condition:** updated members information

**Use Case:** Loan Application

**Actor(s):** Admin and Member

**Description:**

This feature is used to manage the loan application of members made in the system.

**Successful Completion:**

1. Customer can create and submit loan application.
2. Admin can search, add, update and remove loan applications by members.

**Alternative:** Customer can only submit and view updates of their loan application; Admin can access all of the members’ loan applications.

**Precondition:** New application for submission and review, existing application for updating

**Post Condition:** accepted loan application

**Use Case:** Loan Amortization

**Actor(s):** Admin and Member

**Description:**

This feature is used to manage the loan amortization for loans made by the members in the system.

**Successful Completion:**

1. Customer can view amortization for their loans.
2. Admin can search, add, update and remove a loan amortization details using this feature.

**Alternative:** Customer can only view loan amortization; Admin can access all of the members loan amortization information.

**Precondition:** The admin and members will need to login first to access the module.

**Post Condition:** updated loan amortization

**Use Case:** Loan Payment

**Actor(s):** Admin and Member

**Description:**

This feature is used to manage the payments for loans made by the members in the system.

**Successful Completion:**

1. Customer can pay and view their loan payments using this feature.
2. Admin can search, add, update and remove a loan payment details using this feature.

**Alternative:** Customer can only pay and view loan payments; Admin can access all of the members loan payment information.

**Precondition:** The admin and members will need to login first to access the module.

**Post Condition:** updated loan payment information

**Use Case:** SMS

**Actor(s):** Admin and Member

**Description:**

This feature is used to manage the SMS in the system.

**Successful Completion:**

1. Customer can view SMS using this feature.
2. Admin can search, add, update and remove an SMS details using this feature.

**Alternative:** Customer can only view SMS; Admin can access SMS information.

**Precondition:** The admin and members will need to login first to access the module.

**Post Condition:** updated SMS

**Use Case:** User Management

**Actor(s):** Admin

**Description:**

This feature is used to manage the users of the system.

**Successful Completion:**

1. The admin can search, add, update and remove user details using this feature.

**Alternative:** The admin can access all user details

**Precondition:** The admin will login to access and manage the users

**Post Condition:** updated users details

**Use Case:** Reports

**Actor(s):** Admin

**Description:**

This feature is used to view and print the reports of the system.

**Successful Completion:**

1. Admin can view, print and export the report of the system.

**Alternative:** None

**Precondition:**

1. Admin will need to login to access the reports.

**Post Condition:** hard and soft copy of the report of the system.

**Use Case:** Database Backup

**Actor(s):** Admin

**Description:**

This feature is used to manage the backup database of the system.

**Successful Completion:**

1. The admin can add, edit, and update database backup information.

**Alternative:** None

**Precondition:** Admin will create and connect the backup database.

**Post Condition:** new backup database.

**Summary**

The capstone project entitled “**Loan Management System with SMS**” is an online platform that allows members to apply and request loan. This post will focus on the use case diagram of the system. The system has two user sides the admin and the members. The admin can access the entire core modules of the system while the members can access the Loan Application, Loan Amortization, Loan Payment, and SMS modules. In conclusion, the Use Case Diagram is a valuable tool in research and capstone projects. It helps to ensure that all stakeholders have a clear understanding of the system's functionalities, improves communication and collaboration, and provides a useful tool for testing the system. Whether you are a researcher, a capstone project team member, or simply interested in understanding the role of use case diagrams in research and capstone projects, this tool is a must-have for any software development project.