Project - Pawn Shop Management

**Software Requirements Specification**

Version 1.0

Da nang, 17 Sep 2024

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# Textual History

| **Time** | **Summary of changes** | **Version** |
| --- | --- | --- |
| 17/9/2024 | Create the first version SRS | 1.0 |
| 17/9/2024 | Update SRS – Add System Authorization function  Update changes in Activity diagram  Update changes in interface description, Screen Content | 2.0 |
| 22/9/2024 | Edit the description of the Actors, redraw the Use Case and Flow diagrams | 3.0 |

# References document

| **Document name** | **Description** |
| --- | --- |
| SRS\_Sample | Refer to sample SRS |
| Use Case Diagram | Refer to how to draw Use Case diagram |
| UML Activity Diagram | See how to draw Systems Pages Flow diagram |
| MockProject | Task division plan |
|  |  |
|  |  |
|  |  |

# Sharing list

This document is distributed to the following stakeholders for comments and modifications.

| **Full name** | **Position** |
| --- | --- |
| Lê Nam Hải | 4.Introduction(Finish) |
| Lê Nguyễn Quốc Đạt  Đặng Trần Gia Huy | 5.Overview(Finish) |
| Trần Thị Khánh Vy | 6.Function (Not Finish) |
| Phan Thanh Tùng | 7.Non-Functional(Not Finish) |

# Introduction

## Purpose

**Build a Pawn Shop Management System with the following goals:**

- Full of basic features, ensuring the needs of users.

- Intuitive, convenient interface.

- Ability to secure, assign access rights, each type of user can only access specific functions.

- Optimise business operations and enhance user experience.

**Through that:**

- Understand how to deploy a software project according to the most general process

- Cultivate the ability to work in groups, serving the learning process better.

## Scope

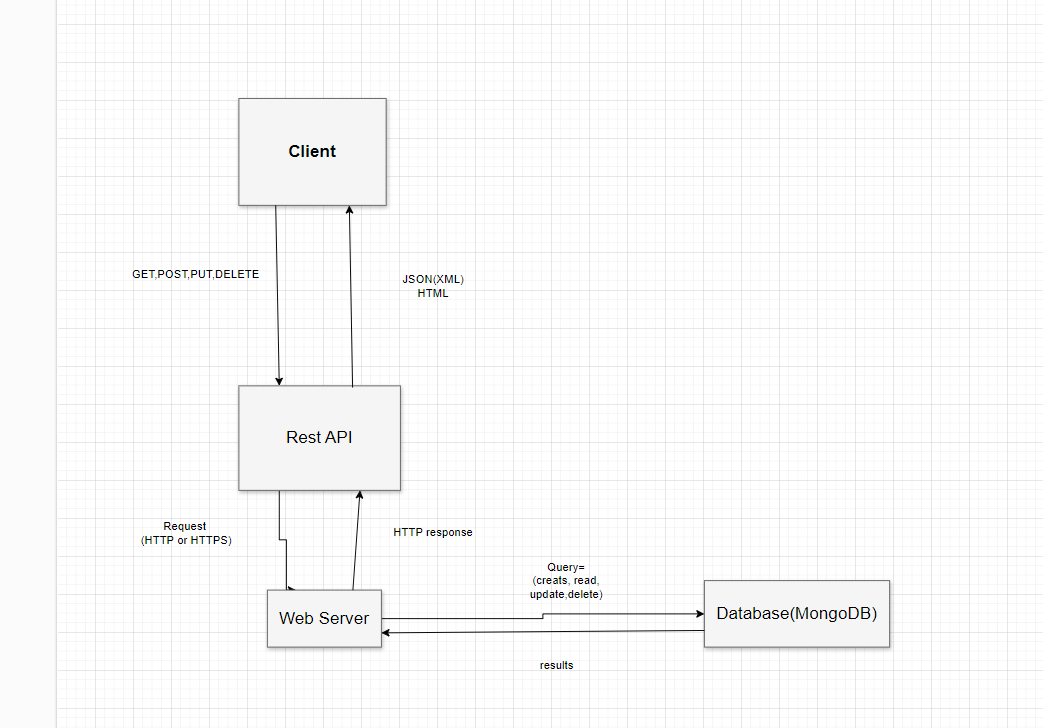
**Project scope Pawnshop Management:**

- Application in small and medium sized pawn shops.

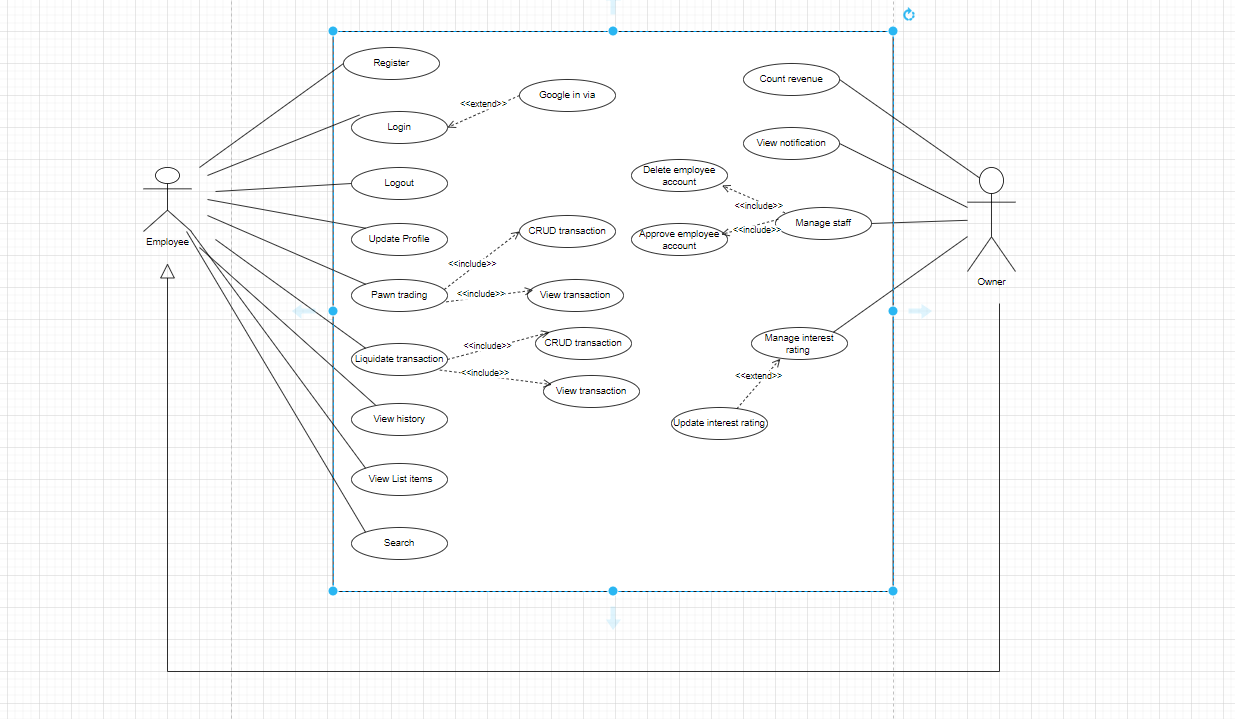
- Suitable for the subject project limit.

# Overview

## Software architecture diagram (Ex: Layered Architecture (Tầng lớp kiến trúc), Client-Server Architecture (Kiến trúc Máy khách - Máy chủ), **Microservices Architecture (Kiến trúc Vi dịch vụ)**, **Event-Driven Architecture (Kiến trúc Điều khiển Sự kiện)**, **Component Diagram (Sơ đồ Thành phần)**, **Deployment Diagram (Sơ đồ Triển khai)**, **Database Architecture Diagram (Sơ đồ Kiến trúc Cơ sở dữ liệu)**, **Service-Oriented Architecture (Kiến trúc Hướng Dịch vụ - SOA)**, **Cloud Architecture Diagram (Sơ đồ Kiến trúc Đám mây) (**hải)



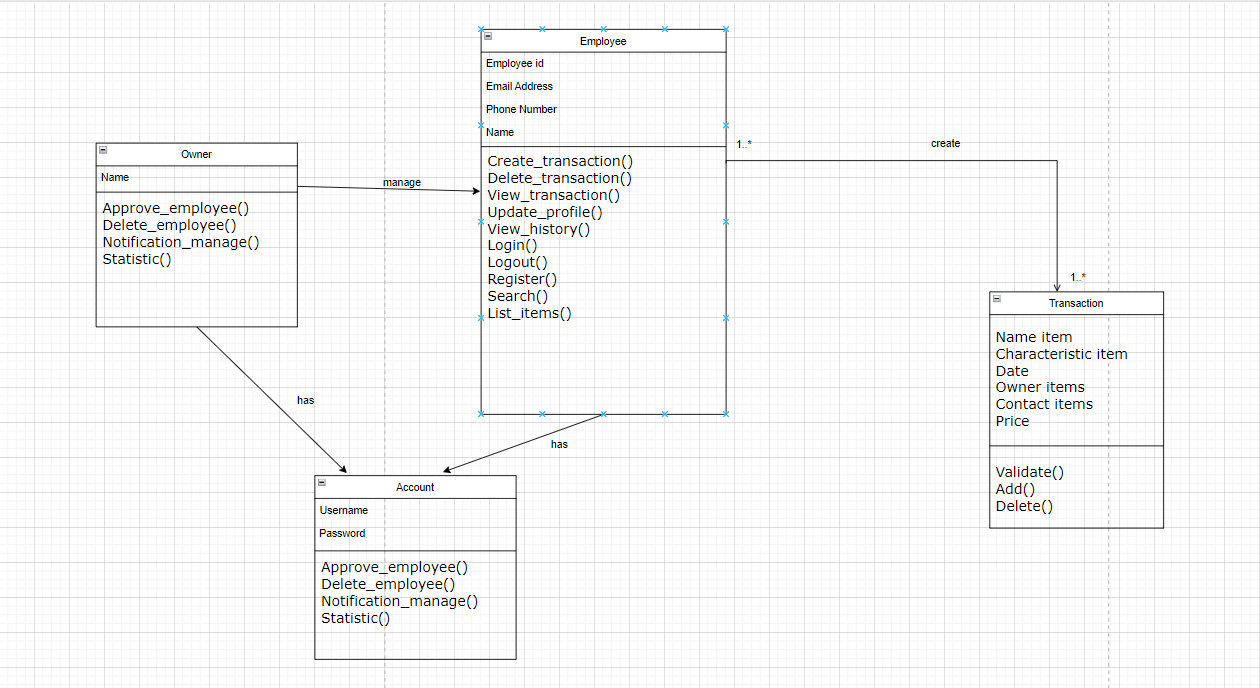
## Use case (huy)



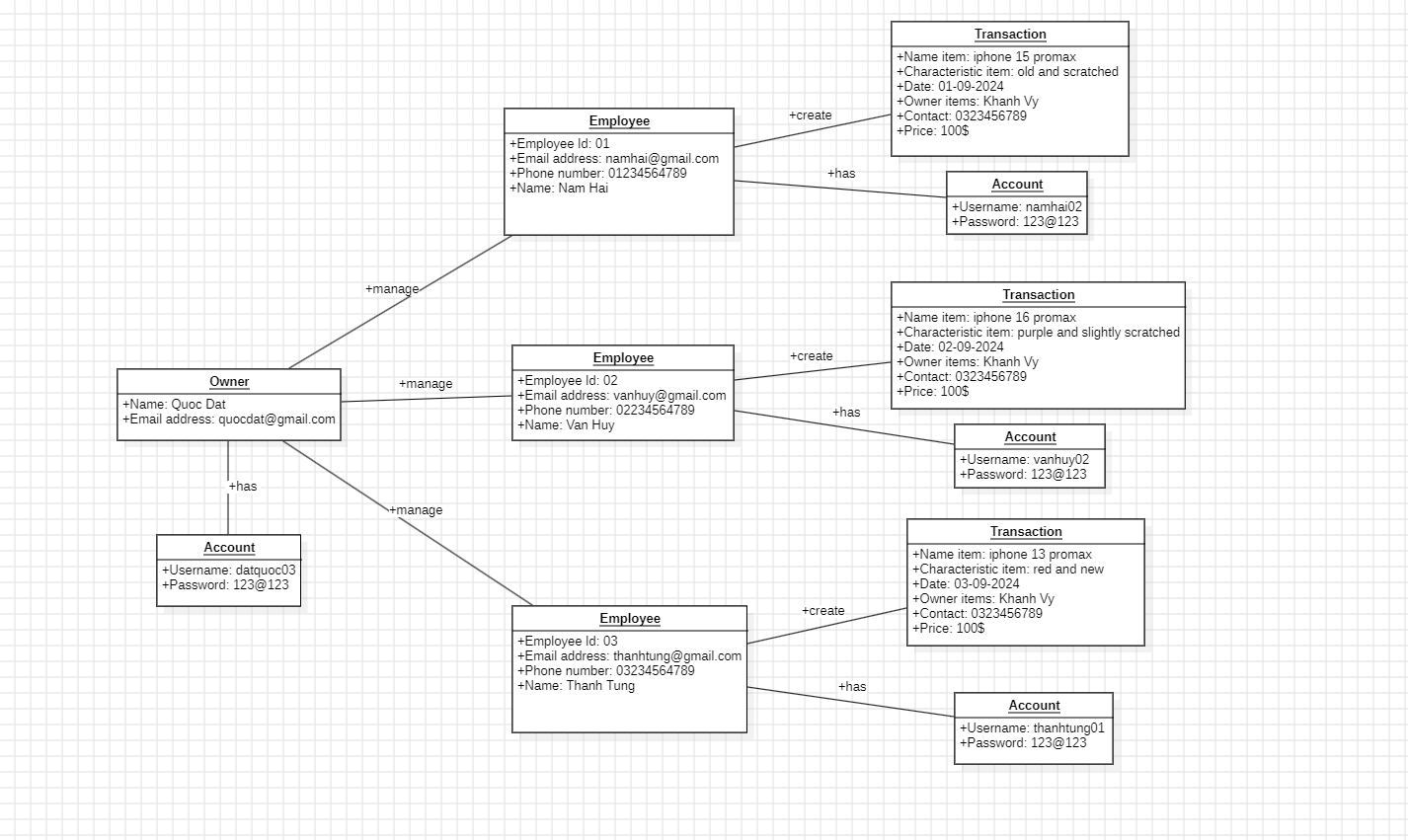
<<Introduction to table>>

| **Use case** | | **Description** |
| --- | --- | --- |
| Register | | This use case allows a new user (employee) to create an account in the pawnshop system. The user provides necessary details such as name, email, phone number, username and password or register via Google. After successful registration, the system creates a profile and stores the user’s information. |
| Login | | This use case allows a registered user to access the system by providing valid credentials (email and password) or log in via Google account. |
| Logout | | This use case allows a user to safely exit the system. After logging out, the user’s session is terminated, and access to the system is revoked until the user logs in again. |
| Update Profile | | This use case allows employees to modify their personal information, such as their name, address, contact details, and password. The updated information is stored and reflected in the system. |
| Pawn Trading | | This use case allows users (owner, employees) to initiate pawn transactions by pledging an item as collateral for a loan. The system captures the item details, loan terms, interest rates, and generates a transaction record. The employee approves the transaction after verifying the item’s value. |
| Liquidation Transaction | | This use case allows users (owner, employees) to create liquidation transactions for items where a customer fails to repay a loan within the agreed upon term. The system tracks liquidation details, including the sale price, buyer information, and any surplus or deficit after the loan is paid off. |
| View History | | This use case allows users (owner, employees) to view a history of their transactions, including pawn trades, liquidation, and payments. The system filters transactions by date, type, or item. |
| View List Items | | This use case enables users (owner, employees) to view and manage a list of all pawned items in the system. The system displays item details such as description, pawn date, loan value, and status (active, repaid, liquidated). |
| Search | | This use case allows users (owner, employees) to search for specific items, transactions, or customers within the system. The system provides a search bar and filters to refine the results. |
| Count Revenue | | This use case generates revenue reports for the pawnshop. It calculates revenue from interest payments, liquidation sales, and other transactions over a specified period. The system provides charts and graphs for better analysis. |
| View Notification | | This use case handles automated notifications sent to owner and employees regarding upcoming payments, overdue loans, or liquidation notices. |
| Manage employee | | This use case allows the admin to manage staff members, including approving employees' accounts, and removing staff. |
| Manage Interest Rating | | This use case allows admins to set and modify interest rates for pawn transactions. The system ensures that the correct interest rate is applied based on the pawn amount and duration. |

## Class Diagram (vy)



## Object Diagram (đạt)



## Deployment Diagram (tùng)

## Activity Diagram(vy, tùng)

## Sequences Diagram(đạt vs hải)

## State Diagram(Huy )

# Function

## Function 1 -

Function Description details

<<GUI>>

| **GUI name** | Đặt vé – Chọn phim và xuất chiếu | | | | |
| --- | --- | --- | --- | --- | --- |
| **Description** | | Hiện thị các phim đang chiếu và các xuất chiếu của phim | | | |
| **Access mode** | | Người dùng truy cập vào đặt vé | | | |
| **GUI of content** | | | | | |
| **Items** | | **Type** | **Data** | **Description** | |
|  | |  |  |  | |
|  | |  |  |  | |
|  | |  |  |  | |
|  | |  |  |  | |
| **Action** | | | | | |
| **Action name** | | **Description** | | **Success** | **Fails** |
|  | |  | |  |  |
|  | |  | |  |  |
|  | |  | |  |  |

# Non Functionals

Performances

| **Id** | **Description** |
| --- | --- |
|  |  |
|  |  |
|  |  |

Enhanced capabilities

| **Id** | **Description** |
| --- | --- |
|  |  |
|  |  |

Security

| **Id** | **Description** |
| --- | --- |
|  |  |

Reliability

| **Id** | **Description** |
| --- | --- |
|  |  |
|  |  |

Backup and Restore

| **Id** | **Description** |
| --- | --- |
|  |  |

Interface

| **Id** | **Description** |
| --- | --- |
|  |  |
|  |  |

Requires operating system and software

| **Id** | **Description** |
| --- | --- |
|  |  |
|  |  |
|  |  |

Language

| **Id** | **Description** |
| --- | --- |
|  |  |
|  |  |

# Appendix

| *Assignment* | Deadline |
| --- | --- |
| 1,2,3,4,5 (5.1 -> 5.5) | 23/09/2024 |
| 5.5 -> 5.8 | 14/10/2024 |
| 6-> End | 28/10/2024 |
|  |  |
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