

CRM software

[Customer Relationship Management software]

Team Quinary
(Group 29)

Background of the Project

- Maintaining accurate data about customer interactions is important for a company.
- The company has implemented all-interaction recording system manually, which needs to be optimized to utilize it in a more efficient way.
- We came with a CRM software to assist businesses in keeping customer contact information up to date, tracking every customer interaction, and managing customer accounts.

Problem

- Businesses in the world are totally dependent on the revenue they make
- It is very important to track customer satisfaction on a regular basis
- For this purpose, we can use a CRM—customer relationship management software.

Aim and Objectives

Aim

- ✓ To Develop a Customer Relationship Management Software to manage customer interactions.

Objectives

- ✓ To keep record of Customer and Project Information.
- ✓ To keep record of Sales History.
- ✓ To send Payment reminders and Newsletters.
- ✓ To keep track of the Payment History.
- ✓ To address the Additional Requests about ongoing projects.
- ✓ To track the customer satisfaction about progress.
- ✓ To generate detailed reports regarding project performance.
- ✓ To get feedback from Customers.

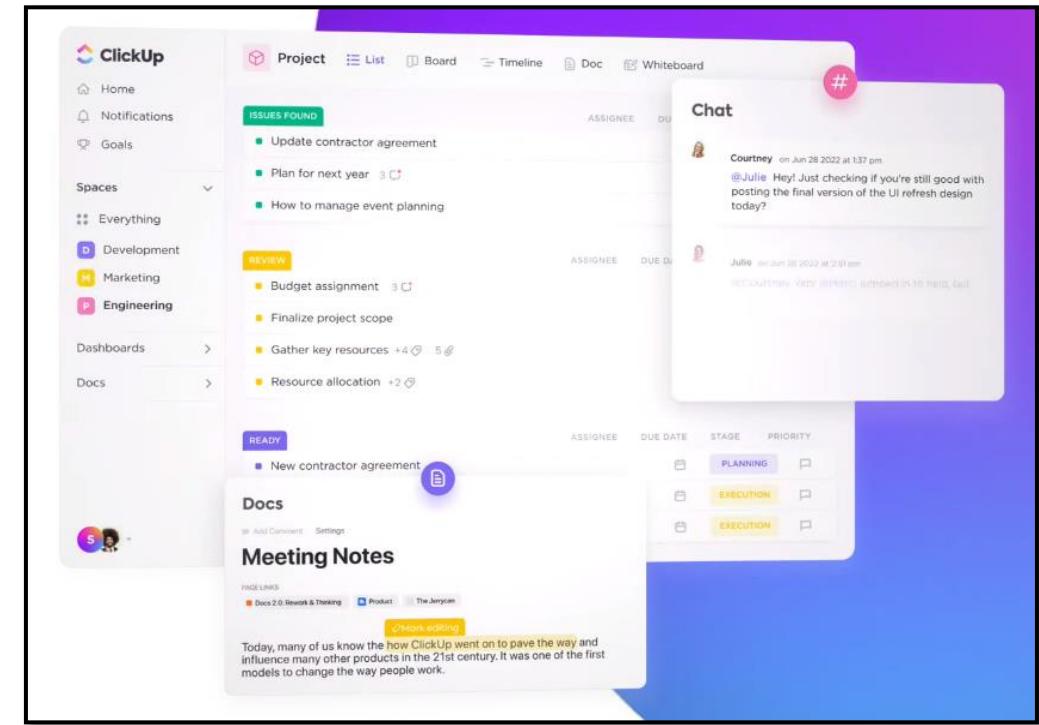


Evaluation of the existing solutions

ClickUp

ClickUp enables users to control their communications and interactions with prospects, clients, and customers.

Also, it allows to create and assign customer management tasks, schedule and track customer communications, and store and organize client information.

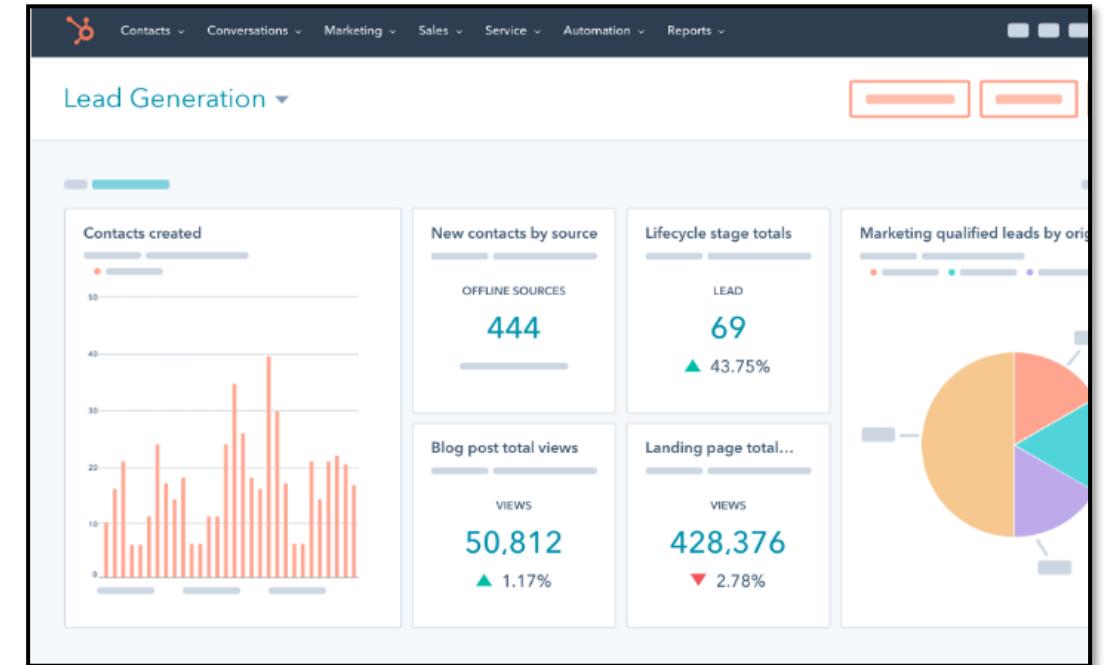


Evaluation of the existing solutions

HubSpot

Some features of HubSpot CRM include:

- ✓ **Contact and company management:** Save and arrange client and lead information, such as contact details, past correspondence, and notes.
- ✓ **Deals and tasks:** Track the status of sales transactions and give team members duties to make sure nothing gets overlooked.

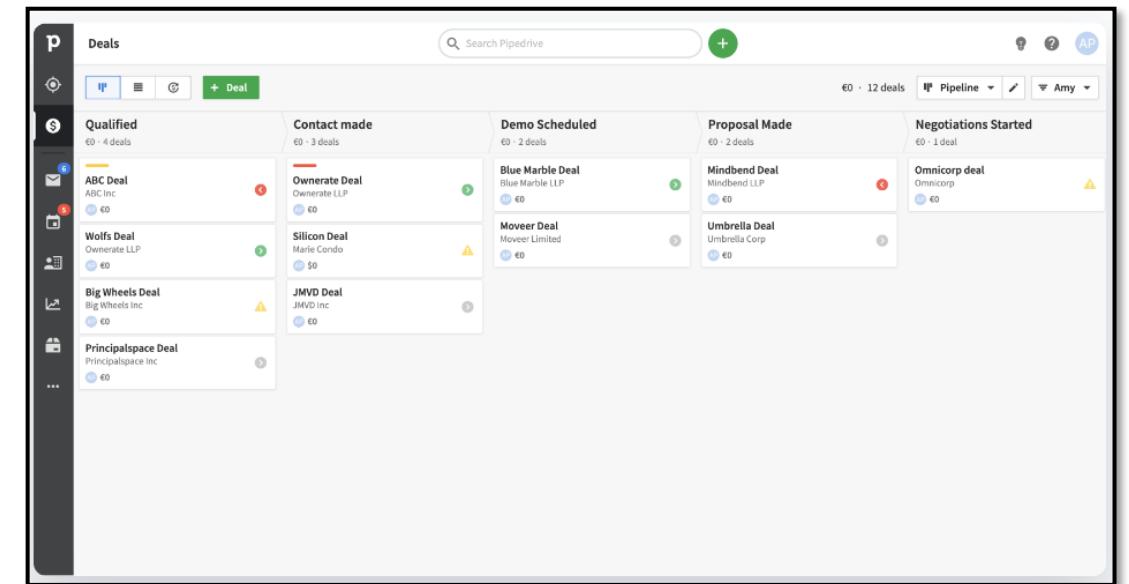


Evaluation of the existing solutions

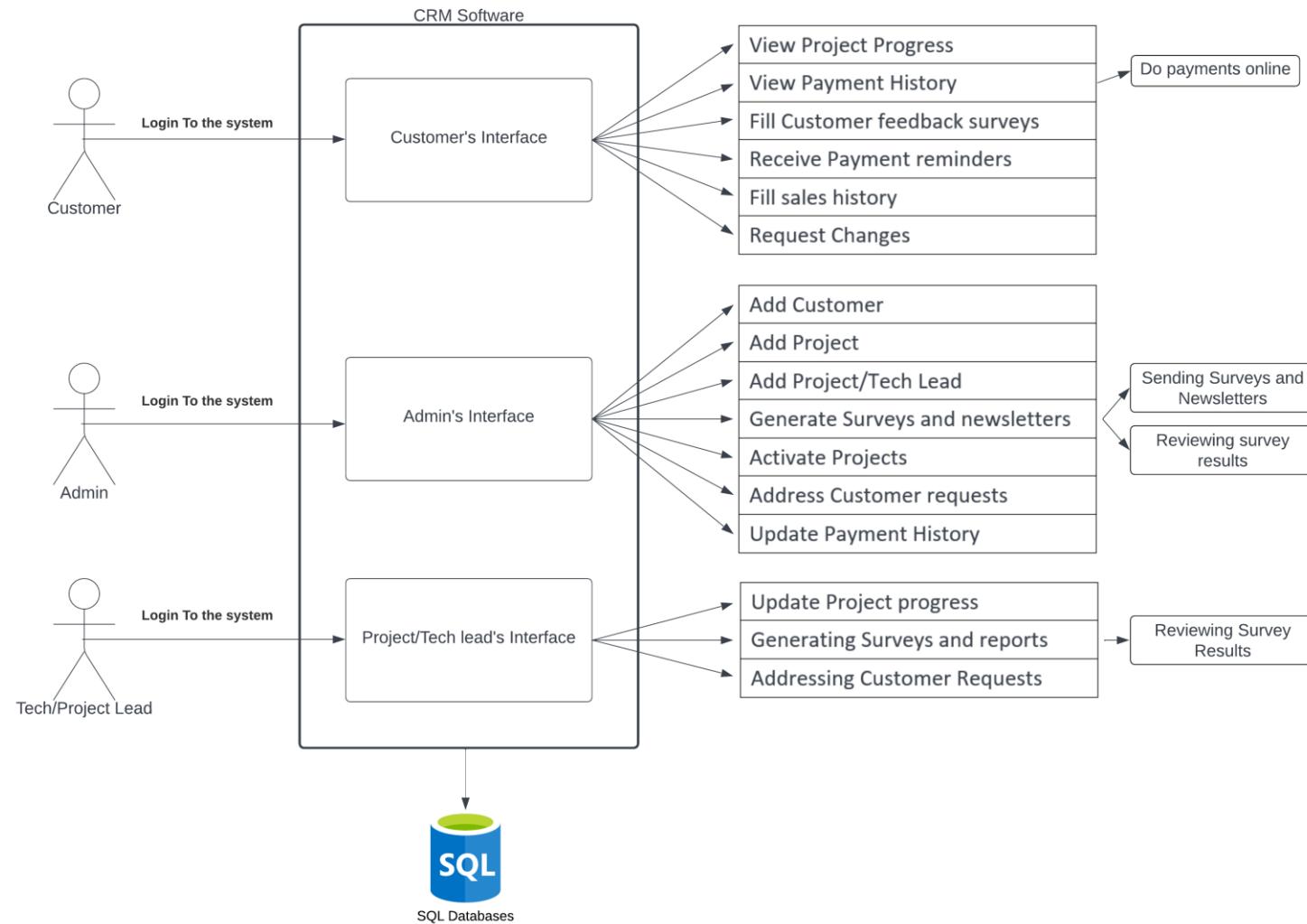
Pipedrive

Unique features of Pipedrive:

- ✓ **Visual sales pipeline:** View and manage sales transactions in a visual pipeline to better understand each deal's status and the following steps.
- ✓ **Email integration:** Connect email account to Pipedrive and track emails within the platform.



Proposed Solution (top level architecture)



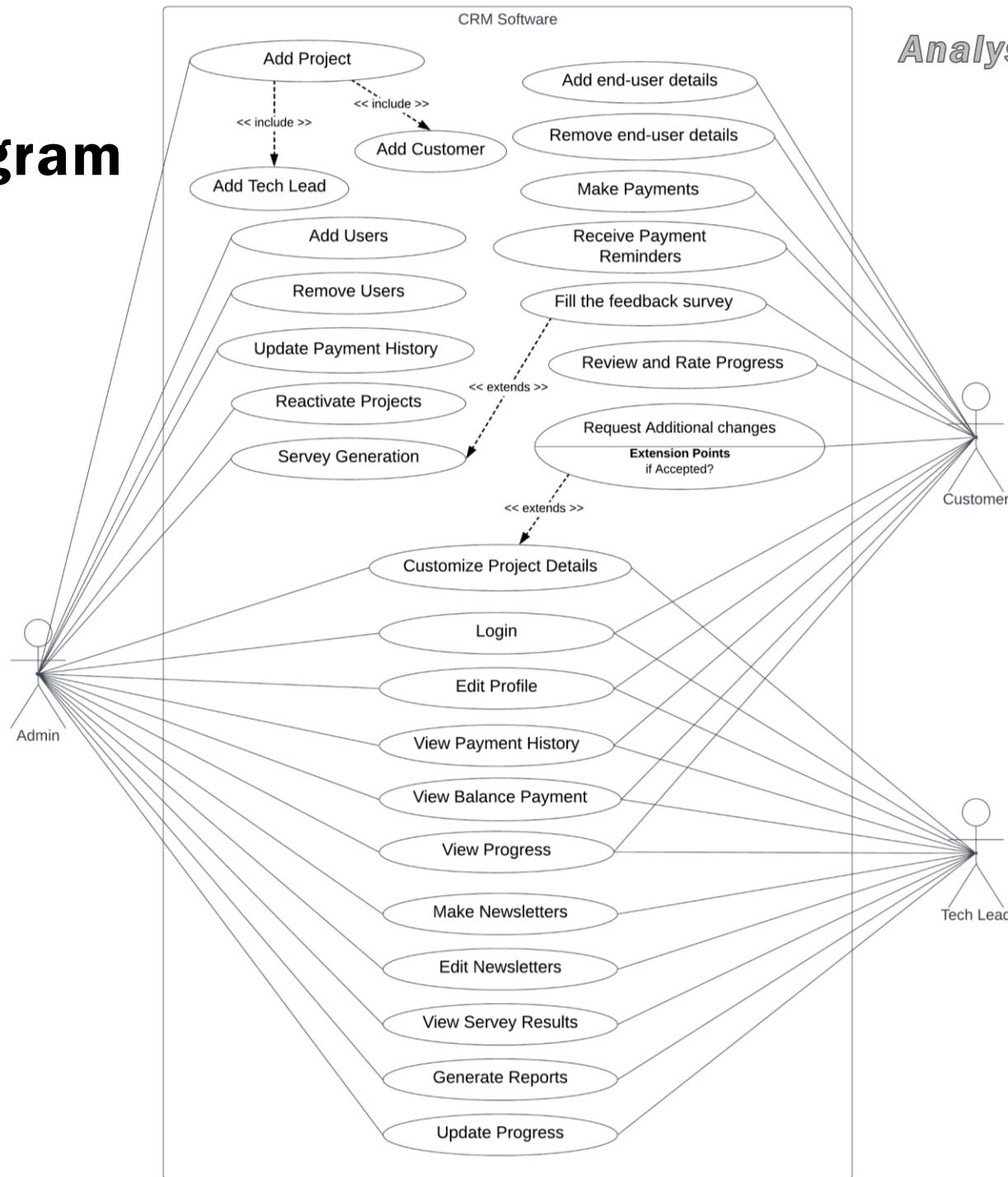
Analysis and Design

Diagrams

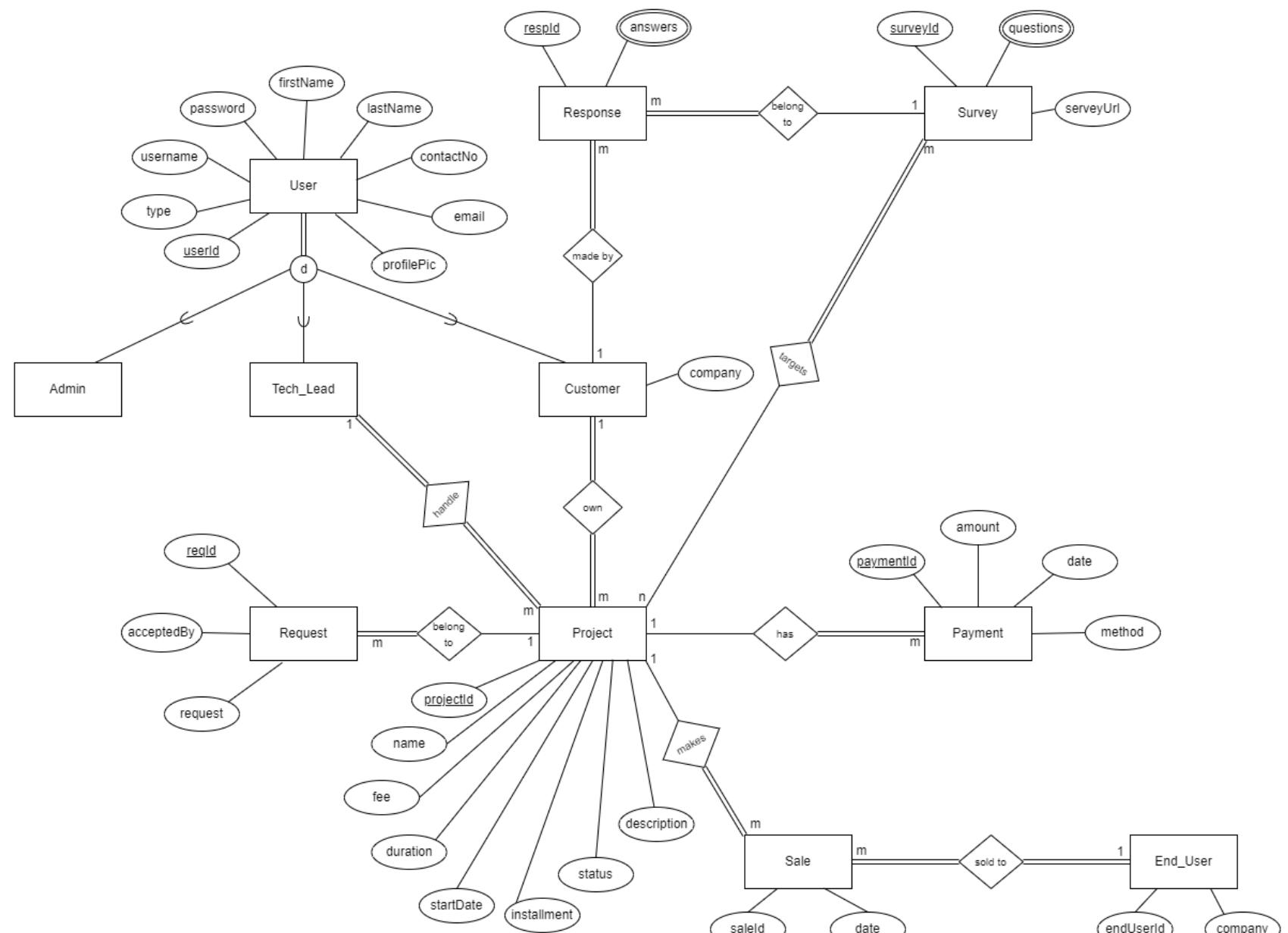
- ✓ Use Case Diagram
- ✓ ER Diagram
- ✓ Class Diagram
- ✓ Activity Diagrams
- ✓ Sequence Diagrams



Use Case Diagram



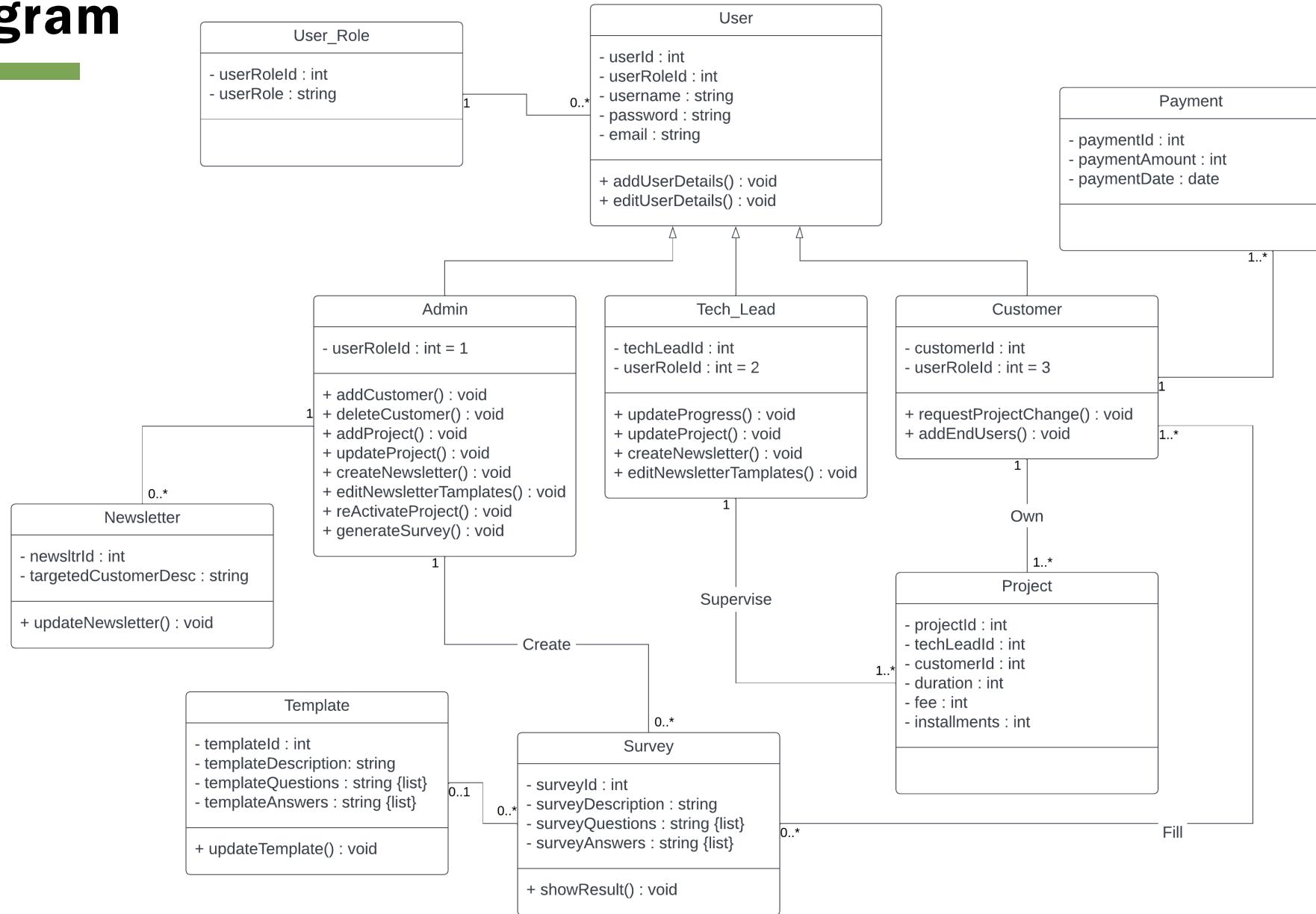
ER Diagram



Assumptions,

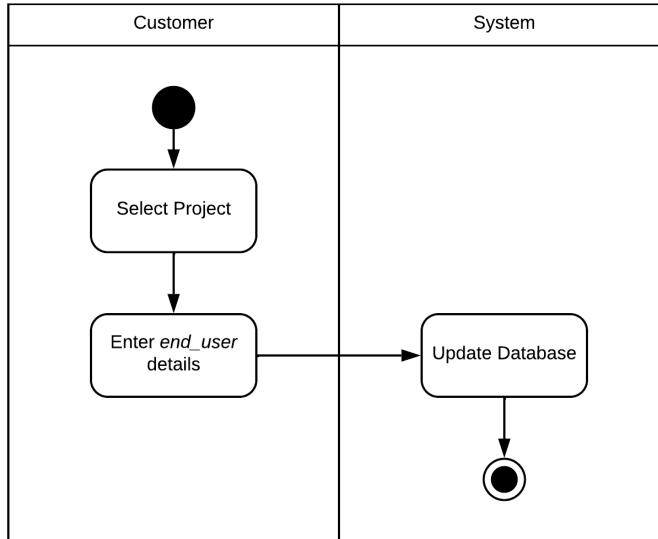
- There cannot be any **Customer** or **Tech_Lead** without a **Project**.
- There may be some **Projects** still haven't made any **Payment**.
- There may be some **Projects** still haven't targeted by any **Survey**.

Class Diagram

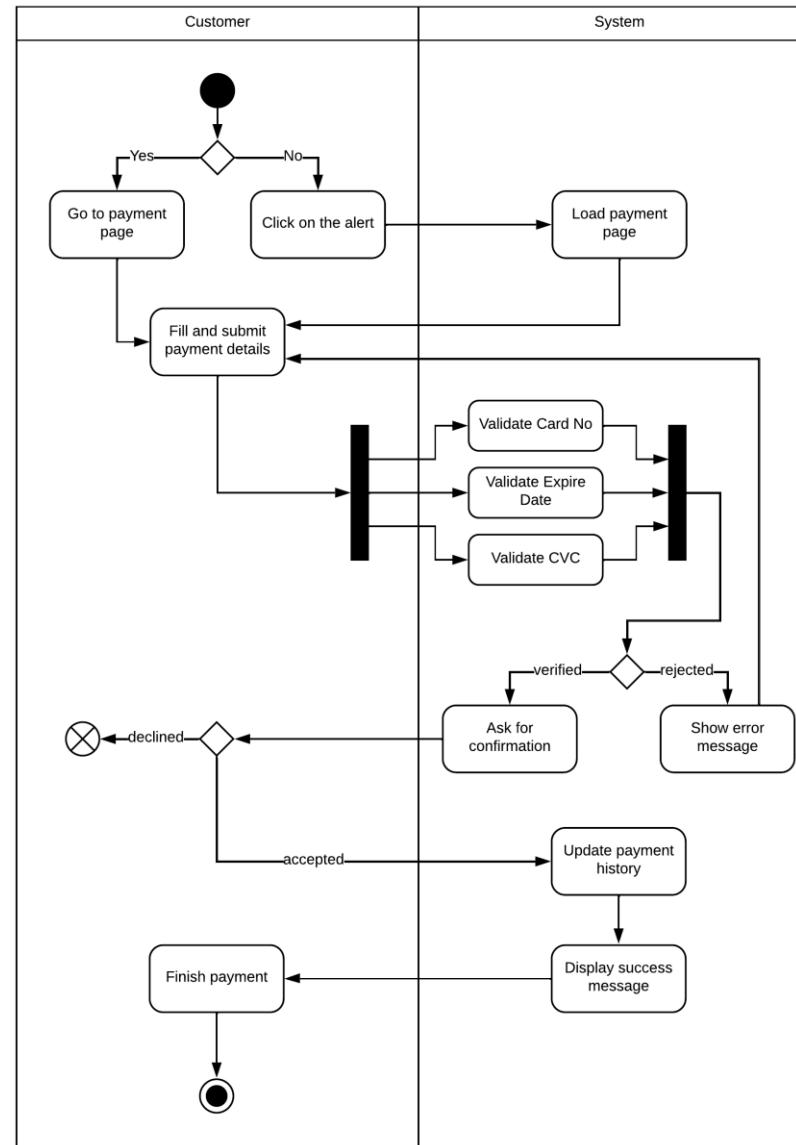


Activity Diagrams

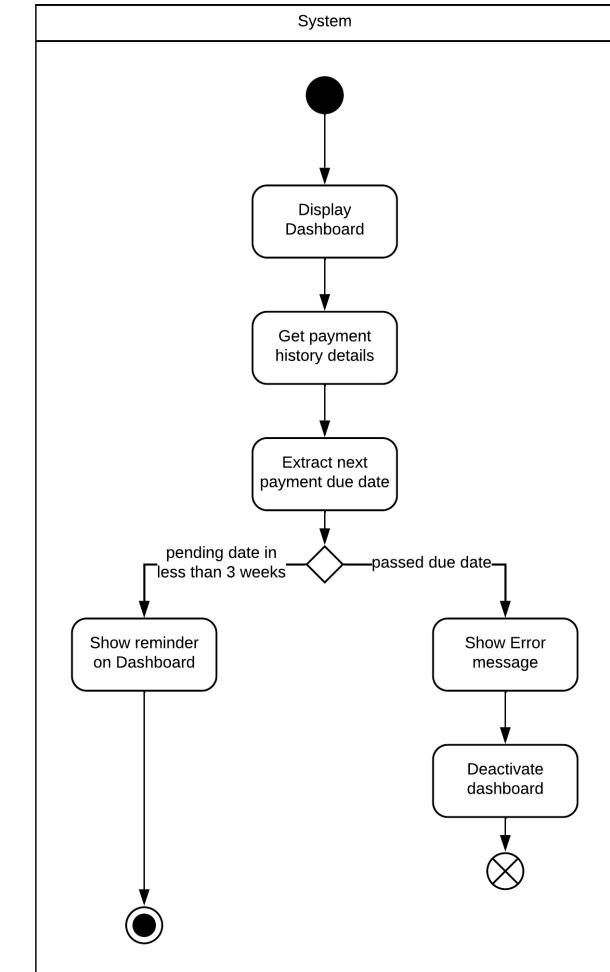
Enter sales Information



Do payments

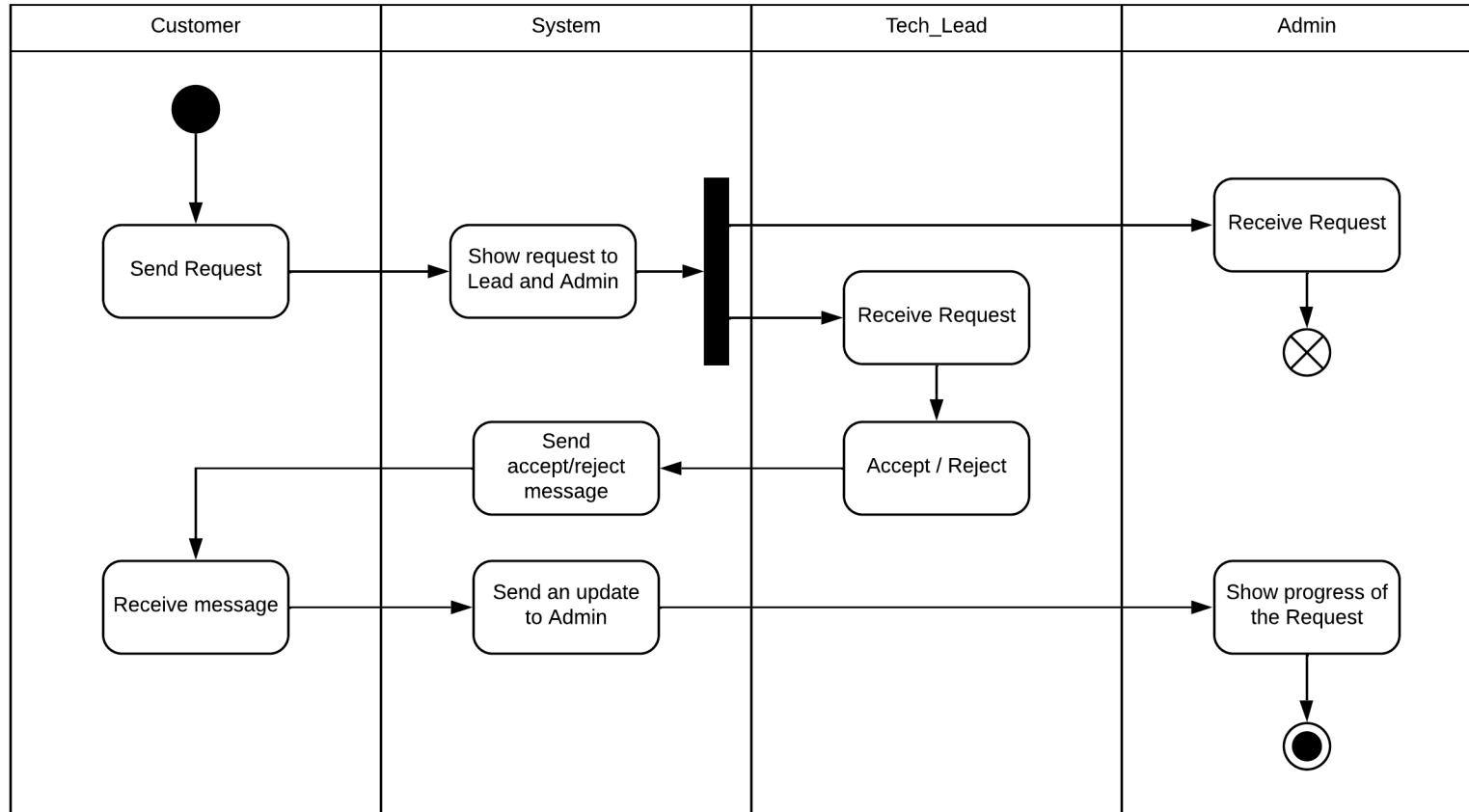


Show payment reminders



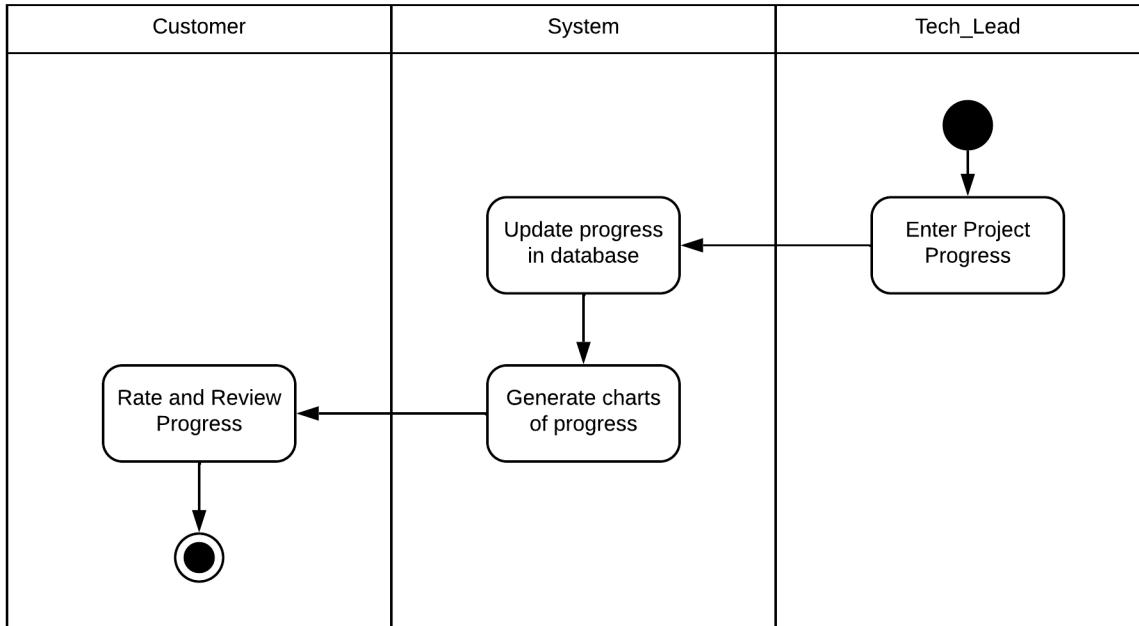
Activity Diagrams

Request Requirement Change

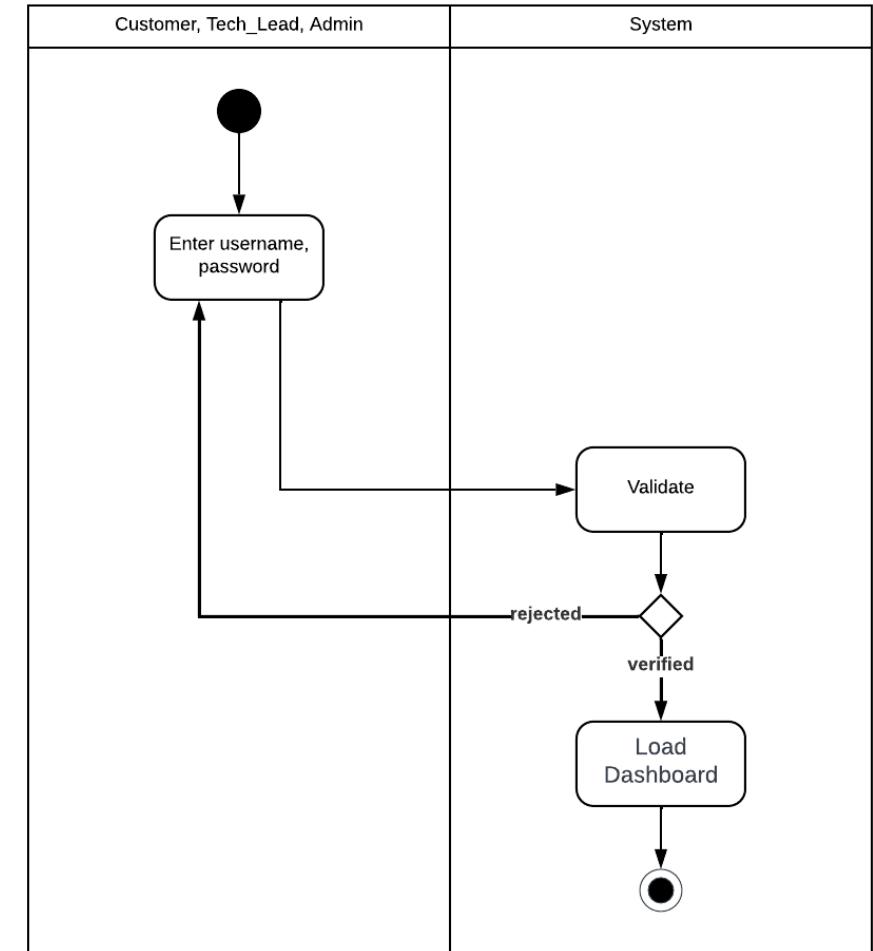


Activity Diagrams

Update Progress and Rate Progress

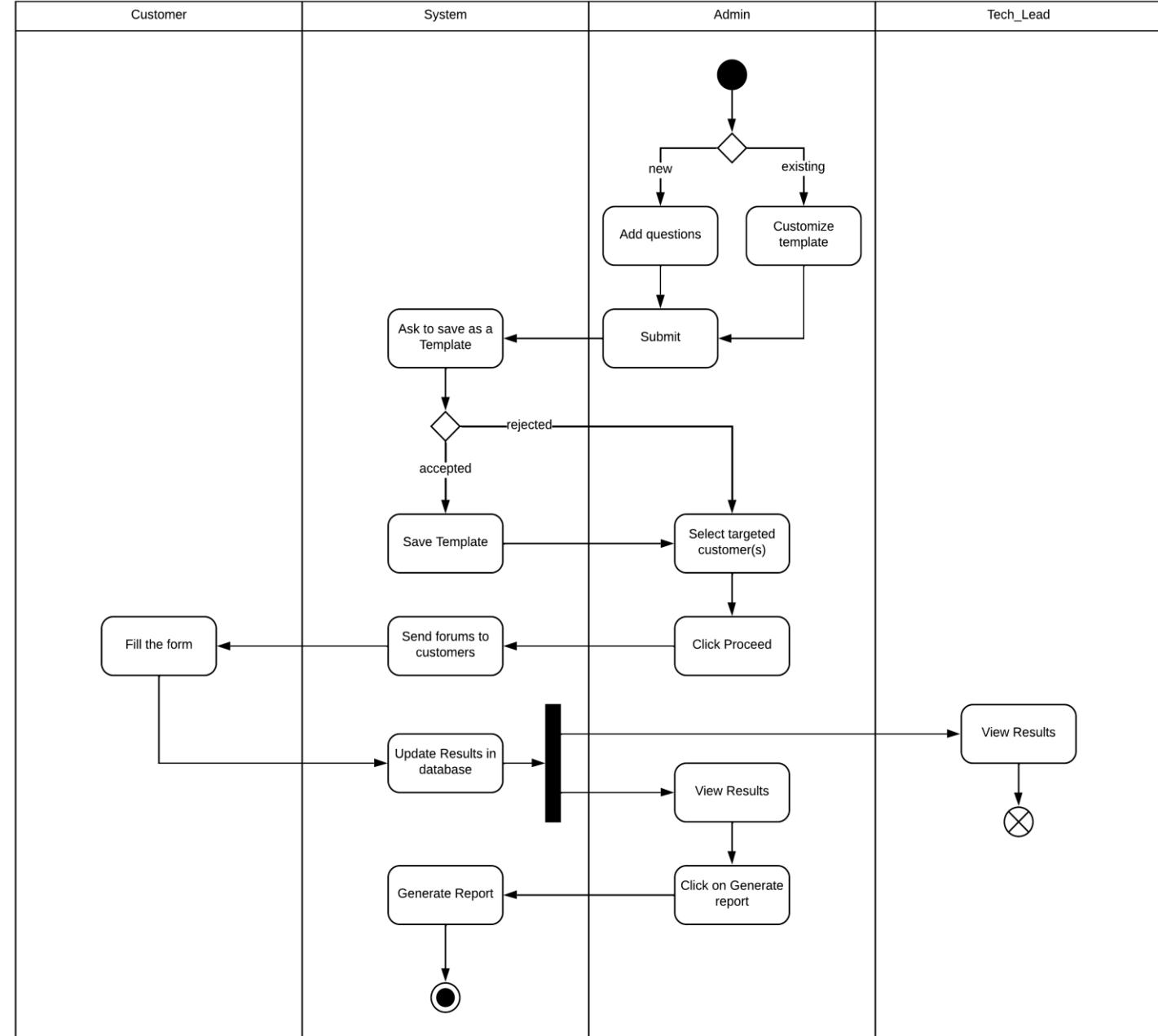


Sign in



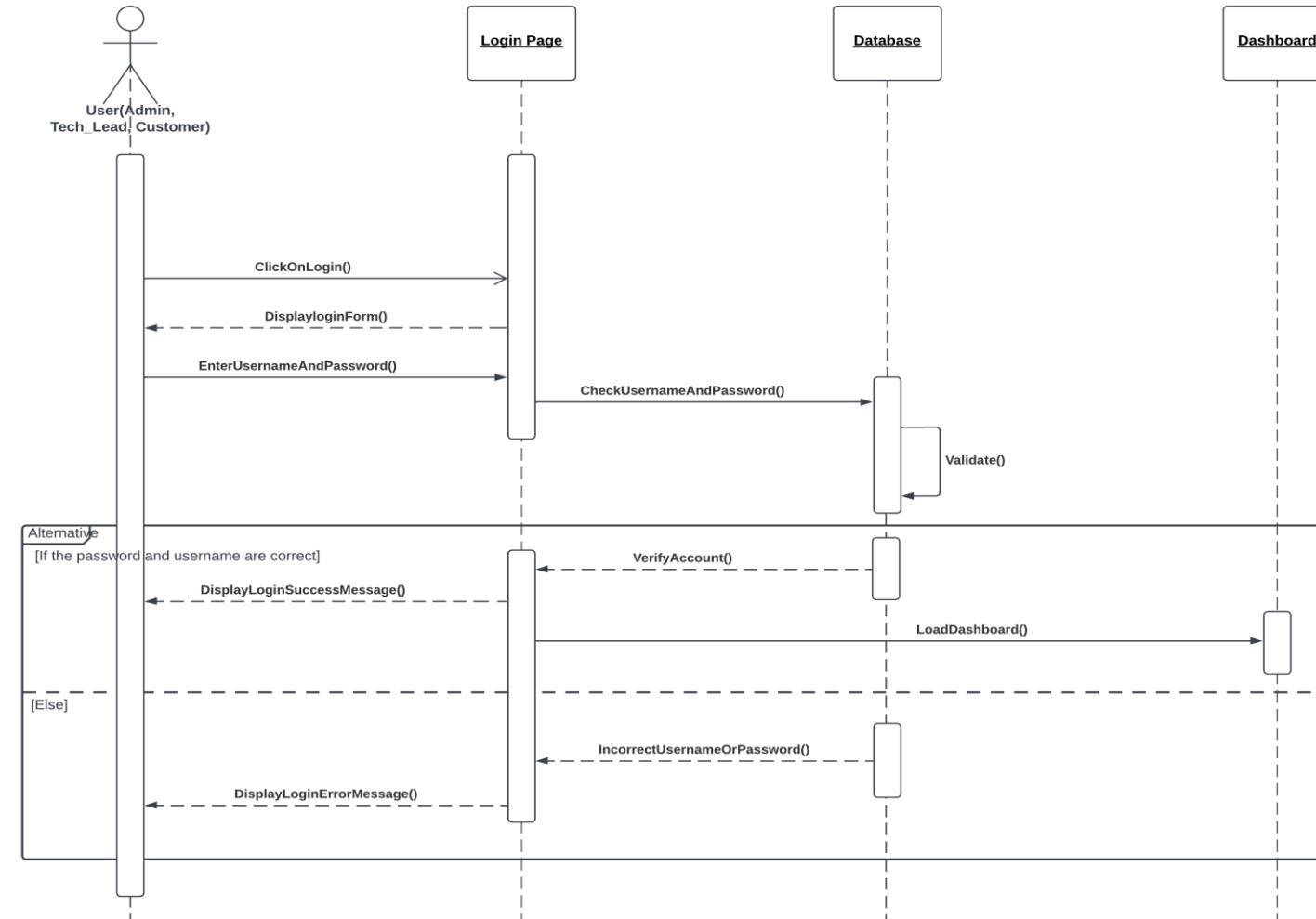
Survey Generation and display Result

Activity Diagrams



Sequence Diagrams

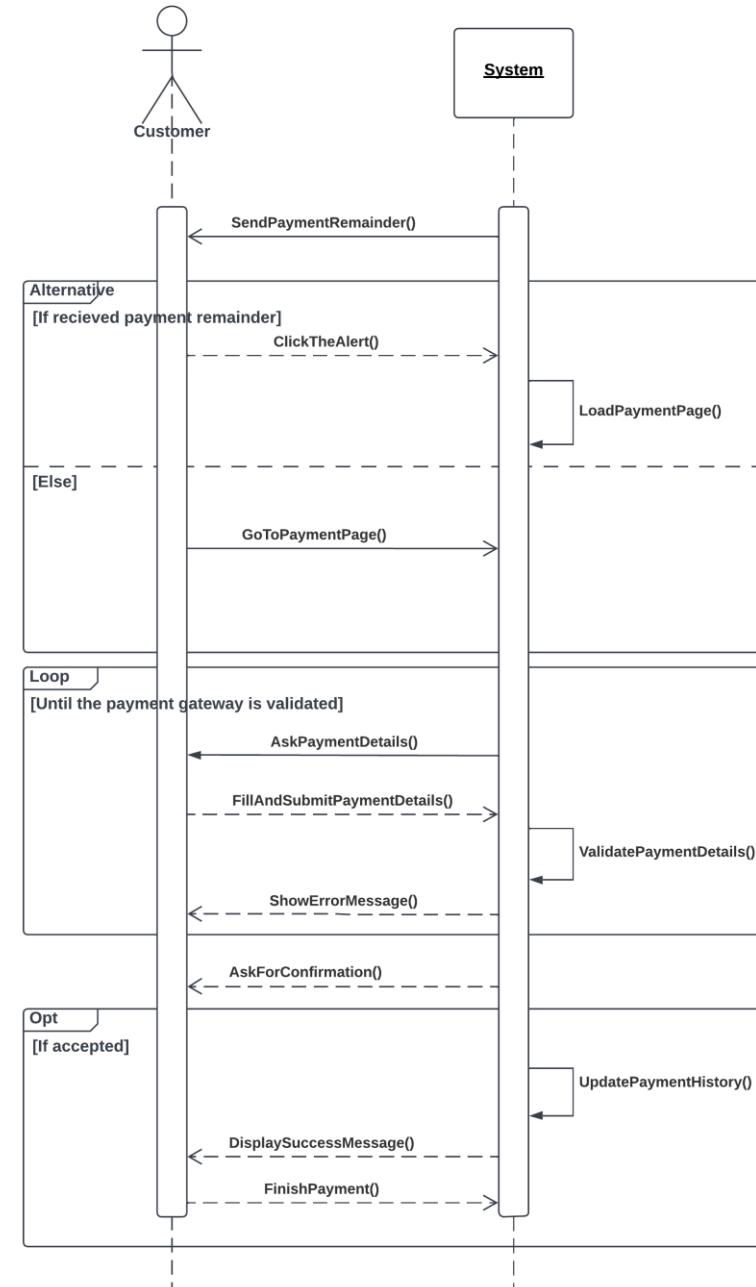
Login



Sequence Diagrams

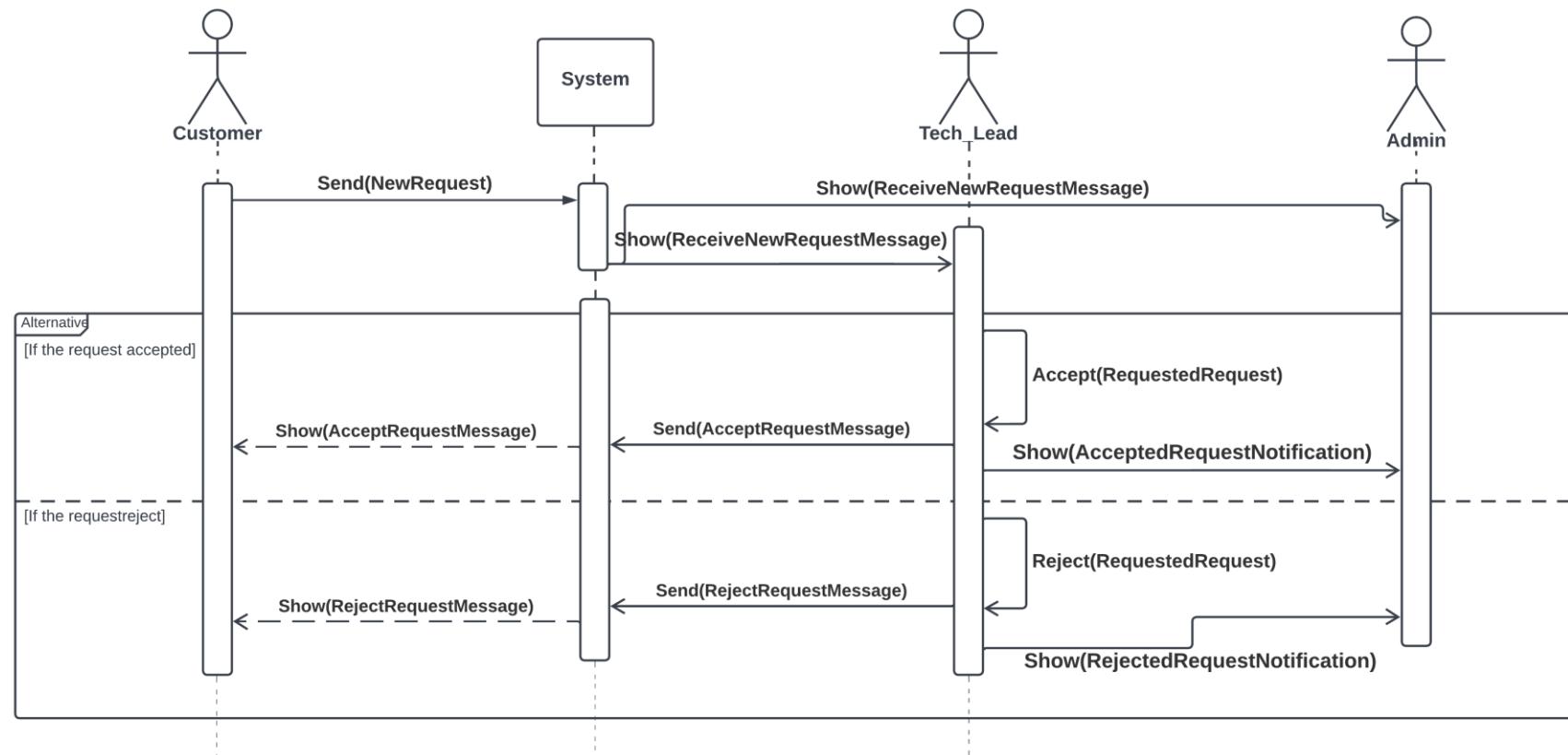
Do Payments

Analysis and Design - Diagrams



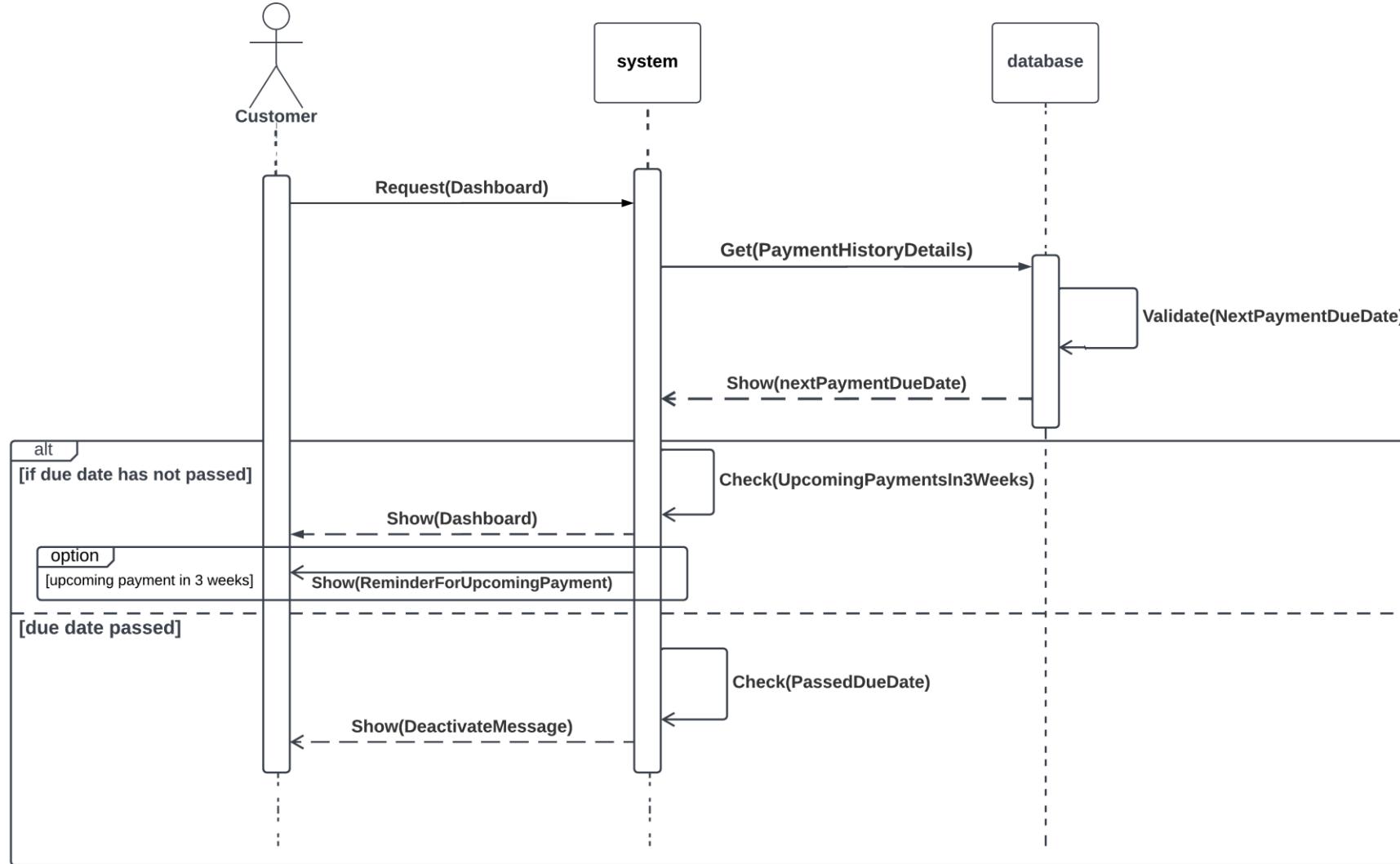
Sequence Diagrams

Request Requirement Change



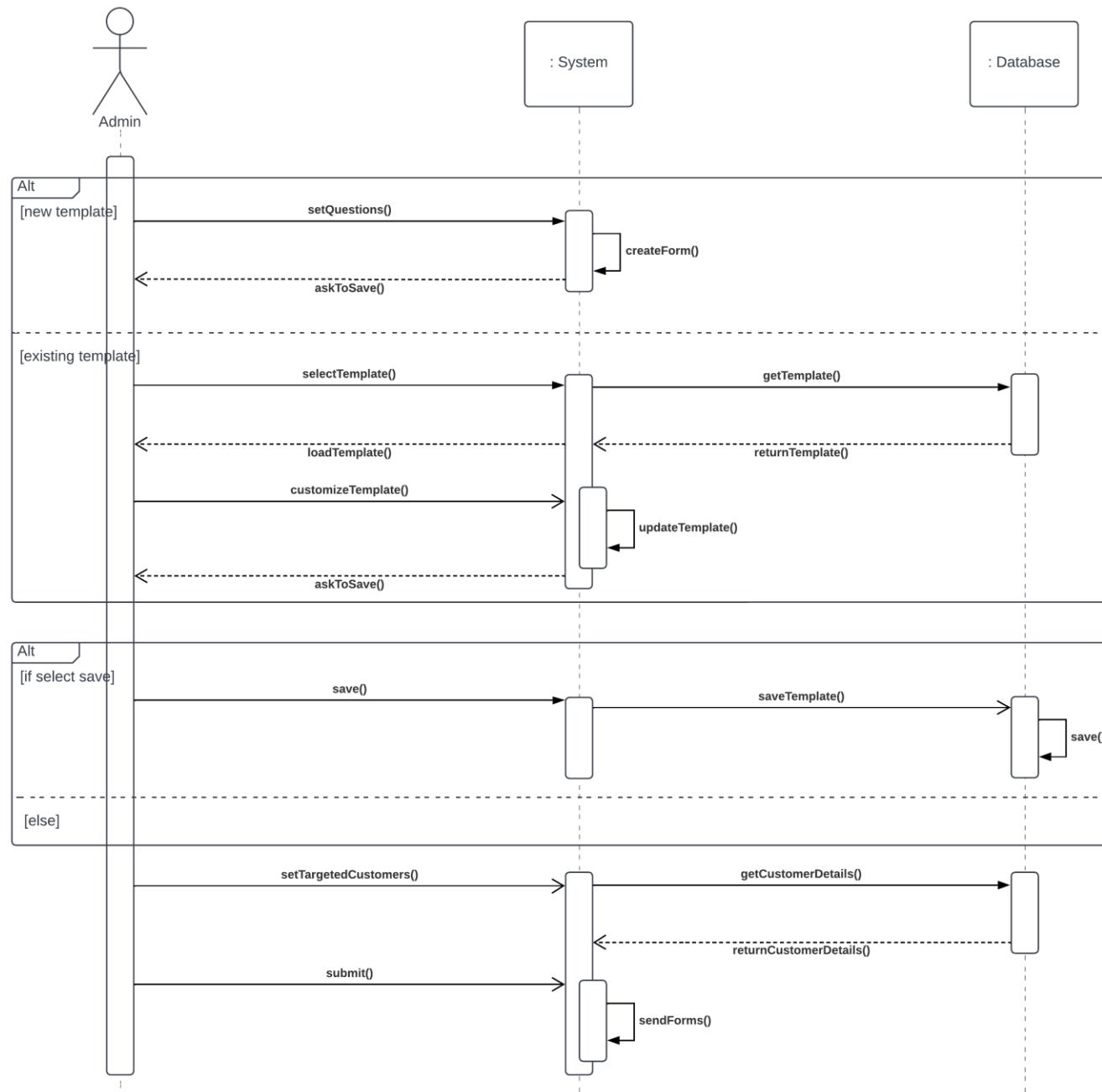
Sequence Diagrams

Show Payment Reminder



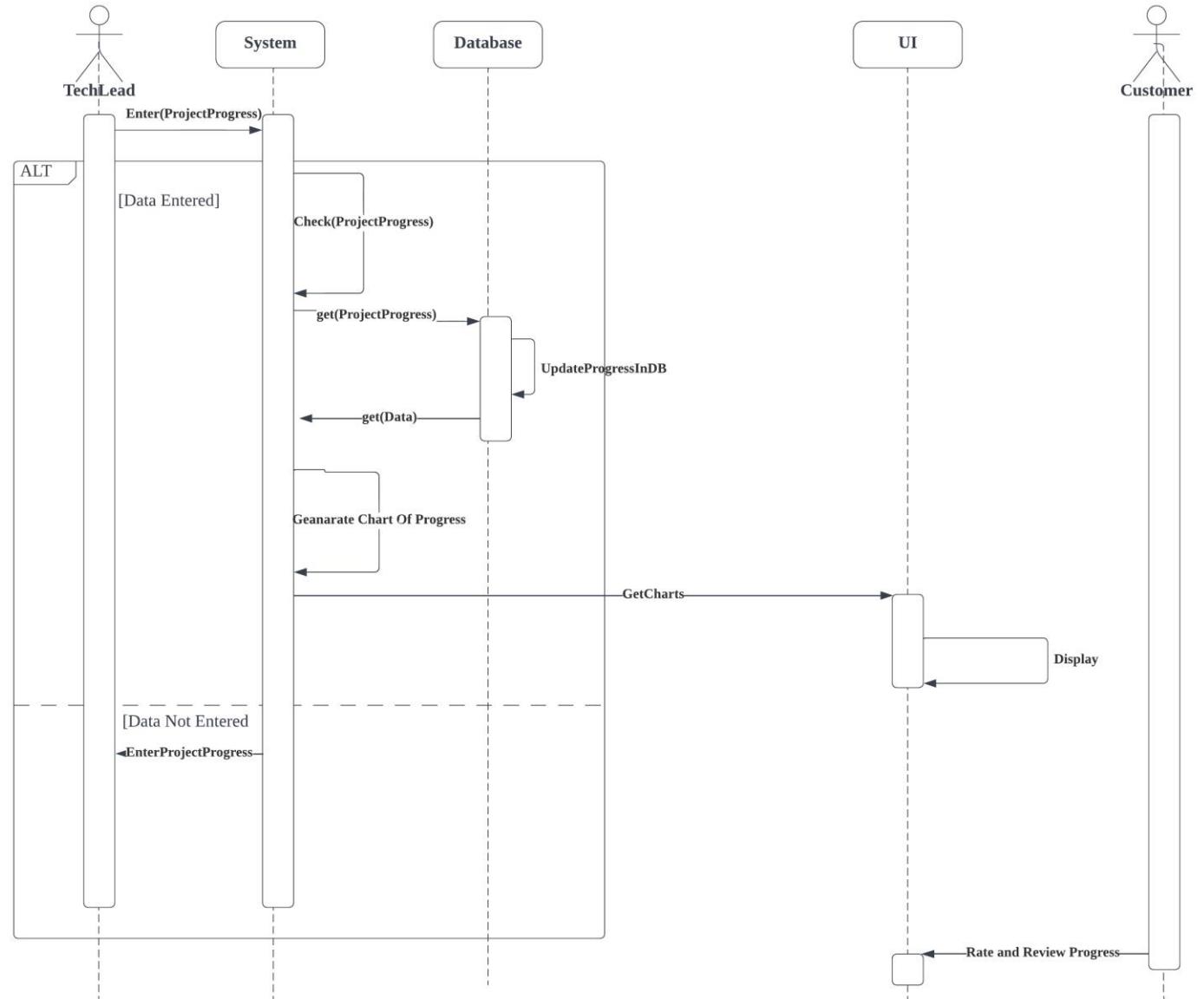
Sequence Diagrams

Survey Generation



Sequence Diagrams

Update Progress



Interfaces

Dashboard – Admin

The dashboard features a clean, minimalist design with a light gray background. A green horizontal bar is positioned at the top left. On the right side, there's a sidebar with a large circular profile picture placeholder for the user 'Thushan D. Fernando'.

Key Metrics:

- # of Projects:** 250
Completed: 100
Ongoing: 150
- # of Customers:** 150
- # of Tech Leads:** 105

Customer Requests:

- Mr. M. P. Wijesekara** (Requirement Change) - Yesterday
- Ms. Waruni Gunasena** (Speed up Development) - 2 days ago
- Ms. Nayanathara** (Requirement Change) - 3 days ago
- Mr. Hasindu Mahanama** (Requirement Change) - 3 days ago

Navigation:

- Project Details
- Customers
- Tech Leads
- Reports
- Feedback Forms
- Newsletters

Buttons:

- Update Profile
- Details (for each customer request)
- See all (at the bottom right)

Interfaces cont.

View Project Details - Customer

The screenshot displays a mobile application interface for viewing project details. At the top right is a power button icon. The main content area is divided into several sections:

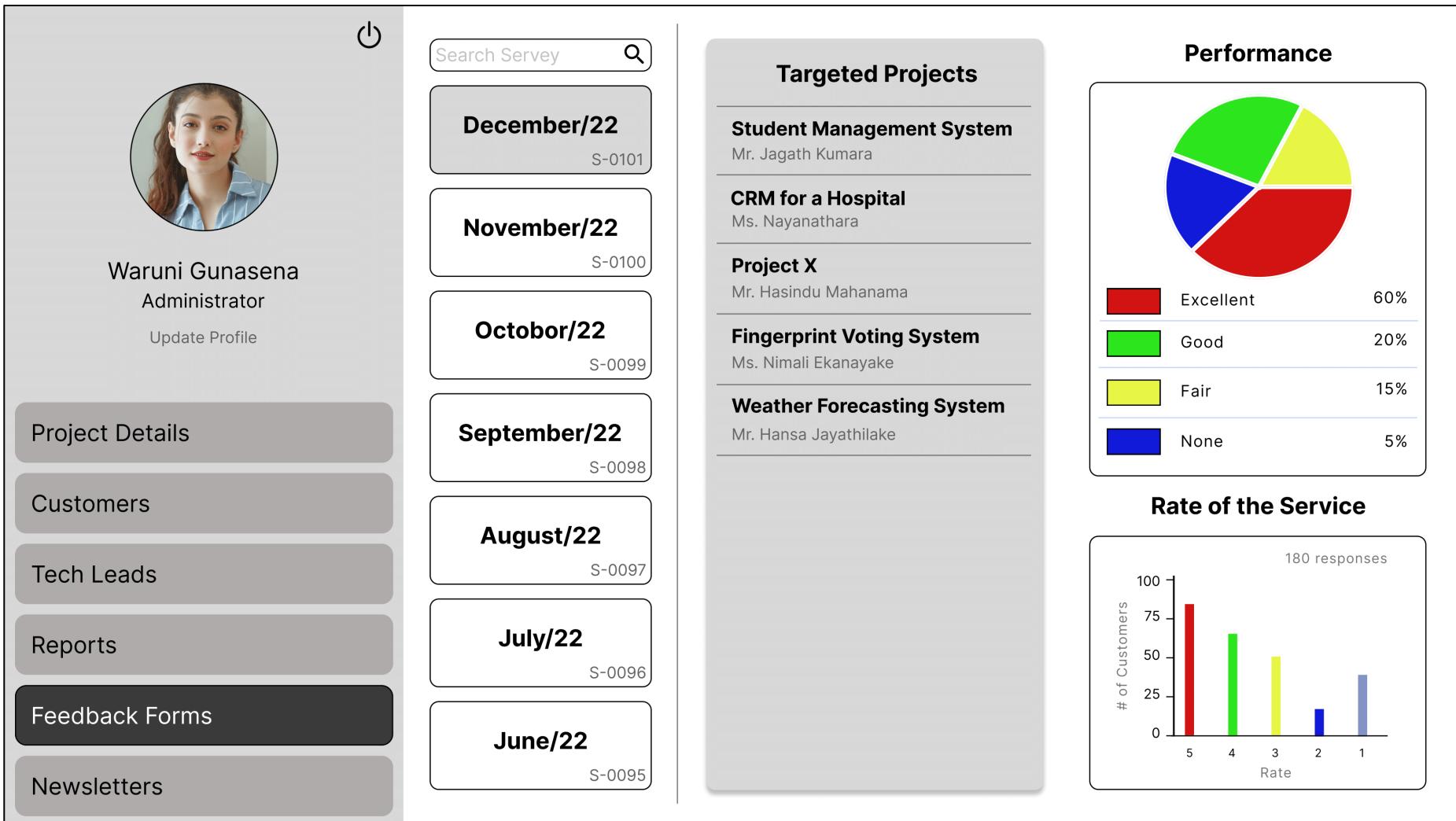
- Profile Section:** Features a large circular placeholder for a profile picture, followed by the name "Hasindu Mahanama" and the title "Customer". Below this is a "Update Profile" button.
- Project Section:** Contains a search bar labeled "Project Name" with a magnifying glass icon. Below it is a card for "Project X" which is identified as the "Vehicle Rental System".
- Request Section:** Titled "Requests", it includes a search bar for "Search by Date" and dropdown filters for "Status - All" and "Type - All". It lists four requests:
 - "Requirement Change" (3 days ago, Accepted) with a "Details" link.
 - "Speed up Development" (02/12/2022, Accepted) with a "Details" link.
 - "Requirement Change" (10/11/2022, Pending) with a "Details" link.
 - "Requirement Change" (25/10/2022, Rejected) with a "Details" link.

At the bottom right is a blue circular icon with a white square and a small circle inside.

25

Interfaces cont.

Feedback Form results - Admin



Technologies Used

Front-end Development

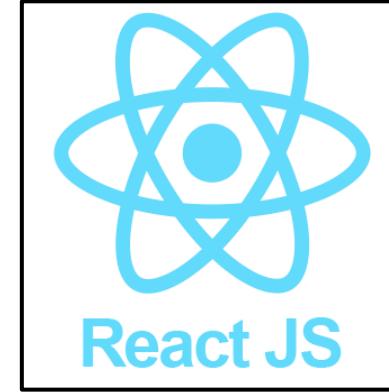
- ✓ React JS

Back-end Development

- ✓ Microsoft .Net framework

Database Development

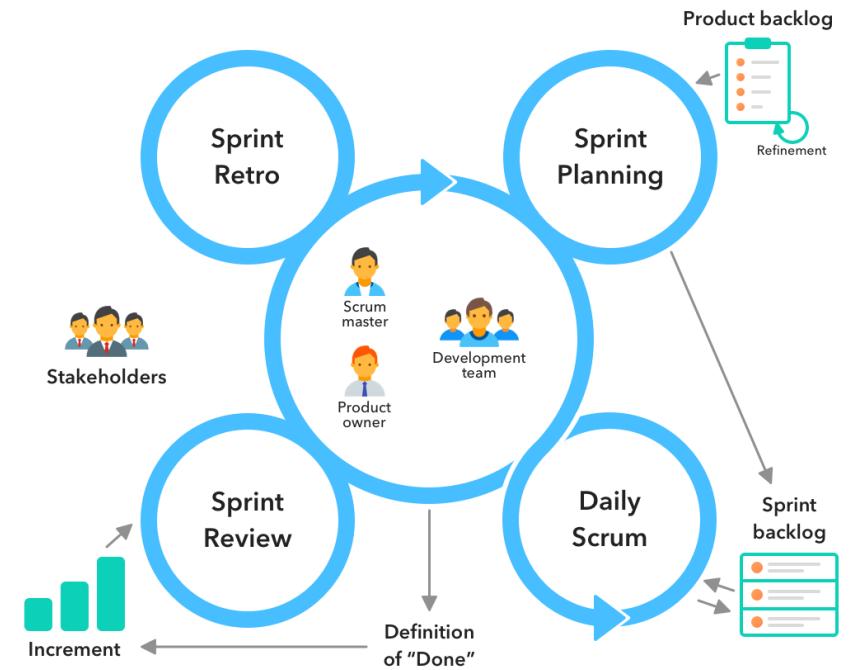
- ✓ MS SQL Server



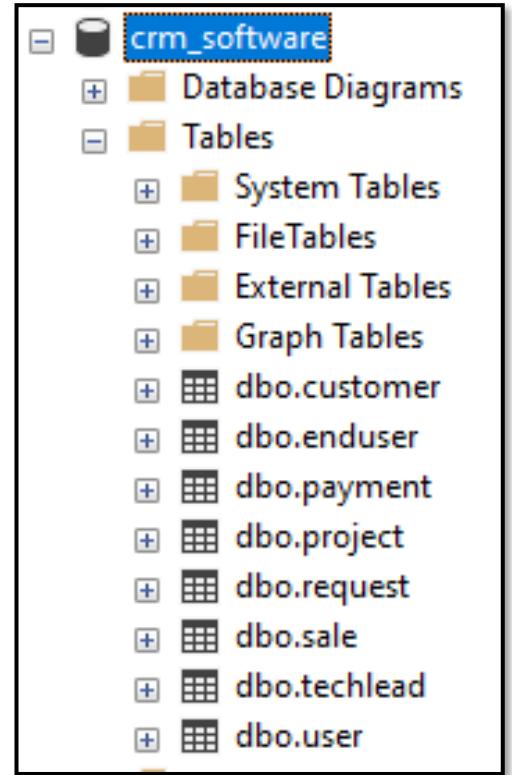
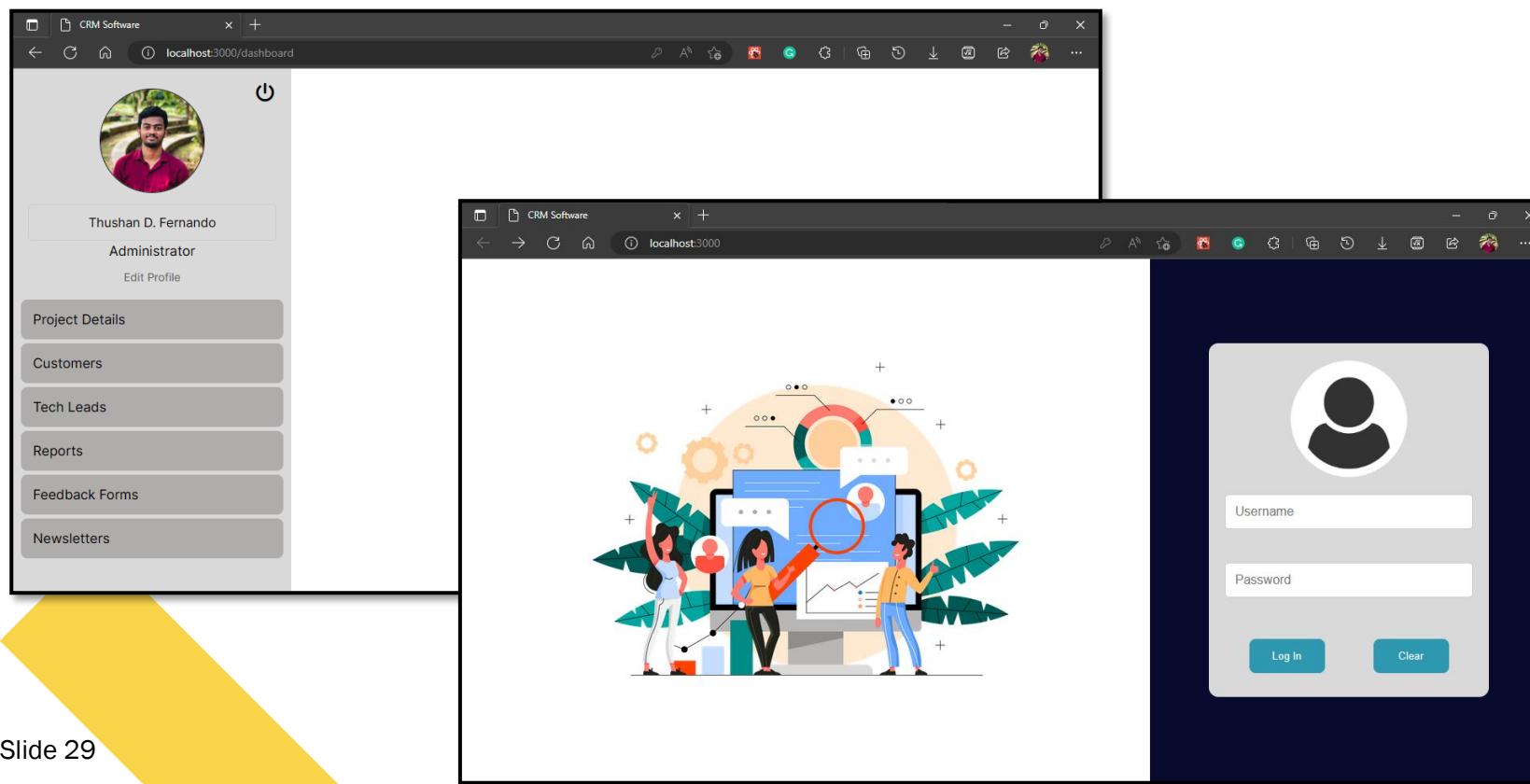
Software Development Model

Agile Scrum Model

- ✓ Possibility of changing requirements in the project
- ✓ Widely being used in industry
- ✓ Operations of SDLC may be done parallelly
- ✓ Need of frequent prototypes after a while
- ✓ To manage development time and cost
- ✓ Recommended by mentor and supervisor



Current Progress



Further Work

Need to integrate project management software used by the company

Modules to be implemented,

- ✓ Payment Gateway
- ✓ Survey Generation and Result Dashboard
- ✓ Performance Management
- ✓ Newsletters and Report Generation



Time Plan

Task	2022				2023				
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Learning about Technologies									
Requirements Analyzing									
Database Design									
UI Design									
Database Development									
Build the Solution									
Testing									
Implementation									

Individual Contribution



204233C – Wijesekara M P

- ❖ Chat System
 - ✓ Studying about technology
 - ✓ Interface designing
 - ✓ Coding the solution
 - ✓ Draw Activity and Sequence Diagrams

- ❖ Survey Generation
 - ✓ Studying about technology
 - ✓ Interface designing
 - ✓ Coding the solution
 - ✓ Draw Activity and Sequence Diagrams



204053A – Fernando K T D

- ❖ Study the Requirements and Technologies for,
 - ✓ Managing end-user details
 - ✓ Showing upcoming payment reminders
 - ✓ Integration of payment gateway
 - ✓ Managing the payment History
- ❖ Draw Activity and Sequence Diagrams
- ❖ Draw ER diagram
- ❖ Design relevant Interfaces



204039L– Dilanka M G G H

❖ Performance Management and Project Handle

- ✓ Studying about technology
- ✓ Interface designing
- ✓ Coding the solution
- ✓ Draw Activity and Sequence Diagrams

❖ Report Generate

- ✓ Studying about technology
- ✓ Interface designing
- ✓ Coding the solution
- ✓ Draw Activity and Sequence Diagrams



204063E - Gunasena K G W C

- ❖ Survey result dashboard
 - ✓ Studying about technology
 - ✓ Interface designing
 - ✓ Coding the solution
 - ✓ Draw Activity and Sequence Diagrams

- ❖ Sending Newsletters
 - ✓ Studying about technology
 - ✓ Coding the solution
 - ✓ Draw Activity and Sequence Diagrams



204183V – Samarakkody S T R H N

❖ Login

- ✓ Studying about technology
- ✓ Interface designing
- ✓ Coding the solution
- ✓ Draw Activity and Sequence Diagrams

❖ User Information Management

- ✓ Studying about technology
- ✓ Interface designing
- ✓ Coding the solution
- ✓ Draw Activity and Sequence Diagrams



Our team



Fernando K T D

204053A



Wijesekara M P

204233C



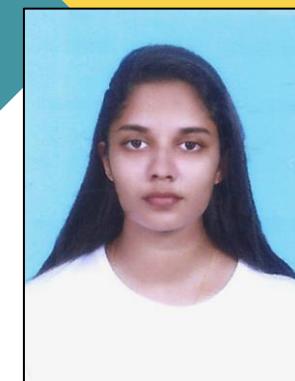
Dilanka M G G H

204039L



Gunasena K G W C

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Samarakkody S T R H N

204183V



Thank you!

Questions...?

Reference

- [1] E. Golightly, “10 best CRM software examples and their use cases,” ClickUp, 18-Nov-2022. [Online]. Available: <https://clickup.com/blog/crm-software-examples/>. [Accessed: 01-Jan-2023].
- [2] “ReactJS Tutorial - javatpoint,” www.javatpoint.com. [Online]. Available: <https://www.javatpoint.com/reactjs-tutorial>. [Accessed: 01-Jan-2023].
- [3]. “NET,” Microsoft. [Online]. Available: <https://dotnet.microsoft.com/en-us/>. [Accessed: 01-Jan-2023].
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- [5] “MS SQL Server Tutorial,” Tutorialspoint.com. [Online]. Available: https://www.tutorialspoint.com/ms_sql_server/index.htm. [Accessed: 01-Jan-2023].