SERVICEHUB

a cross-platform web and mobile application designed to obtain and provide local services in Bukidnon

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SERVICEHUB 2024

ServiceHub

Presentation Outline

- Introduction

- Problem Statement

- Objectives of the Study

- Scope and Limitation

- Significance of the Study

- Technical background

- Review of Related Literature

- Methodology

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Background of the Study

- In communities like Bukidnon, diverse community needs include academic assistance, local services, skill development, and employment opportunities.

- Technological advancements offer new avenues for skill development and job placement.

- Online platforms and the gig economy transform work dynamics but face challenges like unequal access.

- The Philippines ranks third globally in online freelancers, indicating a significant presence in the gig economy.

- Despite online work accessibility, a gap exists in connecting local service providers and academic support in Bukidnon.

- 'Service Hub' is introduced as a platform to address these issues by facilitating a balanced exchange of services within the community, focusing on the unique requirements of Bukidnon

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Statement of the Problem

1. What strategies and features can be implemented in a user registration system and profile management feature to enhance transparency and build trust within a service marketplace platform?
2. In what way can users quickly find the necessary services?
3. How can the platform inform users about the status of service requests or offers?
4. What methods can enable direct communication between service seekers and providers?
5. In what manner will the platform handle overall management tasks such as report generation and other platform-related tasks?

Specific Objectives

1. Create a user registration system and implement profile management containing features that provide clear and detailed service information, including reviews and ratings.
2. Implement posting and listing services features, including filtering and a search engine to discover services and providers.
3. Provide a notification for the status of offers or requests.
4. Integrate a chat feature, enabling direct communication between seekers and providers.
5. Develop an administration module to manage the application, including user management, content moderation, review management, and report generation.

Scope

- Initial launch of ServiceHub in Musuan, Maramag Bukidnon, and Valencia City, Bukidnon, exclusively for service providers.

- Service seekers from any municipality within Bukidnon can access the platform.

- Platform caters to academic support, handyman, arts, personal care, and technology services.

- Real-time communication via text messages, with features like notifications and a rating system.

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Limitations

- Geographic scope is limited to Bukidnon
- User eligibility restricted to legal age individuals; not all sign-ups will be accepted.
- Service quality not guaranteed; relies on the rating system for decision-making.
- Initial version excludes video calls, audio, and image handling for the chat feature.
- Payment process negotiated solely during chat; no built-in payment system.
- Accessible on web browsers and Android devices only; not available on iOS application.

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Significance of the Study

Community Members

- Residents will benefit directly from a centralized platform for their service needs.

Service Seekers

- Individuals seeking academic assistance, local services, or skill development will find ServiceHub useful in connecting them with relevant local providers.

Service Providers

- Local freelancers and businesses will benefit from showcasing their services, expanding their reach within the community.

Local Economy

- Local freelancers and businesses will expand their reach and support the local economy by showcasing their services on ServiceHub.

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Significance of the Study

Students

- ServiceHub will enhance academic development by connecting students with local tutors and mentors

Developers

- Developers can leverage ServiceHub as a reference for best practices in designing and implementing local service exchange platforms.

Future Research

- ServiceHub will contribute to future research by providing a comprehensive understanding of community-focused platforms and serving as a case study for investigating the effects of web-based systems on local service exchange.

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Review of Related Literature

Gig Economy and Online Labor Platforms

- Freelance work in the gig economy is characterized by temporary contracts and facilitated through online platforms (Lutkevich & Gillis, 2022).

Challenges and Criticisms in Online Labor Platforms

- Unequal access to online job opportunities and disparities in connecting local service providers are prevalent issues (Shesteryakova & Shesteryakov, 2022; Bandy, J.).

Impact and Dynamics of Gig Economy in Global Context

- The gig economy has transformed work arrangements globally, with implications for workers' precarity and vulnerability (Anwar & Graham, 2020).

Review of Related Literature

Freelancer Marketplaces and Online Labor Platforms

- Effective communication and reputation systems are vital for successful interactions on freelancer marketplaces (Ludwig et al., 2021; Lukac & Grow, 2020).

Online Freelancing Landscape in the Philippines

- The Philippines ranks third globally in the number of online freelancers, with significant participation in online gig platforms (Tintiangko & Soriano, 2020; Soriano et al., 2021).

Role of Online Platforms and Gig Economy in Rural Areas

- The gig economy extends to rural areas, with online platforms facilitating remote work opportunities (Stephany et al., 2021; Raval & Lalvani, 2022).

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Technical Background

Programming Language and Integrated Development Environment (IDE)

- Dart
- Visual Studio Code

Framework

- Flutter

Backend Services and Database

- Firebase Hosting
- NoSQL
- Cloud Firestore

Design and Prototyping Tools

- Figma

Storage and Authentication

- Firebase Cloud Storage
- Firebase Auth

Version Control and Collaboration

- Github

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Conceptual Framework

System Development Methodology
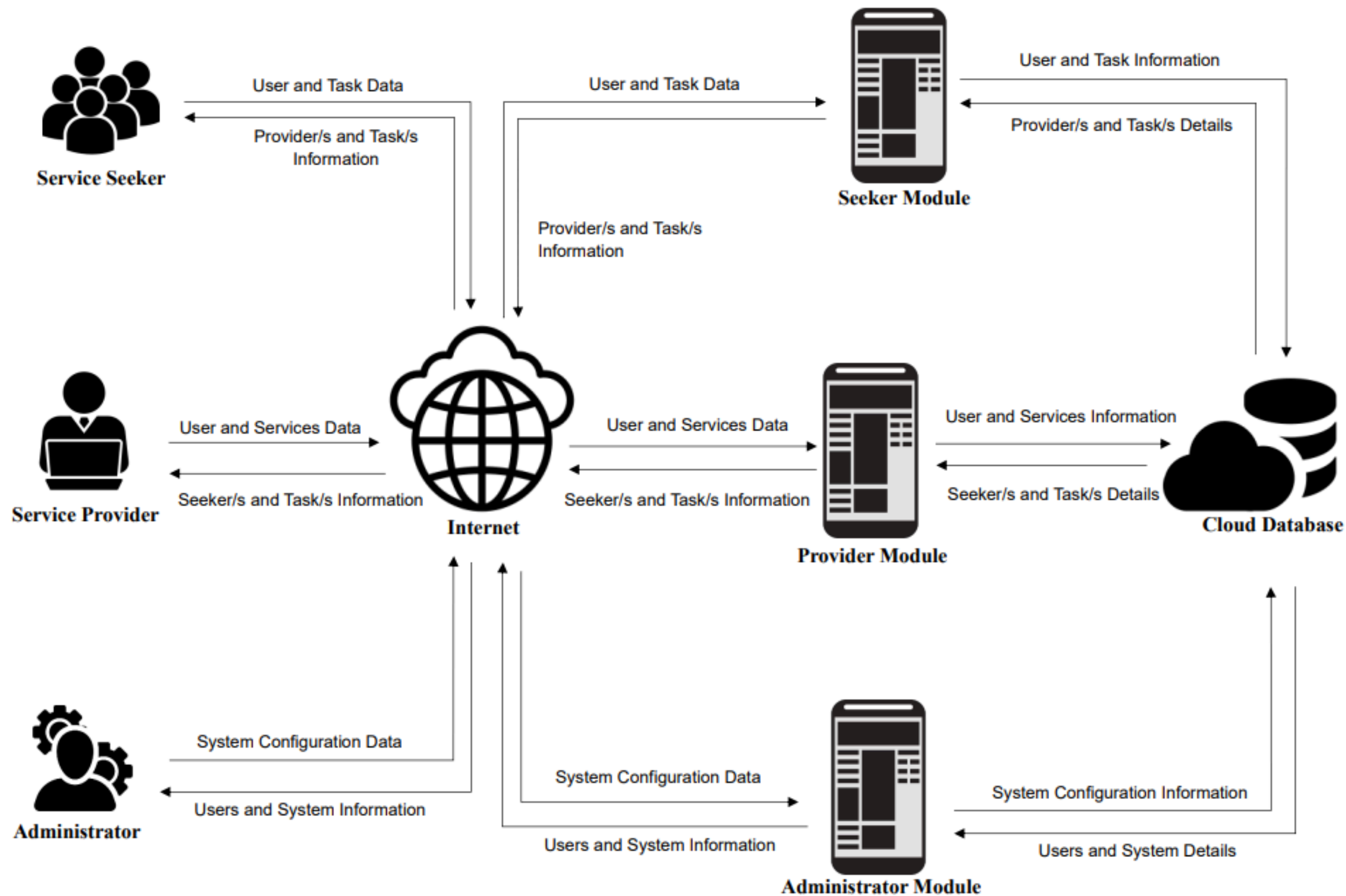
Sprint 1: Application Interface

Sprint 2: Service Provider Module

Sprint 3: Service Seeker Module

Sprint 4: Administrator Module
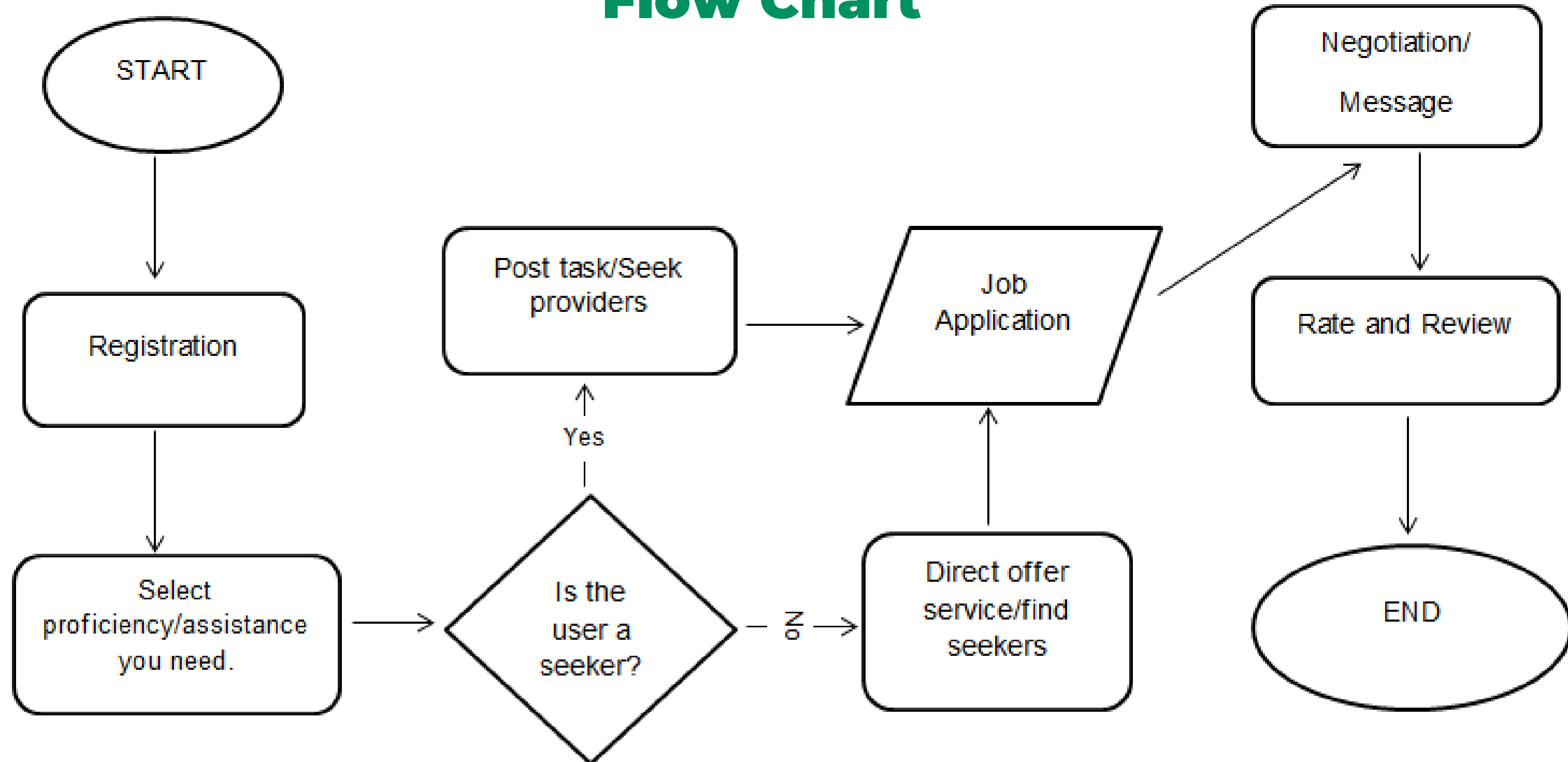
ServiceHub

System Analysis

Flow Chart

System Analysis

Use Case

ServiceHub Use Case Diagram

System Analysis

Use Case

ServiceHub Use Case Diagram

System Analysis

Use Case

ServiceHub Use Case Diagram
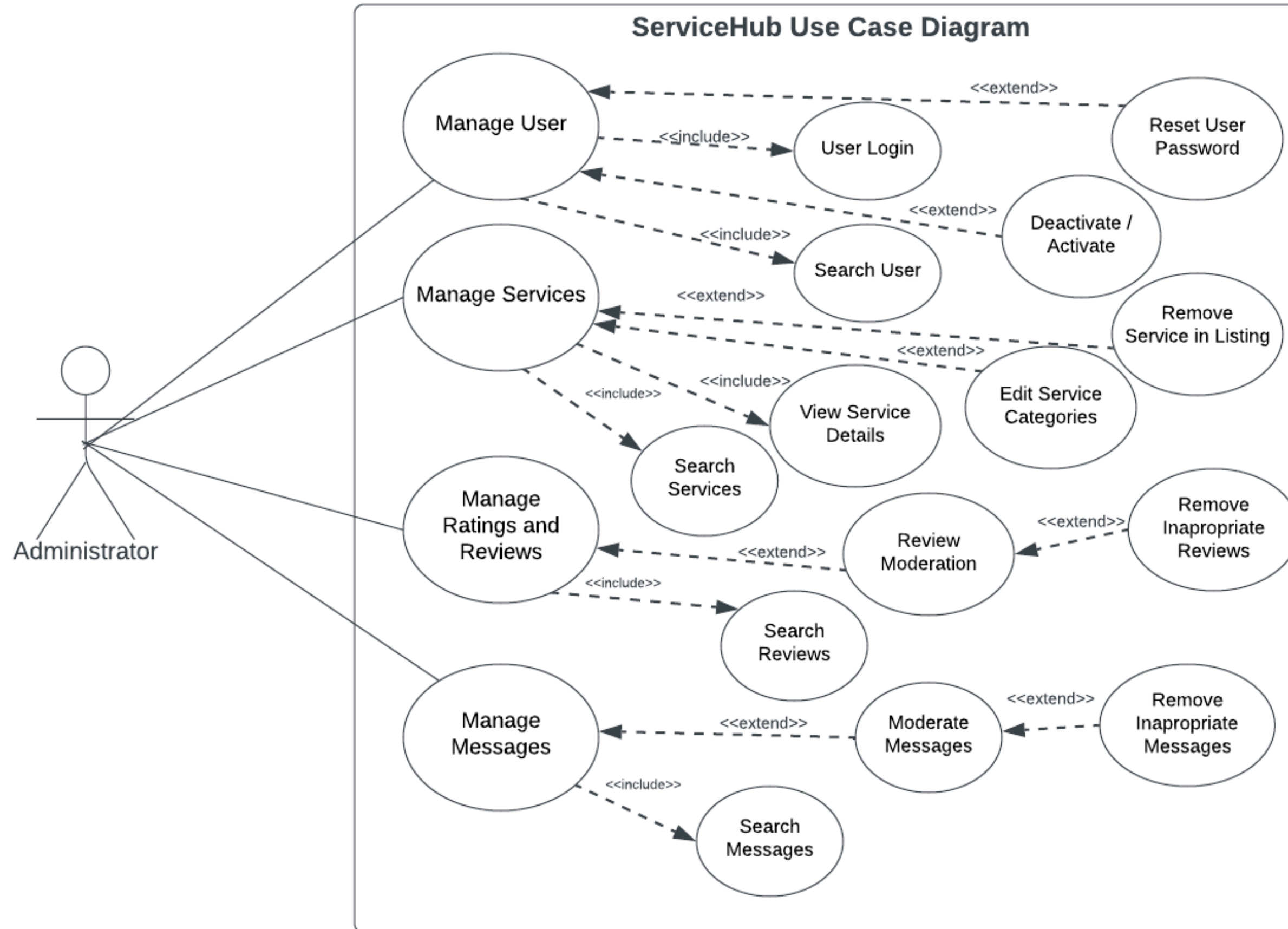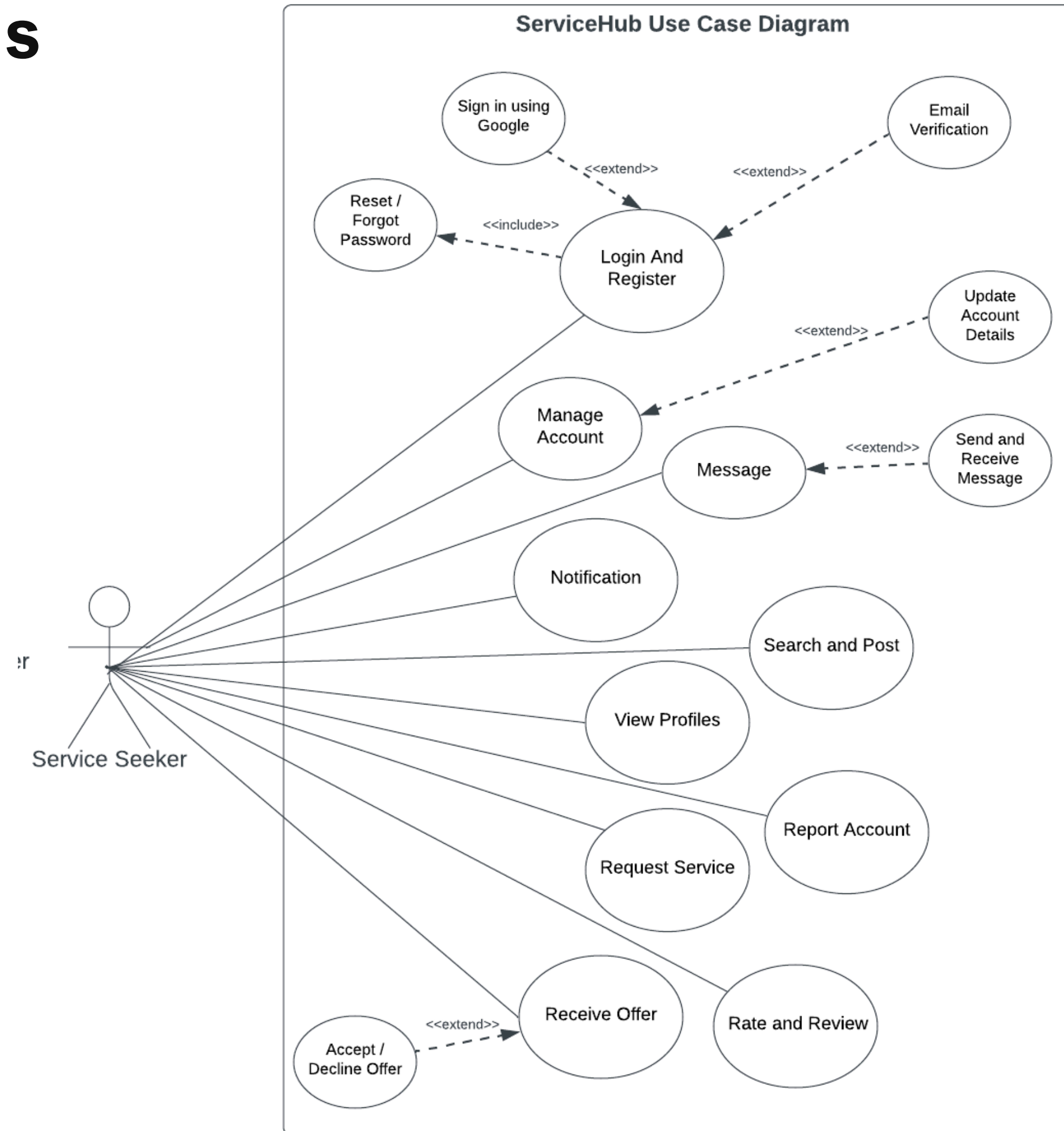
System Analysis

Data Flow Diagram

a. Context Level

CONTEXT DATA FLOW DIAGRAM

System Analysis

Data Flow Diagram

b. Level 0

Data Flow Diagram
(Level 0)

ServiceHub
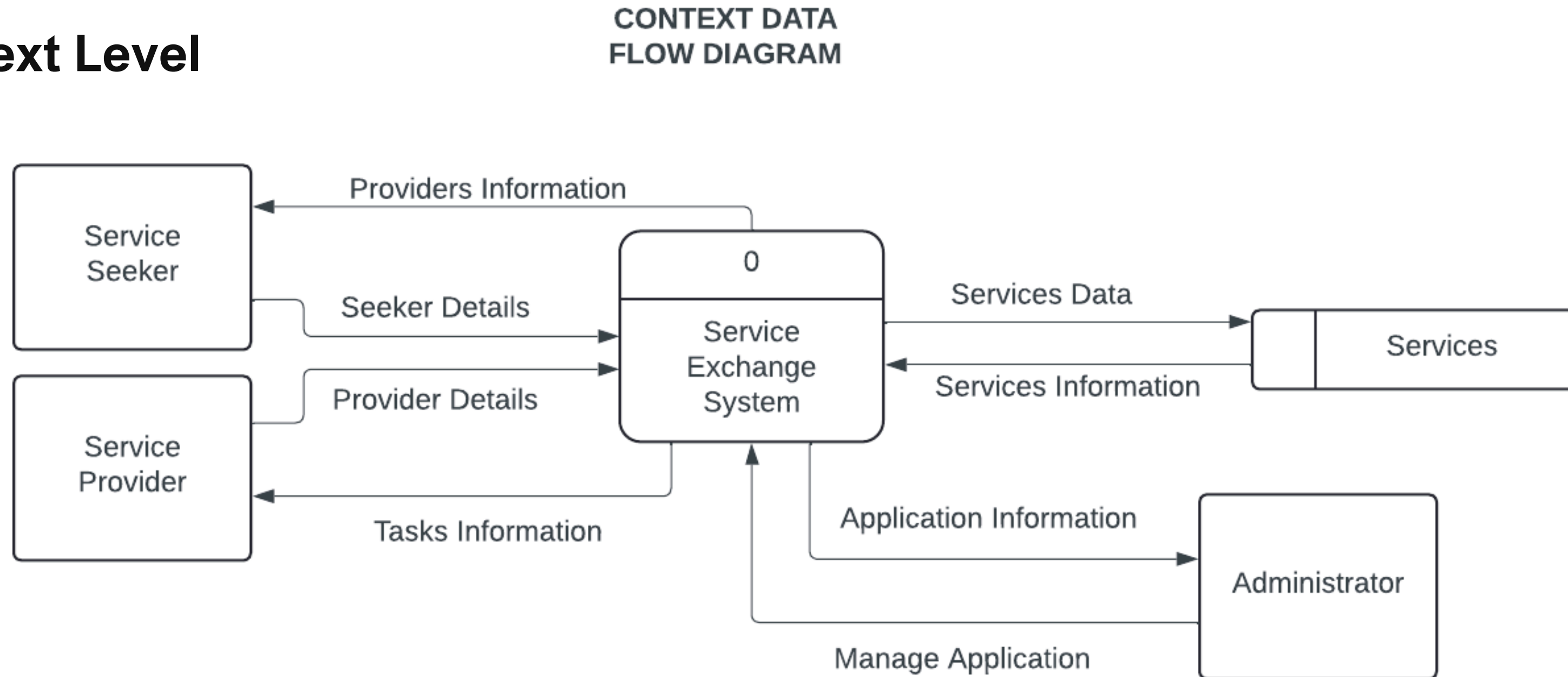
System Requirements Specification

Functional and Non-functional Requirements

a. Functional Requirement

- User Authentication and Profile Management
- Task Posting and Job Application
- Messaging Tool
- Search Functionality
- Rating and Review System
- Notifications

b. Non-Functional Requirements

- Scalability
- Security
- User Experience
- Device Compatibility

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System Requirements Specification

Software Requirement

- Operating System Compatibility
- Minimal System Requirements

Software Requirement

- Internet Connectivity
- Screen Resolution
- Browser Compatibility

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System Design

Database Design

Task

TaskID	Int
Name	Char
OwnerID (FK)	Int
Description	Char
Deadline	Date
Budget	Int
Status	Bit
CategoryID (FK)	Int
Date Posted	Date

Message

MessageID	Int
UserOwnerID (FK)	Int
UserSenderID (FK)	Int
Message	Char
Status	Bit
Date	Date

User

UserID	Int
Username	Char
Email	Char
Location	
Image	Longblob
User Type	Bit
Password	Char
Date Registered	Date
Phone Number	Char

Notification

NotificationID	Int
OwnerID (FK)	Int
Type	Char
Content	Char
Status	Bit
Date Created	Date

Services

ServiceID	Int
Service Category ID (FK)	Int
Service Name	Char
Service Description	Char
Date Added	Date

Provider

ProviderID	Int
Name	Char
UserID (FK)	Int
ReviewID (FK)	Int
Service Offer ID (FK)	Int

Reviews

ReviewID	Int
SenderID (FK)	Int
Rating	Char
Date Created	Date

Transaction

TransactionID	Int
SeekerID (FK)	Int
ProviderID (FK)	Int
DocumentsID (FK)	Int
Status	Bit
Transaction Date	Date

Service Category

CategoryID	Int
Category Name	Char
Date Added	Date

Documents

Document ID	Int
Document Type	Char
File Name	Char
Status	Bit
Date Uploaded	Date

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Testing Methodology

System Usability Scale (SUS)

 he SUS will evaluate user satisfaction and identify any usability issues within the ServiceHub app.

Technology Acceptance Model (TAM)

The TAM will be used to understand user perceptions of ServiceHub's value and ease of use, ultimately influencing the testers' decision to adopt the app.

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Project Management

Gantt Chart

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Lovido, Lumbayan, Yaba
Project Started: September 24, 2023

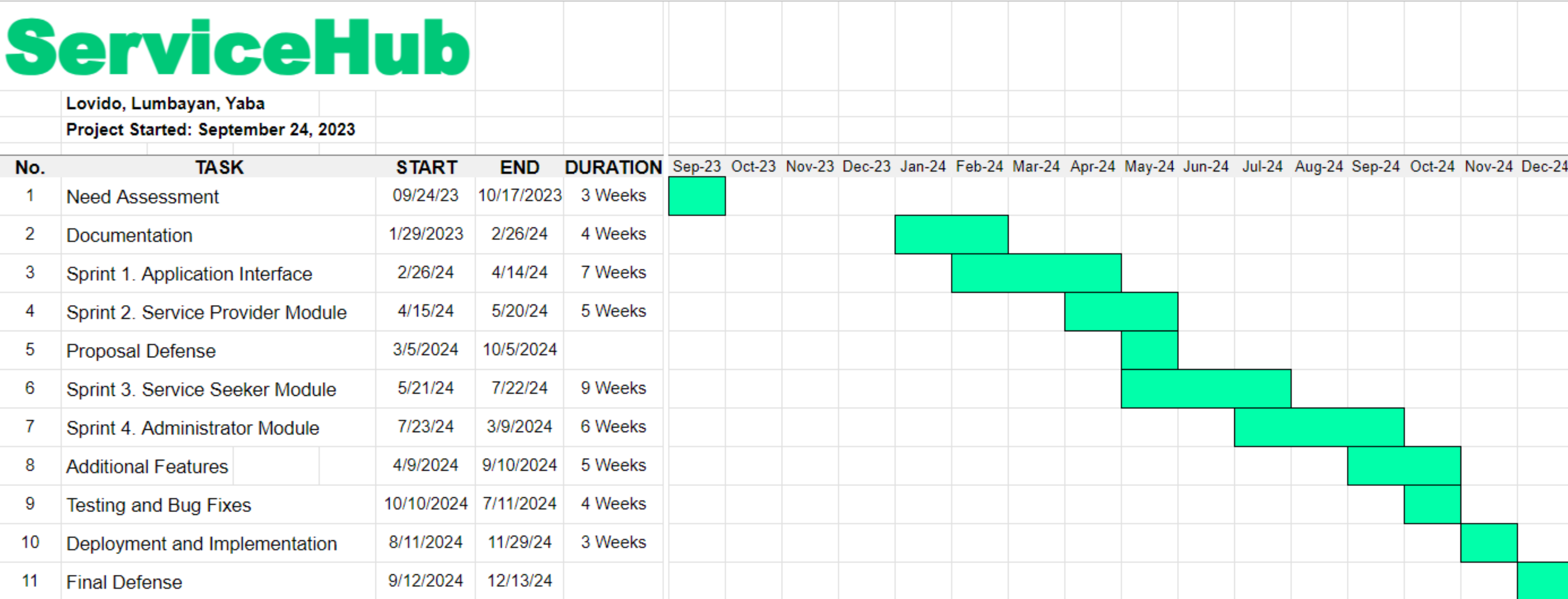| No.	TASK	START	END	DURATION	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
1	Need Assessment	09/24/23	10/17/2023	3 Weeks	■															
2	Documentation	1/29/2023	2/26/24	4 Weeks					■											
3	Sprint 1. Application Interface	2/26/24	4/14/24	7 Weeks						■										
4	Sprint 2. Service Provider Module	4/15/24	5/20/24	5 Weeks							■									
5	Proposal Defense	3/5/2024	10/5/2024																	
6	Sprint 3. Service Seeker Module	5/21/24	7/22/24	9 Weeks								■								
7	Sprint 4. Administrator Module	7/23/24	3/9/2024	6 Weeks									■							
8	Additional Features	4/9/2024	9/10/2024	5 Weeks										■						
9	Testing and Bug Fixes	10/10/2024	7/11/2024	4 Weeks											■					
10	Deployment and Implementation	8/11/2024	11/29/24	3 Weeks												■				
11	Final Defense	9/12/2024	12/13/24														■			

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Chapter IV

THANK YOU

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The Proponents

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Back-end Developer

Starry Mariz Lovido
Researcher

Regeryl Lumbayan
Front-end Developer