

# SERVICEHUB

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

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- Introduction
- Problem Statement
- Objectives of the Study
- Scope and Limitation
- Significance of the Study
- Technical background
- Review of Related Literature
- Methodology

- 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

## Chapter I

### 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

- 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.

# **Limitations**

## **Scope and Limitations**

- Geographic scope is limited to Bukidnon
- User eligibility is restricted to legal-age individuals; not all sign-ups will be accepted.
- Service quality is not guaranteed; relies on the rating system for decision-making.
- The 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 applications.

### 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.

### 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.



### **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).
- Gig work is flexible but can be challenging to categorize as "good" or "bad" due to subjective worker preferences (Dunn, 2020).

### **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.).
- Transparency and pricing mechanisms on online platforms require improvement to ensure fairness (Gussek et al., 2023).

### **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).
- Regulatory frameworks and protective measures are essential for safeguarding gig workers' rights (Kaushik, 2024).

### **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).
- Addressing biases and ensuring fairness is crucial in online freelance marketplaces (Hannák et al., 2017).

### **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).
- Social media groups play a crucial role in supporting Filipino online freelancers (Soriano & Cabañes, 2020).

### **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).
- Challenges such as limited internet access and device shortages exist but do not hinder rural participation in the gig economy (Dube, 2020; Kusuma, 2022).



Dart



Cloud  
Firestore



Cloud Storage  
for Firebase



Flutter



Firebase Hosting



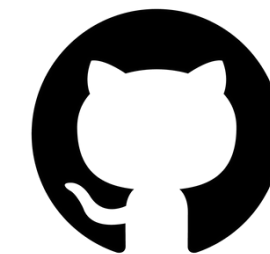
Figma



Visual Studio Code



Firebase Authentication

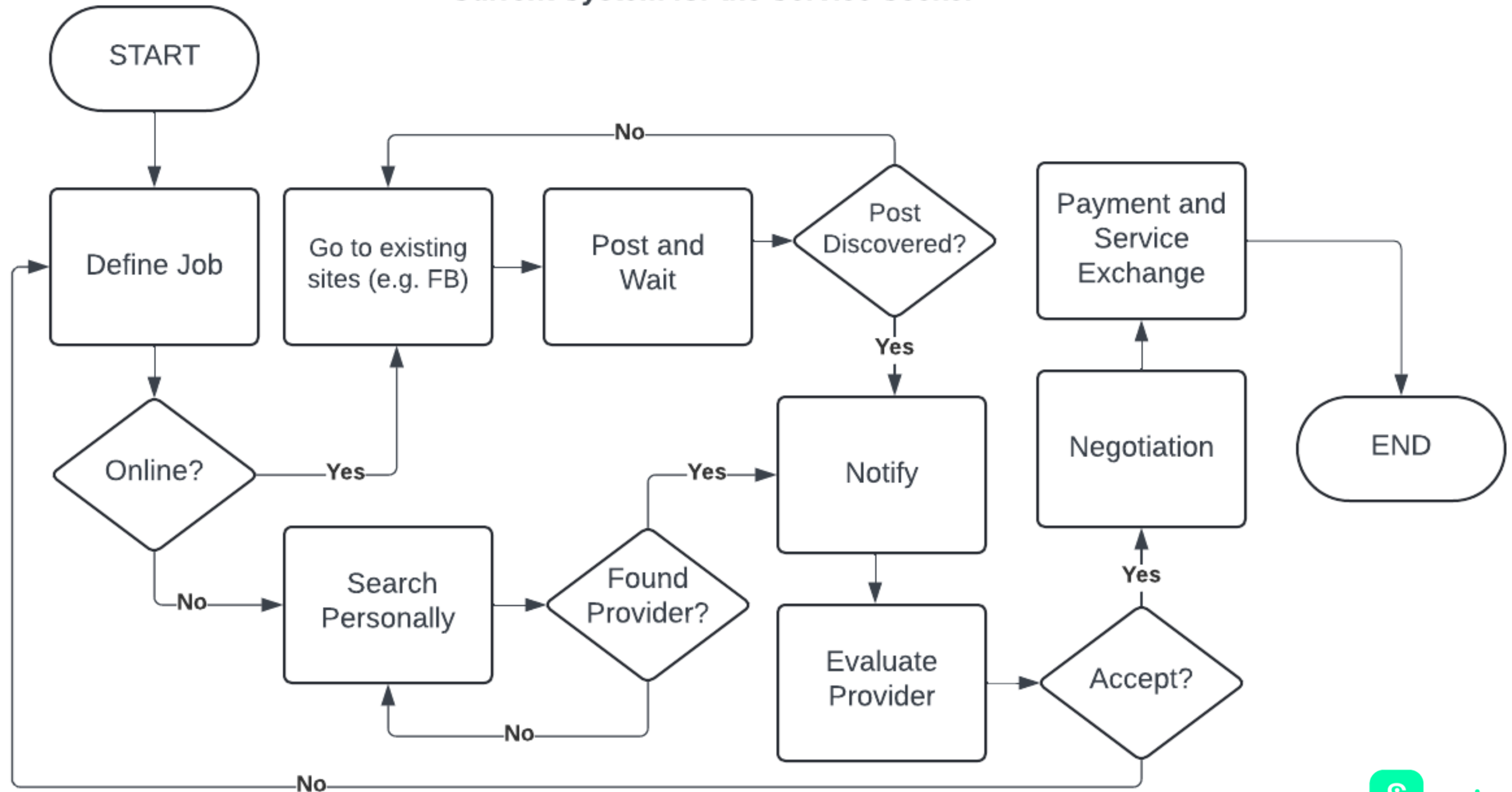


GitHub

# Existing Process

## Flow Chart

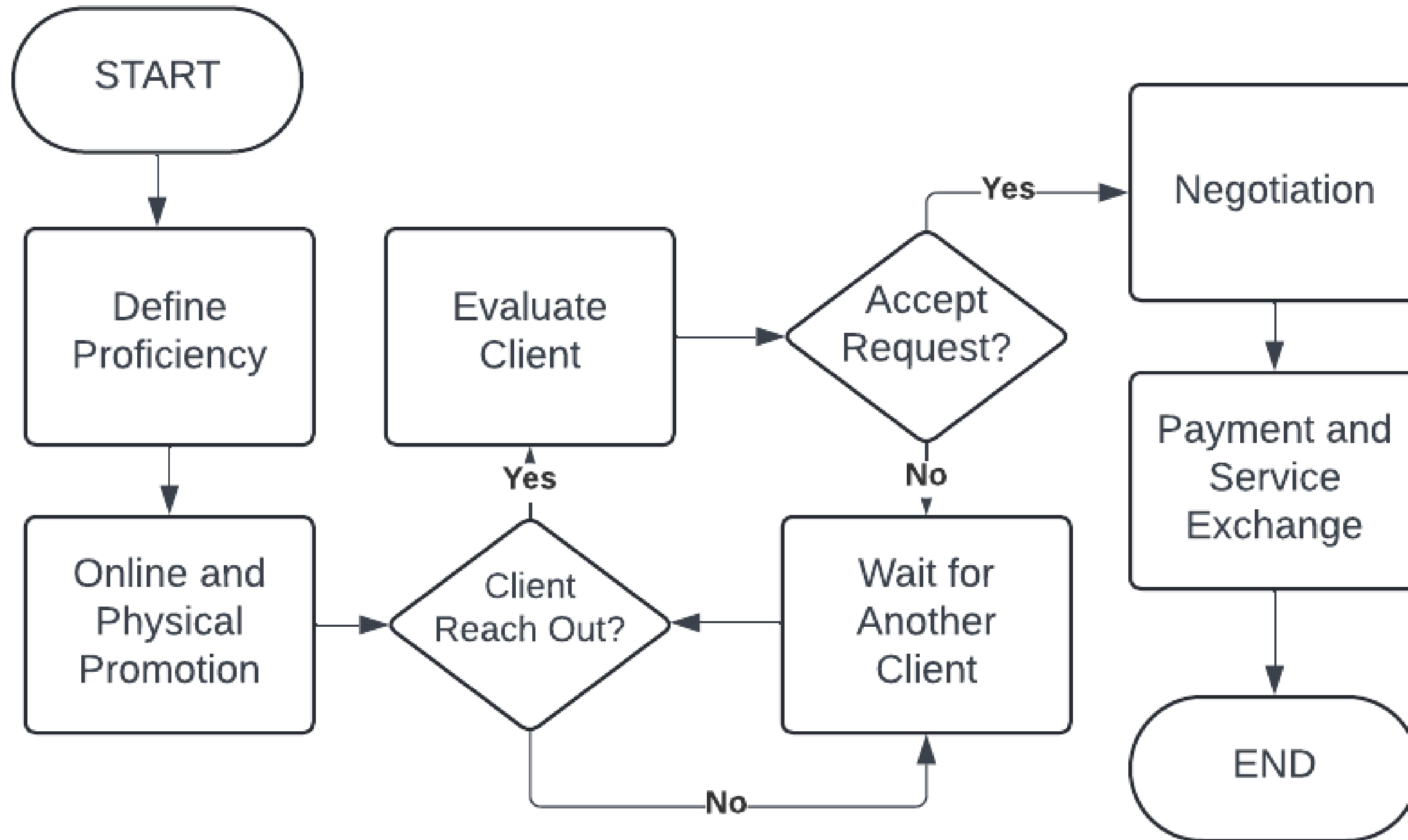
Current System for the Service Seeker

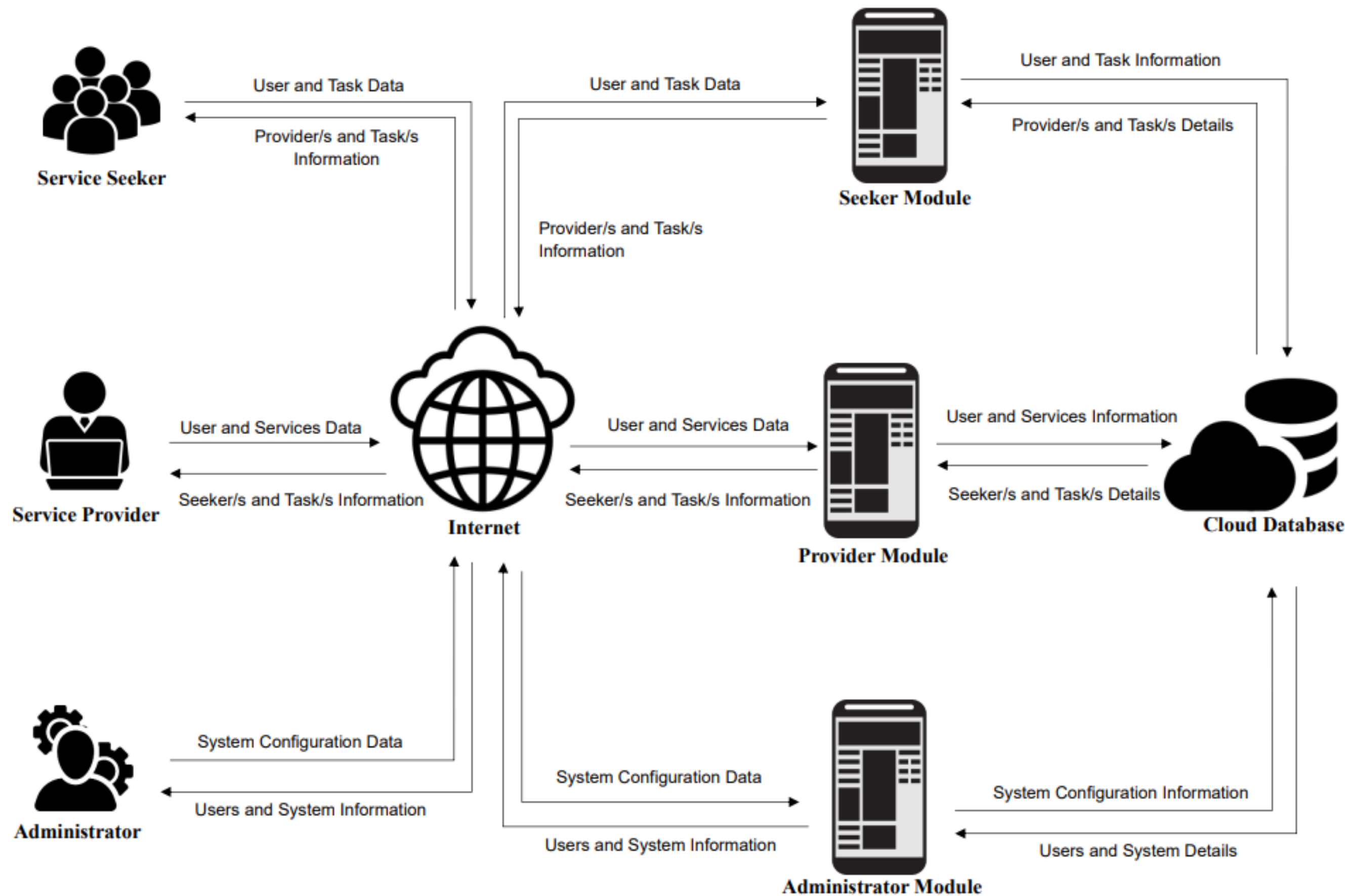


# Existing Process

## Flow Chart

### Current System for the Service Provider









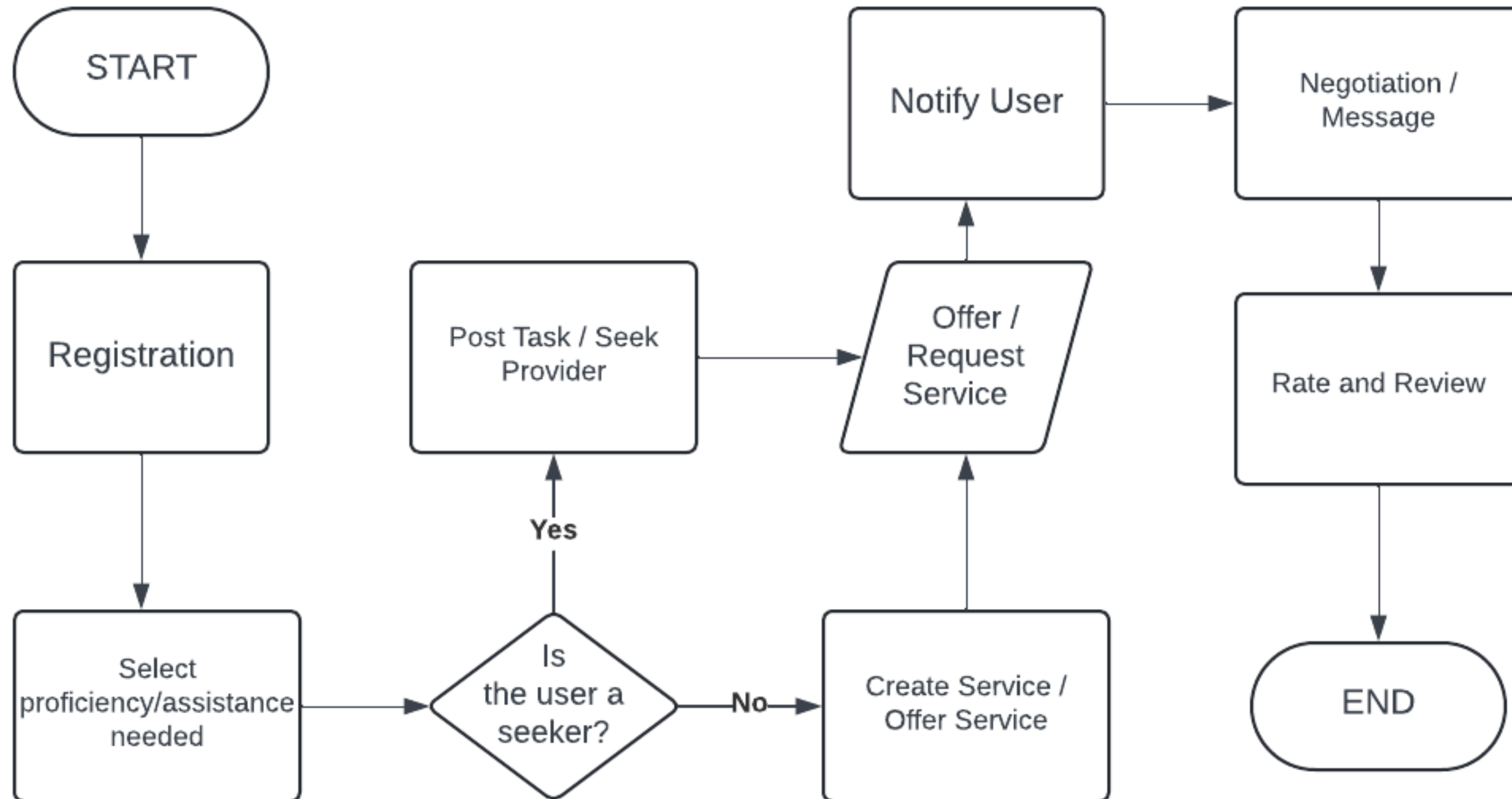
Sprint 1: Application Interface

Sprint 2: Service Provider Module

Sprint 3: Service Seeker Module

Sprint 4: Administrator Module

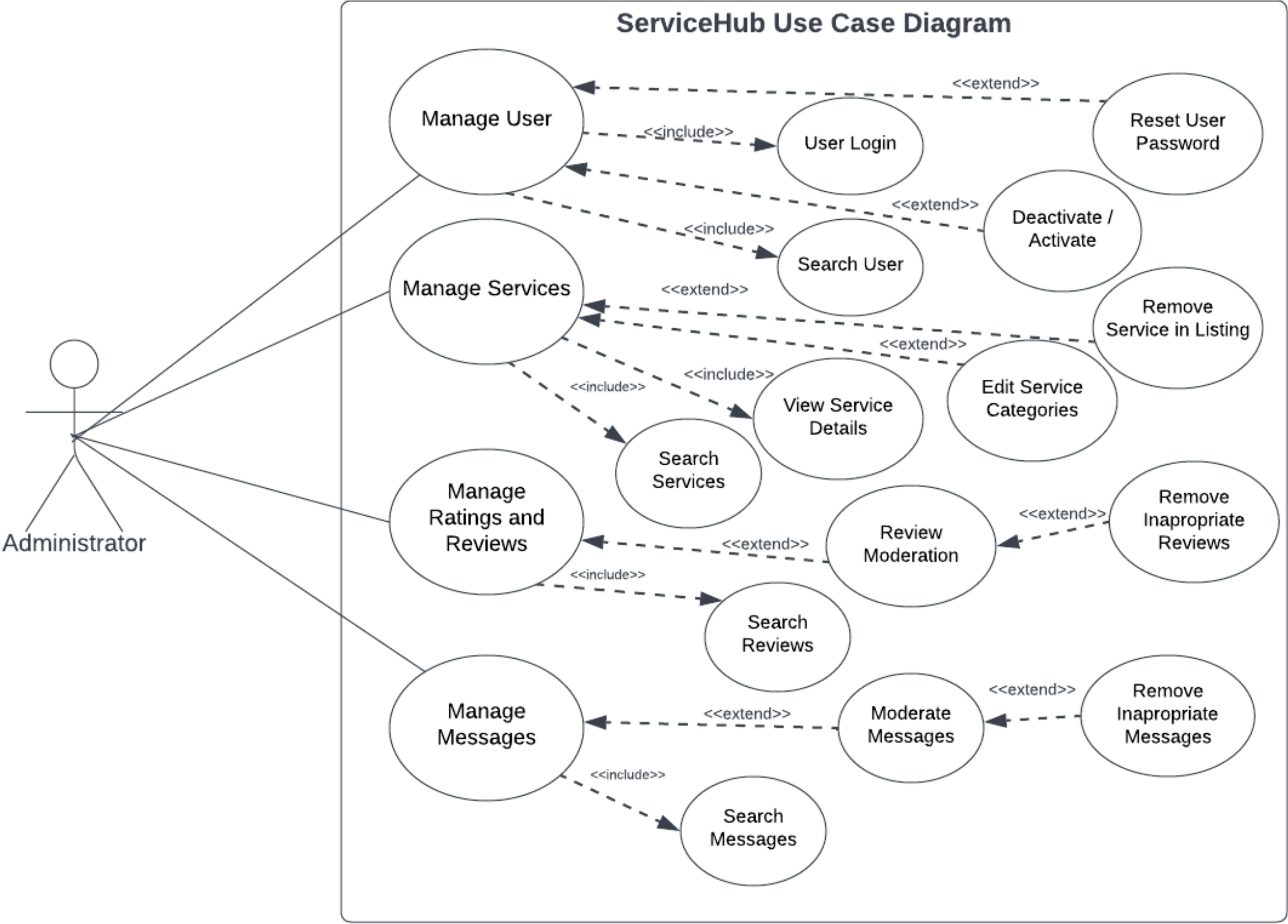
### Flow Chart





# System Analysis

## Use Case



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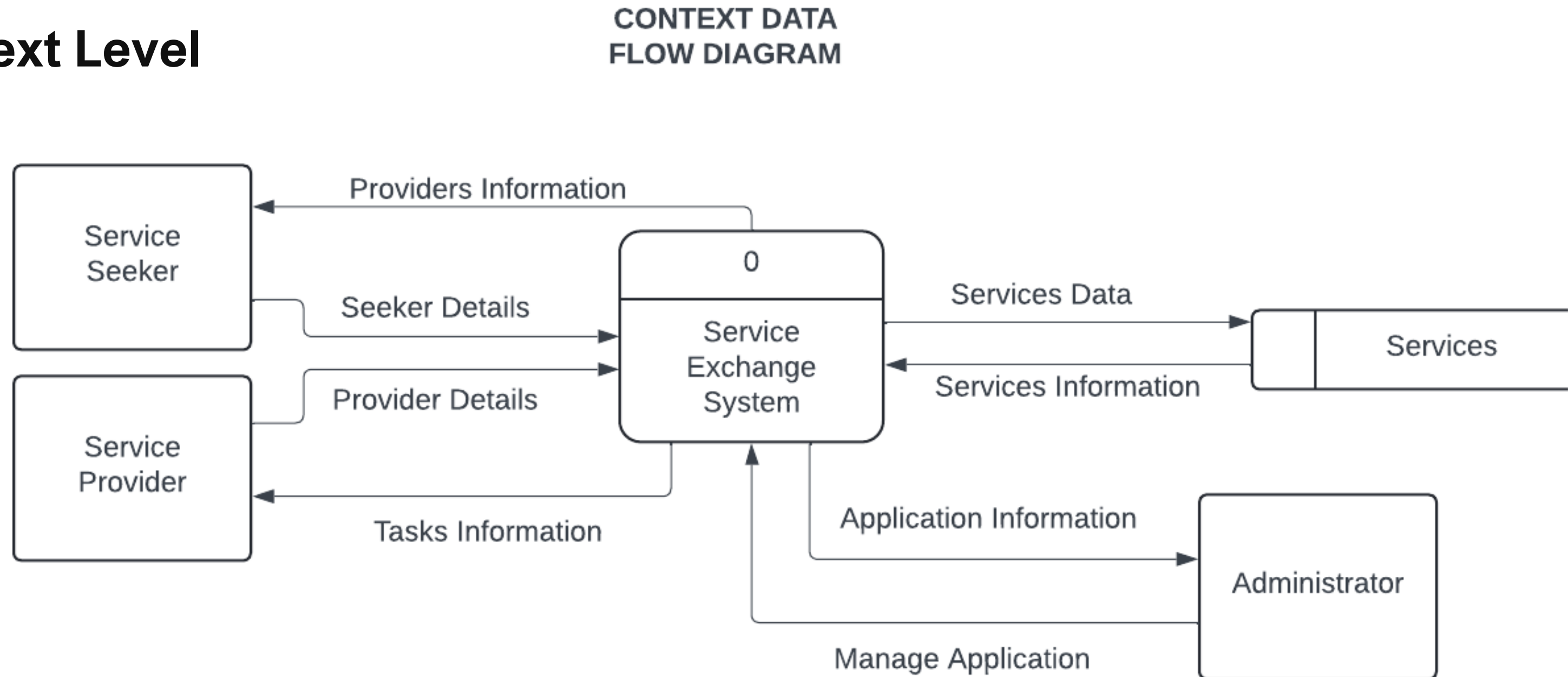
## Use Case



# System Analysis

## Data Flow Diagram

### a. Context Level



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## b. Level 0



# 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 Requirement

- Scalability
- Security
- User Experience
- Device Compatibility



# System Requirements Specification

## Functional and Non-functional Requirements

### Software Requirement

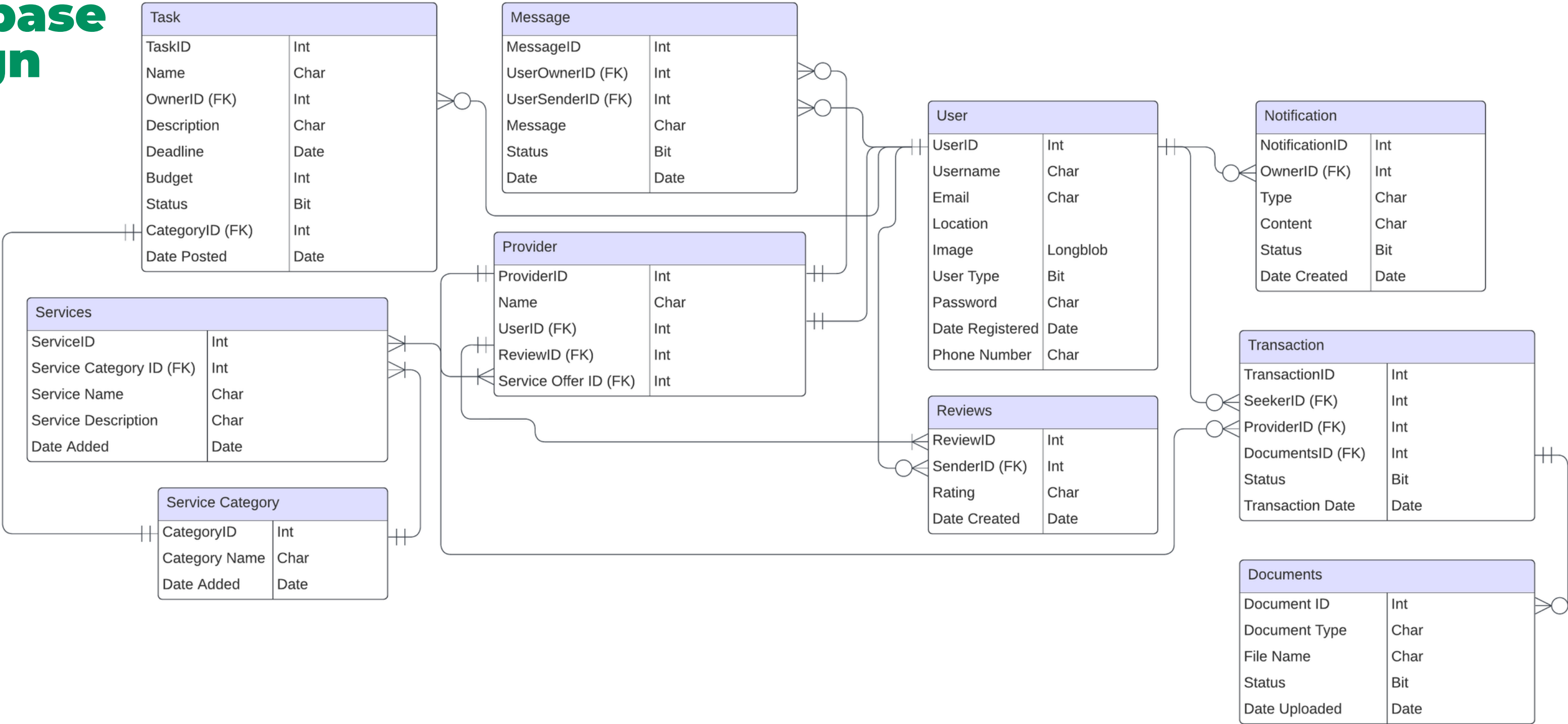
- Operating System Compatibility
- Minimal System Requirements

### Hardware Requirement

- Internet Connectivity
- Screen Resolution
- Browser Compatibility

# System Design

## Database Design



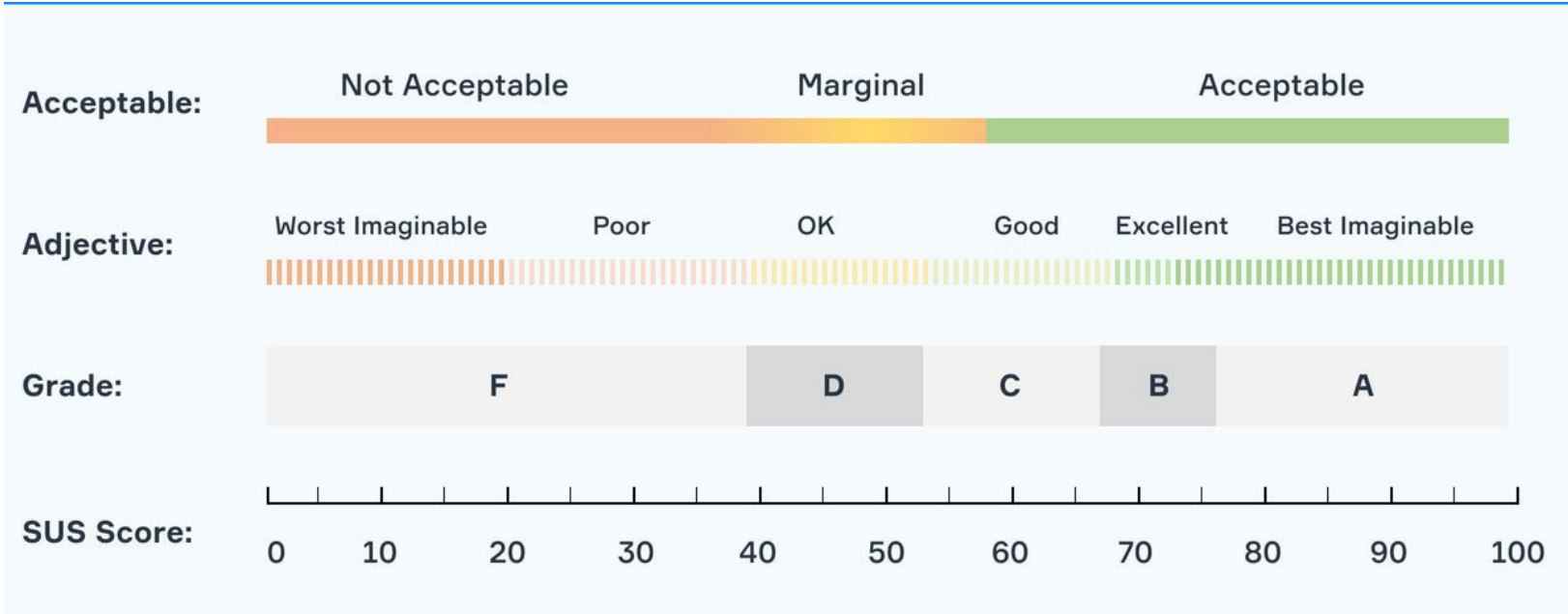


# Testing Methodology

## Functional and Non-functional Requirements

### System Usability Scale (SUS)

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



### Technology Acceptance Model (TAM)

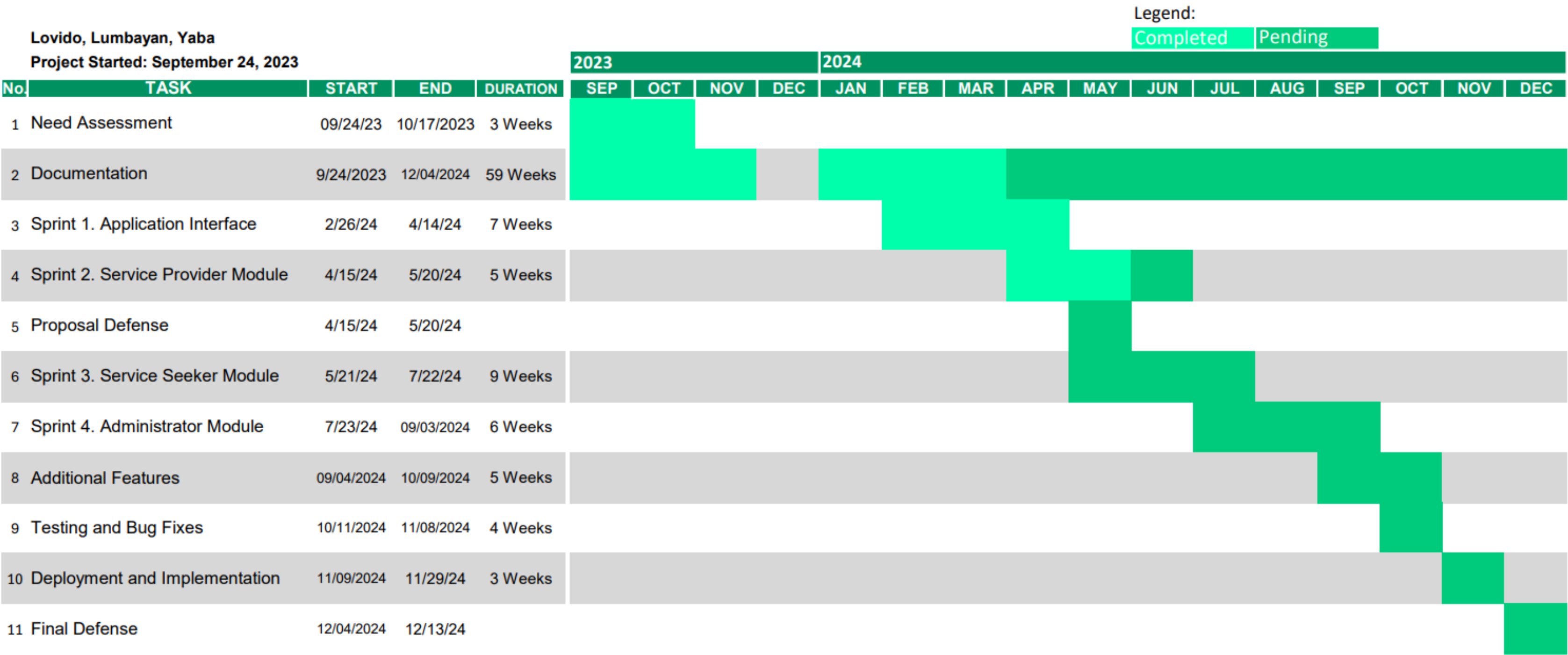
The TAM will be used to understand user perceptions of ServiceHub's value and ease of use, ultimately influencing the testers' decision to adopt the app.

# Project Management



## ServiceHub

### Gantt Chart



# The Proponents

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**Mark Jimuel Yaba**

Back-end Developer



**Starry Mariz Lovido**

Researcher



**Regeryl Lumbayan**

Front-end Developer

# THANK YOU

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