

**TRIBHUVAN UNIVERSITY**

**INSTITUTE OF ENGINEERING**

**HIMALAYA COLLEGE OF ENGINEERING**

**A MINOR PROJECT MID DEFENSE**

**ON**

**“TECHNICIAN FINDER USING GEO-LOCATION AND COLLABORATIVE FILTERING ALGORITHM”**

**[CT 654]**

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**SUBMITTED TO:**

**DEPARTMENT OF ELECTRONICS & COMPUTER ENGINEERING**

**Chyasal, Lalitpur**

**13th February, 2024**

**“TECHNICIAN FINDER USING GEO-LOCATION AND COLLABORATIVE FILTERING ALGORITHM’’**

**[CT 654]**

**A MINOR PROJECT MID DEFENSE**

**SUBMITTED FOR PARTIAL FULFILLMENT OF THE**

**DEGREE OF BACHELORS IN ENGINEERING**

**SUPERVISOR**

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# ACKNOWLEDGEMENT

We are deeply grateful to the Department of Electronics and Computer Engineering for their invaluable support in shaping the inception of our project, 'Technician Finder'. Their unwavering guidance and assistance have been pivotal in laying the groundwork for our project's beginnings.

A profound acknowledgment is owed to HOD Er. **Ashok GM Sir** and supervisor Er. **Gaurab Panthee** Sir for their unwavering belief in our project's potential. Their mentorship and encouragement have propelled us forward, instilling confidence in our endeavors.

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The instrumental role our mentors play in our journey cannot be overstated. We're genuinely thankful for their future help. We know they'll be there for us whenever we hit rough patches or need some extra guidance. Their experience and advice will be our strength as we navigate through the development of 'Technician Finder'.

We would like to acknowledge that this project is an ongoing endeavor, and the collaborative efforts, guidance, and contributions from each mentioned individual and entity have been integral to the project's evolution.

# ABSTRACT

In Nepal's dynamic and diverse landscape, finding reliable and skilled professionals for household and office services can be a tedious and time-consuming task. Traditional methods, such as word-of-mouth recommendations and online directories, often lack efficiency and transparency. This gap in service delivery presents a significant opportunity for innovation and improvement.

Bridging this gap is the fundamental aim of the Technician Finder project. This web-based platform which serves as a bridge between service seekers and qualified professionals, streamlining the process of finding and hiring skilled individuals for various tasks. More than a platform, Technician Finder is a bridge between service seekers and qualified professionals, enhancing efficiency, reliability, and transparency within Nepal's service ecosystem.

Technician Finder is a web-based platform that connects service seekers with qualified professionals in Nepal. Technician Finder is a user-friendly web platform designed to simplify finding and hiring skilled individuals. With Technician Finder, the process is as simple as effortless registration, precise service selection, pinpointing your service location, and smart matching via our intelligent algorithm suggesting nearby technicians. This ensures faster service and minimizes wait times.

For users, informed decision-making is empowered through detailed technician profiles showcasing skills, experience, and distance from the user's location. Seamless communication and booking are facilitated through calls, ensuring ease in discussing details and scheduling appointments. For technicians, Technician Finder offers a platform to stand out matching their expertise and location, enabling direct communication with potential clients and building a strong reputation through positive feedback.

By fostering collaboration, promoting transparency, and improving service delivery, Technician Finder has the potential to revolutionize the way service delivery works in Nepal. This user-friendly platform empowers individuals, strengthens communities, and ultimately contributes to a more efficient and reliable service ecosystem for all stakeholders.

**Keywords:** *location, reliability, service, user friendly, web-based platform*

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# LIST OF ABBREVIATION

API: Application Programming Interface

ER: Entity-Relationship (diagram)

Gantt Chart: Gantt Chart (tool for project scheduling)

ROI: Return on Investment

UI: User Interface

WCAG: Web Content Accessibility Guidelines

# INTRODUCTION

### Background

"Technician Finder" is an intuitive web-based platform dedicated to simplifying daily chores by offering a diverse range of services. Our goal is to redefine how individuals access essential services, focusing on ease and efficiency. It serves as a central hub where users effortlessly connect with skilled professionals for various needs. From household tasks like plumbing and electrical repairs to specific requirements such as tutoring or event planning, Technician Finder covers a wide array of service categories.

The platform features a user-friendly interface empowering users to browse through vetted service providers. They can easily schedule appointments, review provider profiles, access ratings, and make informed decisions tailored to their preferences. Technician Finder ensures reliability by rigorously vetting service providers, instilling trust and confidence in the platform's offerings. Leveraging technology, the platform simplifies the process of availing services, eliminating the hassle of searching for trustworthy professionals and simplifying booking and payment procedures.

With a commitment to convenience and efficiency, Technician Finder aims to redefine service access, bridging the gap between users and reliable service providers.

### Problem Statement

In today's fast-paced world, individuals face challenges finding reliable and accessible services essential for daily life. The traditional process of finding, vetting, and engaging service providers is cumbersome and lacks transparency, resulting in inefficiency and frustration. This gap in efficient access to services poses a considerable hurdle for individuals seeking quality assistance for household tasks, specialized needs, or professional services.

The absence of a user-friendly platform exacerbates the problem, leading users to navigate through disparate options and facing difficulties in assessing provider credibility. Fragmentation in service availability and the absence of a streamlined process for bookings hinder the seamless delivery of services, resulting in wasted time, subpar experiences, and a lack of trust between users and providers.

A centralized, user-friendly platform like Technician Finder is essential, bridging the gap by providing effortless access to vetted service providers, ensuring transparency through reviews, simplifying booking procedures, and guaranteeing reliable and efficient service delivery.

### Objectives

Technician Finder's primary objectives include creating a diverse service hub, enhancing user experience through a user-friendly platform, verifying service providers for reliability, gathering feedback for service enhancement, and offering a single platform for multiple service needs. The specific services are:

* To simplify service access
* To connect service seekers with skilled professionals
* To provide a user-friendly interface
* To facilitate transparent communication

### Project Scope

The Technician Finder project is a web-based platform designed to make it easier for people to find and connect with skilled professionals for various household or office-related services. Imagine you need a plumber, electrician, or handyman for a specific task. Instead of searching extensively or relying on word-of-mouth recommendations, Technician Finder simplifies this process for the users. Users who need specific services can log in to the platform and choose their service requirements. They can choose the type of service needed, such as plumbing, electrical work, carpentry, etc., along with the urgency and location. Alternatively, skilled professionals, such as plumbers, electricians, or other service providers, are displayed to the users based on the distance, experience or any other factor. For instance, if a user logs in and choose for an electrician in the UI of the platform to fix wiring issues in their home, nearby electricians registered on the platform are displayed to the user and can select or communicate to the service provider he wants equipped to handle the job.

### Report Organization

Figure 1.5: Report Organization

Chapter 1 includes introduction about the Technician Finder with background, objectives and project scope. Chapter 2 includes literature reviews which contains all the past research on topic related to the service providing websites or apps. Chapter 3 includes system analysis which contain functional and non- functional requirement. Chapter 4 includes system design which contains different types diagram such as data flow diagram, Er-diagram and use case diagram etc. Chapter 5 includes methodology which is the core part of the project where we discussed about how we analyze system and what we do to generate the result. Chapter 6 includes about projects scheduling which shows how the time require and time management. Chapter 7 includes Expected output that show what can be the result of output of our project.

# LITERATURE REVIEW

### Introduction

The primary objective of the "Technician Finder" project is to establish a basic fundamental web platform connecting service seekers with skilled professionals in Nepal for household and office maintenance tasks. This literature review aims to analyze existing solutions, discern user preferences, and highlight potential opportunities and challenges essential for the success of this basic platform.

### Existing Solutions and Market Trends

In the domain of service-providing platforms, globally renowned platforms such as Upwork and Guru cater to a diverse global audience but may lack direct relevance to the Nepali market. Locally, platforms like Sulekha and Hamro Bazaar offer rudimentary listings without crucial features like user reviews, secure communication channels, and optimized service provider matching. Additionally, resource-intensive on-demand service applications like TaskRabbit and UrbanClap may not align with the scope of a basic platform intended for the Nepali audience.

Some similar platforms lack functionalities like:

* Detailed user reviews with specific feedback.
* Sophisticated algorithms for optimizing service provider matching based on skill sets and location.
* Secure communication channels like encrypted messaging or payment systems

This lack of advanced features creates inefficiencies and hinders user experience compared to platforms like Upwork and Guru which offer more advanced functionalities.

### User Needs and Preferences

Research [1] indicates a prevalent reliance on traditional word-of-mouth referrals or basic online directories among Nepali users. Despite their familiarity, these methods lack efficiency, transparency, and convenience. Users express a distinct preference for a basic platform offering:

* **Simplicity:** A user-friendly interface devoid of technical complexities.
* **Accessibility:** Availability in Nepali language and compatibility with basic devices.
* **Provider Profiles:** Information on providers' skills, experience, location, and contact details.
* **Communication Tools:** Simple and secure messaging features for user-provider interactions.
* **Transparent Pricing:** Clear service cost information to ensure transparency.

### Opportunities and Challenges

**Opportunities**

* **Enhanced Efficiency:** Basic matching of service needs with provider availability could significantly improve service delivery.
* **Trust and Transparency:** Basic user reviews can foster trust and offer valuable insights.
* **Market Expansion:** Increased visibility and client reach for service providers within the local market.
* **Accessibility:** Easy access to skilled professionals for various tasks.

**Challenges**

* **Market Competition:** Existing platforms and traditional methods pose significant hurdles for user adoption.
* **Quality Assurance:** Ensuring service quality and verifying provider credentials remain vital.
* **Establishing Trust:** Establishing a reputable image through user reviews is crucial for user acquisition.
* **Digital Literacy:** Providing support for users unfamiliar with online platforms is essential for adoption.

Despite its basic nature, "Technician Finder" holds potential to revolutionize service delivery within Nepal by addressing user needs for convenience, efficiency, and fundamental transparency. By considering existing solutions, understanding user preferences, and acknowledging inherent challenges, the project can develop a successful platform beneficial for both service seekers and providers within the local context.

# SYSTEM ANALYSIS AND FEASIBILITY STUDY

### Feasibility Analysis

The feasibility analysis of the "Technician Finder" involves assessing its technical, operational, economic, and schedule aspects to determine its viability. Let's break down the analysis for each category:

#### Technical Feasibility

* **Technology Assessment:** Evaluate the availability and suitability of technologies required to build the "Technician Finder". This includes backend frameworks, database systems, frontend development tools, and necessary APIs.
* **Integration Capability:** Assess the feasibility of integrating features like service listings, user profiles, messaging systems, payment gateways, and location-based services seamlessly within the website.
* **Scalability and Performance:** Determine if the chosen technology stack and architecture can scale to accommodate a growing user base while maintaining optimal performance.

#### Operational Feasibility

* **User Acceptance:** Evaluate the willingness of users (service providers and customers) to adopt and use the platform. Conduct market research or surveys to understand their needs, preferences, and potential challenges.
* **Resource Availability:** Assess the availability of necessary resources—human resources, infrastructure, skills—for developing, maintaining, and operating the website.
* **Training and Support:** Determine if users require training or support to use the website effectively and plan for providing necessary documentation or assistance.

#### Economic Feasibility

* **Cost-Benefit Analysis:** Conduct a thorough analysis of development costs, operational expenses, marketing expenses, and potential revenue streams (subscription fees, service fees, advertisements). Compare these costs against the projected benefits to determine financial feasibility.
* **Return on Investment (ROI):** Estimate the expected ROI based on factors such as user acquisition, retention, and monetization strategies.
* **Risk Assessment:** Identify potential risks and uncertainties that could impact the project financially and devise mitigation strategies.

#### Schedule Feasibility

* **Timeline and Milestones:** Develop a realistic timeline for the website's development, testing, and deployment phases.
* **Resource Allocation:** Assess the availability and allocation of resources - human resources, technology, finances—according to the planned schedule.
* **Dependencies and Constraints:** Identify external dependencies (third-party integrations, regulatory approvals) and potential constraints that could affect the project timeline.

A comprehensive feasibility analysis covering these aspects will provide insights into the viability, potential challenges, and strategies for mitigating risks associated with developing and launching the "Technician Finder" website. It will assist in making informed decisions before initiating the project.

### Requirement Analysis

#### Functional Requirement

* **User Registration:**
* Users should be able to create accounts, log in, and manage profiles with personal information, service listings (for providers), and preferences.
* **Service Listings and Search:**
* Service providers should be able to list their services, including descriptions, availability, and service categories.
* Users should be able to search for services based on categories, location, ratings.
* **Communication:**
* The platform facilitates communication between service seekers and providers to discuss service details, negotiate terms, and finalize arrangements.
* **Reviews and Ratings:**
* Users should have the ability to rate and provide feedback on services received.
* Providers should be able to receive and respond to reviews and ratings from users.
* **Profile Management:**
* After registration, users can manage their profiles. Profile management involves updating personal information, adding details related to service preferences, and maintaining a record of past interactions

#### Non-Functional Requirement

* **Performance:**
* Ensure quick response times for searches, service listings, messaging, and other interactions within the website.
* **Security:**
* Robust security measures to protect user data, including encryption of sensitive information, secure payment transactions, and measures against unauthorized access.
* **Scalability:**
* Ability to handle a growing user base, increasing service listings, and interactions without compromising performance or functionality.
* **Usability and User Experience:**
* User-friendly interface design, easy navigation, and a consistent user experience across web and mobile platforms to cater to a diverse user base.
* **Reliability:**
* High availability with minimal downtime for maintenance or updates, ensuring the website is accessible 24/7.
* **Compliance:**
* Adherence to legal regulations, such as data protection laws and any relevant industry standards or regulations in the regions where the website operates.
* **Accessibility:**
* Ensuring the website is accessible to users with disabilities, complying with accessibility standards like WCAG.
* **Localization:**
* Support for multiple languages and regional preferences to cater to a diverse user base.

# SYSTEM DESIGN

### System Block Diagram

Figure 4.1: System Block Diagram

### USE Case Diagram

Figure 4.2: Use Case Diagram

### Data Flow Diagram

Figure 4.3: DFD Level 0 Diagram

Figure 4.3: DFD Level 1 Diagram

# METHODOLOGY

### System block diagram for workflow and functionality

Figure 5.1: System Block Diagram

#### User Interface

* This is the graphical interface where users interact with the application.
* It includes login/signup forms, profile creation forms, service selection options, and technician recommendations.

#### Frontend Logic

* Responsible for handling user interactions and processing data on the client-side.
* Implements frontend logic using HTML, CSS, and JavaScript.

#### Backend Logic

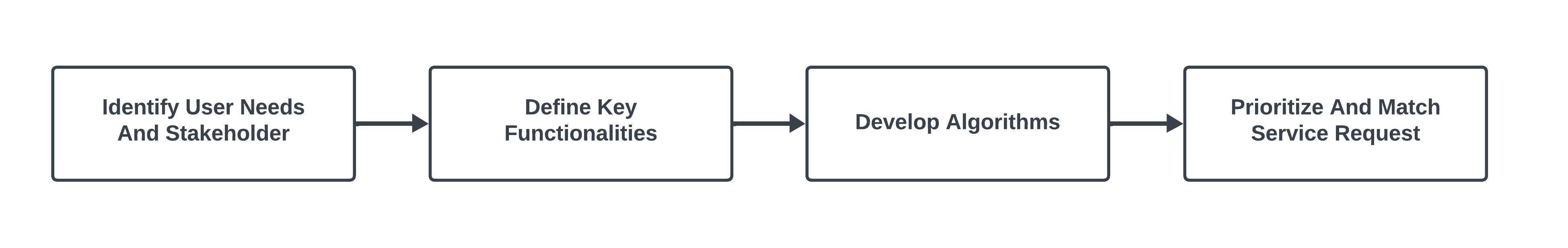
* Handles business logic, authentication, and data processing on the server-side.
* Implements APIs for user authentication, profile creation, service selection, and technician recommendation.
* Incorporates algorithms for geo-location based filtering and collaborative filtering.

#### Database

* Stores data related to users, technicians, services, ratings, and reviews.
* Handles database queries and updates to retrieve and store information as required by the application.

### Requirements Analysis

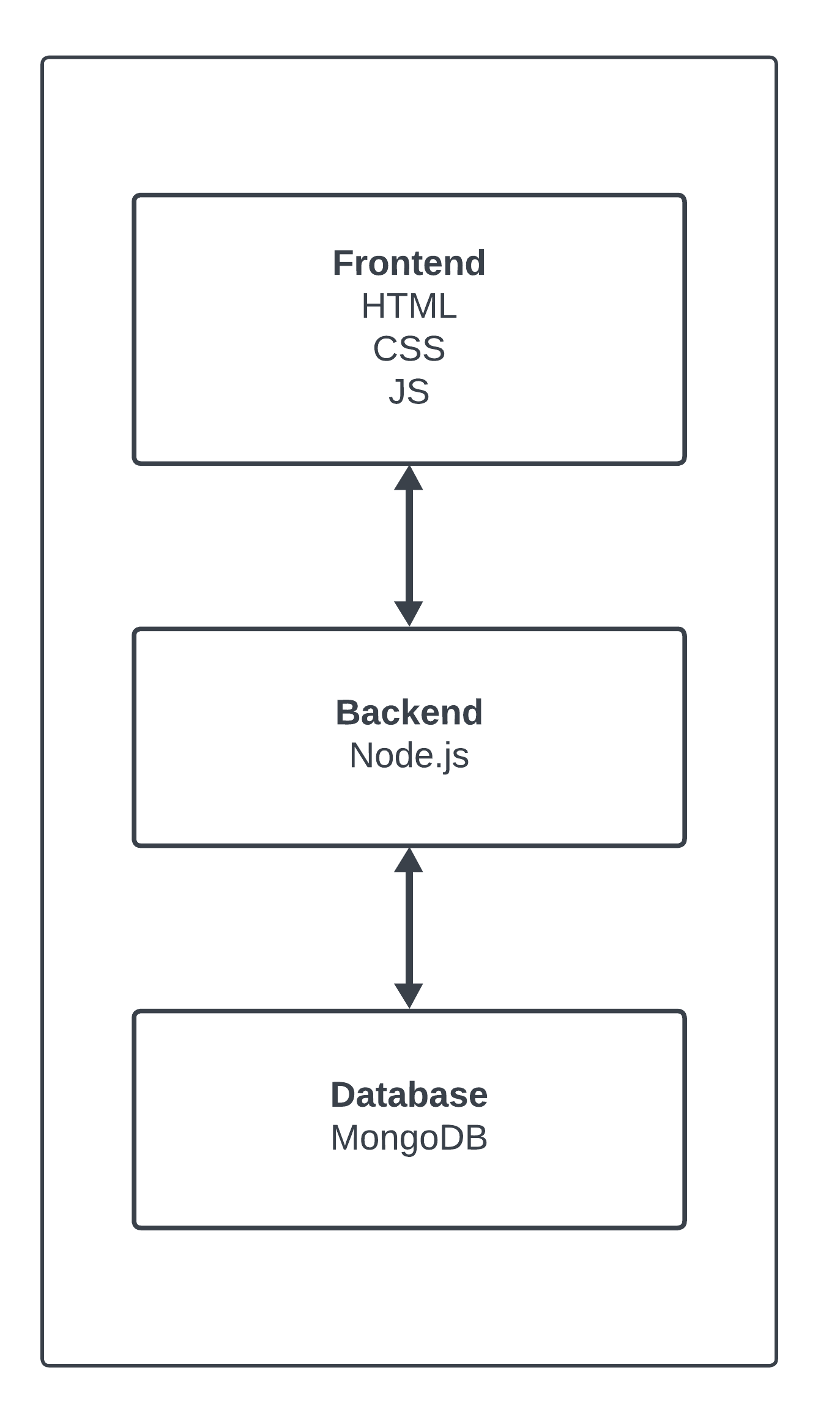
Figure 5.2: Requirement Analysis



Before diving into development, a thorough analysis of the requirements was conducted. This involved understanding the needs of both service seekers and providers. The key functionalities identified include user authentication, service posting, service provider matching, communication tools, and a rating system. Algorithms were developed to prioritize and match service requests with the most suitable providers based on factors such as proximity, availability, and expertise.

### System Architecture

Figure 5.3: System Architecture [2]



#### Frontend

* The user interface where users interact with the application.
* It includes HTML, CSS, and JavaScript code to render the interface in web browsers.

#### Backend

* The backend of the application responsible for handling HTTP requests from the frontend, processing business logic, and interacting with the database.

#### Database

* Stores all data related to users, technicians, services, and other relevant information. The database is NoSQL database MongoDB.

### User Authentication

To ensure the security of user data, a comprehensive user authentication system was implemented. Password hashing algorithms were used to protect user credentials.

**Procedure for User Authentication:**

1. **User Registration:**
   * Collect user registration details, including username, email, and password.
   * Generate a unique salt for the user.
   * Combine the password with the salt.
   * Hash the combined string using a secure hashing algorithm.
   * Store the hashed password, salt, and other user details in the database.
2. **User Login:**
   * Collect user login credentials, including username and password.
   * Retrieve the stored salt for the user from the database.
   * Combine the entered password with the retrieved salt.
   * Hash the combined string using the same hashing algorithm used during registration.
   * Compare the computed hash with the stored hashed password.
   * If the hashes match, the password is correct.

### Service Posting and Matching

The core functionality of Technician Finder involves choosing the desired service and the available service providers are displayed. Algorithms were developed to match service requests with providers based on multiple criteria, including location, availability, and skills. The matching process involves a scoring system to prioritize suitable providers.

**Procedure for Service Posting with Technician Selection**

1. **User Posts Service Request**
   * User logs into the platform.
   * Navigates to the service posting section.
   * Inputs details such as service type, urgency, location, and any additional relevant information.
   * Submits the service request.
2. **Display Available Technicians**
   * The system retrieves a list of available technicians based on the service type, location, and other criteria.
   * The user is presented with a list of available technicians along with their details, such as expertise, ratings, and availability.
3. **User Selects Technician**
   * The user reviews the information about available technicians.
   * Selects a specific technician based on their expertise or other relevant factors.
4. **Initiate Call to Technician**
   * The system provides an option for the user to initiate a call to the selected technician directly from the platform.
   * The user clicks a "Call Technician" button, and the system connects the user with the technician.
5. **Communication with Technician**
   * The user communicates with the technician to discuss the job specifics, provide additional information, and confirm the technician's availability.
   * The system may facilitate the communication through in-app messaging or a direct phone call.
6. **Confirmation and Agreement:**
   * The user and technician agree on the details of the service, including the time for the service to be performed.
7. **Store Service Request:**
   * After confirmation, the service request details are updated in the database, indicating that the request is assigned to the chosen technician.
   * The status of the request is updated to reflect that it's in progress.
8. **Service Completion:**
   * Once the service is provided, the user and technician update the service request status to "completed."

### Communication Module

A communication module was implemented to ensure smooth interaction between users and service providers. The platform incorporates messaging and calling features.

### Rating and Reviews System

A system was implemented to encourage quality service. Users can rate service providers based on their experience. Algorithms were developed to calculate and update the reputation scores of service providers dynamically.

### Testing and Quality Assurance

The development process includes rigorous testing at each stage. Unit testing, integration testing [4], and user acceptance testing were conducted to ensure the reliability and functionality of the platform. Bug tracking and resolution processes were documented.

### Algorithms

### Geo-location Based Filtering Algorithm

* + This algorithm aims to recommend technicians who are geographically close to the client's location.
  + It utilizes the latitude and longitude coordinates of both the client's location and the technicians' locations.
  + The algorithm calculates the distance between the client and each technician using methods such as the Haversine formula, which considers the curvature of the Earth.
  + Technicians within a certain radius or distance threshold from the client are considered as potential matches.

**STEPS:**

1. **Collect User Location:**
   * Utilize the browser's geolocation API or prompt the user to input their location (e.g., zip code, city) when they sign up or search for technicians.
2. **Store Technician Locations:**
   * Store the location of each technician in your database. This can be done by prompting technicians to input their address during registration or by using a geocoding service to convert their address into latitude and longitude coordinates.
3. **Calculate Distance:**
   * Use the Haversine formula to calculate the distance between the user's location and each technician's location. The Haversine formula calculates the shortest distance between two points on a sphere given their latitude and longitude coordinates.

Formula:

a = sin²(Δlat/2) + cos(lat1) \* cos(lat2) \* sin²(Δlon/2) c = 2 \* atan2( √a, √(1−a) ) distance = R \* c

Where:

* + **lat1** and **lon1** are the coordinates of the user's location.
  + **lat2** and **lon2** are the coordinates of the technician's location.
  + **R** is the radius of the Earth (mean radius = 6,371 km).

1. **Filter Technicians by Distance:**
   * Set a maximum distance threshold within which technicians should be considered. Any technician whose calculated distance from the user's location exceeds this threshold can be filtered out.
2. **Implementation in Project:**
   * Haversine formula will be implemented in the backend code to calculate distances.
   * When a user searches for technicians, query is made to database for technicians within the specified distance range.
   * Filtered list of technicians to the user will be displayed, sorted by proximity to their location.

### Collaborative Filtering Algorithm

* + This algorithm recommends technicians based on the ratings and reviews they have received from previous clients.
  + It analyzes the historical data of technician-client interactions to identify patterns and preferences.
  + Technicians with higher ratings and positive reviews are given greater weight in the recommendation process.
  + The algorithm considers factors such as the average rating, the number of ratings received, and the recency of the ratings.
  + It employs techniques as weighted averaging to predict the suitability of technicians for a given client based on their past performance.

**STEPS:**

1: User’s Similarity Calculation

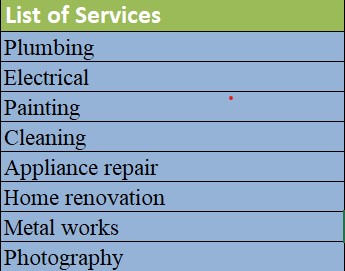
2: Identify similar to the target user

3: Rating Prediction (Weighted average are often used)

4: Top N Recommendation

**List of services (including future enhancement services)**

Table 1: List of services



# EXPECTED OUTPUT

* Dedicated customer service
* User-friendly and accessible platform
* Flexibility in service options
* Transparent Communication
* Effective Matching Algorithm
* Reliable and timely delivery of services
* Wide range of services offered
* Skilled and experienced professionals providing the services

# COMPLETED AND IN PROGRESS TASKS

* 1. **Completed Tasks**
* Frontend Development
* The initial phase of our project has been marked by significant progress across multiple fronts. In terms of frontend development, we have successfully crafted essential components to establish user interaction. Specifically, we have implemented HTML and CSS to construct a seamless Login/Signup Page, providing users with a streamlined experience for authentication purposes. Additionally, we have designed and developed a dynamic Home Page, and booking functionality, ensuring an intuitive interface for users to navigate through various service offerings.
* Backend
* Our backend infrastructure is now established. Leveraging Node.js, we have set up the backend environment, laying the foundation for server-side operations. Subsequently, we have commenced the implementation of backend logic, for handling of HTTP requests and responses despite some errors which will be definitely resolving. Our progress in backend development creates a base for backend system that can handle our application needs.
* Database Setup
* Our database setup is now some sort of operational, with help of MongoDB. Through the configuration, we have established a database environment, to ensure optimal performance and data integrity. This pivotal step in database setup underscores our dedication to creating a secure and reliable data storage solution that underpins the functionality of our application.

In essence, our progress in frontend development, backend setup, and database configuration represents the advancement of our project. In summary, we've made progress in setting up the frontend, backend, and database for our project. With these important parts ready to go, we're ready to move on to the next step. We'll be working on making the features we already have even better, adding new features, and testing everything thoroughly to make sure it works smoothly for our users.

* 1. **In Progress/Remaining Tasks**
* Algorithm Implementation
* We're currently in the process of researching and exploring various methods to implement algorithms effectively within our system. This phase involves understanding the requirements of our project and identifying the most suitable algorithms to enhance our application's functionality. Once we've completed our research and analysis, we'll begin the process of integrating these algorithms into our system to improve user experience and overall performance.
* Testing
* Testing is an integral part of our development process, aimed at ensuring the reliability and functionality of our application. We're actively conducting thorough testing procedures to identify any potential issues or bugs within our system. This includes unit testing, integration testing, and user acceptance testing to validate the effectiveness of our application's features and functionalities. Our goal is to address any issues promptly and deliver a polished and seamless user experience to our users.

# RESULT AND ANALYSIS

* **Customer Satisfaction:** Assessing feedback, reviews, and ratings from users/customers regarding their experience with the service. Positive reviews, high ratings, and consistent feedback can indicate a successful service.
* **Service Performance Metrics:** Analyzing specific metrics related to the service offered. For instance, if it's a delivery service, on-time delivery rates, accuracy, and customer complaints can be analyzed. For a customer service platform, response times, issue resolution rates, and customer feedback are crucial.
* **Community Impact:** If "Technician Finder" involves community initiatives or services, evaluating the impact on the community could involve metrics such as reach.
* **Financial Performance:** If "Technician Finder" is a business or commercial service, analyzing financial metrics like revenue, profitability, customer acquisition cost, and return on investment can be crucial indicators of success.
* **Comparative Analysis:** Comparing "Technician Finder" with competitors or similar services in the industry can provide valuable insights into its strengths, weaknesses, and areas for improvement.
* **Operational Efficiency:** Assessing the efficiency of operations, including resource utilization, scalability, and adaptability, can indicate how well "Technician Finder" is functioning.

# CONCLUSION

### Limitations

* **Service Scope:** Technician Finder's current version offers a limited range of services due to project constraints, limiting its overall utility.
* **Technological Simplicity:** The platform's basic framework might restrict advanced features that users might expect from larger-scale service providers.
* **Geographical Boundaries:** The platform's accessibility might be confined to specific areas due to connectivity or resource limitations.

### Future Enhancements

* **Service Expansion:** Gradually broadening service categories to accommodate additional tasks, aligning with user needs and preferences.
* **Improved User Interface:** Simple enhancements to the platform's usability, like clearer instructions and more intuitive navigation.
* **Enhanced Connectivity:** Exploring options for broader coverage to include more areas and connect with additional service providers.

Technician Finder, envisioned as a basic project, stands as an initial endeavor towards simplifying service access. At this proposal stage, comprehending its fundamental functionalities is pivotal as we plan for future improvements within the confines of project limitations. While the project hasn't commenced, the vision is to gradually enhance the platform's usability without compromising its inherent simplicity. These gradual advancements aim to cater to the evolving needs of users, keeping the project well-aligned within its intended scope and objectives.

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