Software Requirements Specification

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Arranging Homestays and Cultural Exchange Platform

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# 1 Introduction

## Purpose

The purpose of this document is to present a detailed description of the Arranging Homestays and Cultural Exchange Platform. It will explain the purpose and features of the system, the interfaces of the system, what the system will do, the constraints under which it must operate and how the system will react to external stimuli. This document is intended for both the stakeholders and the developers of the system.

## Project Scope

This project involves the development of a platform designed to facilitate homestays and cultural exchanges between hosts and travelers. The system aims to connect individuals globally, encouraging cultural immersion, skill sharing, and budget-friendly travel solutions. It allows hosts to specify their needs and accommodations while enabling travelers to create profiles showcasing their skills and preferences. The platform supports secure communication and efficient management of arrangements, fostering meaningful interactions between diverse communities by promoting cultural exchange, offering affordable travel options through skill-based contributions, supporting hosts in isolated or underserved communities, providing flexible arrangements for both short-term and long-term stays, and streamlining profile creation, communication, and arrangement management.

## Glossary and Abbreviations

|  |  |
| --- | --- |
| **Term** | **Definition** |
| Active Article | The document that is tracked by the system; it is a narrative that is planned to be posted to the public website. |
| Author | Person submitting an article to be reviewed. In case of multiple authors, this term refers to the *principal author*, with whom all communication is made. |
| Database | Collection of all the information monitored by this system. |
| Editor | Person who receives articles, sends articles for review, and makes final judgments for publications. |
| Field | A cell within a form. |
| Historical Society Database | The existing membership database (also HS database). |
| Member | A member of the Historical Society listed in the HS database. |
| Reader | Anyone visiting the site to read articles. |
| Review | A written recommendation about the appropriateness of an article for publication; may include suggestions for improvement. |
| Reviewer | A person that examines an article and has the ability to recommend approval of the article for publication or to request that changes be made in the article. |
| Software Requirements Specification | A document that completely describes all of the functions of a proposed system and the constraints under which it must operate. For example, this document. |
| Stakeholder | Any person with an interest in the project who is not a developer. |
| User | Reviewer or Author. |

## List of System Stakeholders

1. Travelers/Volunteers: Individuals looking for affordable accommodations and cultural immersion experiences. They contribute their time and skills in exchange for food and lodging.

2. Hosts: People or families offering accommodations and seeking assistance with specific tasks. They are central to the platform's operations.

3. Platform Administrators: Responsible for managing the platform, maintaining functionality, overseeing user activity, and ensuring smooth interactions.

4. Communities: Local communities hosting travelers, benefiting from the cultural exchange and skill-sharing aspect.

5. Language Learners: Both hosts and travelers aiming to improve their foreign language skills through immersive experiences.

6. Security and Verification Entities: Stakeholders involved in verifying user profiles, ensuring secure payments, and promoting safe interactions.

7. Potential Sponsors/Advertisers: Organizations or brands interested in partnering with the platform to promote services aligned with the platform's goals.

8. Government and Regulatory Authorities: Monitor legal compliance, data security, and public safety aspects of such operations.

## References

IEEE. *IEEE Std 830-1998 IEEE Recommended Practice for Software Requirements Specifications.* IEEE Computer Society, 1998.

<https://www.cse.msu.edu/~cse435/Handouts/SRSExample-webapp.doc>

<https://www.grammarly.com>

# Functional Requirements

1. **Host Requirements**
2. **Hosts must be able to register and create profiles**, including details about themselves, the type of help they need, their accommodation, and expectations. *(Must have)*
3. **Hosts must be able to mark opportunities as "filled" or "available"** to manage volunteer applications. *(Must have)*
4. **Hosts should be able to view and respond to volunteer applications** through a dashboard. *(Should have)*
5. **Hosts should receive notifications** for new messages, applications, or profile views. *(Should have)*
6. **Hosts could have access to basic analytics**, such as profile views and application rates. *(Could have)*
7. **Volunteer/Traveler Requirements**
8. **Volunteers must be able to create profiles**, including personal details, skills, and past experiences. *(Must have)*
9. **Volunteers must be able to search and filter hosts** by country, work type, duration, and required skills. *(Must have)*
10. **Volunteers must be able to apply for opportunities** and receive confirmations/denials from hosts. *(Must have)*
11. **Volunteers should be able to message hosts** to discuss exchange details before applying. *(Should have)*
12. **Volunteers should be able to leave and read reviews** about past exchanges with hosts. *(Should have)*
13. **Volunteers could have access to multi-language support** for better usability. *(Could have)*
14. **System Requirements**
15. **The system must securely encrypt all user data**, including personal details and messages. *(Must have)*
16. **The system must process membership payments** from volunteers via a secure payment gateway. *(Must have)*
17. **The system should send automated emails**, such as booking confirmations and reminders. *(Should have)*
18. **The system could offer a mobile-responsive design** for better accessibility. *(Could have)*
19. **Prioritization (MoSCoW Scheme)**

* **Must have**: Host registration, opportunity management, volunteer profiles, search & filtering, applications, data security, and payment processing.
* **Should have**: Host dashboards, notifications, messaging, reviews, and automated emails.
* **Could have**: Analytics, multi-language support, and mobile optimization.
* **Won't have this time**: AI-based matching or advanced social features.

# Non-functional Requirements

## General Types/Categories

## Specification

## Fit Criteria

## Effect on Architecture

# Design & Implementation Constraints

# System Evolution

## Anticipated Changes

## Effect on Design

# Requirements Discovery Approaches

# Requirements Validation Techniques