Home Helper Finder System

**Software Requirements Specification**

Version 1.0

Danang, February 2025

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[**2. REFERENCE DOCUMENTS 3**](https://docs.google.com/document/d/1S9FNbs-nEtjO5GqLJZycpcXZ_HSlXZrhbq5GcSd4LlQ/edit?fbclid=IwZXh0bgNhZW0CMTEAAR2SZNggOR9BF-MXU6ywXOqYj11V5S0yFEFj8hjX4HsJDqE5OOVWd6Lf-eQ_aem_w29Mq7OlEZaxan30vXMjIw&tab=t.0#heading=h.jrnxi0z80tsy)

[**3. INTRODUCTION 3**](https://docs.google.com/document/d/1S9FNbs-nEtjO5GqLJZycpcXZ_HSlXZrhbq5GcSd4LlQ/edit?fbclid=IwZXh0bgNhZW0CMTEAAR2SZNggOR9BF-MXU6ywXOqYj11V5S0yFEFj8hjX4HsJDqE5OOVWd6Lf-eQ_aem_w29Mq7OlEZaxan30vXMjIw&tab=t.0#heading=h.nd9tt24jub99)

[3.1 Purpose 3](https://docs.google.com/document/d/1S9FNbs-nEtjO5GqLJZycpcXZ_HSlXZrhbq5GcSd4LlQ/edit?fbclid=IwZXh0bgNhZW0CMTEAAR2SZNggOR9BF-MXU6ywXOqYj11V5S0yFEFj8hjX4HsJDqE5OOVWd6Lf-eQ_aem_w29Mq7OlEZaxan30vXMjIw&tab=t.0#heading=h.g3gah9nlcrrh)

[3.2 In Scope 4](https://docs.google.com/document/d/1S9FNbs-nEtjO5GqLJZycpcXZ_HSlXZrhbq5GcSd4LlQ/edit?fbclid=IwZXh0bgNhZW0CMTEAAR2SZNggOR9BF-MXU6ywXOqYj11V5S0yFEFj8hjX4HsJDqE5OOVWd6Lf-eQ_aem_w29Mq7OlEZaxan30vXMjIw&tab=t.0#heading=h.a6mf6uqioisp)

[**4. OVERVIEW 4**](https://docs.google.com/document/d/1S9FNbs-nEtjO5GqLJZycpcXZ_HSlXZrhbq5GcSd4LlQ/edit?fbclid=IwZXh0bgNhZW0CMTEAAR2SZNggOR9BF-MXU6ywXOqYj11V5S0yFEFj8hjX4HsJDqE5OOVWd6Lf-eQ_aem_w29Mq7OlEZaxan30vXMjIw&tab=t.0#heading=h.mnrij95yz507)

[4.1 Actors 4](https://docs.google.com/document/d/1S9FNbs-nEtjO5GqLJZycpcXZ_HSlXZrhbq5GcSd4LlQ/edit?fbclid=IwZXh0bgNhZW0CMTEAAR2SZNggOR9BF-MXU6ywXOqYj11V5S0yFEFj8hjX4HsJDqE5OOVWd6Lf-eQ_aem_w29Mq7OlEZaxan30vXMjIw&tab=t.0#heading=h.q1mabmypqkth)

[4.2 System Use Case Diagram 5](https://docs.google.com/document/d/1S9FNbs-nEtjO5GqLJZycpcXZ_HSlXZrhbq5GcSd4LlQ/edit?fbclid=IwZXh0bgNhZW0CMTEAAR2SZNggOR9BF-MXU6ywXOqYj11V5S0yFEFj8hjX4HsJDqE5OOVWd6Lf-eQ_aem_w29Mq7OlEZaxan30vXMjIw&tab=t.0#heading=h.jzpxcwe5s51f)

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[**5. USE CASE DESCRIPTION 7**](https://docs.google.com/document/d/1S9FNbs-nEtjO5GqLJZycpcXZ_HSlXZrhbq5GcSd4LlQ/edit?fbclid=IwZXh0bgNhZW0CMTEAAR2SZNggOR9BF-MXU6ywXOqYj11V5S0yFEFj8hjX4HsJDqE5OOVWd6Lf-eQ_aem_w29Mq7OlEZaxan30vXMjIw&tab=t.0#heading=h.a6a2rrg56rss)

[5.1. Sign Up 7](https://docs.google.com/document/d/1S9FNbs-nEtjO5GqLJZycpcXZ_HSlXZrhbq5GcSd4LlQ/edit?fbclid=IwZXh0bgNhZW0CMTEAAR2SZNggOR9BF-MXU6ywXOqYj11V5S0yFEFj8hjX4HsJDqE5OOVWd6Lf-eQ_aem_w29Mq7OlEZaxan30vXMjIw&tab=t.0#heading=h.4xv11oq6hnxp)

[5.2. Sign In 9](https://docs.google.com/document/d/1S9FNbs-nEtjO5GqLJZycpcXZ_HSlXZrhbq5GcSd4LlQ/edit?fbclid=IwZXh0bgNhZW0CMTEAAR2SZNggOR9BF-MXU6ywXOqYj11V5S0yFEFj8hjX4HsJDqE5OOVWd6Lf-eQ_aem_w29Mq7OlEZaxan30vXMjIw&tab=t.0#heading=h.3m9dnl5u1oma)

[5.3. Sign Out 10](https://docs.google.com/document/d/1S9FNbs-nEtjO5GqLJZycpcXZ_HSlXZrhbq5GcSd4LlQ/edit?fbclid=IwZXh0bgNhZW0CMTEAAR2SZNggOR9BF-MXU6ywXOqYj11V5S0yFEFj8hjX4HsJDqE5OOVWd6Lf-eQ_aem_w29Mq7OlEZaxan30vXMjIw&tab=t.0#heading=h.3ua3uvgc2r4o)

[5.4. Edit User Profile 11](https://docs.google.com/document/d/1S9FNbs-nEtjO5GqLJZycpcXZ_HSlXZrhbq5GcSd4LlQ/edit?fbclid=IwZXh0bgNhZW0CMTEAAR2SZNggOR9BF-MXU6ywXOqYj11V5S0yFEFj8hjX4HsJDqE5OOVWd6Lf-eQ_aem_w29Mq7OlEZaxan30vXMjIw&tab=t.0#heading=h.9l2sjc93c36h)

[5.5. Create Club 12](https://docs.google.com/document/d/1S9FNbs-nEtjO5GqLJZycpcXZ_HSlXZrhbq5GcSd4LlQ/edit?fbclid=IwZXh0bgNhZW0CMTEAAR2SZNggOR9BF-MXU6ywXOqYj11V5S0yFEFj8hjX4HsJDqE5OOVWd6Lf-eQ_aem_w29Mq7OlEZaxan30vXMjIw&tab=t.0#heading=h.i7v8bzm0n5rq)

[5.6.Update Club Detail Information 13](https://docs.google.com/document/d/1S9FNbs-nEtjO5GqLJZycpcXZ_HSlXZrhbq5GcSd4LlQ/edit?fbclid=IwZXh0bgNhZW0CMTEAAR2SZNggOR9BF-MXU6ywXOqYj11V5S0yFEFj8hjX4HsJDqE5OOVWd6Lf-eQ_aem_w29Mq7OlEZaxan30vXMjIw&tab=t.0#heading=h.i5f91usi31lh)

[5.7. Join Club Request 15](https://docs.google.com/document/d/1S9FNbs-nEtjO5GqLJZycpcXZ_HSlXZrhbq5GcSd4LlQ/edit?fbclid=IwZXh0bgNhZW0CMTEAAR2SZNggOR9BF-MXU6ywXOqYj11V5S0yFEFj8hjX4HsJDqE5OOVWd6Lf-eQ_aem_w29Mq7OlEZaxan30vXMjIw&tab=t.0#heading=h.hu2h0h7dke3w)

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[5.9. Create Post 18](https://docs.google.com/document/d/1S9FNbs-nEtjO5GqLJZycpcXZ_HSlXZrhbq5GcSd4LlQ/edit?fbclid=IwZXh0bgNhZW0CMTEAAR2SZNggOR9BF-MXU6ywXOqYj11V5S0yFEFj8hjX4HsJDqE5OOVWd6Lf-eQ_aem_w29Mq7OlEZaxan30vXMjIw&tab=t.0#heading=h.c6r8es2zys59)

[5.10 Update Post 19](https://docs.google.com/document/d/1S9FNbs-nEtjO5GqLJZycpcXZ_HSlXZrhbq5GcSd4LlQ/edit?fbclid=IwZXh0bgNhZW0CMTEAAR2SZNggOR9BF-MXU6ywXOqYj11V5S0yFEFj8hjX4HsJDqE5OOVWd6Lf-eQ_aem_w29Mq7OlEZaxan30vXMjIw&tab=t.0#heading=h.mrndmi585kjd)

[5.11 Delete Post 20](https://docs.google.com/document/d/1S9FNbs-nEtjO5GqLJZycpcXZ_HSlXZrhbq5GcSd4LlQ/edit?fbclid=IwZXh0bgNhZW0CMTEAAR2SZNggOR9BF-MXU6ywXOqYj11V5S0yFEFj8hjX4HsJDqE5OOVWd6Lf-eQ_aem_w29Mq7OlEZaxan30vXMjIw&tab=t.0#heading=h.vw1ah0dgjy9x)

[5.12 Interact Post 21](https://docs.google.com/document/d/1S9FNbs-nEtjO5GqLJZycpcXZ_HSlXZrhbq5GcSd4LlQ/edit?fbclid=IwZXh0bgNhZW0CMTEAAR2SZNggOR9BF-MXU6ywXOqYj11V5S0yFEFj8hjX4HsJDqE5OOVWd6Lf-eQ_aem_w29Mq7OlEZaxan30vXMjIw&tab=t.0#heading=h.x7s4nvtlb19f)

[5.13 Approve Post 22](https://docs.google.com/document/d/1S9FNbs-nEtjO5GqLJZycpcXZ_HSlXZrhbq5GcSd4LlQ/edit?fbclid=IwZXh0bgNhZW0CMTEAAR2SZNggOR9BF-MXU6ywXOqYj11V5S0yFEFj8hjX4HsJDqE5OOVWd6Lf-eQ_aem_w29Mq7OlEZaxan30vXMjIw&tab=t.0#heading=h.jvqfo4nf9h8)

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[5.16 Remove Members 26](https://docs.google.com/document/d/1S9FNbs-nEtjO5GqLJZycpcXZ_HSlXZrhbq5GcSd4LlQ/edit?fbclid=IwZXh0bgNhZW0CMTEAAR2SZNggOR9BF-MXU6ywXOqYj11V5S0yFEFj8hjX4HsJDqE5OOVWd6Lf-eQ_aem_w29Mq7OlEZaxan30vXMjIw&tab=t.0#heading=h.knxoqwy8wv8l)

[5.17 Create Club Event 27](https://docs.google.com/document/d/1S9FNbs-nEtjO5GqLJZycpcXZ_HSlXZrhbq5GcSd4LlQ/edit?fbclid=IwZXh0bgNhZW0CMTEAAR2SZNggOR9BF-MXU6ywXOqYj11V5S0yFEFj8hjX4HsJDqE5OOVWd6Lf-eQ_aem_w29Mq7OlEZaxan30vXMjIw&tab=t.0#heading=h.vqt7vhkglem5)

[5.18 Update Club Event 28](https://docs.google.com/document/d/1S9FNbs-nEtjO5GqLJZycpcXZ_HSlXZrhbq5GcSd4LlQ/edit?fbclid=IwZXh0bgNhZW0CMTEAAR2SZNggOR9BF-MXU6ywXOqYj11V5S0yFEFj8hjX4HsJDqE5OOVWd6Lf-eQ_aem_w29Mq7OlEZaxan30vXMjIw&tab=t.0#heading=h.i73bxcapojwx)

[5.19 Delete Club Event 29](https://docs.google.com/document/d/1S9FNbs-nEtjO5GqLJZycpcXZ_HSlXZrhbq5GcSd4LlQ/edit?fbclid=IwZXh0bgNhZW0CMTEAAR2SZNggOR9BF-MXU6ywXOqYj11V5S0yFEFj8hjX4HsJDqE5OOVWd6Lf-eQ_aem_w29Mq7OlEZaxan30vXMjIw&tab=t.0#heading=h.2jsebhbib6ub)

[5.20 Create Task 29](https://docs.google.com/document/d/1S9FNbs-nEtjO5GqLJZycpcXZ_HSlXZrhbq5GcSd4LlQ/edit?fbclid=IwZXh0bgNhZW0CMTEAAR2SZNggOR9BF-MXU6ywXOqYj11V5S0yFEFj8hjX4HsJDqE5OOVWd6Lf-eQ_aem_w29Mq7OlEZaxan30vXMjIw&tab=t.0#heading=h.acmiu1dop0jn)

[5.21 Delete Task 30](https://docs.google.com/document/d/1S9FNbs-nEtjO5GqLJZycpcXZ_HSlXZrhbq5GcSd4LlQ/edit?fbclid=IwZXh0bgNhZW0CMTEAAR2SZNggOR9BF-MXU6ywXOqYj11V5S0yFEFj8hjX4HsJDqE5OOVWd6Lf-eQ_aem_w29Mq7OlEZaxan30vXMjIw&tab=t.0#heading=h.jr7q0nwu273t)

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[5.23 View Task 32](https://docs.google.com/document/d/1S9FNbs-nEtjO5GqLJZycpcXZ_HSlXZrhbq5GcSd4LlQ/edit?fbclid=IwZXh0bgNhZW0CMTEAAR2SZNggOR9BF-MXU6ywXOqYj11V5S0yFEFj8hjX4HsJDqE5OOVWd6Lf-eQ_aem_w29Mq7OlEZaxan30vXMjIw&tab=t.0#heading=h.6apb6bqppjqh)

[5.24 Assign Task for Club Member 33](https://docs.google.com/document/d/1S9FNbs-nEtjO5GqLJZycpcXZ_HSlXZrhbq5GcSd4LlQ/edit?fbclid=IwZXh0bgNhZW0CMTEAAR2SZNggOR9BF-MXU6ywXOqYj11V5S0yFEFj8hjX4HsJDqE5OOVWd6Lf-eQ_aem_w29Mq7OlEZaxan30vXMjIw&tab=t.0#heading=h.5vgqoitrdd)

[5.25 Approve/Reject Create Club Requests 34](https://docs.google.com/document/d/1S9FNbs-nEtjO5GqLJZycpcXZ_HSlXZrhbq5GcSd4LlQ/edit?fbclid=IwZXh0bgNhZW0CMTEAAR2SZNggOR9BF-MXU6ywXOqYj11V5S0yFEFj8hjX4HsJDqE5OOVWd6Lf-eQ_aem_w29Mq7OlEZaxan30vXMjIw&tab=t.0#heading=h.xuluzkl9ecwy)

[5.26 Delete Club 36](https://docs.google.com/document/d/1S9FNbs-nEtjO5GqLJZycpcXZ_HSlXZrhbq5GcSd4LlQ/edit?fbclid=IwZXh0bgNhZW0CMTEAAR2SZNggOR9BF-MXU6ywXOqYj11V5S0yFEFj8hjX4HsJDqE5OOVWd6Lf-eQ_aem_w29Mq7OlEZaxan30vXMjIw&tab=t.0#heading=h.3q1jb2wmagha)

[**6. DATA STRUCTURE 37**](https://docs.google.com/document/d/1S9FNbs-nEtjO5GqLJZycpcXZ_HSlXZrhbq5GcSd4LlQ/edit?fbclid=IwZXh0bgNhZW0CMTEAAR2SZNggOR9BF-MXU6ywXOqYj11V5S0yFEFj8hjX4HsJDqE5OOVWd6Lf-eQ_aem_w29Mq7OlEZaxan30vXMjIw&tab=t.0#heading=h.sdhvcmijd48o)

[6.1 Database 37](https://docs.google.com/document/d/1S9FNbs-nEtjO5GqLJZycpcXZ_HSlXZrhbq5GcSd4LlQ/edit?fbclid=IwZXh0bgNhZW0CMTEAAR2SZNggOR9BF-MXU6ywXOqYj11V5S0yFEFj8hjX4HsJDqE5OOVWd6Lf-eQ_aem_w29Mq7OlEZaxan30vXMjIw&tab=t.0#heading=h.xy2k9q1748rp)

# **1. DOCUMENT HISTORY**

| **Date** | **Summary of Changes** | **Version** |
| --- | --- | --- |
| 25/01/2025 | Analyse software requirements | CMS\_SRS\_sample\_v1.0 |
|  |  |  |
|  |  |  |

# 

# **2.** **REFERENCE DOCUMENTS**

| **Document Name** | **Description** |
| --- | --- |
| [1] What is Class Diagram? - visual-paradigm | Reference document |
| [2] Slide bài giảng SWD392 | Reference document |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

# **3.** **INTRODUCTION**

The following subsections of the Software Requirements Specifications (SRS) document provide an overview of the entire SRS.

## **3.1** **Purpose**

* The Software Requirements Specification (SRS) defines the requirements for the Mobile Home Helper Finder Application. It ensures the system automates the process of finding, booking, and managing home cleaning and assistance services, providing users with a fast, reliable, and user-friendly platform. This SRS will guide developers in building the application effectively and ensure it aligns with stakeholder expectations. Feedback from users and service providers will be incorporated to deliver a solution tailored to the needs of households seeking trusted home helpers.

## **3.2** **In Scope**

The Mobile Home Helper Finder Application will serve as a platform connecting users with local home service providers. It will support service listing, booking, and management features. The system will enable location-based searches, handle user and helper registrations, and facilitate secure, role-based access for users, helpers, and administrators. It will also support efficient operations, service tracking, and basic reporting to ensure reliability and ease of use.

# **4.** **OVERVIEW**

## **4.1** **Actors**

| **Actor** | **Description** |
| --- | --- |
| Guest | A Guest is a person who accesses the app without logging in. They can view the public information about platform and general services |
| Member | A Member is a person with an account in the platform. They can view helper and book sessions |
| Helper | A Helper is a member who process the main workload with booked sessions from other member |
| Admin | An Admin can monitor, moderate and adjust the platform |

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## **4.2** **System Use Case Diagram**

## 

## **4.3** **System Class Diagram**

# **5.** **USE CASE DESCRIPTION**

## **5.1. Sign Up**

| Use Case ID: | **UC-01** | USE CASE NAME | **SIGN-UP** |
| --- | --- | --- | --- |
| Create By: | MinhDQ | Date Created: |  |
| Primary Actor: | Guest | Secondary Actor | None |
| Description | This use case describes the process of a new visitor signing up for an account, providing their personal details such as name, email, and password to become a registered user. | | |
| Priority: | High | | |
| Trigger | The guest clicks on the "Sign Up" button on the login page or accesses the registration page via a link. | | |
| Preconditions: | PRE-01**:** The guest has a valid email address.  PRE-02**:** The guest provides a valid password. | | |
| Post-Conditions | POST-01**:** The system works stably without errors.  POST-02**:** A new user account is created, and the guest receives a unique identifier upon successful verification.  POST-03**:** The guest can log in using their newly created account | | |
| Basic Flow: | 1. The guest accesses the home page. 2. Clicks on the avatar icon, then selects the “Sign In” button. 3. The system redirects to the sign-in page. 4. Clicks on “Sign Up.” 5. Fills in all required fields for account creation. 6. Clicks the “Create Account” button. 7. Verifies email with the code sent to their registered email. 8. The system redirects to the sign-in page. | | |
| Alternative Flow: | None | | |
| Exception: | **1a.** The guest enters an invalid username or email.   * **1a1.** The system displays an error message and prompts the guest to enter a valid username, email, or password.   **1b.** The guest enters a username or email that already exists.   * **1b1.** The system displays an error message and prompts the guest to enter a different username or email. | | |

## **5.2. Sign In**

| Use Case ID: | **UC-02** | USE CASE NAME | **SIGN-IN** |
| --- | --- | --- | --- |
| Create By: | AnNNH | Date Created: |  |
| Primary Actor: | Guest | Secondary Actor | None |
| Description | This use case describes how a user can sign in to their account. The system verifies the credentials and grants access to the user's account. | | |
| Priority: | High | | |
| Trigger | User clicks on the "Sign In" Button in Home Page. | | |
| Preconditions: | PRE-01: User has a created and valid account  PRE-02: User account has been authorised. | | |
| Post-Conditions | POST-01: The system works stably without errors.  POST-02:User successfully logged into the website. | | |
| Basic Flow: | 1. User access to the sign-in page.  2. User to choose login with their account.  3. User type in account info and press sign in button.  4. System verifies the user's account information and allows the user  to access the system.  5. System redirects to Home page. | | |
| Alternative Flow: | 2a. User to login with Gmail method.  2a1. System redirects to the Google sign in page.  3a. Users type in their Google account and click log in.  4a. Google verifies the account’s information and allows the user access to the system. | | |
| Exception: | 4c. The system fails to verify the user's account information and display messages.  4c1. Users stop the login process.  Use case stops.  4c2. Users click on Forgot password | | |

## **5.3. Sign Out**

| Use Case ID: | **UC-03** | USE CASE NAME | **SIGN-OUT** |
| --- | --- | --- | --- |
| Create By: | AnNNH | Date Created: |  |
| Primary Actor: | Member,Club admin,System admin | Secondary Actor | None |
| Description | This use case describes how a user can sign out of their account, which clears any active cookies and logs them out of the system | | |
| Priority: | High | | |
| Trigger | User clicks on the "Logout" Button in the sidebar. | | |
| Preconditions: | PRE-01: User has logged in into website | | |
| Post-Conditions | POST-01: The system works stably without errors.  POST-2: System navigates the users back to the home page. | | |
| Basic Flow: | 1. User click on “mark 3 line” to expand the sidebar .  2. Click on the log out option.  3. The user is now no longer determined as any role but Guest.  4. The guest will be navigated back to the home page. | | |
| Alternative Flow: | None | | |
| Exception: | None | | |

## **5.4. Edit User Profile**

| Use Case ID: | **UC-04** | USE CASE NAME | **EDIT-PROFILE** |
| --- | --- | --- | --- |
| Create By: | MinhDQ | Date Created: |  |
| Primary Actor: | Registered User | Secondary Actor | None |
| Description | This use case describes how a registered user can view and update their personal details. | | |
| Priority: | High | | |
| Trigger | The user clicks on the profile section. | | |
| Preconditions: | PRE-01: The user must be logged into the system. | | |
| Post-Conditions | POST-01: The system updates and saves the user’s profile changes.  POST-02: The user sees the updated profile information. | | |
| Basic Flow: | 1. The user logs into the system. 2. Clicks on the profile section. 3. Edits profile details (e.g., name, email, profile picture). 4. Clicks the "Save" button. 5. The system updates and displays the changes. | | |
| Alternative Flow: | None | | |
| Exception: | **4a.** The user enters invalid information.   * **4a1.** The system displays an error message and prompts the user to correct the information. | | |

# **6.** **DATA STRUCTURE**

## **6.1** **Database**

# **7.** **NON-FUNCTIONAL**

## **1. External Interfaces**

### **1.1. User Interface**

* UI-01: The system must display Success Message or Error Message when completing an action.
* UI-02: When the user is doing the Delete option, there must be a Confirm (Y/N) dialog.
* UI-03: The UI must minimise horizontal scrolling.
* UI-04: All pages in the system must have a Header menu and a Navigation menu.

### **1.2. Software Interface**

* SI-01: Users can use Google services as Login, which will help them to authenticate their account.
* UI-02: When the user is doing the Delete option, there must be a Confirm (Y/N) dialog.
* UI-03: The UI must minimise horizontal scrolling.
* UI-04: All pages in the system must have a Header menu and a Navigation menu.

## **2. Quality Attributes**

### **2.1. Availability**

* The Club management System should be accessible for at least 95% of the time
* The Club management System is accessible 24/7 from Monday to Sunday, except for the maintenance hours of 23:00-24:00 on Sundays.

### **2. 2 Usability**

* An untrained user can use the payment function within a maximum of 15 minutes.
* Links and buttons are easily clickable.

### **2.3. Reliability**

* Under the worst conditions, the mean time between failures should be no more than 5%.
* The platform's ability to recover from any issues should take no longer than 5 hours.

### **2.4. Performance**

* The platform’s loading time should not exceed 2 seconds.
* The platform’s content should be both rendered and readable within a maximum of 3 seconds
* Processing times of the most complexes request must complete within 3s (not include timeout ones)
* Uploads of large images (>20mb) should be complete processing after 3s.
* The platform has the ability to handle up to 200 requests per second.

### **2.5. Security**

* The user’s password should be encrypted using the Bcrypt algorithm before being stored in the database.
* Data backup should be performed every month.

# **8.** **APPENDICES**

## Appendix A: Acronyms and Abbreviations

A list of commonly used acronyms and abbreviations in this document:

* **SDS**: Software Design Specification
* **UI**: User Interface
* **API**: Application Programming Interface
* **DB**: Database
* **RBAC**: Role-Based Access Control

## Appendix B: References

A list of documents, tools, and resources referenced in this specification:

* System architecture diagrams
* Database schema design documents
* Relevant API documentation
* Security and compliance guidelines

## Appendix C: Tools and Technologies

A summary of the tools and technologies used in the system:

* **Backend**: NET 9.0, Kotlin
* **Frontend**: HTML, CSS, JavaScript, Android
* **Database**: SQL Server
* **Version Control**: Git, GitHub
* **Testing Framework**: JUnit

## Appendix D: Glossary

Definitions of key terms used in this document:

* **Scalability**: The ability of the system to handle growth efficiently.
* **Microservices**: An architectural style where applications are composed of loosely coupled services.
* **Authentication**: The process of verifying user identity.
* **Encryption**: The process of encoding information to protect it from unauthorized access.

## Appendix E: Contact Information

Relevant contact details for project stakeholders and support: