



# **Artifact Design and Test Plan**

Name: Krishma Khadgi

Student Number: 2329461

Course: Bachelors (Hons) in Computer Science

University email: k.khadgi@wlv.ac.uk

Supervisor: Mohit Acharya

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## User Registration and Authentication

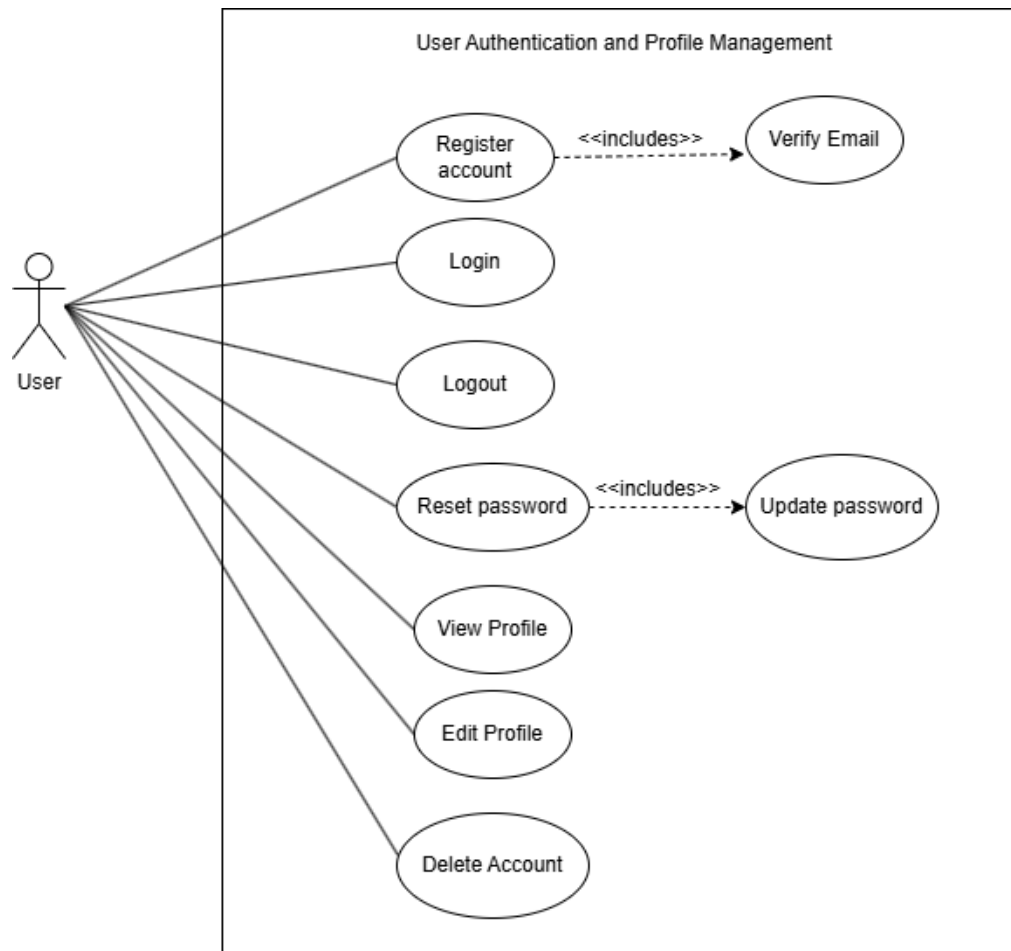
### Software Requirements Specification

Req. Code	Req. Description	Use Case
HRF-UR-1.0	The platform shall allow new users to create an account with essential credentials.	User Registration
HRF-UR-1.1	Each user account must have a unique email address.	User Registration
HRF-UR-1.2	Passwords must adhere to security standards.	User Registration
HRF-UR-1.3	The platform should require users to confirm their password during registration.	User Registration
HRF-UR-1.4	The must validate all the required registration fields.	User Registration
HRF-UR-1.5	User credentials should be stored in a database securely.	User Registration
HRF-UR-1.6	A verification email should be sent upon registration to confirm account ownership.	User Registration
HRF-UR-1.7	Users shall receive real-time error messages for invalid input during registration.	User Registration
HRF-UR-1.8	User login should be possible using their registered email and password.	User Login
HRF-UR-1.9	The platform should verify login credentials against stored data.	User Login

<b>HRF-UR-1.10</b>	Secure authentication methods like JSON Web token should be used to prevent unauthorized access.	User Login
<b>HRF-UR-1.11</b>	Important data like password must be stored after encryption.	User Login
<b>HRF-UR-1.12</b>	Upon successful login, the system shall initiate a user session.	User Login
<b>HRF-UR-1.13</b>	Users shall be redirected to their dashboard after logging in.	User Login
<b>HRF-UR-1.14</b>	The platform should allow users to log out securely.	User Logout
<b>HRF-UR-1.15</b>	User sessions shall be invalidated upon logout.	User Logout
<b>HRF-UR-1.16</b>	If login fails due to incorrect credentials, an appropriate error message shall be displayed.	User Login
<b>HRF-UR-1.17</b>	The system shall provide a password reset mechanism.	Password Reset
<b>HRF-UR-1.18</b>	User authentication and authorization mechanisms shall be designed to protect against security threats.	Security
<b>HRF-UR-1.19</b>	Passwords and authentication tokens shall never be stored in plaintext.	Security
<b>HRF-UR-1.20</b>	The platform should respond to user requests.	General

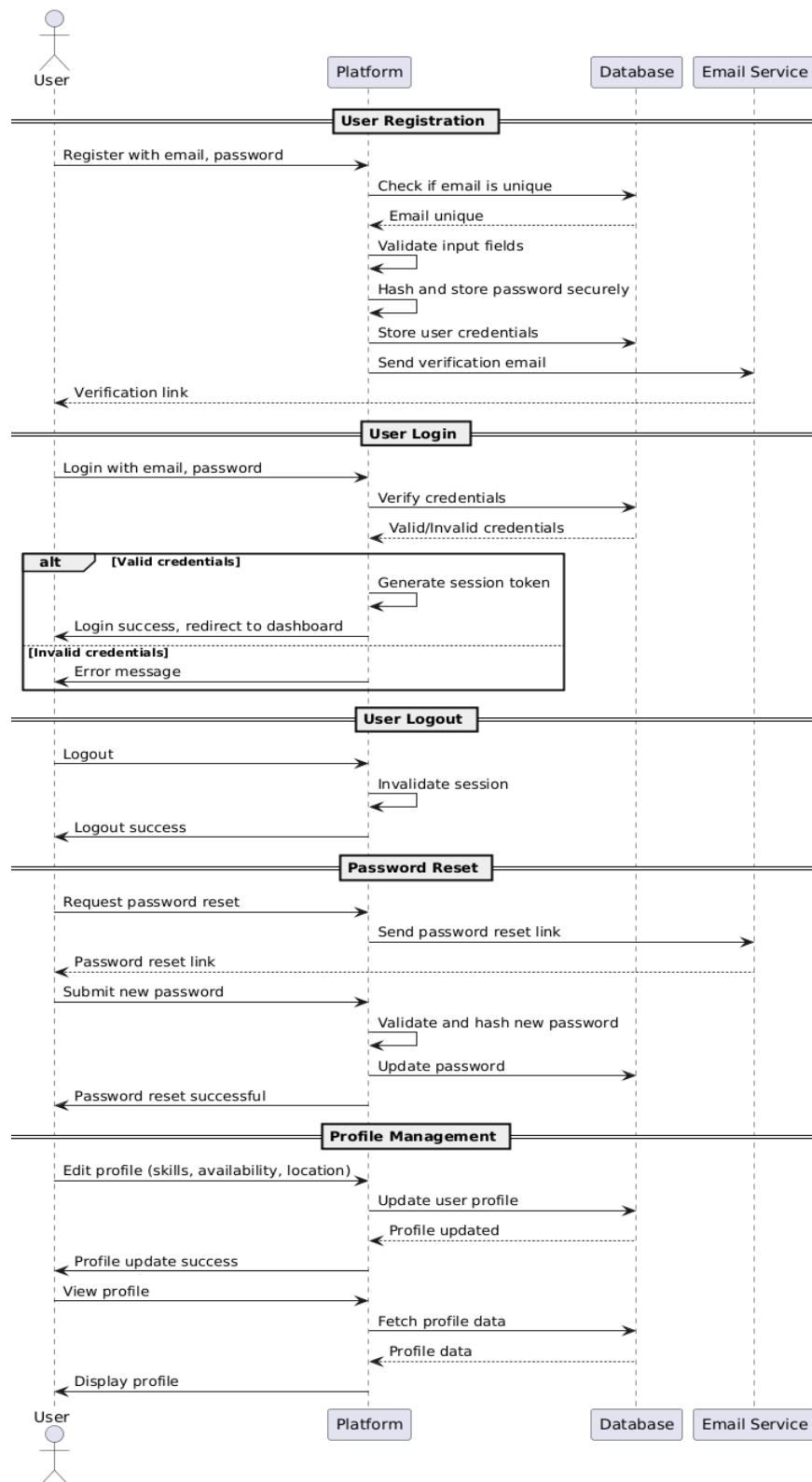
<b>HRF-UR 1.21</b>	The system shall provide visual feedback when processing user requests.	User Experience
<b>HRF-UR 1.22</b>	The platform should be fully responsive.	User Experience
<b>HRF-UR 1.23</b>	The system shall allow users to edit their profile information, including skills offered, availability, and location.	Profile Management
<b>HRF-UR 1.24</b>	The system shall display user profiles with relevant information (skills, availability, ratings, etc.).	Profile Management

### Use case diagram



Use case diagram for User Authentication 1

## Sequence diagram



Sequence diagram for User Authentication 1

**Testing**

Req. Code	Req. Description	Test ID	Test Case Description	Expected Result	Status
UM-F-1.0	The platform shall allow new users to create an account with essential credentials.	TC-001	Verify that a new user can successfully create an account with required credentials	User should be able to create an account successfully	Success
UM-F-1.1	Each user account must have a unique email address.	TC-002	Ensure that a duplicate email address cannot be used for registration	System should reject duplicate email addresses	Success
UM-F-1.2	Passwords must adhere to security standards.	TC-003	Validate password strength requirements (e.g. minimum length, special characters)	System should enforce password security rules	Success
UM-F-1.3	The platform should require users to confirm their password during registration.	TC-004	Check if users must re-enter and match their password before proceeding	Passwords must match for registration to succeed	Success
UM-F-1.4	The system must validate all the required registration fields.	TC-005	Verify that registration fails if required fields are missing	System should display appropriate error messages	Success
UM-F-1.5	User credentials should be stored in a database securely.	TC-006	Confirm that passwords are not stored in plaintext and use encryption	Passwords should be securely hashed	Success
UM-F-1.6	A verification email should be sent upon registration to	TC-007	Ensure that a verification email is sent	User should receive a verification email	Success



	confirm account ownership.		after successful registration		
UM-F-1.7	Users shall receive real-time error messages for invalid input during registration.	TC-008	Check if invalid inputs display error messages in real time	System should provide immediate feedback	Success
UM-F-1.8	User login should be possible using their registered email and password.	TC-009	Verify that users can log in with correct credentials	User should be able to log in successfully	Success
UM-F-1.9	The platform should verify login credentials against stored data.	TC-010	Ensure the system correctly validates login credentials	Invalid credentials should be rejected	Success
UM-F-1.10	Secure authentication methods like JSON Web Token should be used to prevent unauthorized access.	TC-011	Verify that JWT is issued upon successful login	JWT should be generated and used for authentication	Success
UM-NF-1.11	Important data like passwords must be stored after encryption.	TC-012	Confirm that sensitive data is encrypted in storage	Data should not be stored in plaintext	Success
UM-F-1.12	Upon successful login the system shall initiate a user session.	TC-013	Verify that a user session starts after login	System should create a session for authenticated users	Success
UM-F-1.13	Users shall be redirected to their dashboard after logging in.	TC-014	Check if users are redirected to their dashboard post-login	User should land on the dashboard	Success
UM-F-1.14	The platform should allow users to log out securely.	TC-015	Ensure that users can log out successfully	User should be logged out and redirected appropriately	Success

UM-F-1.15	User sessions shall be invalidated upon logout.	TC-016	Confirm that user sessions are terminated after logout	Session should be invalidated upon logout	Success
UM-F-1.16	If login fails due to incorrect credentials, an appropriate error message shall be displayed.	TC-017	Verify that incorrect login attempts show a relevant error message	User should see a meaningful error message	Success
UM-F-1.17	The system shall provide a password reset mechanism.	TC-018	Ensure users can reset passwords via email	Users should receive password reset instructions	Success
UM-NF-1.18	User authentication and authorization mechanisms shall be designed to protect against security threats.	TC-019	Test if authentication mechanisms are resilient against common attacks	System should prevent unauthorized access	Success
UM-NF-1.19	Passwords and authentication tokens shall never be stored in plaintext.	TC-020	Confirm that passwords and tokens are securely stored	Passwords/tokens should be encrypted	Success
UM-F-1.20	The platform should respond to user requests.	TC-021	Verify if the platform provides responses to various user requests	System should respond appropriately	Success
UM-UR-1.21	The system shall provide visual feedback when processing user requests.	TC-022	Check if visual indicators (e.g. loading spinners) appear during processing	Users should see feedback during operations	Success
UM-UR-1.22	The platform should be fully responsive.	TC-023	Ensure the platform adapts	System should be usable on all device types	Pending

			well to different screen sizes		
UM-F-1.23	The system shall allow users to edit their profile information including skills offered, availability, and location.	TC-024	Verify that users can update their profile details	Users should be able to save edited profiles	Success
UM-F-1.24	The system shall display user profiles with relevant information (skills, availability, ratings, etc.).	TC-025	Ensure that user profiles display accurate and relevant information	Profiles should show correct user details	Success

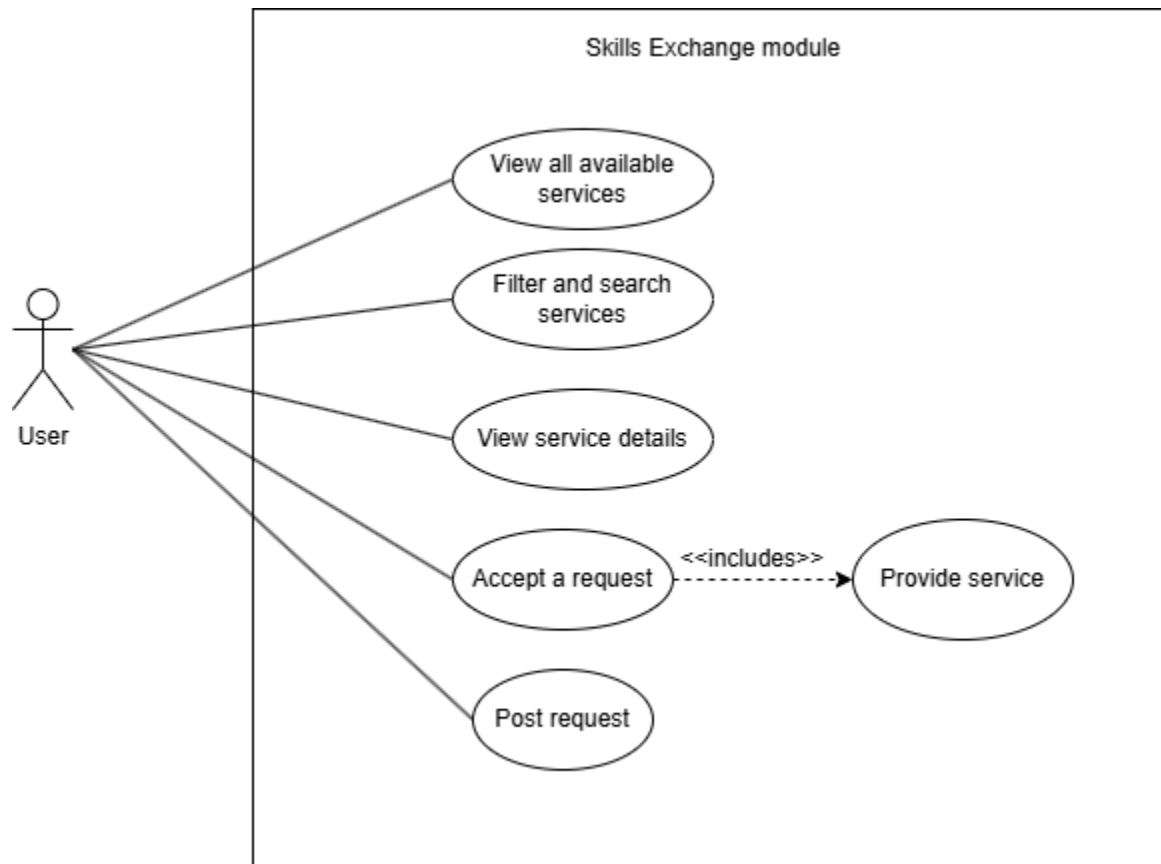
## Skills Exchange System

### Software Requirements Specification:

Req. Code	Req. Description	Use Case
HRF-SE- 1.0	Users shall be able to post a service request based on their needs.	Service Request
HRF-SE- 1.1	The system shall allow users to search for available services based on their location and skill type.	Service Exchange
HRF-SE- 1.2	The system shall allow users to request services from others.	Service Exchange
HRF-SE- 1.3	The system shall allow users to offer their services to others.	Service Exchange
HRF-SE- 1.4	The system shall use Geolocation API to capture the user's live location for service matching.	Service Matching

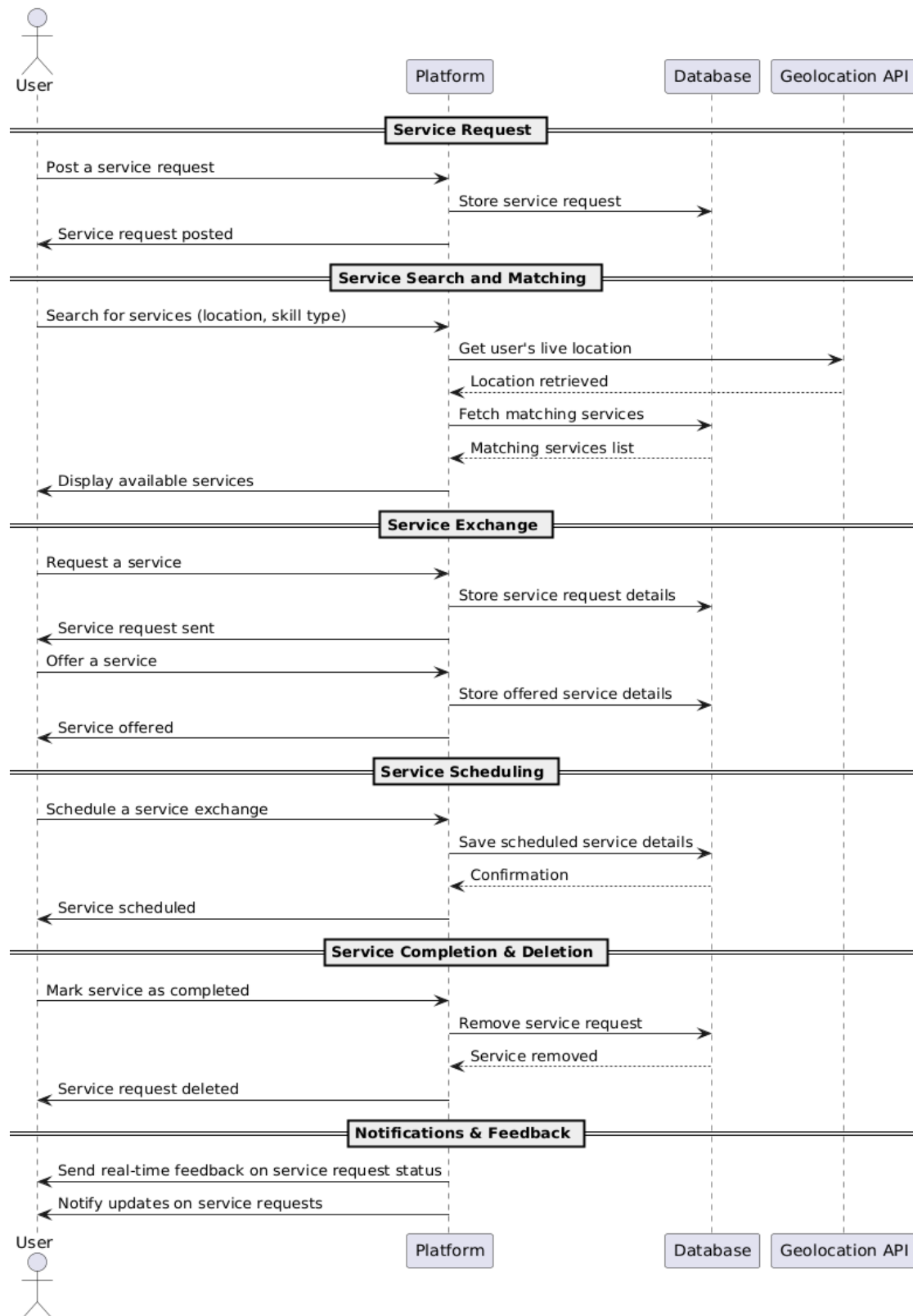
<b>HRF-SE- 1.5</b>	The system shall create a skills profile for each user based on the extracted and categorized skills.	Service Exchange
<b>HRF-SE- 1.6</b>	The system shall filter services based on the user's location and search radius.	Service Exchange
<b>HRF-SE- 1.7</b>	Each service shall have a time-based value	Service Exchange
<b>HRF-SE- 1.8</b>	Users shall be able to schedule service exchanges.	Service Scheduling
<b>HRF-SE- 1.9</b>	After service completion, the service request should be automatically removed from the "Services" page.	Service Deletion

### Use case diagram



Use case diagram for Service Exchange 1

## Sequence diagram



Sequence diagram for Service Exchange 1

**Testing**

Req. Code	Req. Description	Test ID	Test Case Description	Expected Result	Status
SES-F-1.0	Users shall be able to post a service request based on their needs.	TC-001	Verify that users can successfully post a service request based on their needs	User should be able to post a service request	Success
SES-F-1.1	The system shall allow users to search for available services based on their location and skill type.	TC-002	Ensure users can search for services based on location and skill type	User should see relevant service results based on search parameters	Success
SES-F-1.2	The system shall allow users to request services from others.	TC-003	Check if users can request services from others	User should be able to request services	Success
SES-F-1.3	The system shall allow users to offer their services to others.	TC-004	Verify that users can offer services to others	User should be able to offer services	Success
SES-F-1.4	The system shall use the Geolocation API to capture the user's live location for service matching.	TC-005	Confirm if the system captures the user's location using the Geolocation API	User's live location should be captured and used for service matching	Success
SES-F-1.5	The system shall create a skills profile for each user based on the extracted and categorized skills.	TC-006	Ensure the system creates a skills profile for each user	A profile should be created with categorized skills	Success
SES-F-1.6	The system shall filter services based on the user's location and search radius.	TC-007	Check if services are filtered by location and search radius	Services should be displayed according to location and radius	Pending

SES-F-1.7	Each service shall have a time-based value.	TC-008	Verify if each service has a time-based value	Services should have a time-based value	Success
SES-F-1.8	Users shall be able to schedule service exchanges.	TC-009	Ensure users can schedule a service exchange	Users should be able to select a time for service exchanges	Success
SES-F-1.9	After service completion, the service request should be automatically removed from the 'Services' page.	TC-010	Check if service requests are removed after completion	Service requests should disappear from the page after completion	Success
SES-NF-1.10	The system shall ensure data security and privacy for all users.	TC-011	Verify that user data is secure and privacy is maintained	User data should be secure and private	Success
SES-NF-1.11	The system shall be available with 99.9% uptime for reliability.	TC-012	Test system availability and uptime	System should have 99.9% uptime	Success
SES-NF-1.12	Service matching algorithms shall process requests within 2 seconds.	TC-013	Ensure service matching requests are processed within 2 seconds	Requests should be processed within 2 seconds	Success
SES-NF-1.13	The system shall encrypt all personal user data in transit and at rest.	TC-014	Verify that personal data is encrypted in transit and at rest	Data should be encrypted both during transit and while stored	Success
SES-UR-1.14	The platform shall provide a user-friendly interface for browsing and posting service requests.	TC-015	Ensure the platform has an intuitive and user-friendly interface	Interface should be easy to navigate and use	Success
SES-UR-1.15	The system shall provide real-time feedback on service request status.	TC-016	Check if the system provides real-time status	Users should see real-time feedback on request status	Success

			updates for service requests		
SES-UR-1.16	Users shall receive clear notifications for service request updates.	TC-017	Ensure that users receive notifications for service request updates	Users should receive timely and clear notifications	Pending
SES-UR-1.17	The system shall support responsive design for mobile, tablet, and desktop users.	TC-018	Check if the system is responsive on mobile, tablet, and desktop devices	The platform should adapt to all device types	Pending

## Time Banking System

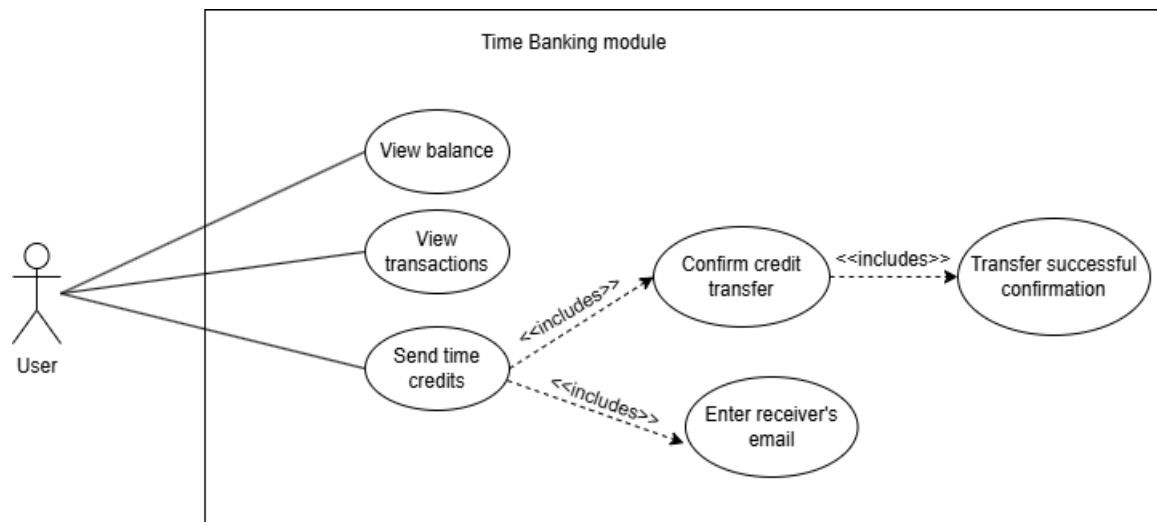
### Software Requirements Specification:

Req. Code	Req. Description	Use Case
HRF-TB- 1.0	The system shall allow users to send time credits after receiving services.	Time Banking
HRF-TB- 1.1	The system should dynamically update the service provider's time credits after clients send the amount.	Time Banking
HRF-TB- 1.2	The system shall track each user's time hours and update it in real-time.	Time Banking
HRF-TB- 1.3	The system shall display the user's current time balance on their profile.	Time Banking
HRF-TB- 1.4	The users should be allowed to view their recent transactions.	Time Banking



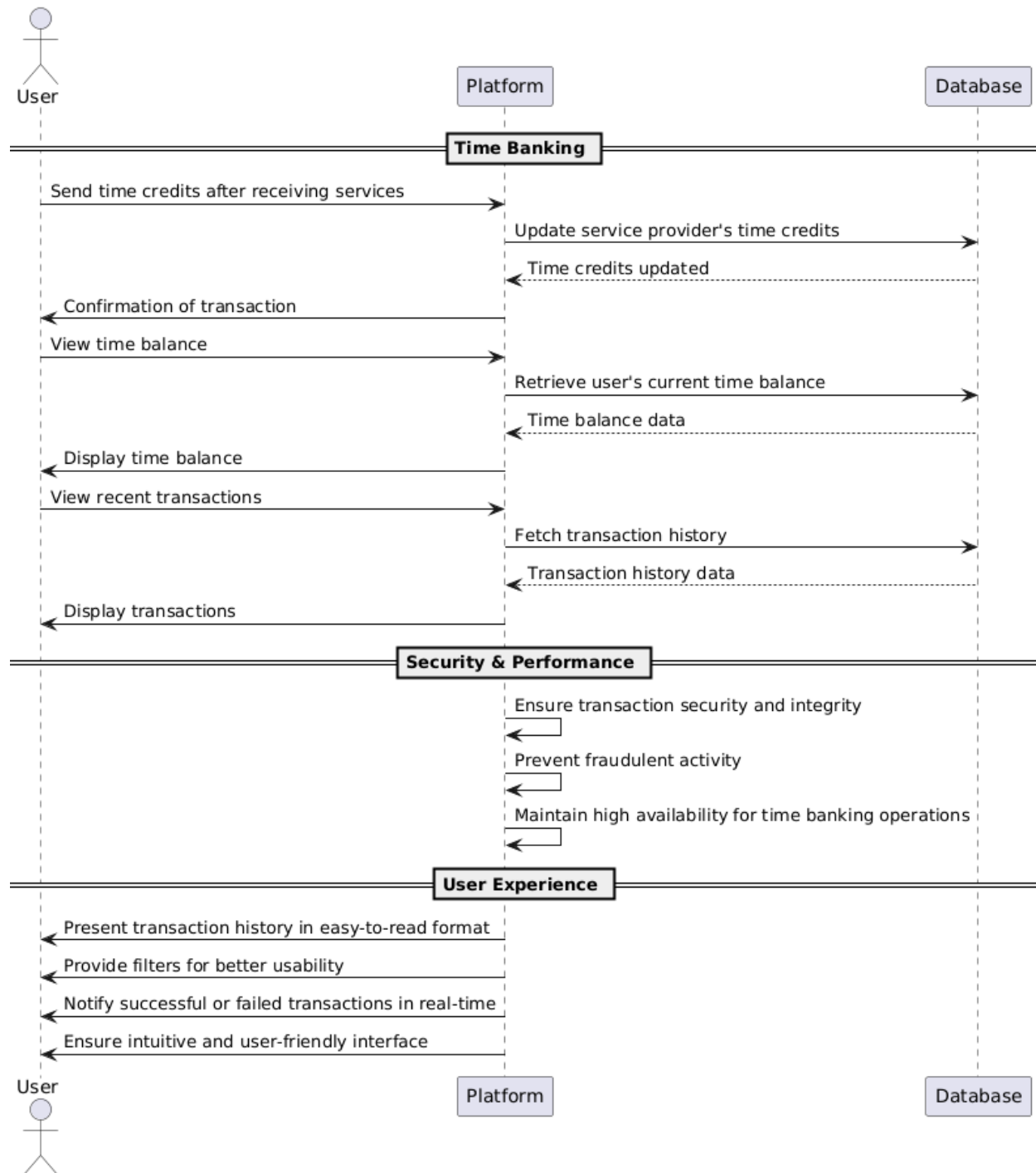
<b>HRF-TB- 1.5</b>	The system should be secure in handling transactions so that no blunder occurs.	Security
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## Use case diagram



Use case diagram for Time Banking 1

## Sequence diagram



Sequence diagram for Time Banking 1

**Testing**

Req. Code	Req. Description	Test ID	Test Case Description	Expected Result	Status
TBS-F-1.0	The system shall allow users to send time credits after receiving services.	TC-001	Verify that users can send time credits after receiving services	Users should be able to send time credits after services	Success
TBS-F-1.1	The system should dynamically update the service provider's time credits after clients send the amount.	TC-002	Ensure that the service provider's time credits are updated dynamically	Time credits should be updated in real-time for service provider	Success
TBS-F-1.2	The system shall track each user's time hours and update it in real-time.	TC-003	Verify that the system tracks and updates each user's time hours in real-time	Time hours should be tracked and updated instantly	Success
TBS-F-1.3	The system shall display the user's current time balance on their profile.	TC-004	Ensure that the user's time balance is displayed on their profile	Time balance should be visible on the user profile	Success
TBS-F-1.4	The users should be allowed to view their recent transactions.	TC-005	Verify that users can view their recent transactions	Recent transactions should be accessible to users	Success
TBS-NF-1.5	The system should be secure in handling transactions so that no blunder occurs.	TC-006	Check if the system securely handles transactions without errors	Transactions should be securely processed without errors	Success
TBS-NF-1.6	The system shall ensure transaction integrity and prevent fraudulent activity.	TC-007	Ensure that the system prevents fraudulent activities and maintains	Transactions should be secure and fraud-free	Success

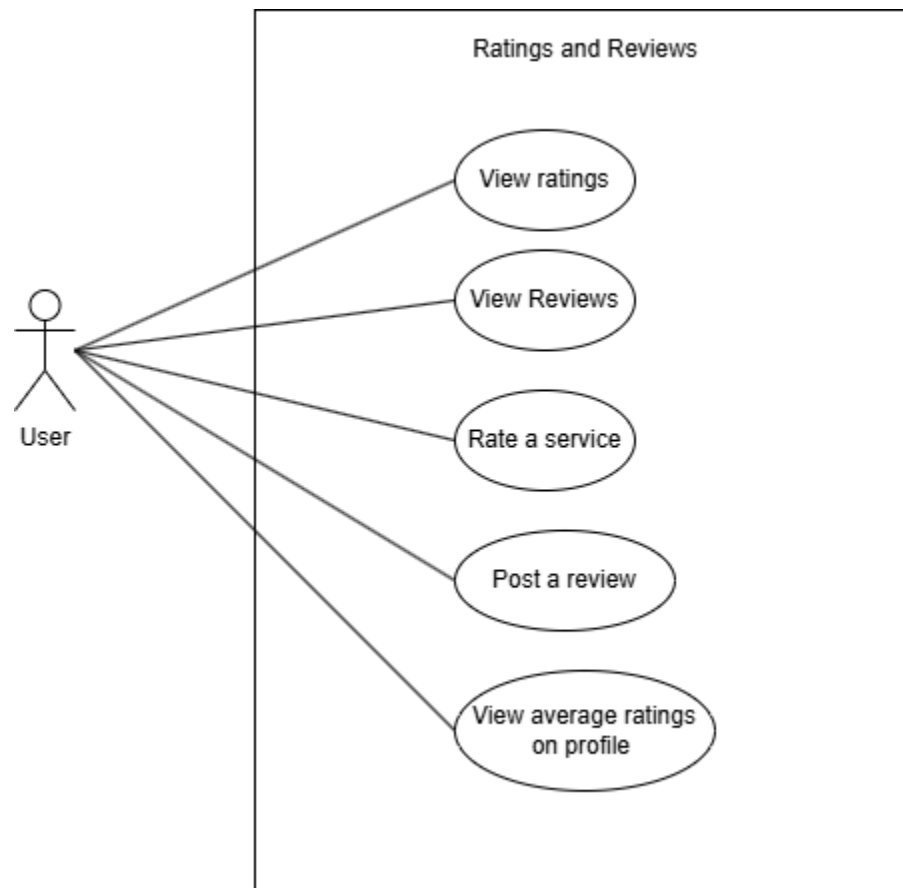
			transaction integrity		
TBS-NF-1.7	The system should support high availability to ensure seamless time banking operations.	TC-008	Test the system's availability and performance during high traffic	The system should maintain high availability during heavy usage	Success
TBS-UR-1.8	The transaction history shall be presented in an easy-to-read format with filters for better usability.	TC-009	Ensure the transaction history is readable with available filters	Transaction history should be easy to read and filterable	Pending
TBS-UR-1.9	Users shall receive real-time notifications for successful and failed transactions.	TC-010	Verify that users receive notifications for both successful and failed transactions	Users should get real-time notifications for transaction outcomes	Success
TBS-UR-1.10	The interface for sending and receiving time credits should be intuitive and user-friendly.	TC-011	Check if the interface for sending and receiving time credits is user-friendly	The interface should be intuitive and easy to use	Success

## Ratings and Review Management System

### Software Requirements Specification:

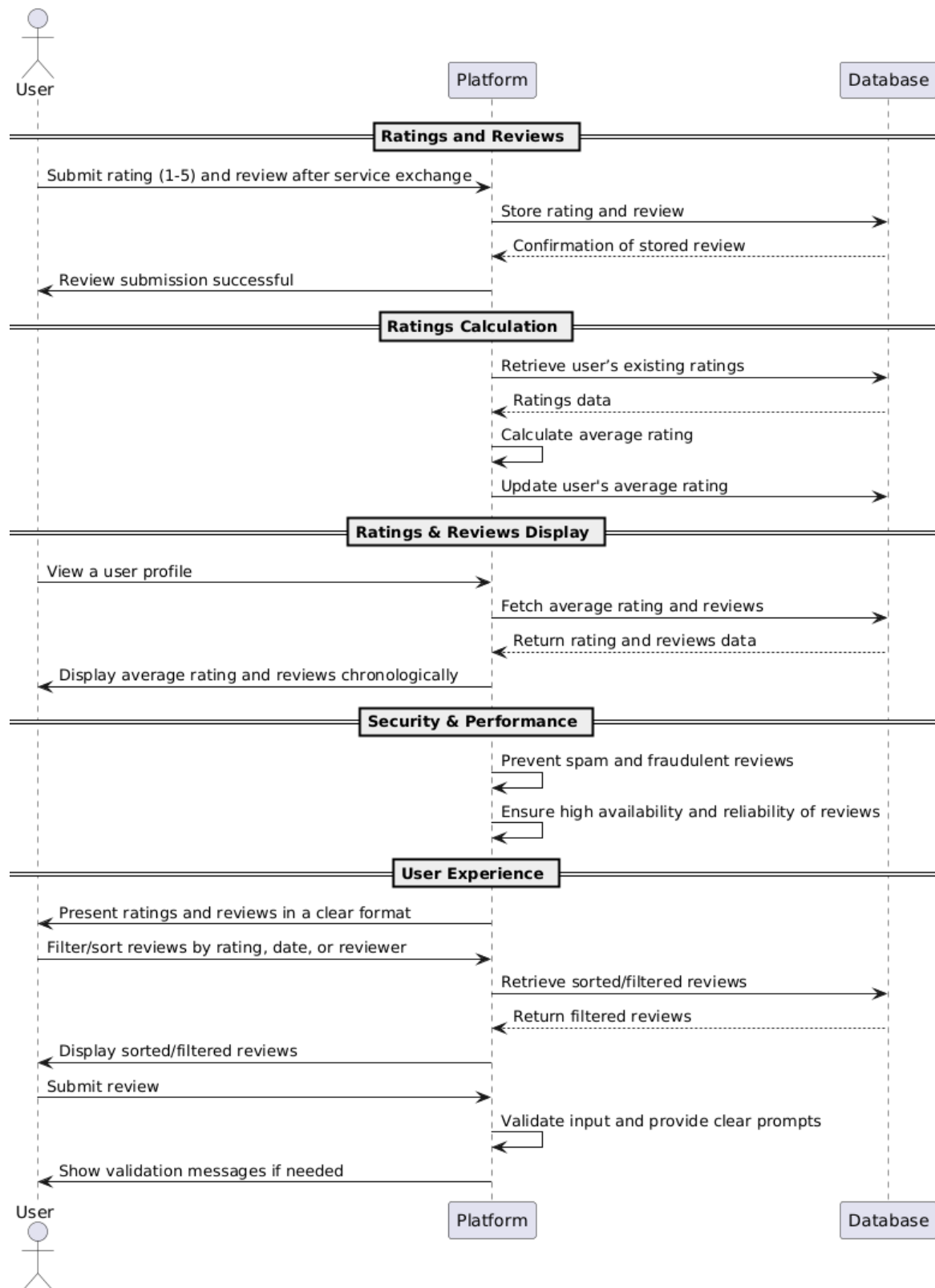
Req. Code	Req. Description	Use Case
<b>HRF-RR-1.0</b>	The system shall allow clients to rate and review individuals after service exchanges.	Ratings and Reviews
<b>HRF-RR-1.1</b>	The users can be rated on a scale of 1-5.	Ratings and Reviews
<b>HRF-RR-1.2</b>	The system shall calculate each user's average rating.	Ratings calculation
<b>HRF-RR-1.3</b>	The average rating should be dynamically updated on user profiles	Ratings display
<b>HRF-RR-1.4</b>	The system shall display individual reviews on user profiles.	Reviews display
<b>HRF-RR-1.5</b>	The system shall display the reviewer's name or alias with each review.	Ratings and Reviews
<b>HRF-RR-1.6</b>	The system shall display reviews in chronological order (most recent first).	Ratings and Reviews

## Use case diagram



*Use case diagram for Ratings and Reviews 1*

## Sequence diagram



Sequence diagram for Ratings and Reviews 1

**Testing**

Req. Code	Req. Description	Test ID	Test Case Description	Expected Result	Status
RMS-F-1.0	The system shall allow clients to rate and review individuals after service exchanges.	TC-001	Verify that clients can rate and review individuals after service exchanges	Clients should be able to rate and review after completing service exchanges	Success
RMS-F-1.1	The users can be rated on a scale of 1-5.	TC-002	Ensure that users can be rated on a scale from 1 to 5	Users should be able to select a rating from 1 to 5	Success
RMS-F-1.2	The system shall calculate each user's average rating.	TC-003	Verify that the system calculates each user's average rating correctly	Average rating should be accurately calculated based on ratings	Success
RMS-F-1.3	The average rating should be dynamically updated on user profiles.	TC-004	Ensure that the average rating is updated in real-time on user profiles	Average rating should update immediately after a new rating	Success
RMS-F-1.4	The system shall display individual reviews on user profiles.	TC-005	Verify that individual reviews are displayed on user profiles	Each review should be visible on the user's profile	Success
RMS-F-1.5	The system shall display the reviewer's name or alias with each review.	TC-006	Ensure that each review displays the reviewer's name or alias	Reviewer's name or alias should appear with their review	Success
RMS-F-1.6	The system shall display reviews in chronological order (most recent first).	TC-007	Ensure reviews are shown in chronological order, with the most recent review displayed first	Reviews should appear in order with most recent at the top	Success



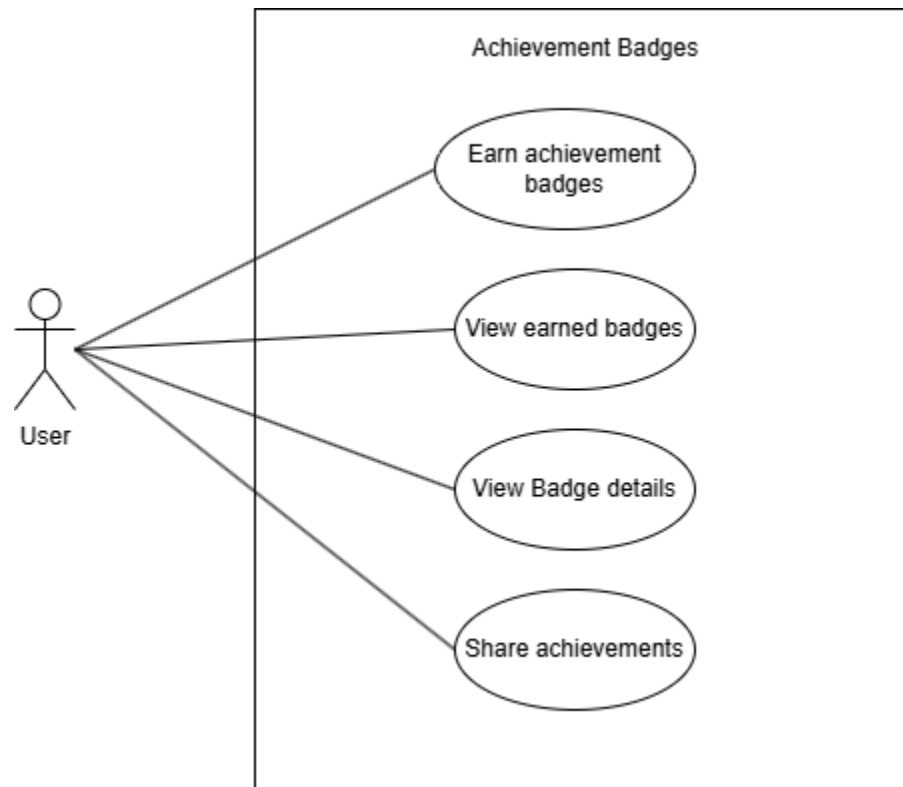
RMS-NF-1.7	The rating system shall be designed to prevent spam or fraudulent reviews.	TC-008	Verify that the rating system prevents spam or fraudulent reviews	The system should block fraudulent or spam reviews	Success
RMS-NF-1.8	The system should ensure high availability and reliability of the rating and review feature.	TC-009	Test if the rating and review feature works during high traffic	The rating and review feature should function smoothly during peak traffic	Success
RMS-UR-1.9	The ratings and reviews should be presented in a clear and readable format.	TC-010	Ensure that ratings and reviews are displayed in a readable format	Ratings and reviews should be easy to read and understand	Success
RMS-UR-1.10	Users shall be able to filter and sort reviews based on rating, date, or reviewer.	TC-011	Verify that users can filter and sort reviews by rating, date, or reviewer	Users should be able to filter and sort reviews by specified parameters	Pending
RMS-UR-1.11	The review submission process should be user-friendly with clear prompts and validation messages.	TC-012	Check if the review submission process is user-friendly with prompts and validation	The review submission should be easy to complete with helpful prompts	Success

## Achievement Badges Management System

### Software Requirements Specification:

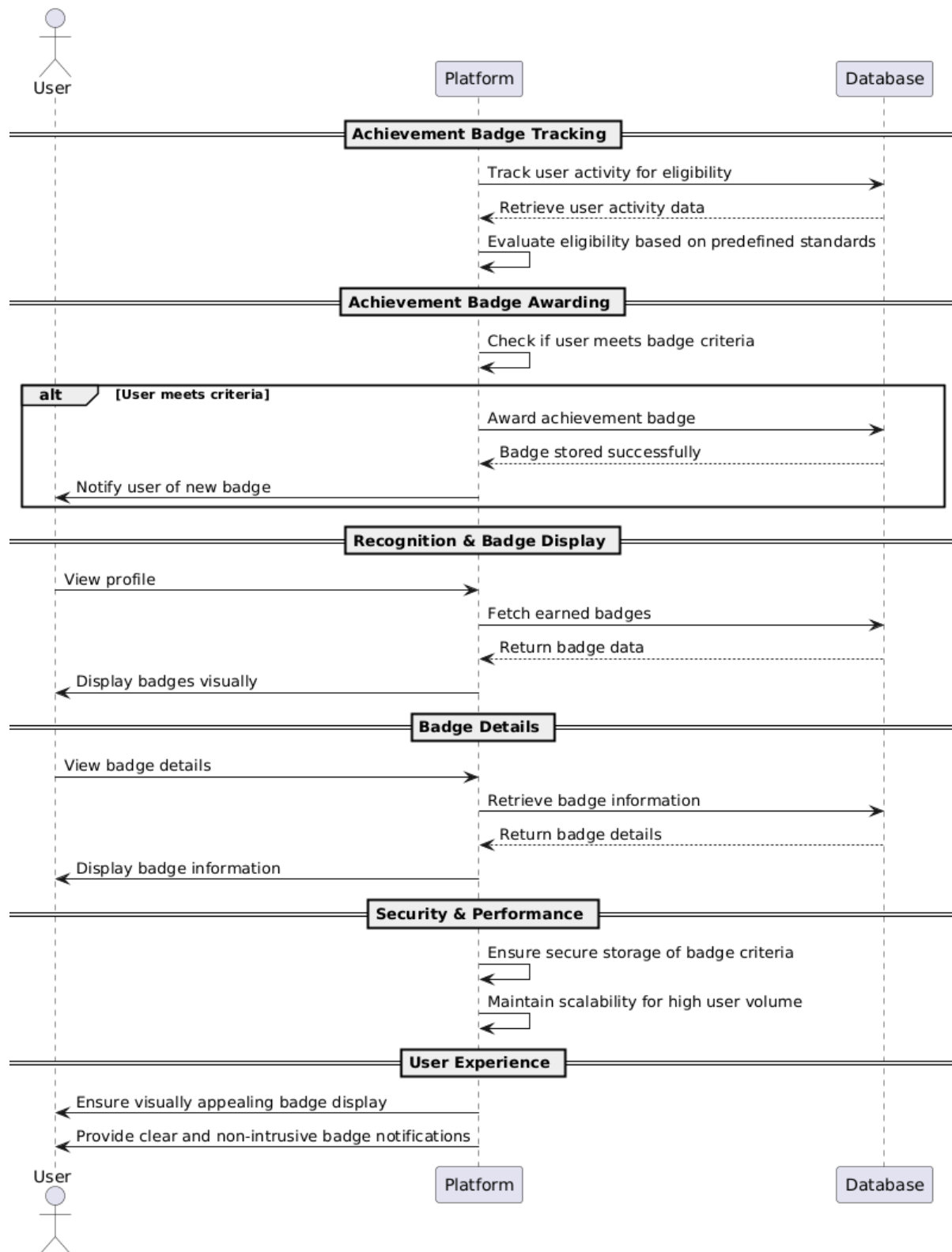
Req. Code	Req. Description	Use Case
<b>HRF-AB- 1.0</b>	The system shall track eligibility for achievement badges based on predefined standards.	Achievement Badges
<b>HRF-AB- 1.1</b>	The system shall dynamically award achievement badges to users based on specific criteria (e.g., completing a certain number of service hours).	Achievement Badges Creation
<b>HRF-AB- 1.2</b>	The system shall display earned badges on user profiles.	Recognition
<b>HRF-AB- 1.3</b>	The system shall allow users to view detailed information about each badge (e.g., description, criteria to earn it).	Achievement Badges
<b>HRF-AB- 1.4</b>	The system shall notify users when they earn a new badge.	Achievement Badges

## Use case diagram



*Use case diagram for Achievement Badges 1*

## Sequence diagram



Sequence diagram for Achievement Badges 1

**Testing**

Req. Code	Req. Description	Test ID	Test Case Description	Expected Result	Status
AMS-F-1.0	The system shall track eligibility for achievement badges based on predefined standards.	TC-001	Verify that the system tracks eligibility for achievement badges based on standards	System should track eligibility correctly based on the predefined criteria	Pending
AMS-F-1.1	The system shall dynamically award achievement badges to users based on specific criteria (e.g., completing a certain number of service hours).	TC-002	Ensure that achievement badges are awarded dynamically based on specific criteria	Badges should be awarded automatically when criteria are met	Pending
AMS-F-1.2	The system shall display earned badges on user profiles.	TC-003	Verify that earned badges are displayed on user profiles	Earned badges should be visible on user profiles	Pending
AMS-F-1.3	The system shall allow users to view detailed information about each badge (e.g., description, criteria to earn it).	TC-004	Ensure users can view detailed information about each badge	Users should be able to view the description and criteria for each badge	Pending
AMS-F-1.4	The system shall notify users when they earn a new badge.	TC-005	Verify that users are notified when they earn a new badge	Users should receive a notification when a new badge is earned	Pending
AMS-NF-1.5	The badge assignment process should be automated and	TC-006	Ensure the badge assignment process is	System should handle a high volume of users	Pending

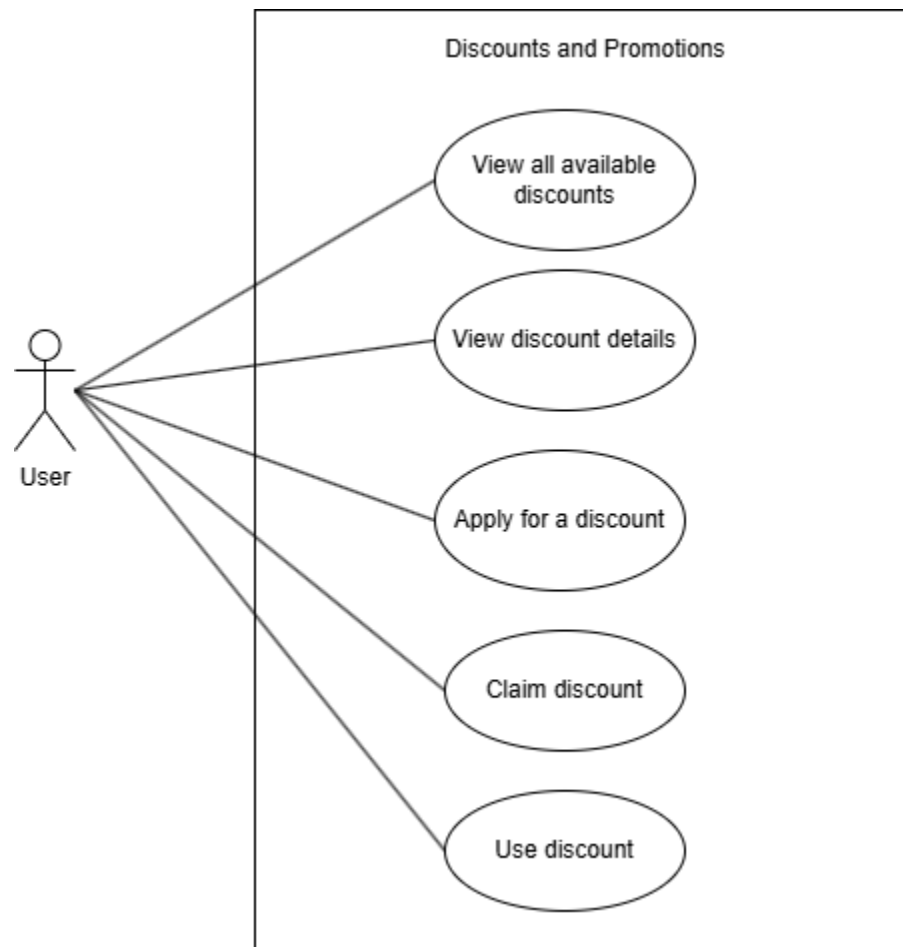
	scalable for high user volume.		automated and scalable	without performance issues	
AMS-NF-1.6	The system should ensure that badge criteria are securely stored and cannot be tampered with.	TC-007	Verify that badge criteria are securely stored and protected	Badge criteria should be securely stored and tamper-proof	Pending
AMS-UR-1.7	The badge display should be visually appealing and easy to understand.	TC-008	Check that the badge display is visually appealing and easy to understand	Badges should have a clear attractive design	Pending
AMS-UR-1.8	Users should be able to sort and filter badges in their profile.	TC-009	Ensure users can sort and filter badges in their profile	Users should be able to filter and sort badges by relevant criteria	Pending
AMS-UR-1.9	Notifications about new badges should be clear and non-intrusive.	TC-010	Verify that badge notifications are clear and non-intrusive	Notifications should be clear and not disrupt the user experience	Pending

## Discount Management System

### Software Requirements Specification:

Req. Code	Req. Description	Use Case
<b>HRF-DP- 1.0</b>	The users should be able to view all the available discounts on “discounts” page.	Discounts display
<b>HRF-DP- 1.1</b>	The users shall be able to preview discounts information.	Discounts and Promotions
<b>HRF-DP- 1.2</b>	Users should be allowed to accept the discounts and offers.	Discounts and Promotions
<b>HRF-DP- 1.3</b>	The system shall provide discounts at partner businesses based on the user's time hours.	Discounts and Promotions
<b>HRF-DP- 1.4</b>	The system shall track eligibility for discounts based on time hours.	Discounts and Promotions
<b>HRF-DP- 1.5</b>	A prompt should be given if the user does not have sufficient time credits.	Discounts and Promotions

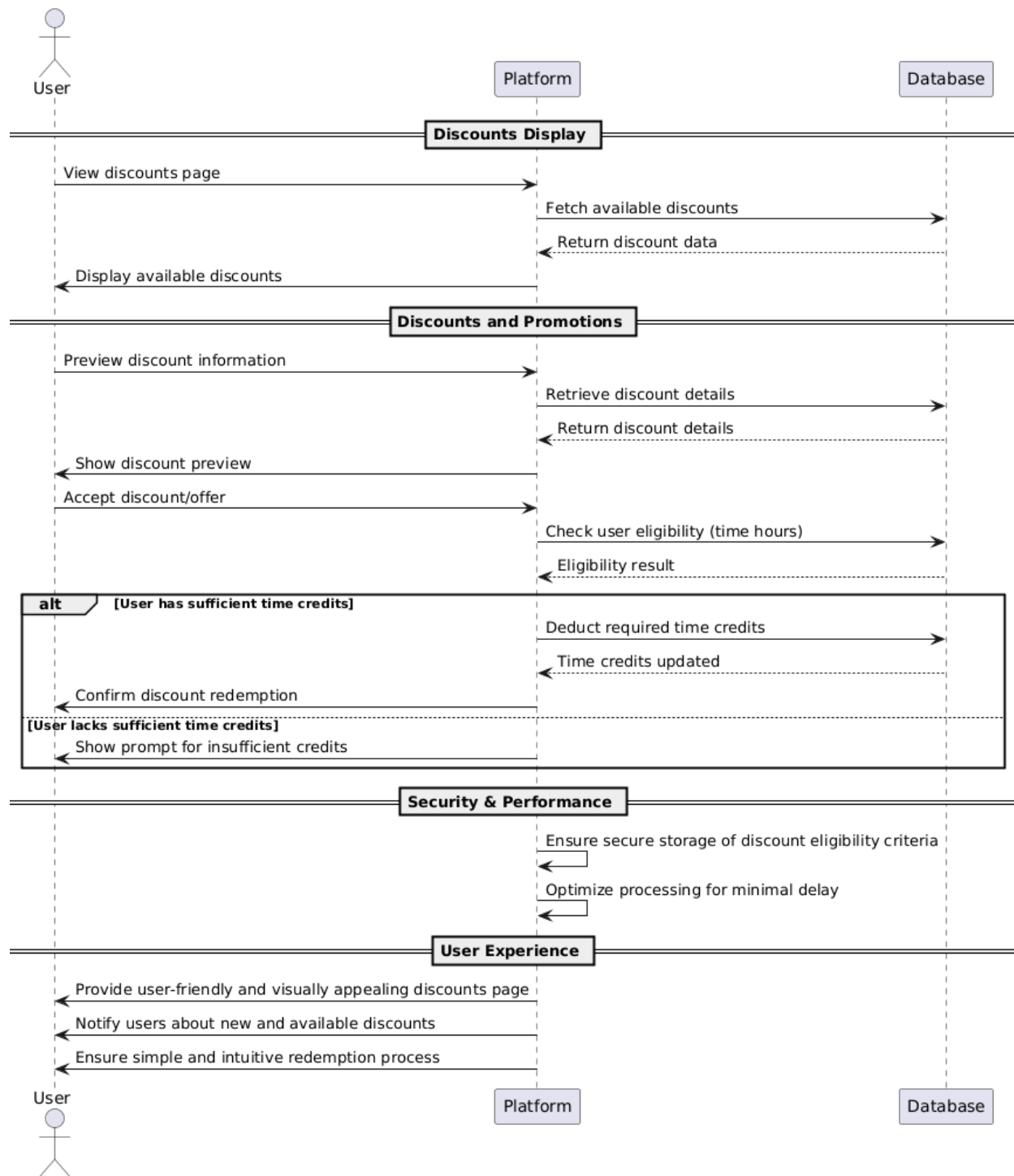
## Use case diagram



*Use case diagram for Discounts 1*



## Sequence diagram



Sequence diagram for Discounts system 1

**Testing**

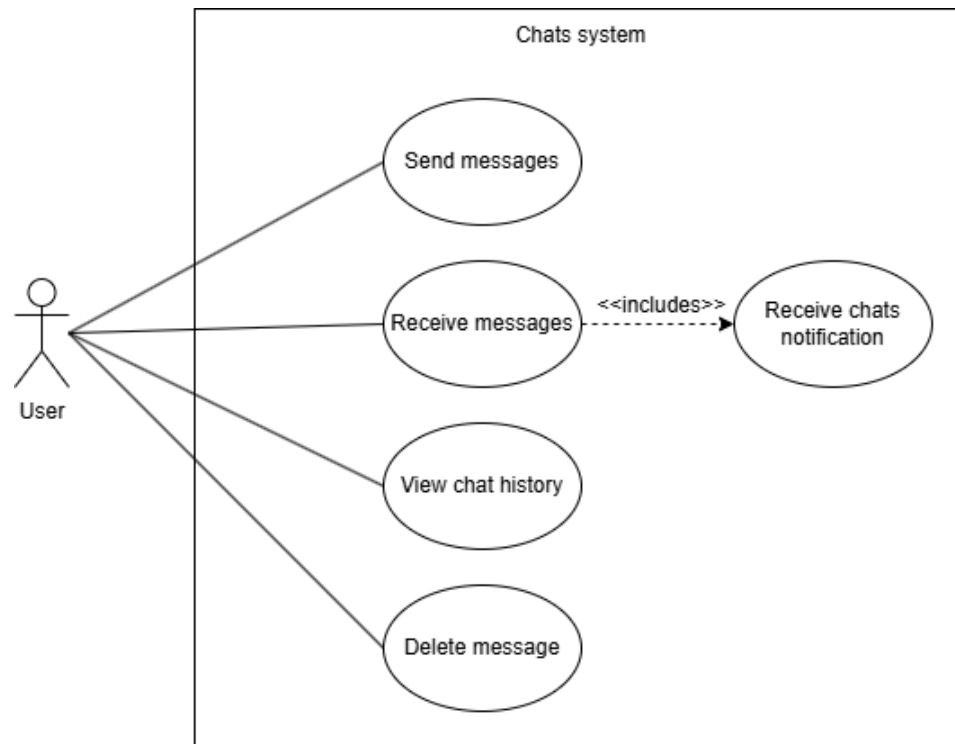
Req. Code	Req. Description	Test ID	Test Case Description	Expected Result	Status
DMS-F-1.0	The users should be able to view all the available discounts on the “discounts” page.	TC-001	Ensure users can view all available discounts on the discounts page	Users should be able to see a list of all available discounts on the page	Pending
DMS-F-1.1	The users shall be able to preview discount information.	TC-002	Verify that users can preview information about discounts	Users should be able to click and view detailed discount information	Pending
DMS-F-1.2	Users should be allowed to accept the discounts and offers.	TC-003	Ensure users can accept discounts and offers	Users should be able to click an accept button to confirm the discount	Pending
DMS-F-1.3	The system shall provide discounts at partner businesses based on the user's time hours.	TC-004	Verify that discounts are provided based on user's time hours	Discounts should be calculated based on the time hours a user has	Pending
DMS-F-1.4	The system shall track eligibility for discounts based on time hours.	TC-005	Ensure the system tracks eligibility for discounts based on time hours	System should calculate and track user eligibility for discounts based on hours	Pending
DMS-F-1.5	A prompt should be given if the user does not have sufficient time credits.	TC-006	Ensure prompt is displayed if the user lacks sufficient time credits	A prompt should appear informing the user about insufficient credits	Pending
DMS-NF-1.6	The system should ensure that discount eligibility criteria are stored securely.	TC-007	Verify that discount eligibility criteria are securely stored	Eligibility criteria should be encrypted and stored securely	Pending

DMS-NF-1.7	The system should process discount requests efficiently to minimize delays.	TC-008	Ensure efficient processing of discount requests	Discount requests should be processed quickly and with minimal delay	Pending
DMS-UR-1.8	The discounts page should be user-friendly and visually appealing.	TC-009	Ensure the discounts page is user-friendly and visually appealing	The discounts page should have a clean intuitive design with easy navigation	Success
DMS-UR-1.9	Users should receive clear and timely notifications about available discounts.	TC-010	Ensure users receive notifications about available discounts	Users should get clear notifications promptly when new discounts are available	Pending
DMS-UR-1.10	The discount redemption process should be simple and intuitive.	TC-011	Verify the simplicity and intuitiveness of the discount redemption process	The process should be straightforward with clear steps for redemption	Pending

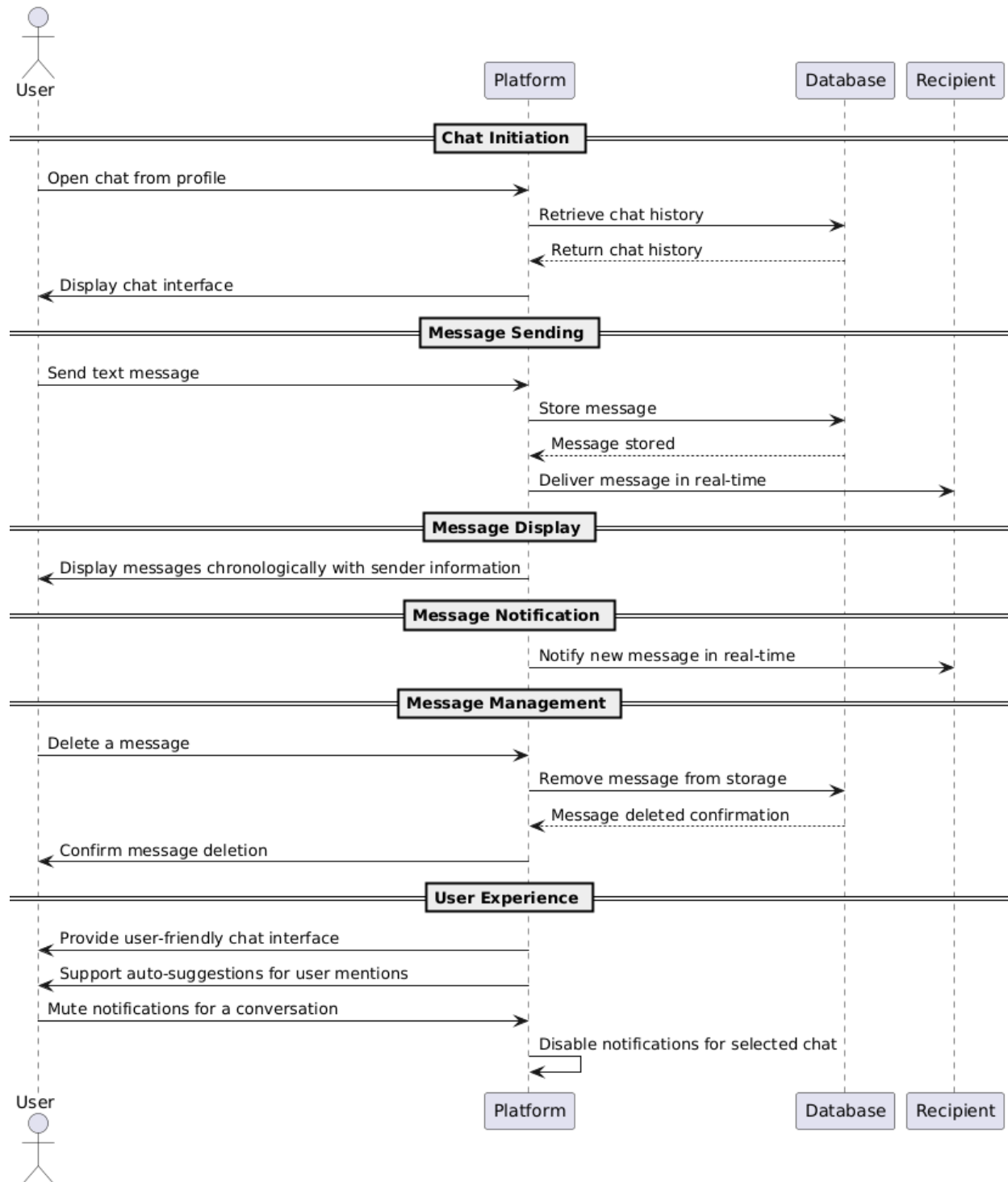
## Chat System

### Software Requirements Specification:

Req. Code	Req. Description	Use Case
<b>HRF-CS- 1.0</b>	The system should allow chat functionality to allow clients and service providers to chat with each other.	Message Sending
<b>HRF-CS- 1.1</b>	The chat system shall support text-based conversations.	Message Sending
<b>HRF-CS- 1.2</b>	Messages shall display sender information.	Message Display
<b>HRF-CS- 1.3</b>	Conversations shall be shown in chronological order.	Message Display
<b>HRF-CS- 1.4</b>	Users shall receive real-time notifications for new messages.	Message Notification
<b>HRF-CS- 1.5</b>	Message history shall be stored for future reference.	Message Persistence
<b>CHAT-F- 1.6</b>	Users shall be able to search for messages within their chat history.	Message Retrieval
<b>CHAT-F- 1.7</b>	Chat shall be accessible from user profiles	Chat Initiation
<b>CHAT-F- 1.8</b>	Users shall be able to delete their messages.	Message Management

**Use case diagram***Use case diagram for chats system 1*

## Sequence diagram



Sequence diagram for chats system 1

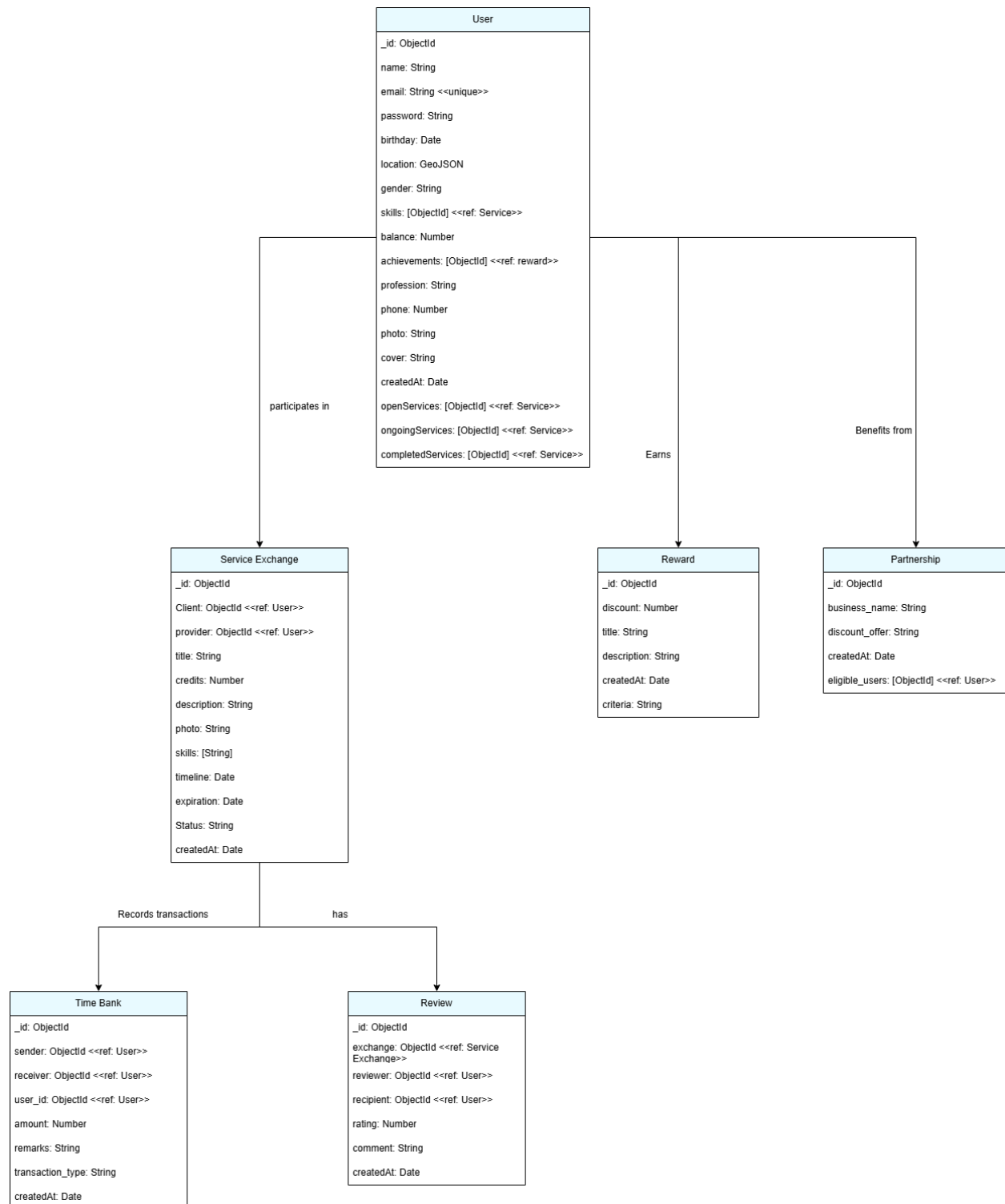
**Testing**

Req. Code	Req. Description	Test ID	Test Case Description	Expected Result	Status
CS-F-1.0	The system should allow chat functionality to enable clients and service providers to chat with each other.	TC-001	Ensure users can send and receive messages in the chat	Users should be able to send and receive messages within the chat	Pending
CS-F-1.1	The chat system shall support text-based conversations.	TC-002	Verify that the system supports text-based messages	The system should allow users to send and receive text-based messages	Pending
CS-F-1.2	Messages shall display sender information.	TC-003	Ensure that messages display the sender's information	Messages should show the sender's name or profile information	Pending
CS-F-1.3	Conversations shall be shown in chronological order.	TC-004	Verify that conversations are displayed in the correct order	Messages should appear in chronological order with the newest message at the bottom	Pending
CS-F-1.4	Users shall receive real-time notifications for new messages.	TC-005	Ensure users receive notifications for new messages	Users should get immediate notifications when new messages are received	Pending
CS-F-1.5	Message history shall be stored for future reference.	TC-006	Verify that the system stores message history	Messages should be saved and retrievable from past conversations	Pending
CS-F-1.6	Users shall be able to search for messages within their chat history.	TC-007	Ensure users can search their chat history	Users should be able to search messages by keywords or other criteria	Pending

CS-F-1.7	Chat shall be accessible from user profiles.	TC-008	Verify that chat can be accessed from user profiles	Users should be able to open and access the chat from their profile page	Pending
CS-F-1.8	Users shall be able to delete their messages.	TC-009	Ensure users can delete their messages	Users should be able to delete individual messages within a conversation	Pending
CS-NF-1.9	The system should encrypt messages to ensure data privacy.	TC-010	Ensure that messages are encrypted	Messages should be encrypted during transmission to protect privacy	Pending
CS-NF-1.10	The chat feature should have minimal latency for real-time interaction.	TC-011	Verify the latency of the chat system	The chat system should have minimal delay providing near-instant communication	Pending
CS-NF-1.11	The system should handle a large number of concurrent chats without performance issues.	TC-012	Ensure the system supports multiple concurrent chats	The system should maintain performance even with a large number of active users chatting simultaneously	Pending
CS-UR-1.12	The chat interface should be user-friendly and visually clear.	TC-013	Verify the clarity and ease of use of the chat interface	The interface should be intuitive and easy to navigate	Pending
CS-UR-1.13	The message input field should support auto-suggestions for user mentions.	TC-014	Ensure the message input field supports auto-suggestions	When typing the system should suggest user names for mentions	Pending
CS-UR-1.14	Users should be able to mute notifications.	TC-015	Ensure users can mute notifications for specific chats	Users should be able to mute notifications.	Pending

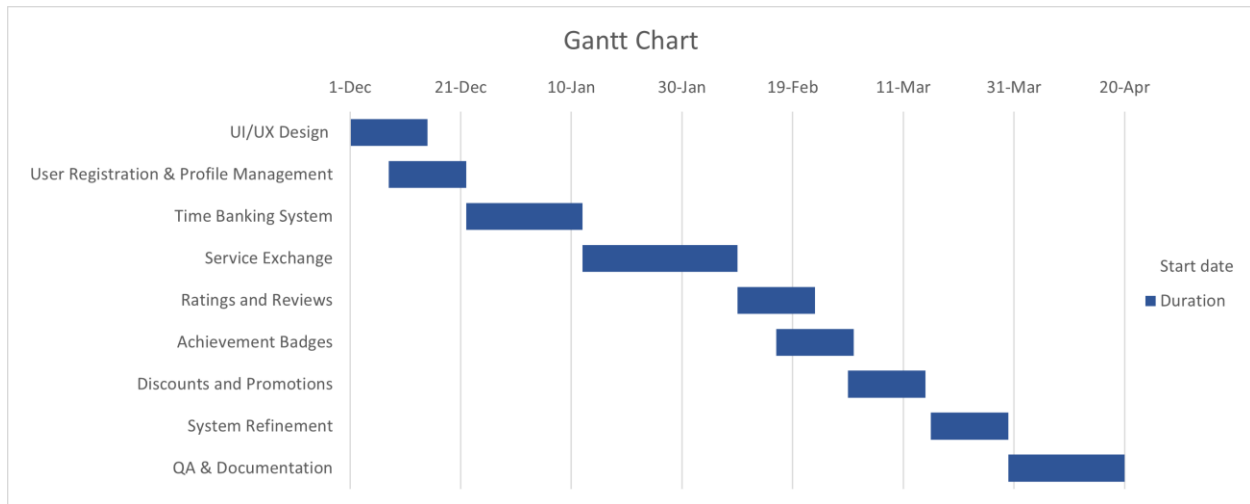


## MongoDB Schema Design Diagram



MongoDB Schema Design Diagram 1

## Gantt



*Gantt chart 1*

## Wireframes

### Create Account

First Name

Last Name

Email

Password

Create Account

Already have an account? [Login](#)

or

Sign up with Google

Sign up with Facebook

## Login


Email


Password

**Login**

Don't have an account? [Signup](#) [Forgot Password?](#)

or


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**Jenisha Gurung**


Part-time chef


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**About**


 Female

 Born June 26, 2003

 Kumarigali, Boudha Kathmandu

 jengrg@gmail.com

 983736483

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Simple tasks

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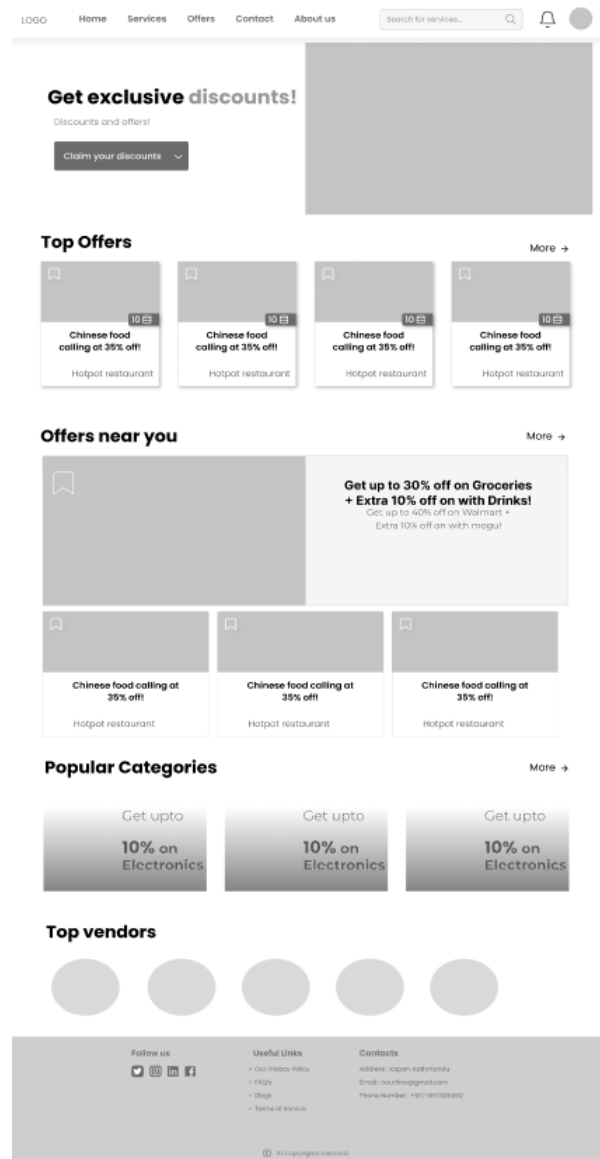
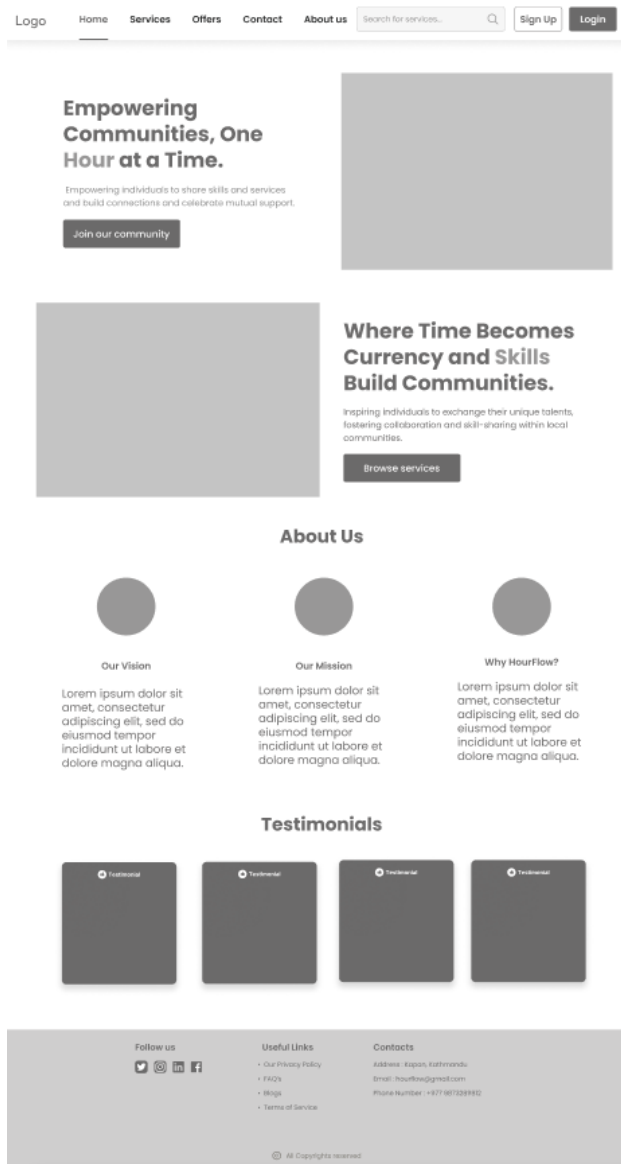
**Contacts**

Address : Kapan, Kathmandu

Email : hourflow@gmail.com

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Jenisha

Last Name

Gurung

Email

jengrg@gmail.com

Address

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Contact Number

9838272988

City

Kathmandu

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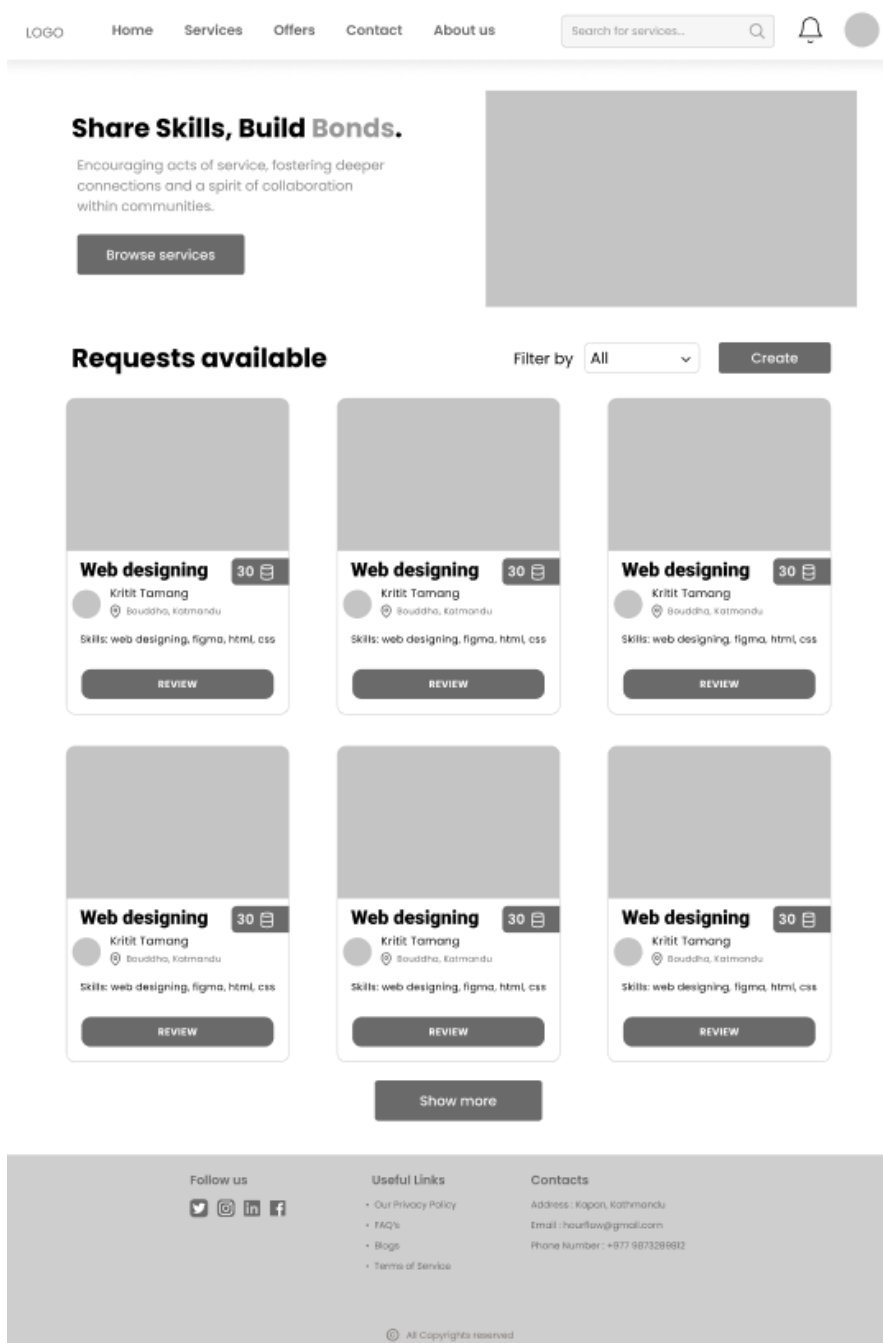
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
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