**LUVMATCH’S REQUIREMENTS**

**AUTHENTICATION:**

1. **User Authentication:**
   * Users must provide a valid email and password combination to log into the application securely.
   * Alternatively, users may have the option to authenticate using single sign-on methods (e.g., OAuth, social media logins) for added convenience and security.
2. **User Registration:**
   * During registration, users must provide the following information: username, valid email address, and a secure password.
   * The application should verify the uniqueness of usernames and email addresses during the registration process.
   * Users should receive a confirmation email to validate their email addresses.
3. **Logout Functionality:**
   * Users should be able to log out from their accounts by selecting a "Logout" or "Sign Out" option.
   * Logging out must terminate the user's session and ensure their data remains secure.
4. **Password Recovery:**
   * Users who forget their passwords should have the option to initiate a password recovery process.
   * Password recovery can include steps like providing the registered email address, receiving a password reset link via email, and creating a new password.
5. **Password Change:**
   * Users should be able to change their existing password by providing the current password and specifying a new one.
   * Strong password policies (e.g., minimum length, special characters) should be enforced to enhance security.

**USER PROFILE:**

1. **View User Profiles:**
   * Users, both regular and premium, should be able to access other users' profiles.
   * Profiles should display user details, photos, interests, and compatibility indicators (e.g., matching preferences).
2. **Update User Profile:**
   * Users should have the ability to edit and update their profile information, including but not limited to: name, age, location, profile photos, bio, interests, and preferences.
   * Users should be able to upload and manage photos, and specify their preferences (e.g., relationship status, interests).

**USER ACCOUNT:**

1. **Modify Account Settings:**
   * Users should be able to modify account settings, including changing their username, email address, password, and notification preferences.
   * Changes to sensitive account information (e.g., email) should trigger email confirmation for security purposes.
   * Administrators and Moderators can modify user accounts to prevent sensitive & harmful content.
2. **Account Deletion:**
   * Administrators should have the capability to permanently delete user accounts in accordance with platform policies and applicable regulations.

**USER ROLES:**

1. **Grant Moderator Permissions:**
   * Administrators should be able to assign moderator roles to trusted users.
   * Moderators are responsible for monitoring user behavior and content, and their actions should be logged and reviewable.

**CONTENT MODERATION:**

1. **Message Report Validation:**
   * Moderators and administrators should have a user-friendly interface to review and validate reports about inappropriate or harmful messages within the app.
   * They should have the ability to take action on reported messages, such as issuing warnings, suspending accounts, or removing content.
2. **Account Report Validation:**
   * Moderators and administrators should have tools to review and validate reports related to inappropriate or harmful user accounts.
   * They should be able to take actions such as suspending or permanently banning user accounts.

**MATCHMAKING:**

1. **Search for Matches:**
   * Users should have advanced search filters to find potential matches based on criteria like age, location, interests, and other relevant factors.
   * The search functionality should provide users with matching suggestions based on their preferences.

**MESSAGING:**

1. **Initiate Messaging:**
   * Users should be able to send messages to their matches to initiate conversations.
   * Messages should be encrypted for security, and users should have access to messaging history.
2. **Receive Messages:**
   * Users should be able to receive messages from their matches and other users interested in interacting with them.
   * Messages should be delivered securely and in a user-friendly format.
3. **Message Reporting:**
   * Users should have a reporting option for individual messages containing inappropriate or abusive content.
   * The reporting process should be straightforward and include the ability to provide context.

**MATCHING PREFERENCES:**

1. **Profile Liking/Disliking:**
   * Users should be able to express their interest or lack of interest in other user profiles by liking or disliking them.
   * Liking profiles may lead to potential matches.

**USER INTERACTION:**

1. **User Blocking:**
   * Users should have the ability to block other users to prevent further interactions and communication.
   * Blocked users should not be able to contact the user, and their profiles may be hidden.

**NOTIFICATIONS:**

1. **Receive Notifications:**
   * Users should receive notifications about various activities, including new matches, messages, likes, and profile views.
   * Users should have the option to customize their notification preferences, including enabling or disabling specific notifications.

**PREMIUM FEATURES:**

1. **Purchase Premium Subscription:**
   * Users should be able to purchase premium subscriptions, granting access to enhanced features and benefits.
   * The purchase process should be secure and include options for different subscription durations (e.g., monthly, quarterly, yearly).
2. **Extend Premium Subscription:**
   * Premium users should have the option to extend their premium subscriptions, ensuring continuous access to premium features.
   * The extension process should be user-friendly and allow for seamless transitions.
3. **Access Premium Features:**
   * Only premium users should have access to premium features, which may include exclusive rights, advanced search filters, ad-free experience, or other enhancements.

**Requirements Traceability Linkage Matrix**

Table 1. Requirements Traceability Linkage Matrix

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Requirement ID** | **RQ-01** | **RQ-02** | **RQ-03** | **RQ-04** | **RQ-05** | **RQ-06** | **RQ-07** | **RQ-08** | **RQ-09** | **RQ-10** | **RQ-11** | **RQ-12** | **RQ-13** | **RQ-14** | **RQ-15** | **RQ-16** | **RQ-17** | **RQ-18** | **RQ-19** | **RQ-20** | **RQ-21** | **RQ-22** |
| **RQ-01** |  | U | U | U |  |  |  | U | U |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **RQ-02** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **RQ-03** |  | R |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **RQ-04** |  |  |  |  | U |  |  | U | U |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **RQ-05** |  |  |  |  | R |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **RQ-06** |  |  |  |  |  |  | R |  |  |  |  |  |  |  |  |  | U |  |  |  |  |  |
| **RQ-07** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **RQ-08** |  | R |  |  |  |  |  |  | U |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **RQ-09** |  | R |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **RQ-10** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **RQ-11** |  |  |  |  |  |  |  |  |  |  |  |  |  | R | R | R |  |  |  |  |  |  |
| **RQ-12** |  |  |  |  |  |  |  |  |  | R | R |  |  |  |  |  |  |  |  |  |  |  |
| **RQ-13** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **RQ-14** |  |  |  |  |  |  |  |  |  |  |  |  | R |  | U |  |  |  |  |  |  |  |
| **RQ-15** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | U |  |  |  |  |  |  |
| **RQ-16** |  |  |  |  |  |  |  |  |  |  |  |  |  | R |  |  |  | U |  |  |  |  |
| **RQ-17** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **RQ-18** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **RQ-19** |  |  |  |  |  |  |  |  |  |  |  |  | R | R | R |  |  |  |  |  |  |  |
| **RQ-20** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **RQ-21** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | R |  | U |
| **RQ-22** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | R |  |  |

**Requirements Source Traceability Matrix**

Table 2. Requirements Source Traceability Matrix

|  |  |  |
| --- | --- | --- |
| **Requirement ID** | **Requirement Description** | **Source(s)** |
| **RQ-01** | User Authentication | Business Requirements Document |
| **RQ-02** | User Registration | Business Requirements Document |
| **RQ-03** | Logout Functionality | Business Requirements Document |
| **RQ-04** | Password Recovery | Security Best Practices |
| **RQ-05** | Password Change | Security Best Practices |
| **RQ-06** | View User Profiles | User Experience Research |
| **RQ-07** | Update User Profile | Stakeholder Feedback, User Experience Research |
| **RQ-08** | Modify Account Settings | Stakeholder Feedback, Security Standards |
| **RQ-09** | Account Deletion | Legal and Regulatory Requirements |
| **RQ-10** | Grant Moderator Permissions | Stakeholder Feedback, Business Requirements Document |
| **RQ-11** | Message Report Validation | Moderation Requirements |
| **RQ-12** | Account Report Validation | Moderation Requirements, Security Standards |
| **RQ-13** | Search for Matches | Business Requirements Document |
| **RQ-14** | Initiate Messaging | Business Requirements Document |
| **RQ-15** | Receive Messages | Business Requirements Document |
| **RQ-16** | Message Reporting | Moderation Requirements, Legal and Regulatory Requirements |
| **RQ-17** | Profile Liking/Disliking | User Experience Research |
| **RQ-18** | User Blocking | User Feedback, Legal and Regulatory Requirements |
| **RQ-19** | Receive Notifications | User Notifications Preferences |
| **RQ-20** | Purchase Premium Subscription | Monetization Strategy |
| **RQ-21** | Extend Premium Subscription | Monetization Strategy |
| **RQ-22** | Access Premium Features | Monetization Strategy |

**Requirements Source Traceability Matrix**

Table 3. Requirements Source Traceability Matrix

|  |  |  |  |
| --- | --- | --- | --- |
| **Requirement ID** | **Requirement Description** | **Stakeholder(s)** | **Comments/Notes** |
| **RE-01** | User Authentication | Security Team, Users | Ensure secure login options. |
| **RE-02** | User Registration | Users, Authentication Service Provider | Verify email and username uniqueness. |
| **RE-03** | Logout Functionality | Users, Authentication Service Provider | Securely terminate sessions. |
| **RE-04** | Password Recovery | Users, Authentication Service Provider | Provide a user-friendly recovery process. |
| **RE-05** | Password Change | Users, Authentication Service Provider | Enforce strong password policies. |
| **RE-06** | View User Profiles | Users, Moderators, Admins | Display user information and interests. |
| **RE-07** | Update User Profile | Users, Moderator, Admins | * + 1. Allow users to edit and upload content.     2. Admins and moderators can edit user profiles.     3. Users only can edit their own profiles. |
| **RE-08** | Modify Account Settings | Users | Implement confirmation for sensitive changes. |
| **RE-09** | Account Deletion | Users, Admin | Follow platform policies and regulations. |
| **RE-10** | Grant Moderator Permissions | Admin, Moderators | Assign and log moderator roles. |
| **RE-11** | Message Report Validation | Admin, Moderators | Provide tools for content review. |
| **RE-12** | Account Report Validation | Admin, Moderators | Handle user account reports. |
| **RE-13** | Search for Matches | Users | Offer advanced search filters and matching suggestions. |
| **RE-14** | Initiate Messaging | Users | Ensure secure, encrypted messaging. |
| **RE-15** | Receive Messages | Users | Secure message delivery. |
| **RE-16** | Message Reporting | Users, Moderators, Admins | User-friendly reporting process. |
| **RE-17** | Profile Liking/Disliking | Users | Allow users to express preferences. |
| **RE-18** | User Blocking | Users | Provide user-blocking functionality. |
| **RE-19** | Receive Notifications | Users, Moderators, Admins | Allow customizable notification preferences. |
| **RE-20** | Purchase Premium Subscription | Users, Payment Service Providers | Secure premium subscription process. |
| **RE-21** | Extend Premium Subscription | Users, Payment Service Providers | Extend premium subscriptions seamlessly. |
| **RE-22** | Access Premium Features | Users | Restrict access to premium features. |