

Requirements

User Authentication and Profile Management Document

1. User Authentication

Ensuring that users have a secure and personalized experience on the platform is crucial. Authentication plays a vital role in verifying user identity and granting appropriate access to their profiles and functionalities.

1.1 Sign-In

Users must log in to their accounts using valid credentials to gain access to personalized features and their learning progress.

Login Process:

- Users must enter their registered **username** and **password** in the provided login fields.
- The system validates the credentials against stored data and either grants access or displays an error message if the credentials are incorrect.

Handling Incorrect Credentials:

- If an incorrect username or password is entered, an error message informs the user that their login attempt was unsuccessful.

Forgot Password Option:

- If users forget their password, they can initiate the password recovery process by selecting "**Forgot Password**".
- A six-digit verification code is sent to the user's registered email address for identity verification.
- If the verification email is not received, users can request a resend after **one minute**.

- Once the code is entered and verified, users are prompted to create a **new password**.

New Users:

- Users without an existing account are directed to the "**Sign Up**" page to create a new profile.

1.2 Sign-Up

New users must register an account to access the platform. The sign-up process involves creating a unique username, setting a secure password, and verifying the email address.

Username Requirements:

- Must be **unique** to prevent duplication.
- Allowed characters include **English letters (A-Z, a-z), digits (0-9), and underscores (_)**.
- Username length: **Minimum 5 characters, maximum 20 characters**.
- If the chosen username is already taken, an error message prompts the user to select a different one.

Password Requirements:

- Passwords must contain at least **one uppercase letter, one special character, and one digit**.
- Length: **Minimum 6 characters, maximum 15 characters**.
- The system provides **real-time feedback** indicating password strength (**Weak, Medium, Strong**).
- **Confirm Password:** The entered password must match the confirmation field; otherwise, an error message is displayed.

Email Verification:

- Users must provide a **valid unused email address** during registration.
- A valid email looks like: [local-part]@[domain].[TLD]

Where:

- **Local-part:** Letters, numbers, ., _, -, + (no spaces).
- **Domain:** Letters, numbers, hyphens, and at least one .
- **TLD:** Like .com, .uk, .ro, ...etc
- A verification email is sent containing a **confirmation link**.
- The user must click on the link to verify the email before gaining access to their account.

1.3 Forgot Password

Password Reset Process:

1. Users must enter their registered email address in the **Forgot Password** field.
2. A six-digit verification code is sent to their email.
3. The user enters the verification code in the designated field for identity verification.
4. Once verified, the system prompts the user to **set a new password**.
5. The new password must adhere to the platform's **password security requirements** and be different from the previous password.
6. If the email is not received, users can **request a resend** after one minute.

2. Profile Management

Users have full control over their profiles, privacy settings, and customization options, allowing them to tailor their experience on the platform.

Profile Settings

Privacy Options:

- By default, profiles are set to **public**, allowing other users to view streaks, levels, and scores.
- Users can switch to **private mode**, restricting visibility of their achievements to themselves only.

Profile Picture Management:

- Users can personalize their profiles by uploading a **profile picture**.
- Supported formats: **PNG, JPEG, JPG**.
- Maximum file size: **5 MB**.
- The image can be uploaded or replaced using an **image picker tool**.

Username Restrictions:

- Once set, the **username cannot be changed** after the initial setup.

Password Update:

- Users can update their password at any time.
- The new password must meet the original security requirements.
- It must also be **different from the previous password**.

Course Enrollment:

- Users can view their **enrolled courses**.

3. Profile Features

Profiles provide insights into users' learning progress and achievements, motivating them to stay engaged.

3.1 Design

- A user's profile page displays his username, avatar, number of friends and the option to:
 - take you to your profile settings page, if the profile is your own
 - add/remove as friend, if the profile is another's and depending on if you're already friends with that user or not.

3.2 Achievements

Users can track their learning journey based on:

- **Quiz completions** (the total number of quizzes the user has completed).
- **Course advancements** (achievements received once a milestone has been hit, e.g. "100 day streak", "50 perfect score quizzes", etc.).

- **Streak maintenance** (number of consecutive days of learning - completing the first quiz in a day increments the streak by 1).

3.3 Course Progress

Users can monitor their progress through:

- A **list of enrolled courses**.
- **Course completion percentage** to measure learning progress.

3.4 Quiz Progress

Users can monitor their progress through:

- A **list of completed quizzes**.
- **Quiz completion accuracy** to measure learning progress.

3.5 Friends List

Users can see their friends.

Friend Management:

- Users can view a **list of friends** they are connected with.
- Users have the ability to **remove friends** from their list if desired.

Sorting options include:

- **Name:** Alphabetical order.
- **Activity:** Most recent activity displayed first.
- **Date Added:** Newest friends appear first.

3.6 Visibility Rules:

- Users can view their **own friend list** when accessing their profile.
- When visiting another user's profile, they can see that user's **friend list**.
- What functionalities will be shown to the user when looking at:

Own profile: 3.1, 3.2, 3.3, 3.4, 3.5

Other profile (public): 3.1, 3.2, 3.3, 3.4, 3.5

Other profile (private): 3.1

4. Leaderboard System

Competitive leaderboards encourage user engagement and motivation through rankings.

4.1 Global Leaderboard

- Displays the **top 100 users** according to a chosen criteria.
- The user can choose what type of ranking criteria they want to see used for the players.
- The criteria are:
 - **Quiz completion total** (total number of completed quizzes; a quiz is considered completed when the grade is above 50%).
 - **Quiz performance accuracy** (total accuracy based on all quizzes, regardless of the grade -number of questions answered correct/number of total questions) .

Leaderboard Entry Details:

- Username.
- Progress percentage.
- Accuracy percentage.
- Rank index.

4.2 Friends Leaderboard

- Functions similarly to the global leaderboard but displays only **friends**.
- Ranking criteria remain the same.

5. Search Functionality

Users can discover and connect with others through search and recommendation features.

5.1 User Search

- Users can search for others by **username**.
- **Search results display:**
 - Profile picture.
 - Username.
 - Mutual friends (if applicable).

5.2 Friend Suggestions

How Recommendations Work:

- Users enrolled in the **same course** may be suggested as potential friends.
- Users with **multiple mutual friends** are also recommended.