

4.7.2 Use-Case Description:

1. Registration:

- **Description:** The user needs to register by adding details such as email, full name, address, phone number, and password.
- **Summary:** The user registers for the Volunteer Management System application.
- **Actor:** User (Volunteer or Organization).
- **Pre-condition:** The user should not already have an account.
- **Post-condition:** The user can log in with the registered email and password.
- **Exception:** An error message is shown if any input is empty, or if the email or phone number does not match the required pattern or is already associated with an existing account.

2. Login:

- **Description:** The user and admin enter their login credentials which are verified by the system. If the verification is successful, the user and admin are redirected to the home page or dashboard.
- **Summary:** The user and admin enter their credentials to access the system.
- **Actor:** User (Volunteer or Organization), Admin.
- **Pre-condition:** The user/Admin must have a registered account .
- **Post-condition:** The user/Admin is authenticated and is redirected to Homepage.
- **Exception:** An error message is shown if any input is empty, or if the email or password is incorrect or if the account doesn't exist.

3. Forgot Password:

- **Description:** The user requests to reset their password. An OTP (One-Time Password) is sent to their registered email or phone number for verification. Upon successful verification, the user can reset their password.
- **Summary:** The user resets their password using OTP verification.

- **Actor:** User (Volunteer or Organization), Admin.
- **Pre-condition:** The user must have a registered account with a valid email.
- **Post-condition:** The user receives an OTP, verifies it, and resets their password.
- **Exception:** An error message is shown if the email is not found in the system, the OTP verification fails, or the new password input does not meet the required criteria.

4. Create Event:

- **Description:** The organization posts details about a new volunteering event, including title, description, date, time, location, and required skills.
- **Summary:** The organization posts a new event to attract volunteers.
- **Actor:** Organization.
- **Pre-condition:** The organization must be registered and logged in.
- **Post-condition:** The event details are visible to all registered volunteers.
- **Exception:** An error message is shown if any input is empty or does not meet the required format.

5. Edit Event:

- **Description:** The organization updates details of an existing event, such as changing the date, time, location, or description.
- **Summary:** The organization modifies the details of a posted event.
- **Actor:** Organization.
- **Pre-condition:** The organization must be registered, logged in, and the owner of the event.
- **Post-condition:** The updated event details are saved and displayed to volunteers.
- **Exception:** An error message is shown if any input is empty, does not meet the required format, or if the user does not have permission to edit the event.

6. Delete Event:

- **Description:** The organization deletes an existing event from the system.
- **Summary:** The organization removes an event from the platform.

- **Actor:** Organization.
- **Pre-condition:** The organization must be registered, logged in, and the owner of the event.
- **Post-condition:** The event is removed from the system and is no longer visible to volunteers.
- **Exception:** An error message is shown if the user does not have permission to delete the event or if the deletion process encounters an error.

7. View Event:

- **Description:** The user browses through the list of available volunteering events.
- **Summary:** The user views details of various events posted on the platform.
- **Actor:** User (Volunteer).
- **Pre-condition:** The user must be registered and logged in to see event details.
- **Post-condition:** The user can see a list of events with details such as title, description, date, time, location, and required skills.
- **Exception:** An error message is shown if the event data fails to load due to technical issues.

8. Apply for Event:

- **Description:** The volunteer browses through the list of events and applies to participate in an event by clicking the "Apply" button.
- **Summary:** The volunteer expresses interest and signs up for an event.
- **Actor:** Volunteer.
- **Pre-condition:** The volunteer must be registered, logged in, and able to view event details.
- **Post-condition:** The volunteer's application is recorded, and the organization is notified of the volunteer's interest.
- **Exception:** An error message is shown if the application process fails due to technical issues or if the event has reached its maximum number of participants or if the volunteer has already applied for the event.

9. Feedback and Ratings:

- **Description:** The volunteer provides feedback and rates an event they participated in.
- **Summary:** The volunteer submits their evaluation and rating for a completed event.
- **Actor:** Volunteer.

- **Pre-condition:** The volunteer must be registered, logged in, and have participated in the event.
- **Post-condition:** The feedback and rating are recorded and visible to the organization and other volunteers.
- **Exception:** An error message is shown if the feedback submission fails due to technical issues or if the volunteer has not participated in the event.

10. Search:

- **Description:** The user searches for events based on specific criteria such as keywords, date, location, or category.
- **Summary:** The user locates events that match their search criteria.
- **Actor:** User (Volunteer or Organization).
- **Pre-condition:** The user must be registered and logged in to perform detailed searches.
- **Post-condition:** The system displays a list of events that match the search criteria.
- **Exception:** An error message is shown if no events match the search criteria or if there is a technical issue during the search process.

11. Create/Post Picture:

- **Description:** The user (volunteer or organization) uploads and posts pictures related to volunteering events.
- **Summary:** The user shares images from events to the platform.
- **Actor:** User (Volunteer or Organization).
- **Pre-condition:** The user must be registered, logged in, and the image file must meet the platform's requirements (e.g., file size and format).
- **Post-condition:** The picture is uploaded, stored in the database, and displayed on the event's page.
- **Exception:** An error message is shown if the upload fails due to technical issues, file size limits, or unsupported file formats.

12. Edit Post Picture:

- **Description:** The user edits details of an already posted picture related to a volunteering event.
- **Summary:** The user modifies the description or other details of a previously uploaded picture.
- **Actor:** User (Volunteer or Organization).
- **Pre-condition:** The user must be registered, logged in, and the owner of the picture.
- **Post-condition:** The updated details are saved and displayed on the platform.
- **Exception:** An error message is shown if the user does not have permission to edit the picture.

13. Delete Post Picture:

- **Description:** The user deletes a picture they previously posted related to a volunteering event.
- **Summary:** The user removes an uploaded picture from the platform.

- **Actor:** User (Volunteer or Organization).
- **Pre-condition:** The user must be registered, logged in, and the owner of the picture.
- **Post-condition:** The picture is removed from the platform and is no longer visible to other users.
- **Exception:** An error message is shown if the user does not have permission to delete the picture or if there are technical issues during the deletion process.

14. View Post Picture:

- **Description:** The user views pictures that have been posted related to a volunteering event.
- **Summary:** The user accesses and sees images associated with a specific event.
- **Actor:** User (Volunteer or Organization).
- **Pre-condition:** The user must be registered and logged in to view pictures.
- **Post-condition:** The user can see the uploaded pictures along with their details (such as captions or descriptions).
- **Exception:** None.

15. View Comments:

- **Description:** The user views comments made on a posted picture related to a volunteering event.
- **Summary:** The user accesses and reads comments associated with a specific image that has been uploaded.
- **Actor:** User (Volunteer or Organization).
- **Pre-condition:** The user must be registered and logged in to view comments on the pictures.
- **Post-condition:** The user can see all comments associated with the picture, including the text and commenter's details.
- **Exception:** None.

16. Add Comments:

- **Description:** The user adds a comment to a posted picture related to a volunteering event.
- **Summary:** The user submits a textual comment on a specific image that has been uploaded to the platform.
- **Actor:** User (Volunteer or Organization).
- **Pre-condition:** The user must be registered, logged in, and have access to the picture they want to comment on.
- **Post-condition:** The comment is added to the picture and displayed along with other existing comments.
- **Exception:** if any input field is invalid or empty error message is shown.

17. Delete Comments:

- **Description:** The user deletes a comment they previously made on a posted picture related to a volunteering event.
- **Summary:** The user removes their comment from the picture.

- **Actor:** User (Volunteer or Organization).
- **Pre-condition:** The user must be registered, logged in, and the owner of the comment.
- **Post-condition:** The comment is removed from the picture and is no longer visible to other users.
- **Exception:** An error message is shown if the user does not have permission to delete the comment or if there are technical issues during the deletion process.

18. Manage Profile:

- **Description:** The user updates and manages their profile information, including personal details, contact information, and profile picture.
- **Summary:** The user modifies their profile information to keep it current and accurate.
- **Actor:** User (Volunteer or Organization).
- **Pre-condition:** The user must be registered and logged in to access and update their profile.
- **Post-condition:** The updated profile information is saved and reflected on the user's profile page.
- **Exception:** An error message is shown if the update fails due to technical issues or if the input data does not meet the required criteria (e.g., invalid email format or file size limits for profile picture).

19. Delete Account:

- **Description:** The user permanently deletes their account from the system.
- **Summary:** The user removes their account and all associated data from the platform.
- **Actor:** User (Volunteer or Organization).
- **Pre-condition:** The user must be registered and logged in to initiate the account deletion process.
- **Post-condition:** The user's account and all associated data (including posts, comments, and application history) are permanently deleted from the system.
- **Exception:** An error message is shown if the deletion process fails due to technical issues or if the user does not have permission to delete the account. Additionally, confirmation is required to prevent accidental deletions.

20. Messaging:

- **Description:** The user sends and receives messages to and from other users on the platform.
- **Summary:** The user communicates with other users through personal or group messages.
- **Actor:** User (Volunteer or Organization).
- **Pre-condition:** The user must be registered, logged in, and have an active connection to the messaging service.
- **Post-condition:** Messages are sent to and received from other users and are stored in the user's message history.

- **Exception:** if any input field is invalid or empty an error message is shown.

21. Manage Event Applicant:

- **Description:** The event organizer manages applicants who have applied to participate in their event, including reviewing applications, approving or rejecting them.
- **Summary:** The organizer processes and manages volunteer applications for an event.
- **Actor:** Event Organizer.
- **Pre-condition:** The organizer must be registered, logged in, and have access to the event's applicant list.
- **Post-condition:** The organizer's decisions (approve or reject) are recorded, and applicants are notified of their application status.
- **Exception:** An error message is shown if there are issues with the application management process, such as technical failures, or if the organizer does not have the proper permissions to manage the applicants.

22. Manage Users:

- **Description:** The admin manages user accounts by suspending or unsuspending users, which involves restricting or restoring their access to the platform.
- **Summary:** The admin can temporarily disable or enable user accounts as needed.
- **Actor:** Admin.
- **Pre-condition:** The admin must be logged in with appropriate permissions to manage user accounts.
- **Post-condition:** The targeted user's account status is updated to suspended or active, and the user is notified of the change in their access rights.
- **Exception:** An error message is shown if the suspension or unsuspending fails due to technical issues or if the admin lacks the necessary permissions to perform the action.

23. Manage Events:

- **Description:** The admin manages events by suspending or unsuspending them, which involves temporarily disabling or restoring the event's visibility and participation.
- **Summary:** The admin can control the status of events by suspending them (making them inactive or hidden) or unsuspending them (making them active or visible).
- **Actor:** Admin.
- **Pre-condition:** The admin must be logged in with the necessary permissions to manage events.
- **Post-condition:** The event's status is updated to suspended or active, and users are informed of the change in the event's availability.
- **Exception:** None.

24. Manage Groups:

- **Description:** The admin manages user groups by suspending or unsuspending them, which involves temporarily disabling or restoring the group's visibility and functionality on the platform.
- **Summary:** The admin can control the status of user groups by suspending them (making them inactive or hidden) or unsuspending them (making them active or visible).
- **Actor:** Admin.
- **Pre-condition:** The admin must be logged in with the appropriate permissions to manage user groups.
- **Post-condition:** The group's status is updated to suspended or active, and group members are notified of the change in the group's status.
- **Exception:** None.

25. Add Admin:

- **Description:** The existing admin adds a new admin to the system, granting them administrative privileges to manage various aspects of the platform.
- **Summary:** The current admin creates a new admin account with the required permissions.
- **Actor:** Existing Admin (Super Admin).
- **Pre-condition:** The existing admin must be logged in with the necessary permissions to add new admin accounts.
- **Post-condition:** A new admin account is created and the new admin is notified of their access and responsibilities.
- **Exception:** An error message is shown if the account creation fails due to technical issues or if the existing admin lacks the necessary permissions to perform this action.

26. Delete Admin:

- **Description:** The existing admin removes an admin account from the system, revoking their administrative privileges and access.
- **Summary:** The current admin deletes an admin account, ensuring the individual no longer has administrative control.
- **Actor:** Existing Admin (Super Admin).
- **Pre-condition:** The existing admin must be logged in with the necessary permissions to delete admin accounts.
- **Post-condition:** The targeted admin account is deleted, and the former admin is notified of the revocation of their access and privileges.
- **Exception:** An error message is shown if the account deletion fails due to technical issues or if the existing admin lacks the necessary permissions to perform this action. Additionally, the system should ensure at least one admin account remains active to prevent locking out administrative access.

27. Role Management:

- **Description:** The admin manages user roles within the system, including assigning, modifying, or removing roles for different users to control their access and permissions.
- **Summary:** The admin controls the roles of users, determining what actions they can perform on the platform.

- **Actor:** Admin (Super Admin).
- **Pre-condition:** The admin must be logged in with the necessary permissions to manage user roles.
- **Post-condition:** The user's role is updated, and they are notified of any changes to their permissions and access rights.
- **Exception:** None.

4.8 Scenario:

1. Registration:

- The user navigates to the registration page and inputs the required details (name, email, phone number, password, date of Birth, username etc).
- The system checks if the email or phone number is already associated with an existing account.
- The system sends an email containing a verification link to the entered email address.
- The user clicks on the verification link in the email.
- The system verifies the link and confirms the user's email address.
- If verification is successful, the user's details are stored in the database, and a "registration successful" message is displayed.
- If any error occurs during registration, an "registration unsuccessful" message is displayed.
- The user is then redirected to the login page.

2. Login:

- The user navigates to the login page and inputs their registered email and password.
- The system checks if the email and password match an existing account.
- If the credentials are correct, the user is granted access to the system and redirected to the homepage.
- If the credentials are incorrect, an error message is displayed, and the user is prompted to try again.

3. Forgot Password:

- The user issues a request to reset their password
- The user enters an email.
- The system checks if the email is registered with an user or not.
- If the email is a valid registered email:
 - The system sends a email containing the OTP to the users email address.
 - The user enters the OTP on the system.
 - If the OTP is correct, the user is prompted to enter a new password.
 - The system updates the user's password in the database.
 - A "Password reset Successful" message is displayed, and the user is redirected to the login page.
 - If the OTP is incorrect or any error occurs, an appropriate error message is displayed.
- Else, "OTP verification Failed ! Enter a valid email !" message is displayed.

4. Add/Create Event:

- i. The organizer navigates to the "Add Event" page.
- ii. The organizer inputs event details such as title, date, time, location, description, and any other relevant information.
- iii. The system validates the input details to ensure all required fields are filled and the data is in the correct format.
- iv. If the input is valid, the system stores the event details in the database.
- v. A "event added successfully" message is displayed to the organizer.
- vi. If any error occurs during the process, an "event addition unsuccessful" message is displayed, and the organizer is prompted to correct the errors.

5. Edit Event Details:

- i. The organizer navigates to their event management page and selects an event to edit.
- ii. The organizer makes changes to the event details (e.g., date, time, location, description).
- iii. The system validates the new event details.
- iv. If the details are valid, the system updates the event information in the database.
- v. A "event updated successfully" message is displayed to the organizer.
- vi. If any error occurs, an "event update unsuccessful" message is displayed.

6. Delete Event:

- i. The organizer navigates to their event management page and selects an event to delete.
- ii. The system prompts the organizer to confirm the deletion.
- iii. If the organizer confirms, the system removes the event from the database.
- iv. A "event deleted successfully" message is displayed.
- v. If any error occurs, an "event deletion unsuccessful" message is displayed.

7. View Event:

- i. The user navigates to the events page.
- ii. The system retrieves the list of all active events from the database.
- iii. The events are displayed to the user with details such as date, time, location, and description.
- iv. The user can click on an event to view more details or to apply for the event.

8. Search Event:

- i. The user navigates to the search page and inputs keywords or filters for events.
- ii. The system retrieves events from the database that match the search criteria.
- iii. The matching events are displayed to the user.
- iv. The user can click on an event to view more details or to apply for the event.

9. Apply for Event:

- i. The user views the details of an event and clicks the "Apply" button.
- ii. The system checks if the user is logged in. If not, the user is prompted to log in.

- iii. If the user is logged in, the system records the user's application for the event in the database.
- iv. A "application successful" message is displayed to the user.
- v. If any error occurs, an "application unsuccessful" message is displayed.

10. Feedback and Rating For Events:

- i. After participating in an event, the user navigates to the feedback page for that event.
- ii. The user inputs their feedback and rating for the event.
- iii. The system validates the feedback and rating.
- iv. If the input is valid, the system stores the feedback and rating in the database.
- v. A "feedback submitted successfully" message is displayed to the user.
- vi. If any error occurs, an "feedback submission unsuccessful" message is displayed.

11. Post Picture:

- i. The user navigates to the event's page and clicks the "Post Picture" button.
- ii. The user uploads a picture and adds a description.
- iii. The system validates the picture and description.
- iv. If the input is valid, the system stores the picture and description in the database.
- v. A "picture posted successfully" message is displayed to the user.
- vi. If any error occurs, an "picture posting unsuccessful" message is displayed.

12. Edit Post Picture:

- i. The user navigates to their posted pictures page and selects a picture to edit.
- ii. The user makes changes to the picture's description.
- iii. The system validates the new description.
- iv. If the input is valid, the system updates the picture's information in the database.
- v. A "picture updated successfully" message is displayed to the user.
- vi. If any error occurs, an "picture update unsuccessful" message is displayed.

13. Delete Post Picture:

- i. The user navigates to their posted pictures page and selects a picture to delete.
- ii. The system prompts the user to confirm the deletion.
- iii. If the user confirms, the system removes the picture from the database.
- iv. A "picture deleted successfully" message is displayed.
- v. If any error occurs, an "picture deletion unsuccessful" message is displayed.

14. View Post Picture:

- i. The user navigates to the event's page and views the posted pictures.
- ii. The system retrieves all pictures related to the event from the database.
- iii. The pictures are displayed to the user with their descriptions.
- iv. The user can click on a picture to view it in full size and read the comments.

15. View Comments on Post Picture:

- i. The user clicks on a picture to view it in full size.
- ii. The system retrieves all comments related to the picture from the database.
- iii. The retrieved comments are then displayed to the user, if no comment are found then "No Comments Found!!" is displayed.

16. Add Comments:

- i. The user views a picture and inputs a comment in the comment box.
- ii. The system validates the comment.
- iii. If the comment is valid, the system stores the comment in the database.
- iv. A "comment added successfully" message is displayed to the user.
- v. If any error occurs, an "comment addition unsuccessful" message is displayed.

17. Delete Comments:

- i. The user navigates to their comment on a picture and selects it to delete.
- ii. The system prompts the user to confirm the deletion.
- iii. If the user confirms, the system removes the comment from the database.
- iv. A "comment deleted successfully" message is displayed.
- v. If any error occurs, an "comment deletion unsuccessful" message is displayed.

18. Manage Profile:

- i. The user navigates to their profile page and clicks the "Edit Profile" button.
- ii. The user updates their profile details (e.g., name, email, phone number).
- iii. The system validates the new profile details.
- iv. If the details are valid, the system updates the user's information in the database.
- v. A "profile updated successfully" message is displayed to the user.
- vi. If any error occurs, an "profile update unsuccessful" message is displayed.

19. Delete Account:

- i. The user navigates to their account settings page and clicks the "Delete Account" button.
- ii. The system prompts the user to confirm the account deletion.
- iii. If the user confirms, the system deletes the user's account from the database.
- iv. A "account deleted successfully" message is displayed.
- v. If any error occurs, an "account deletion unsuccessful" message is displayed.

20. Messaging:

- i. The user navigates to the messaging page and selects a contact or group to send a message to.
- ii. The user types a message and clicks the "Send" button.
- iii. The system sends the message to the selected contact or group.
- iv. The message is stored in the database and displayed in the chat window.
- v. If any error occurs, an "message sending unsuccessful" message is displayed.

21. Manage Event Applicant:

- i. The organizer navigates to their event management page and selects an event.
- ii. The organizer views the list of applicants for the event.

- iii. The organizer reviews the applications and makes decisions (approve or reject).
- iv. The system updates the status of each applicant in the database.
- v. The applicants are notified of their application status (approved or rejected).
- vi. If any error occurs, an appropriate error message is displayed.

22. Manage Users(Suspend/Unsuspend):

- i. The admin navigates to the user management page and selects a user to suspend or unsuspend.
- ii. The admin changes the status of the user to suspended or active.
- iii. The system updates the user's status in the database.
- iv. The user is notified of the change in their account status.
- v. If any error occurs, an appropriate error message is displayed.

23. Manage Events(Suspend/Unsuspend):

- i. The admin navigates to the Event management page and selects a Event to suspend or unsuspend.
- ii. The admin changes the status of the Event to suspended or active.
- iii. The system updates the Event's status in the database.
- iv. Users are notified of the change in the Event's availability.

24. Manage Groups(Suspend/Unsuspend):

- i. The admin navigates to the Group management page and selects a Group to suspend or unsuspend.
- ii. The admin changes the status of the Group to suspended or active.
- iii. The system updates the Group's status in the database.
- iv. Users are notified of the change in the Group's availability