



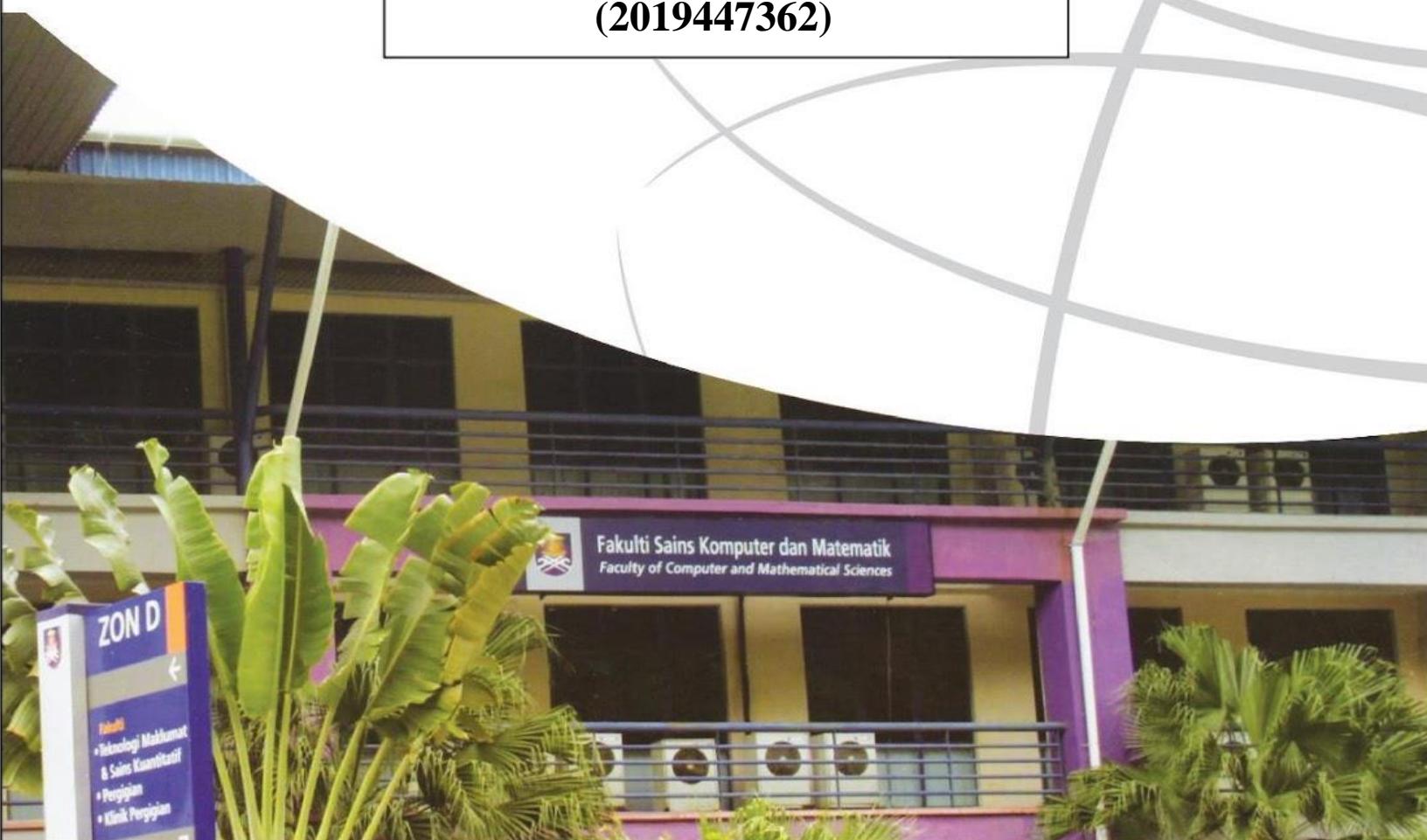
جامعة تكنولوجى مارا
UNIVERSITI
TEKNOLOGI
MARA

Fakulti Sains Komputer Dan Matematik

eVolunteer System

Sime Darby Plantation Berhad

Amirul Adli Fahmi bin Azam
(2019447362)



Universiti Teknologi MARA

eVolunteer System

Sime Darby Berhad

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Diploma Of Computer Science (CS110)

February 2022

Approved By:

MR. ALIAS BIN DERAMAN

**UNIVERSITI TEKNOLOGI MARA CAWANGAN MELAKA KAMPUS
JASIN**

SIGNATURE:

.....

DATE:

Acknowledgement:

I am very grateful because I have managed to complete my final project assignment given by my industrial internship coordinator, Madam Nurulhuda Zainuddin. This assignment cannot be completed without the efforts and co-operations from my lecturer supervisor, Sir Alias Deraman, my industrial supervisor, Norasmah Jaafar, my co-workers, Mohd Syarifuddin Ab Hamid, Azu Quraisya Ayob and Mohd Alif Lammim Mohamad Zake.

Thanks to my family, who gives support, ideas, and encouragement.

Thanks to my friends, who help me to understand some part of the assignments.

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1.0 INTRODUCTION

1.1 Industrial Training Program Background

The company of the industrial training program is Sime Darby Plantation Berhad, which involved in various activities such as upstream plantations, downstream operations, research and development, renewables and agri-business. There are many operations spans across 14 countries worldwide, and I am stationed at one of the Sime Darby Plantation Tower at Ara Damansara Petaling Jaya Selangor, which is one of the headquarters for Sime Darby Plantation Berhad.

1.2 Industrial Training Objectives

The industrial training objective for Sime Darby Plantation berhad aims is to equip graduates with the necessary skills and experience to be ready and prepare to adept in the corporate world. As for my own objective is to learn and experience as many as I could as an industrial trainee in programming such as upgrading, maintaining and develop software.

1.3 Introduction of the Project

The project I develop is a web-based application using php and XAMPP Server called eVolunteer. The project has been developed to handle basic information from user that want to be a volunteer in a program they want to do. For this problem, I have made research and organized the data need to make the software/application to be easy and simple to use and help the society.

For me, this application can be a steppingstone, that could have an effect to the society, as the use of this application can be a huge help towards those in needs.

eVolunteer requires information about its users and input given to be retained into the XAMPP's SQL Server Database. eVolunteer will keep track of the information given, such as user suggestions for volunteering program, user achievement to make the user have a sense of belongings.

eVolunteer offers clean and user-friendly environment, for user to be more adept to the system. The project can be modified according to the user's future requirement.

1.4 Objective of the Project

eVolunteer is a way of referring to a computer-based system that manages volunteer data. The key aim of this project is to effectively control the information given by user and keep tracks of the volunteer program activities.

It is a system that is built to receive input from user, and automatically generate output in an easy way, instead of taking a long time to manually store data and get the output needed.

Besides that, the system given the opportunity to the volunteer to find and join a volunteering program easily and be able to keep track of available possible future volunteering program. The system also has many features such as achievement features that have achievement that can be obtainable by volunteer by doing a specific condition, which will make the system more fun and interactive for volunteer to keep use the system.

To conclude everything, this application is to automate the current existing system of manually maintain the records of the volunteer and program. This will make a great impact to the volunteer society. The system can give a lot of benefits, such as to get record easily, and lessen the time taken to find volunteering activities.

2.0 Organization

2.1 Organization Background

Sime Darby Plantation Berhad is a fully integrated global plantation company, the world's largest oil palm plantation company (by planted area) and the world's largest producer of Certified Sustainable Palm Oil (CSPO).

2.2 Business Activities

Sime Darby Plantation Berhad involved in many business activities such as Upstream, Renewables, Oils, Research and Development.

Upstream operations, which fresh fruit bunches are processed into crude palm oil(CPO).

Renewables, that aims to create a portfolio of sustainable business in the industrial biotechnology space through the development of innovative Biogas, Biomass and Solar projects.

Oils, to oversees the trading, manufacturing, and sales and marketing of oils and fats products, palm oil-based biodiesel, nutraceuticals and other derivatives.

Research and Development, committed towards developing, applying and transferring relevant knowledge, research finding and technologies to improve our plantation yields, milling processes and customize the downstream products.

2.3 Vision, Mission and Objectives of the organization

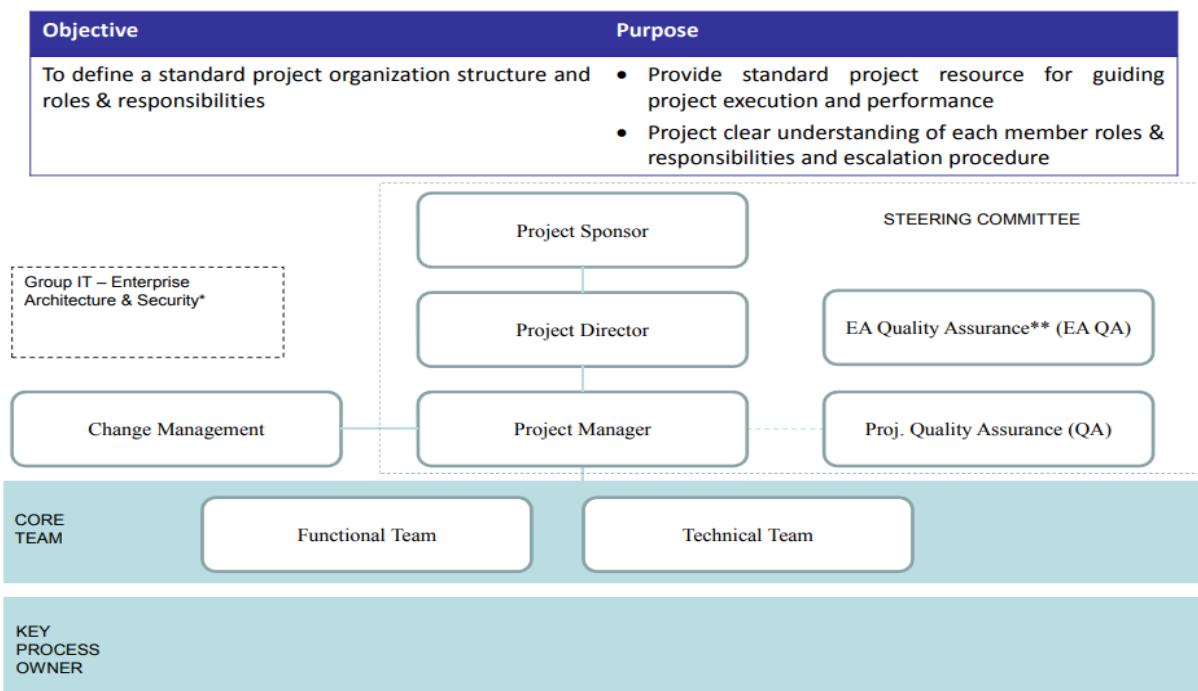
Sime Darby Plantation Berhad vision is to be a leading multinational cooperation delivering sustainable value to all stakeholders.

Sime Darby Plantation Berhad mission is to commit to developing a winning portfolio of sustainable businesses and to be a good cooperate governance and high ethical values.

Sime Darby Plantation Berhad objectives is to promote integrity, transparency, accountability and responsiveness.

2.4 Organizational Chart

As seen in Figure 1 below:



(Figure 1)

3.0 System Planning

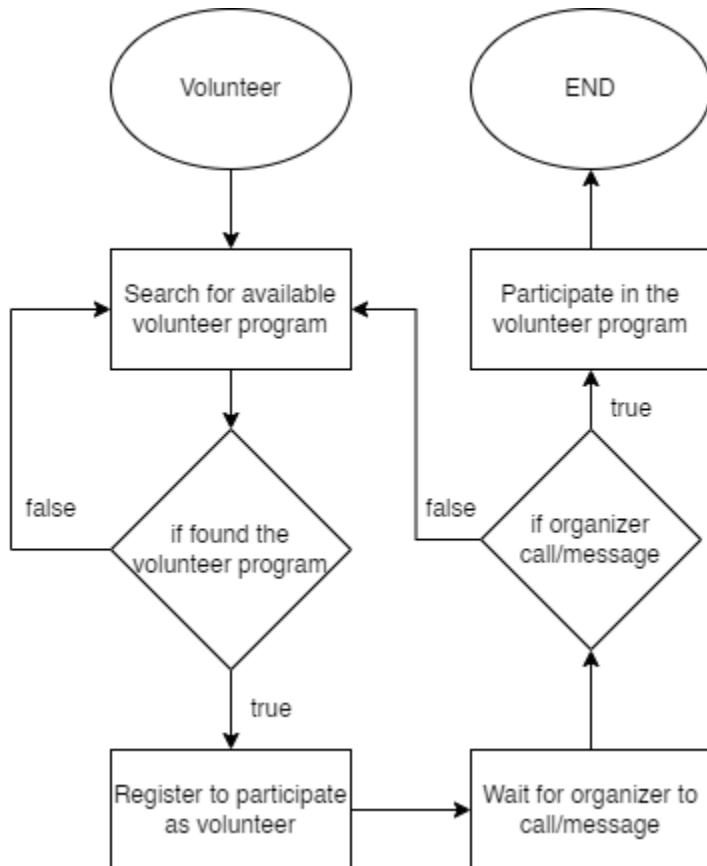
3.1 Introduction

To plan on developing the current/existing system for process of volunteer to make it easily find and join volunteering program, and that will help user/volunteer manage their time and cost more effective.

3.1 Description of the Current/Existing System

User/Volunteer:

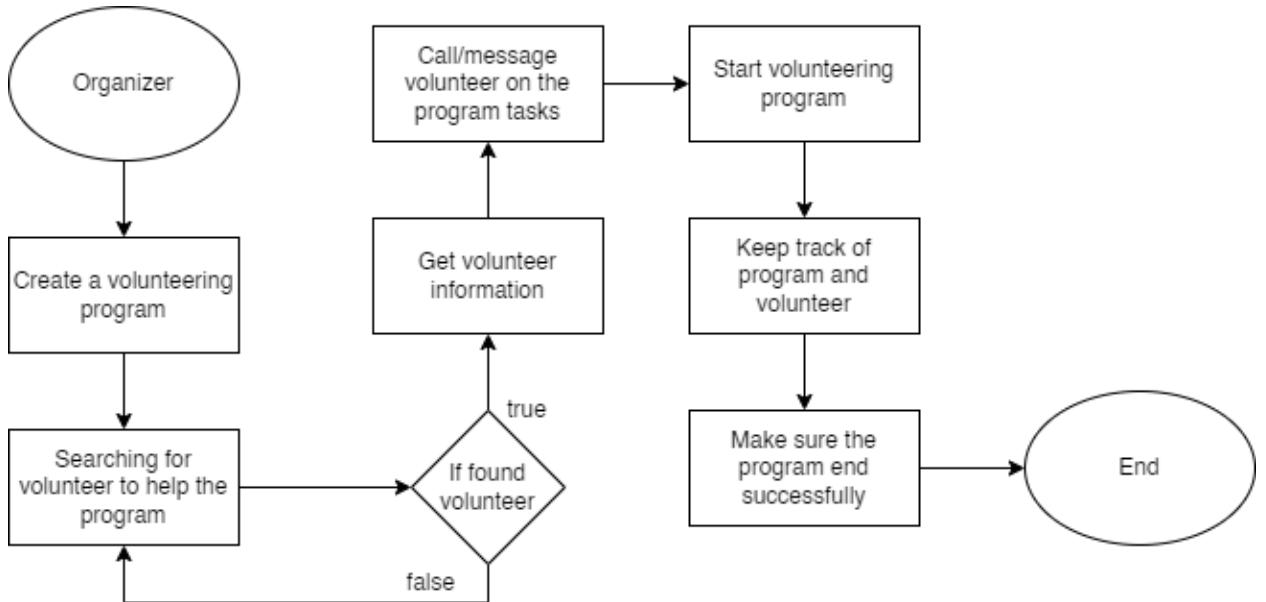
1. The user/volunteer search for volunteering program and register their info to join the program.
2. Wait for the volunteering program to call/message to help volunteering.
3. Join Volunteering Program and help the program based on the task information



(Figure 2)

Volunteering program organizer:

1. Create a volunteering program.
2. Searching for volunteer to join their volunteering program and must keep track of the volunteer information.
3. Call/message volunteer to inform the volunteering program information.
4. Keep track of volunteer and give them their tasks



(Figure 3)

3.2 Main Reason of the System Project

The main reason of the system project is to make the current existing system much easier to use for volunteer and will help keep track of the volunteer activities.

Another reason is to easily let volunteer to give suggestions on what volunteering program would be, and the future volunteering program will be selected based on the majority vote from suggestions and volunteer organizer would choose it to organize it.

3.3 Feasibility Study

3.3.1 Operational

The proposed system would get the input from user and would generate the output automatically based on the information given.

3.3.2 Technical

Software Use: XAMPP Server, MYSQL, PHP, Browser (Microsoft Edge, Google Chrome, etc.)

Hardware Use: Intel Core i5 with 64-Bit Operating System, 8 GB RAM and Window 10 Enterprise

3.3.3 Economic

Year-one install and setup cost: RM 4,000

Year-one new hardware required: RM 5,000 (Hardware life expectancy in years: 7 years)

Additional hardware cost each year: RM 3,000

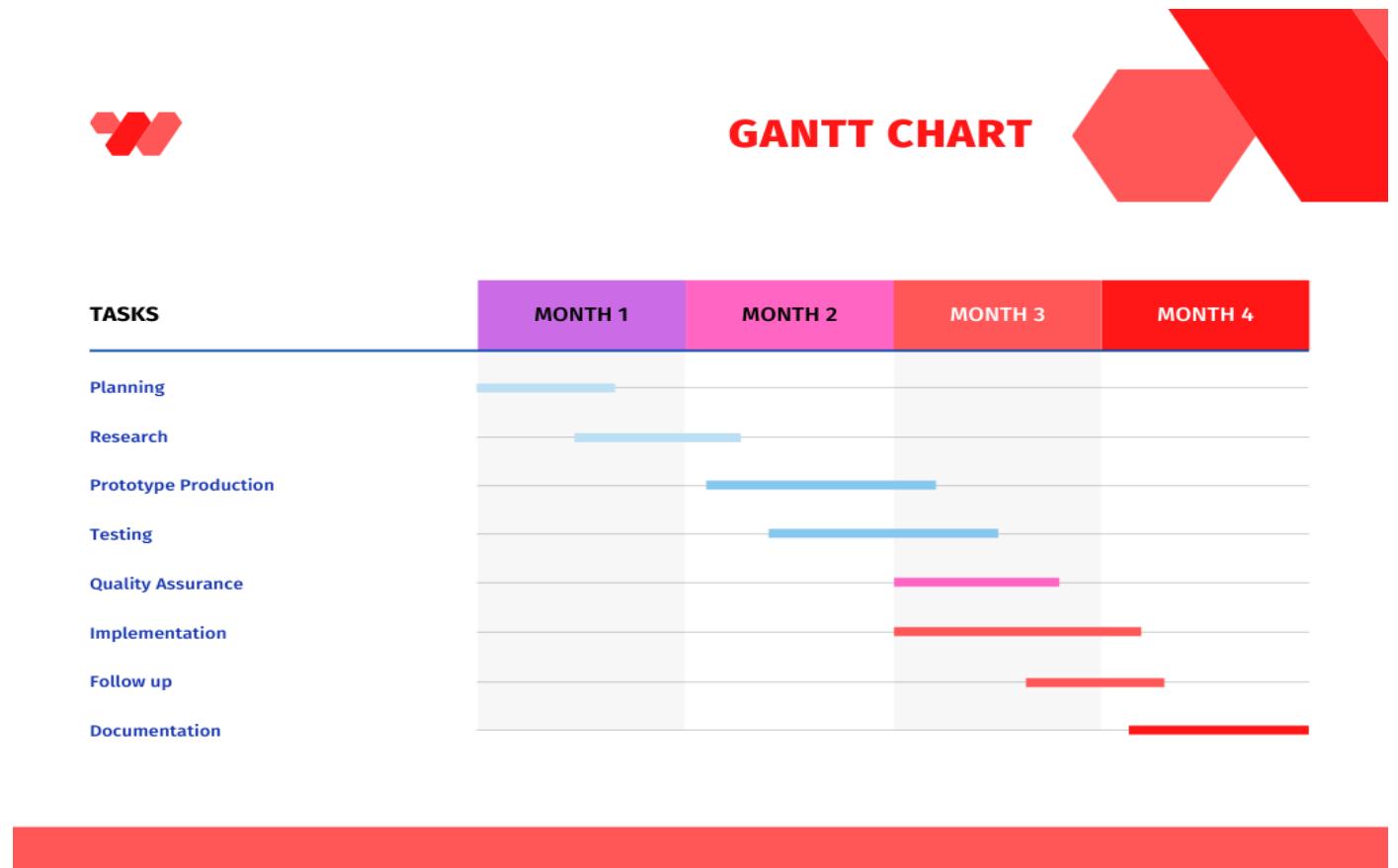
Recurring other costs(annual): RM 1,000

Year 1: RM 10,000

Year 2 until Year 10: RM 4,000

3.3.4 Schedule

As seen in Figure 4 below:



(Figure 4)

4.0 System Analysis and Design

4.1 Introduction

eVolunteer is a web based-application system that will help the volunteer communities to easily suggests what type of volunteering program that organizer should do, which the organizer to keep track on the majority vote for the suggestions and can either accept the volunteer suggestion or adjust a bit for the suggestion and approve it to be made as a volunteering program, while user can choose to participate with the volunteering program or not.

4.2 System requirements

4.2.1 System Objectives

The objective of the system is to get the necessary input from the user and display the output of the input as clean and user friendly as possible, while making the system more engaging by letting the user to post suggestions and voting and having addition features such as achievement to make user who keen on completing missions to keep them from boredom and feel the system is much more fun and easier to use.

4.2.2 System Scope

4.2.2.1 Functional requirements

- a) Calculation:
 - i. Calculate the vote for the suggestions.
 - ii. Calculate the user login count.
 - iii. Calculate the time and date and send notifications to volunteer that participant in the volunteering program based on the start date.
- b) Input:
 - i. Get user input for registration and login.
 - ii. Get user input for specific task, such as getting input for posting suggestions.
 - iii. Get user input from clicking vote/participate.
 - iv. Get user input for editing the posted suggestions.
 - v. Get user input for clicking to another page.
- c) Warning message:
 - i. Send a warning message when user use incorrect login credentials.
 - ii. Send a warning message when user breach the terms and conditions and guidelines.
 - iii. Send a warning message when user entering a page that does not in line with the user group permissions.
- d) Congratulation message:
 - i. Get a message on successful register/login.
 - ii. Get a message on successful post suggestions.
 - iii. Get a message on participating on volunteering program.
 - iv. Get a message on getting achievements.

4.2.2.2 Functional requirements

- a) User friendly interface:
 - i. Clean user interface without non-informative information.
 - ii. Minimalist and simplicity for the user interface, to make user feels at ease to use.
 - iii. User interface theme that is very attractive and fresh for user.
- b) Security:
 - i. Every user password is encrypted and stored securely into the database system.
 - ii. User inputs are strictly monitored by the input function to ensure attackers can't harm the system.
 - iii. Making sure the system is being accessed from browser instead of other platforms, to put extra security.
 - iv. Making sure to add extra security for possible spams input from unethical user.

4.2.3 System Requirement specification

4.2.3.1 Input requirement

- a) Doesn't accept special characters for user credentials (login).
- b) User can use the markdown features to make their posts much more attractive and informational.
- c) Filter out the spam, such as all messages are capitalized, or the message are full of the same word.

4.2.3.2 Output requirement

- a) Output is to be format and change based on the data given.
- b) Output is to be user friendly, which doesn't have any misalign with the user screen display.

4.2.3.3 Process Requirement

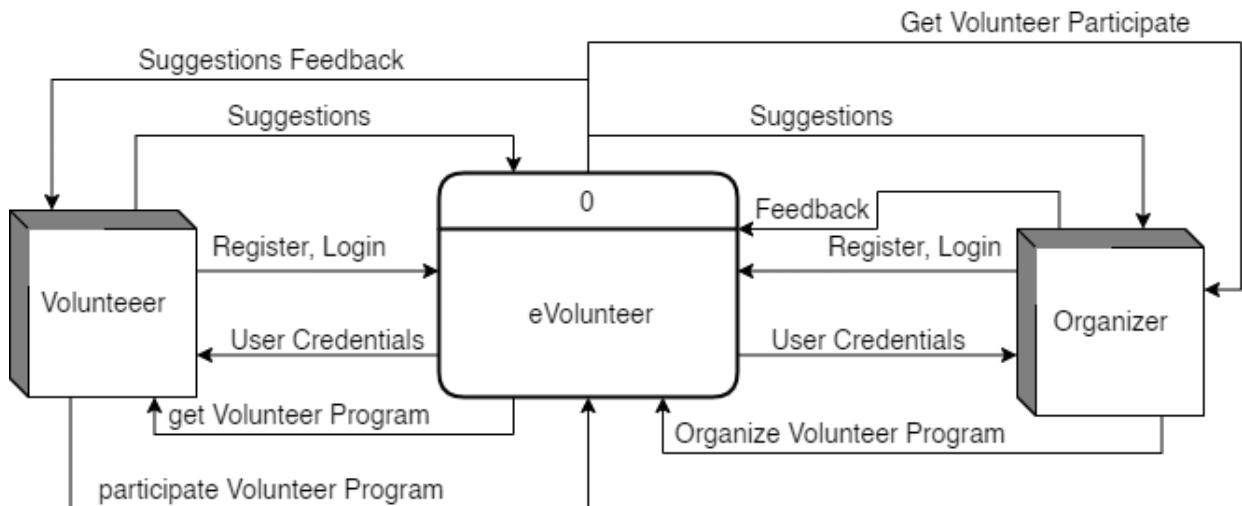
- a) Process is to make sure the data type is correct before processing it.
- b) Process must be accurate and functioning.
- c) Process must be fast.

4.2.3.4 Security and control requirement

- a) The confidential data is to be encrypt using the latest technology and algorithms before storing it at a secure database.
- b) Using a prevention method for any possible bots to gain access to the systems.
- c) Strictly monitor the systems to make sure there is no security issues that could happen
- d) Update any possible algorithms to keep up to date, to ensure the system is up to date.

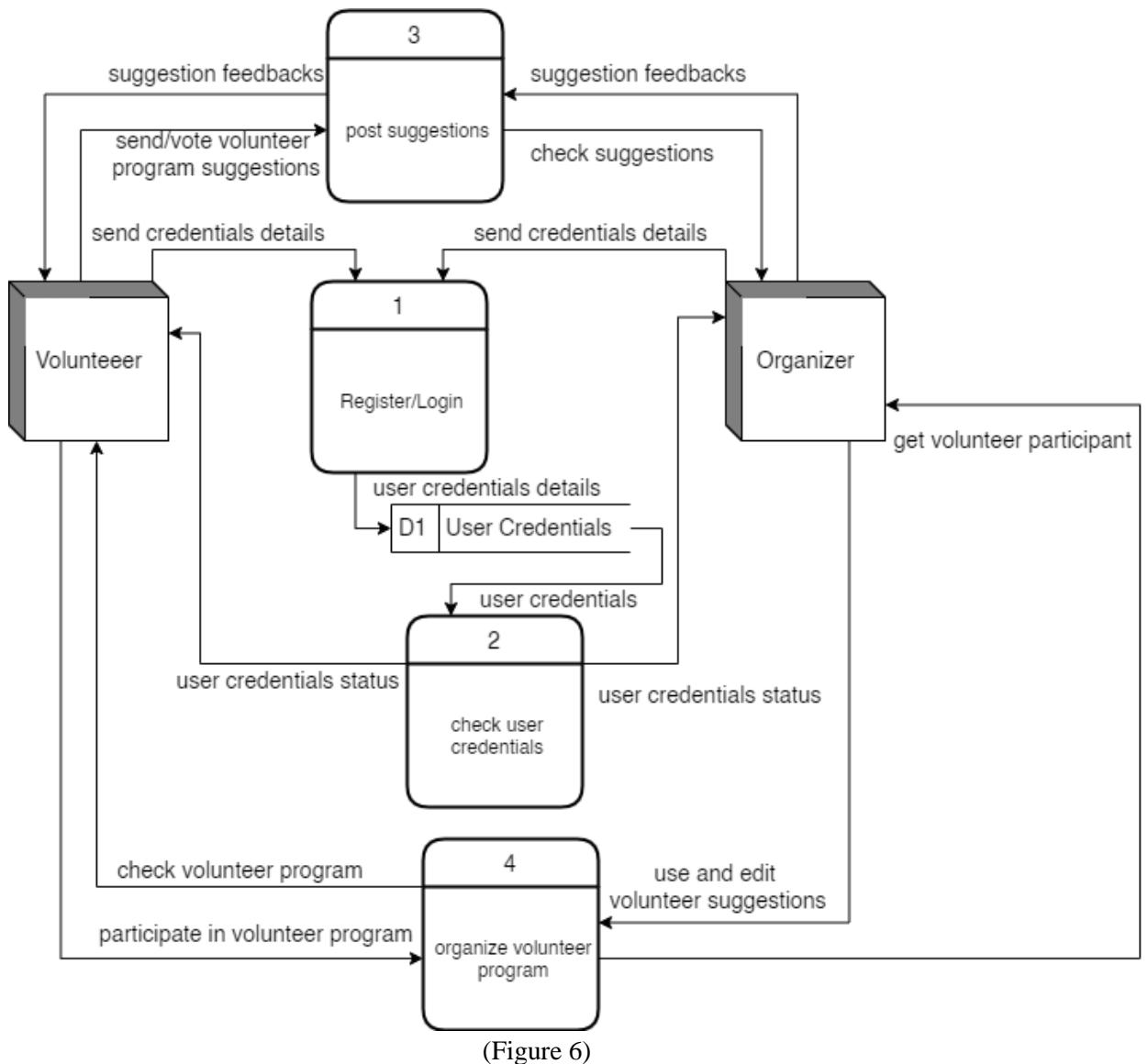
4.3 Process Modelling

4.3.1 Context Diagram



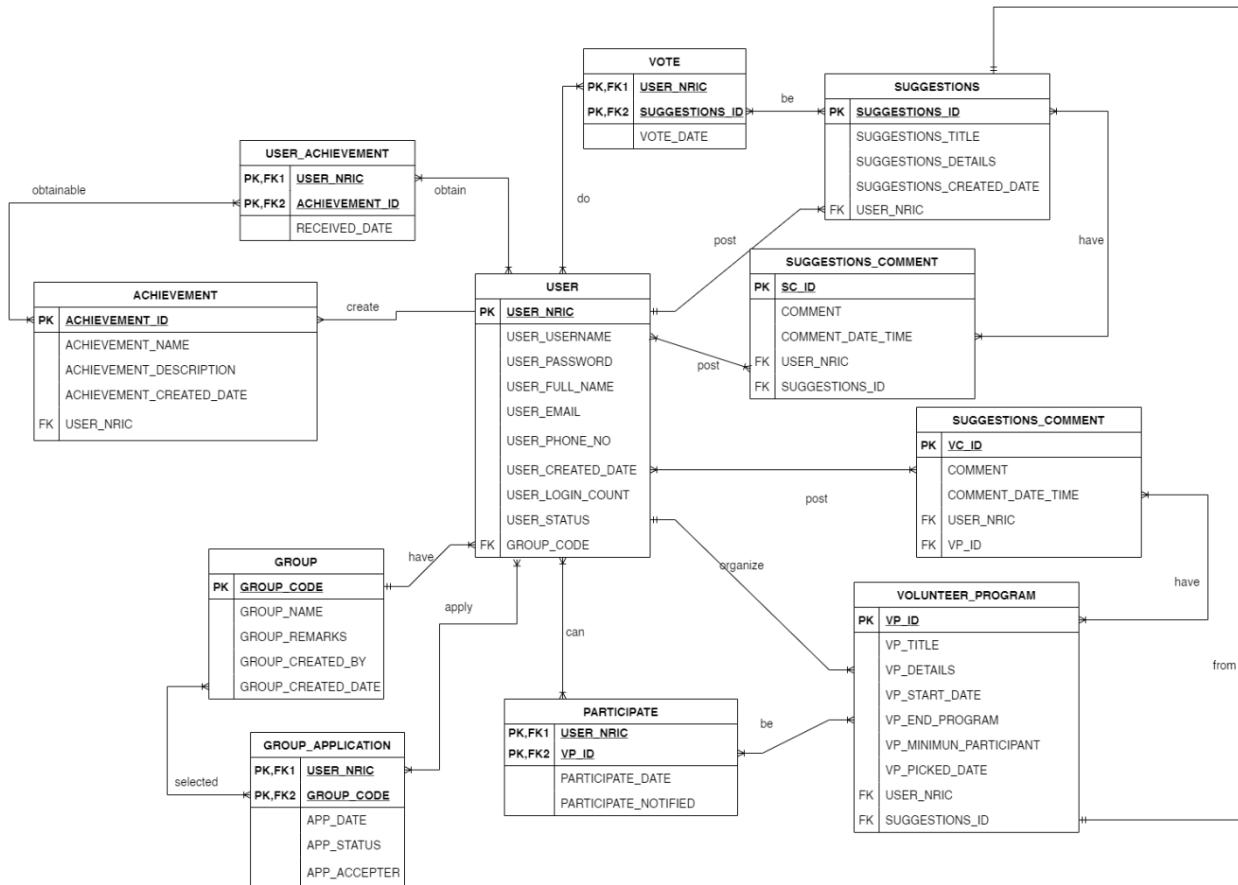
(Figure 5)

4.3.2 Data Flow Diagram 0



4.4 Data Modeling

4.4.1 Entity Relationship Diagram/ERD



(Figure 7)

4.4.2 Relational schema

USER(USER_NRIC, USER_USERNAME, USER_PASSWORD,
USER_FULL_NAME, USER_EMAIL, USER_PHONE_NO,
USER_CREATED_DATE, USER_LOGIN_COUNT, USER_STATUS,
GROUP_CODE*)

GROUP(GROUP_CODE, GROUP_NAME, GROUP_REMARKS,
GROUP_CREATED_BY, GROUP_CREATED_DATE)

GROUP_APPLICATION(USER_NRIC*, GROUP_CODE*, APP_DATE,
APP_STATUS, APP_ACCEPTER)

ACHIEVEMENT(ACHIEVEMENT_ID, ACHIEVEMENT_NAME,
ACHIEVEMENT_DESCRIPTION, ACHIEVEMENT_CREATED_DATE,
USER_NRIC*)

USER_ACHIEVEMENT(USER_NRIC*, ACHIEVEMENT_ID*, RECEIVED_DATE)

SUGGESTIONS(SUGGESTIONS_ID, SUGGESTIONS_TITLE,
SUGGESTIONS_DETAILS, SUGGESTIONS_CREATED_DATE, USER_NRIC)

VOTE(USER_NRIC*, SUGGESTIONS_ID*, VOTE_DATE)

SUGGESTIONS_COMMENT(SC_ID, COMMENT, COMMENT_DATE_TIME,
USER_NRIC*, SUGGESTIONS_ID*)

VOLUNTEER_PROGRAM(VP_ID, VP_TITLE, VP_DETAILS, VP_START_DATE,
VP_END_PROGRAM, VP_MINIMUM_PARTICIPANT, VP_PICKED_DATE,
USER_NRIC*, SUGGESTIONS_ID*)

PARTICIPATE(USER_NRIC*, VP_ID*, PARTICIPATE_DATE,
PARTICIPATE_NOTIFIED)

VP_COMMENT(VC_ID, COMMENT, COMMENT_DATE_TIME, USER_NRIC*,
VP_ID*)

5 System Implementation

5.1 Input Interface

i. Registration

The screenshot shows a Microsoft Edge browser window with the title "eVolunteer - Register". The URL in the address bar is "localhost:8080/evolunteer/user_register.php". The page content is titled "eVolunteer Account Registration." It contains the following form fields:

Full Name	Amirul Adli Fahmi bin Azam
NRIC (eg: 000122886544)	000413140977
Email (eg: youremail@mail.com)	amiruladlifahmi@gmail.com
Phone Number (eg: 04488898899)	01121196596
Username	hyglobalhd
Password	*****
Password Confirm	*****

Agree with our Terms & Conditions and
our Privacy Policy.

Existing user? [Click here to login.](#)

Sign Up

ii. Login

The screenshot shows a Microsoft Edge browser window with the title "eVolunteer - Login". The URL in the address bar is "localhost:8080/127.0.0.1/evol...". The page content is titled "eVolunteer Account Login." It contains the following form fields:

NRIC (eg: 000122886544)	000413140977
Password	*****

New user? [Click here to register.](#)

Sign In

eVolunteer © 2021

© 2021 eVolunteer

Login **Sign-up**

iii. Create Suggestions

The screenshot shows a web browser window with the title "eVolunteer - New Suggestions" and the URL "localhost:8080/evol...". The page has a dark header with the "eVolunteer" logo and navigation links: "Homepage", "Suggestions", "Volunteer Program", "Participation Status", and "Settings". The main content area is titled "New Suggestions". It contains a text input field with placeholder text "Your suggestions title..." and the value "Help in cleaning up flood affected aftermath area". Below this is another text input field with placeholder text "Your suggestions..." and the value "I am suggesting that we hold a volunteer program on helping places that are affected by flood." There are two validation messages at the bottom: "*Suggested Participant: 20" and "*Suggested Period: 3 Weeks".

iv. Edit/Delete Suggestions

The screenshot shows a web browser window with the title "eVolunteer - Edit Suggestions" and the URL "localhost:8080/evol...". The page has a dark header with the "eVolunteer" logo and navigation links: "Homepage", "Suggestions", "Volunteer Program", "Participation Status", and "Settings". The main content area is titled "Edit Suggestions" and includes a "Back" button. It displays the same suggestion details as the previous screen: "Help in cleaning up flood affected aftermath area", "I am suggesting that we hold a volunteer program on helping places that are affected by flood.", and the validation messages "*Suggested Participant: 20" and "*Suggested Period: 3 Weeks".

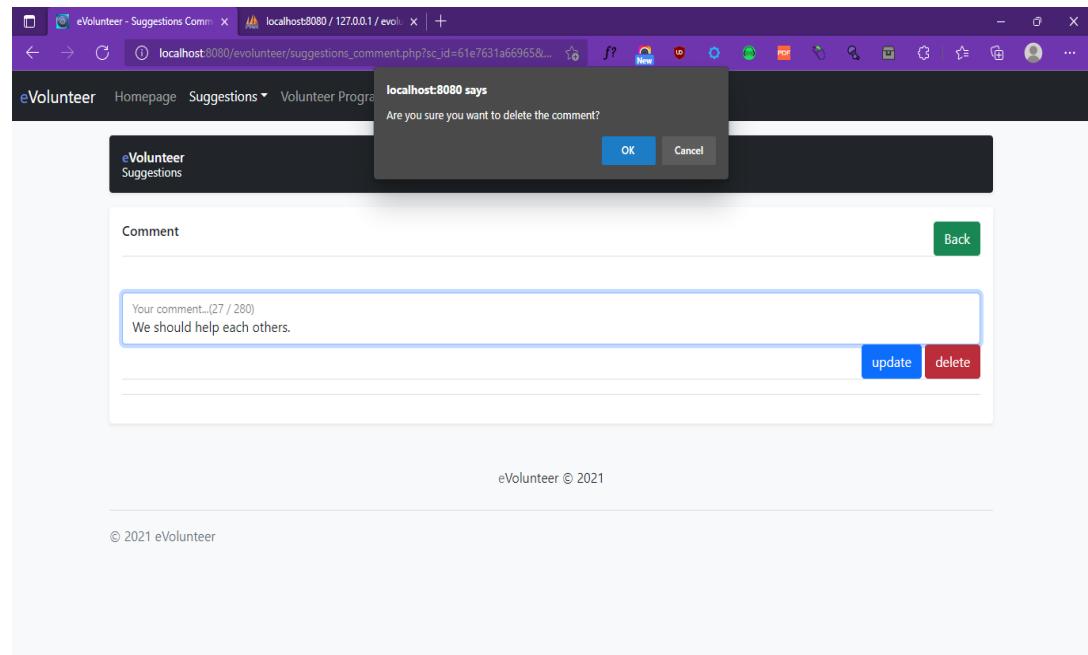
v. Vote/UnVote

The screenshot shows a web browser window for the eVolunteer application. The URL is `localhost:8080/evol/view_suggestions.php?id=61e760a2d540d493292753`. The page title is "eVolunteer - Suggestions". The main content area displays a suggestion titled "Help in cleaning up the flood affected aftermath a". Below the title, it says "I am suggesting that we hold a volunteer program on helping places that are affected by flood." and "Suggested Participant: 20 Suggested Period: 3 Weeks". On the right side, there is a timestamp "Suggest by: @hyglobalhd Suggestion create on: 2022-01-19 08:55:43" and a vote count "Vote: 0". There are two buttons: "vote" and "choose as volunteer program". A link "Edit Suggestions..." is also present. Below the suggestion, there is a "Comment" section with a text input field containing "Your comment...". A blue "comment" button is located to the right of the input field. A note at the bottom of the comment section states "There is no available comment...".

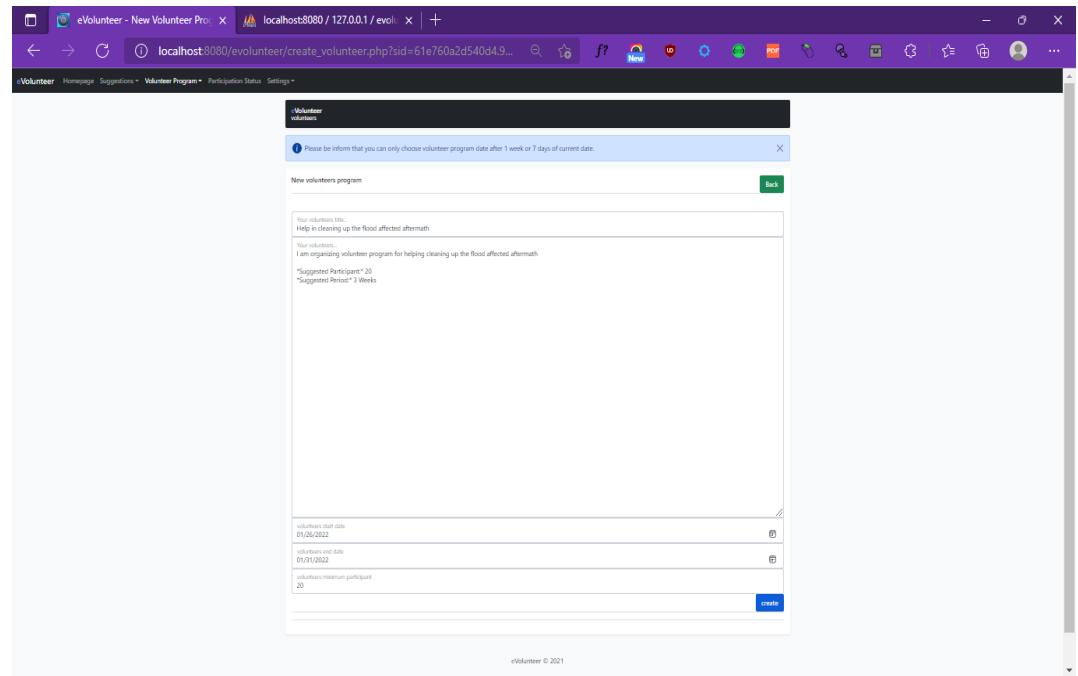
vi. New Suggestions Comment

The screenshot shows the same web browser window after a user has voted. A green success message box appears at the top left, stating "Successfully voted!". The "vote" button is now labeled "unvote". The "comment" section now contains a comment from the user: "Your comment...(27 / 280) We should help each others.". The "comment" button is still visible. At the bottom of the page, there is a footer with the text "eVolunteer © 2021" and "© 2021 eVolunteer".

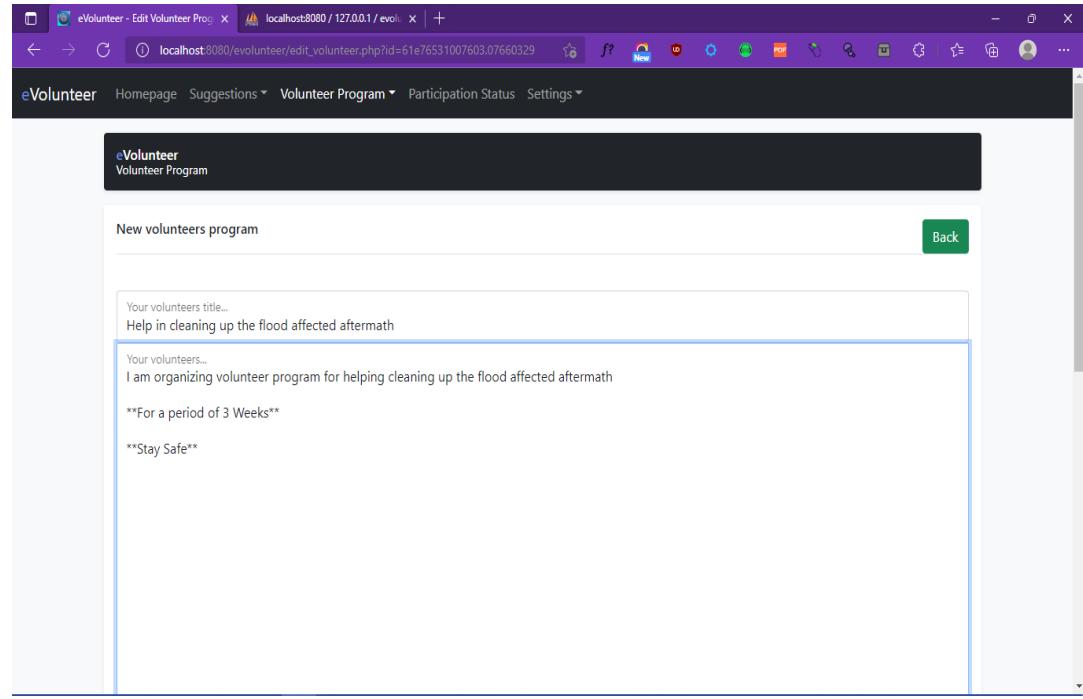
vii. Edit/Delete Suggestions Comment



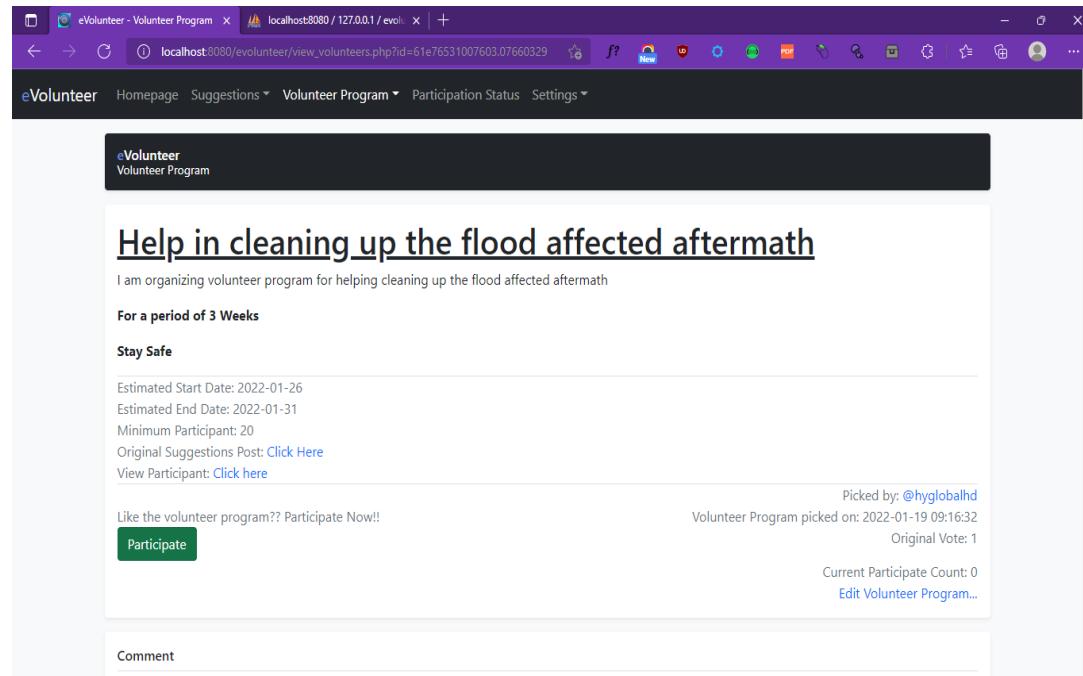
viii. Create Volunteer Program



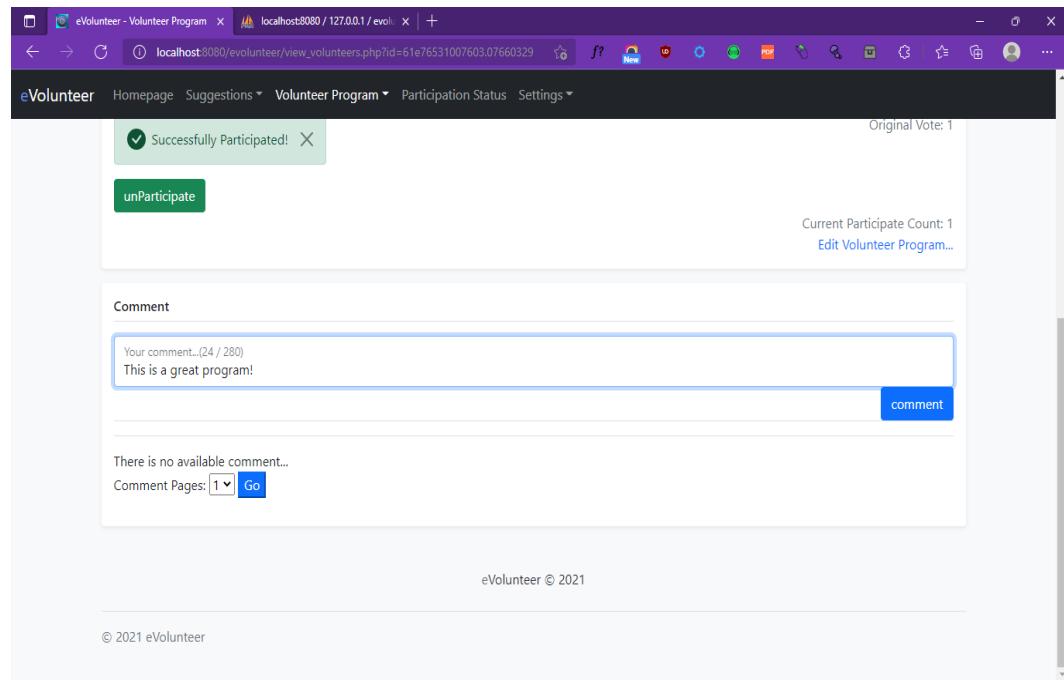
ix. Edit/Delete Volunteer Program



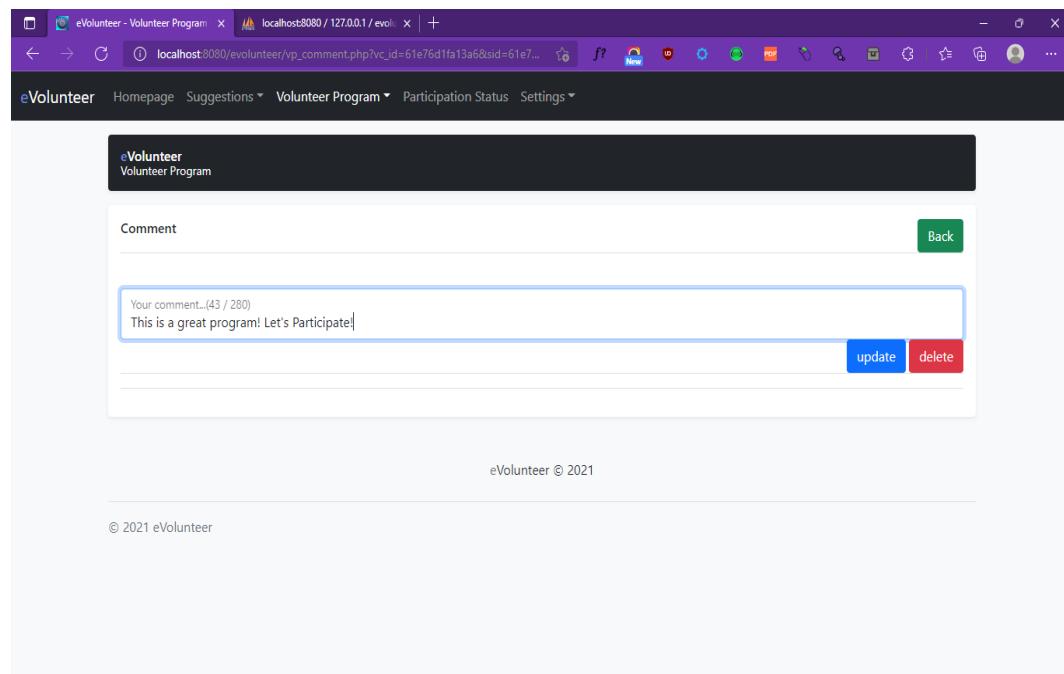
x. Participate/UnParticipate Volunteer Program



xi. New Volunteer Program Comment



xii. Edit/Delete Volunteer Program Comment



xiii. Search Suggestions

The screenshot shows a web browser window with the URL `localhost:8080/evolunteer/searchSuggestions.php`. The page title is "eVolunteer - Search Suggestions". The main content area is titled "eVolunteer Suggestions" and contains a "Search Suggestions" section. A search input field has "Your search..." placeholder text and the word "Port Dickson" entered. To the right of the input field is a blue "search" button. Below the search bar is a "Results:" section which is currently empty. At the bottom of the page, there is footer text "eVolunteer © 2021" and "© 2021 eVolunteer".

xiv. Search Volunteer Program

The screenshot shows a web browser window with the URL `localhost:8080/evolunteer/searchVolunteer.php`. The page title is "eVolunteer - Document". The main content area is titled "eVolunteer Volunteer Program" and contains a "Search Volunteer" section. A search input field has "Your search..." placeholder text and the word "Flood" entered. To the right of the input field is a blue "search" button. Below the search bar is a "Results:" section which is currently empty. At the bottom of the page, there is footer text "eVolunteer © 2021" and "© 2021 eVolunteer".

xv. Update User Profile

The screenshot shows a web browser window with the URL `localhost:8080/evolunteer/edit_user_profile.php`. The page title is "Edit User Profile". The user profile information is displayed in input fields:

- Full Name: AMIRUL ADLI FAHMI BIN AZAM
- Username: hyglobalhd
- NRIC: 000413140977
- Email: amiruladlifahmi@gmail.com
- Phone Number: 01121196599 (highlighted with a blue border)
- Old Password (empty field)
- New Password (empty field)
- Confirm Password (empty field)

A "Back" button is visible in the top right corner.

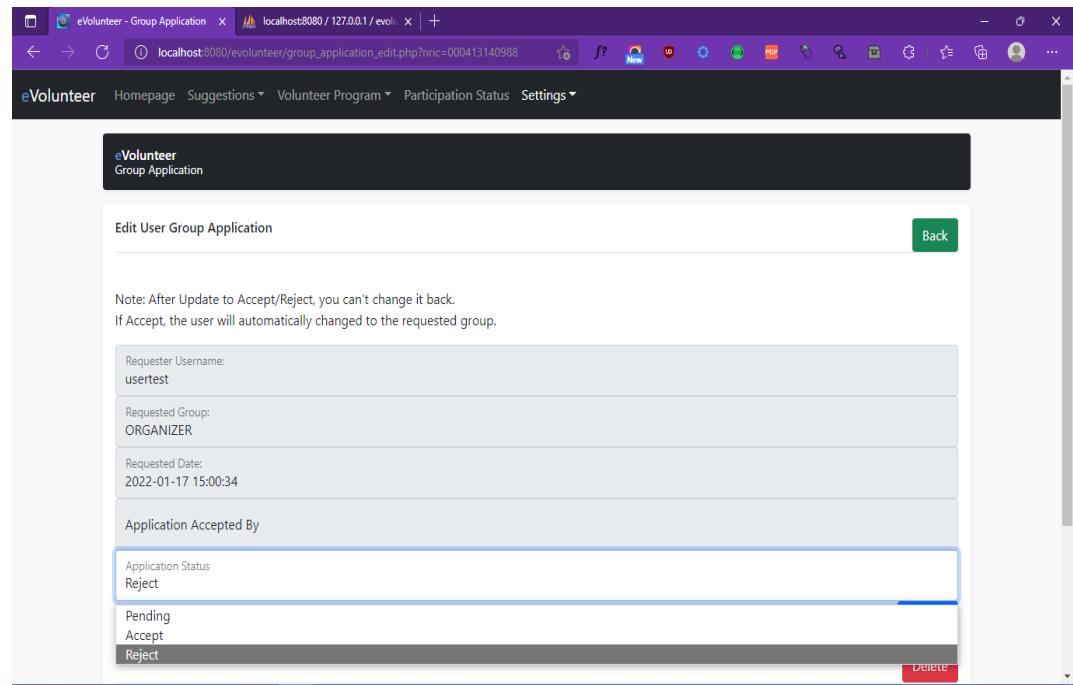
xvi. Group Application Apply

The screenshot shows a web browser window with the URL `localhost:8080/evolunteer/group_apply.php`. The page title is "Apply Group". A message states: "You have not applied for any group yet." Below this, a "Group List" section displays the following text:
ORGANIZER - People who organize volunteer program events based on the suggestions.
An "Apply" button is located to the right of the list.

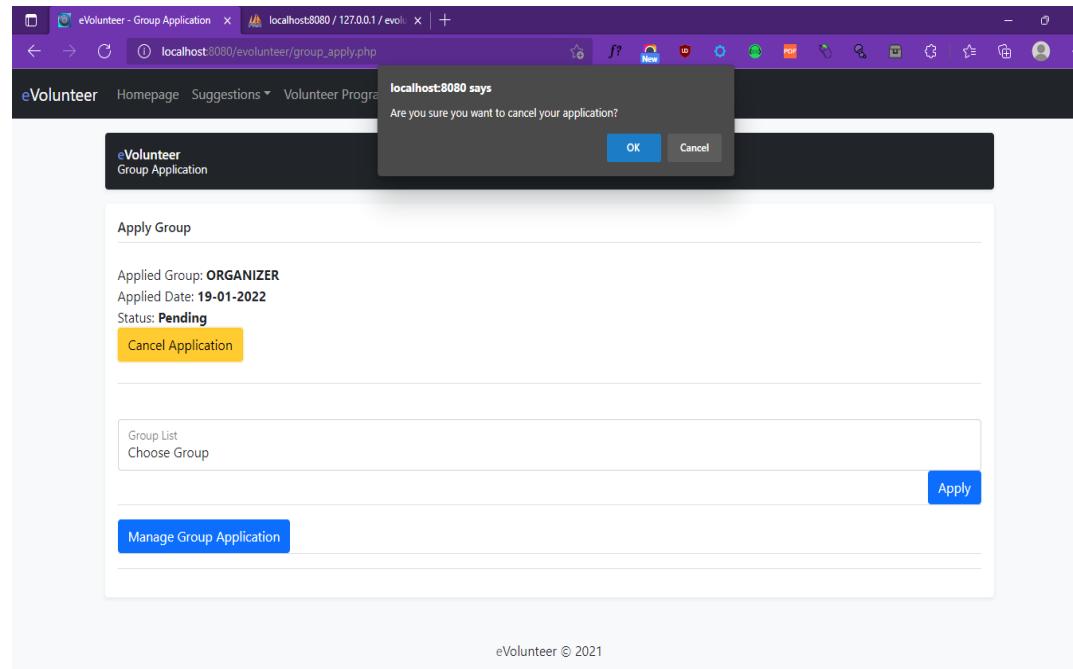
A "Manage Group Application" button is visible at the bottom left of the main content area.

The footer contains the text "eVolunteer © 2021" and "© 2021 eVolunteer".

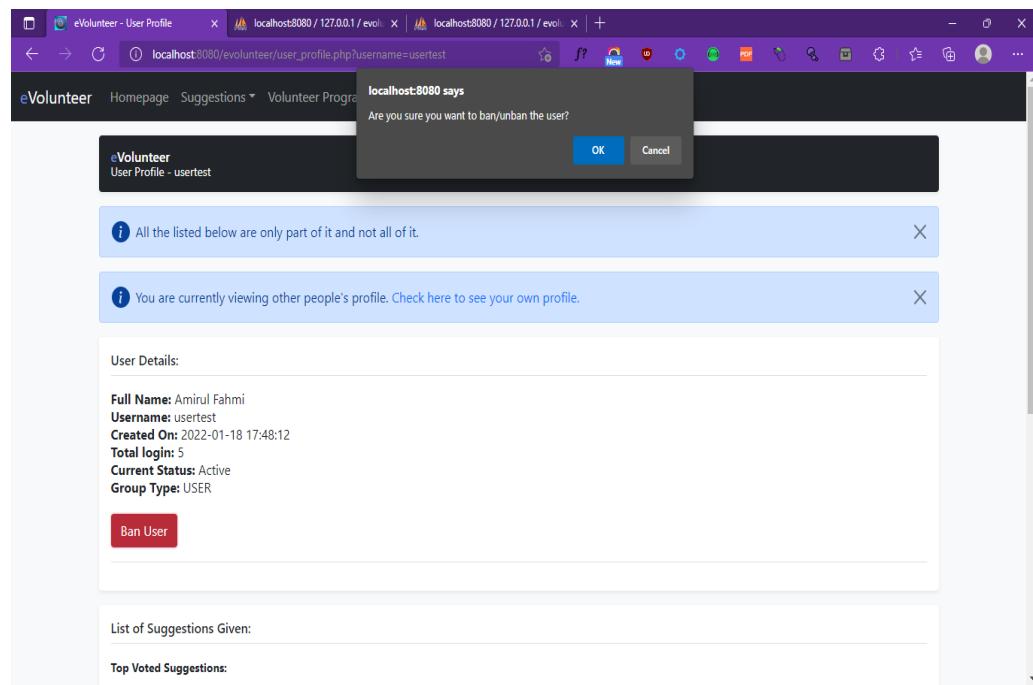
xvii. Admin Group Application Edit



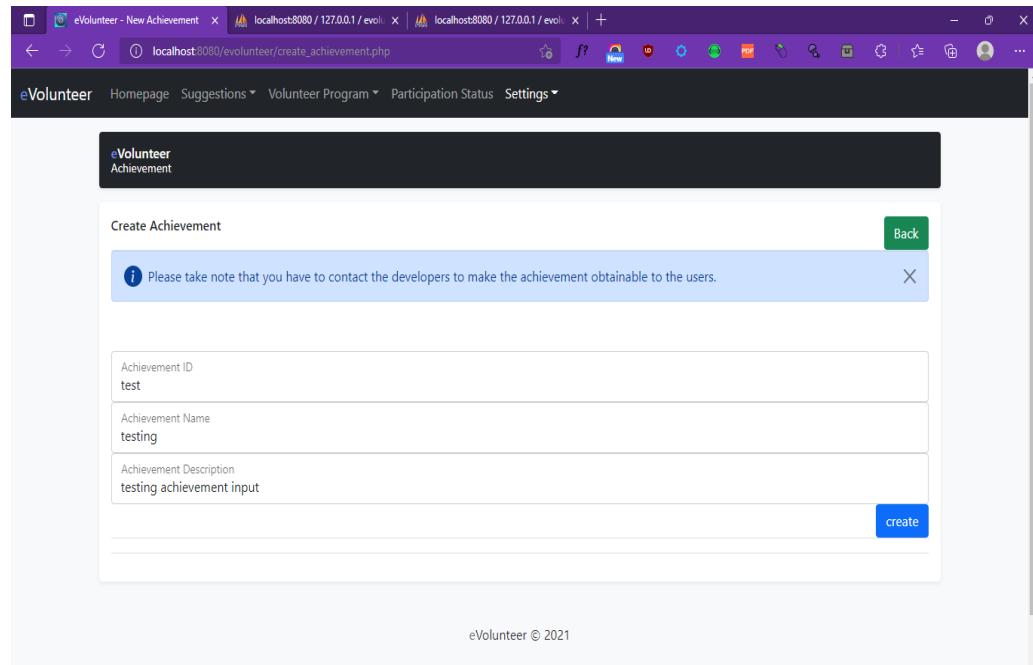
xviii. User Group Application Cancel



xix. Ban/UnBan User



xxx. Create Achievement

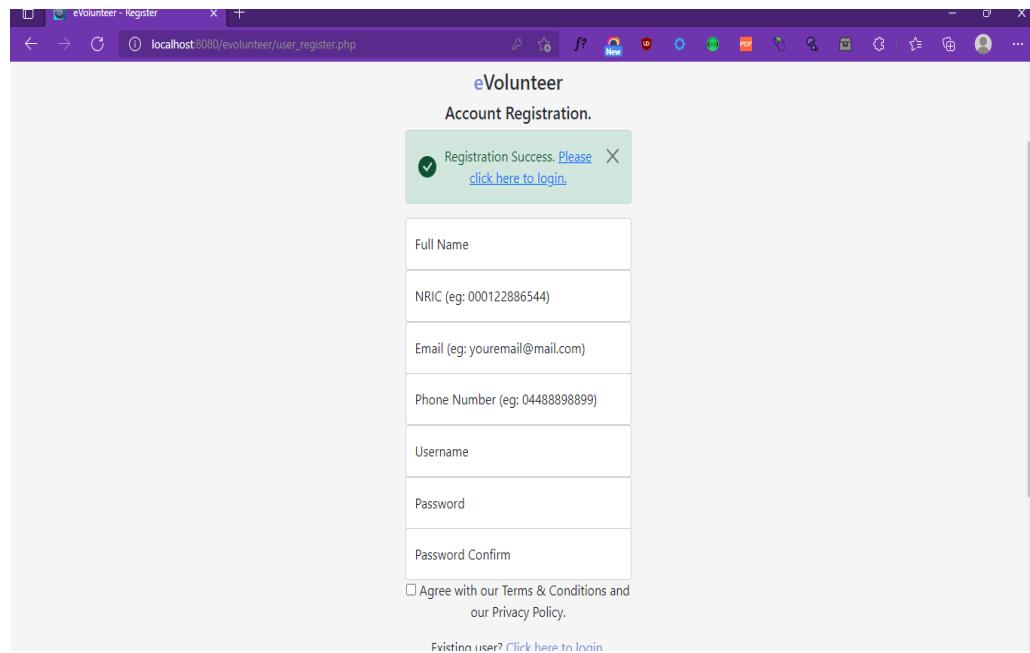


xxxi. Logout

The screenshot shows a Microsoft Edge browser window with three tabs open: 'eVolunteer - Homepage', 'localhost:8080 / 127.0.0.1 / evol...', and 'localhost:8080 / 127.0.0.1 / evol...'. The main content area displays the 'eVolunteer Homepage' with sections for 'Top 3 Suggestions' and 'Recent Suggestions'. A dropdown menu is open over the 'Logout' link in the top right corner, listing 'Profile', 'Achievement', 'Group Application', and 'Logout'. The 'Logout' option is highlighted with a red background. At the bottom of the page, there is a URL bar with the address 'localhost:8080/evolunteer/logout.php'.

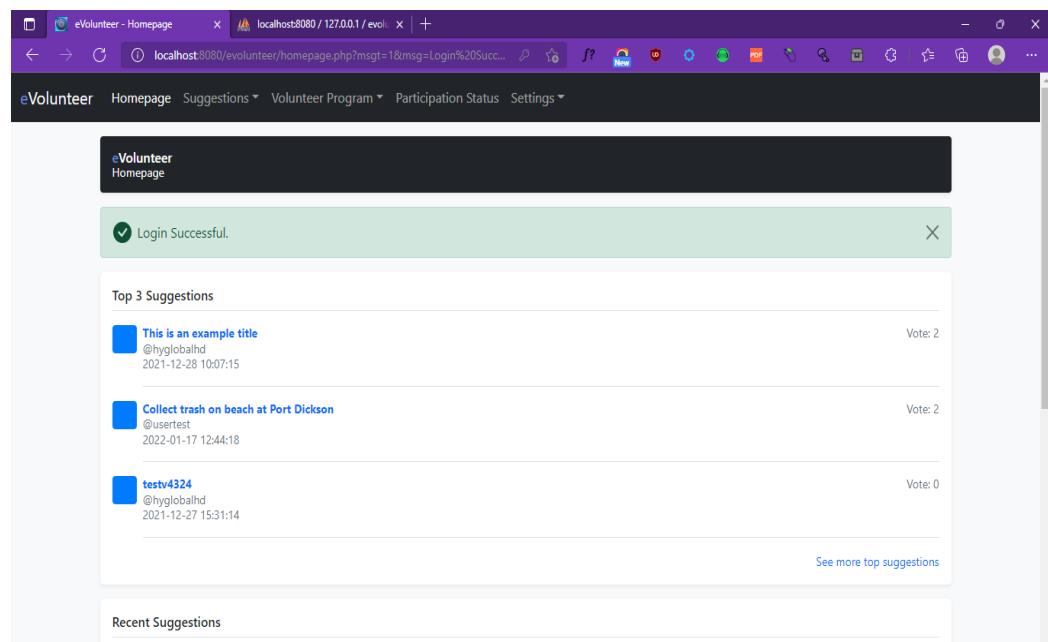
5.2 Output Interface

i. Registration



The screenshot shows a Microsoft Edge browser window with the URL localhost:8080/evolunteer/user_register.php. The page title is "eVolunteer Account Registration." A green success message box displays a checkmark icon and the text "Registration Success. Please [click here to login.](#)". Below the message are input fields for "Full Name", "NRIC (eg: 000122886544)", "Email (eg: youremail@mail.com)", "Phone Number (eg: 0448898899)", "Username", "Password", and "Password Confirm". At the bottom, there is a checkbox labeled "Agree with our Terms & Conditions and our Privacy Policy." and a link "Existing user? [Click here to login](#)".

ii. Login

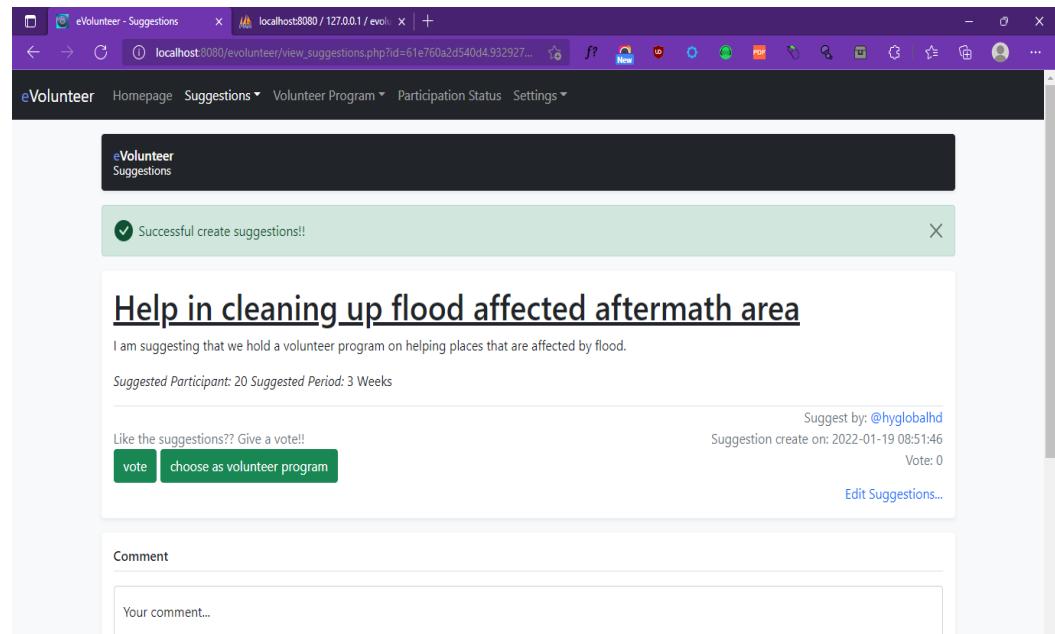


The screenshot shows a Microsoft Edge browser window with the URL localhost:8080/127.0.0.1/evol/. The page title is "eVolunteer Homepage". The navigation bar includes "Homepage", "Suggestions", "Volunteer Program", "Participation Status", and "Settings". A black header bar displays "eVolunteer Homepage". A green success message box shows a checkmark icon and the text "Login Successful.". Below the message, the "Top 3 Suggestions" section lists three items:

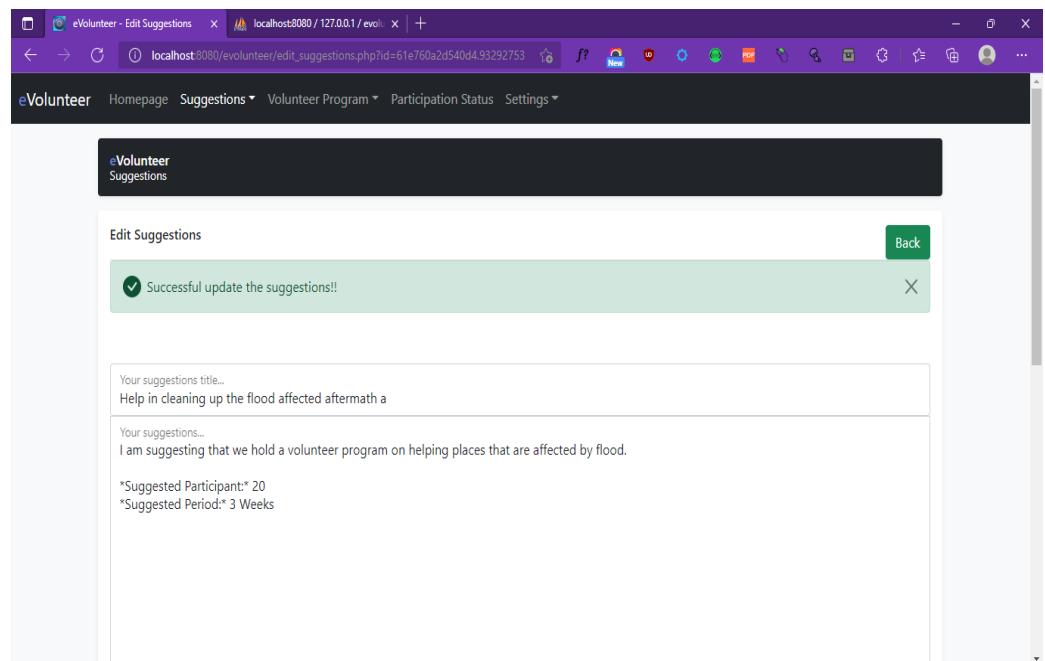
- This is an example title
@hyglobalhd
2021-12-28 10:07:15
Vote: 2
- Collect trash on beach at Port Dickson
@usertest
2022-01-17 12:44:18
Vote: 2
- testv4324
@hyglobalhd
2021-12-27 15:31:14
Vote: 0

A link "See more top suggestions" is located at the bottom of the suggestions list. Below the suggestions, there is a "Recent Suggestions" section.

iii. Create Suggestions



iv. Edit/Delete Suggestions



v. Vote/UnVote

The screenshot shows a web browser window with the URL `localhost:8080/evolunteer/view_suggestions.php?id=61e760a2d540d4.93292753`. The page title is "eVolunteer - Suggestions". The main content area displays a suggestion titled "Help in cleaning up the flood affected aftermath a". Below the title, it says "I am suggesting that we hold a volunteer program on helping places that are affected by flood." and "Suggested Participant: 20 Suggested Period: 3 Weeks". On the right side, there is a message from "Suggest by: @hyglobalhd" dated "2022-01-19 08:55:43" with "Vote: 1". A green button indicates "Successfully voted!". At the bottom, there are buttons for "unvote" and "choose as volunteer program", and a link "Edit Suggestions...".

vi. New Suggestions Comment

The screenshot shows a web browser window with the same URL as the previous screenshot. The main content area displays a comment section for the same suggestion. A message from "ADMINISTRATOR @hyglobalhd" says "We should help each others." and includes a timestamp "2022-01-19 09:02:18" and a "Change" link. Below the comment, there is a "comment" button. At the bottom, there is a footer with "Comment Pages: 1 Go" and the copyright notice "© 2021 eVolunteer".

vii. Edit/Delete Suggestions Comment

The screenshot shows a browser window for the eVolunteer application at localhost:8080. The title bar says "eVolunteer - Suggestions". The main content area displays a suggestion titled "Help in cleaning up the flood affected aftermath a". Below the title, it says "I am suggesting that we hold a volunteer program on helping places that are affected by flood." It also shows "Suggested Participant: 20 Suggested Period: 3 Weeks". On the right, there is a message "Suggest by: @hyglobalhd Suggestion create on: 2022-01-19 08:55:43 Vote: 1" and a link "Edit Suggestions...". A green success message box at the top states "Delete the comment Successful!". Below the suggestion, there is a "Comment" section with a text input field containing "Your comment..." and a "comment" button. A message below the input field says "There is no available comment...".

viii. Create Volunteer Program

The screenshot shows a browser window for the eVolunteer application at localhost:8080. The title bar says "eVolunteer - Volunteer Program". The main content area displays a volunteer program titled "Help in cleaning up the flood affected aftermath". Below the title, it says "I am organizing volunteer program for helping cleaning up the flood affected aftermath". It also shows "Suggested Participant: 20 Suggested Period: 3 Weeks". On the right, there is a message "Picked by: @hyglobalhd Volunteer Program picked on: 2022-01-19 09:11:13 Original Vote: 1" and a link "Edit Volunteer Program...". A green success message box at the top states "Successful create volunteers program!!". Below the title, there are sections for "Estimated Start Date: 2022-01-26", "Estimated End Date: 2022-01-31", "Minimum Participant: 20", "Original Suggestions Post: [Click Here](#)", and "View Participant: [Click here](#)". There is also a "Participate" button and a message "Like the volunteer program?? Participate Now!!".

ix. Edit/Delete Volunteer Program

The screenshot shows a Microsoft Edge browser window with the URL `localhost:8080/evolunteer/edit_volunteer.php?id=61e76531007603.07660329`. The page title is "eVolunteer - Edit Volunteer Program". The main content area displays a "New volunteers program" form. A green success message box at the top right contains the text "Successful update the suggestions!!". Below the message, the form fields show the following information:

- Your volunteers title...: Help in cleaning up the flood affected aftermath
- Your volunteers...: I am organizing volunteer program for helping cleaning up the flood affected aftermath
- **For a period of 3 Weeks**
- **Stay Safe**

A "Back" button is visible in the top right corner of the form area.

x. Participate/UnParticipate Volunteer Program

The screenshot shows a Microsoft Edge browser window with the URL `localhost:8080/evolunteer/view_volunteers.php?id=61e76531007603.07660329`. The page title is "eVolunteer". The main content area displays a volunteer program titled "Help in cleaning up the flood affected aftermath". Below the title, it says "I am organizing volunteer program for helping cleaning up the flood affected aftermath". It also lists "For a period of 3 Weeks" and "Stay Safe". Further down, it provides details about the program: "Estimated Start Date: 2022-01-27", "Estimated End Date: 2022-01-31", "Minimum Participant: 20", "Original Suggestions Post: [Click Here](#)", and "View Participant: [Click here](#)". To the right of these details, it shows "Picked by: @hyglobalhd", "Volunteer Program picked on: 2022-01-19 09:38:57", and "Original Vote: 1". A green success message box at the bottom left contains the text "Successfully Participated! X". A "unParticipate" button is located below the message. In the bottom right corner, it shows "Current Participate Count: 1" and "Edit Volunteer Program...".

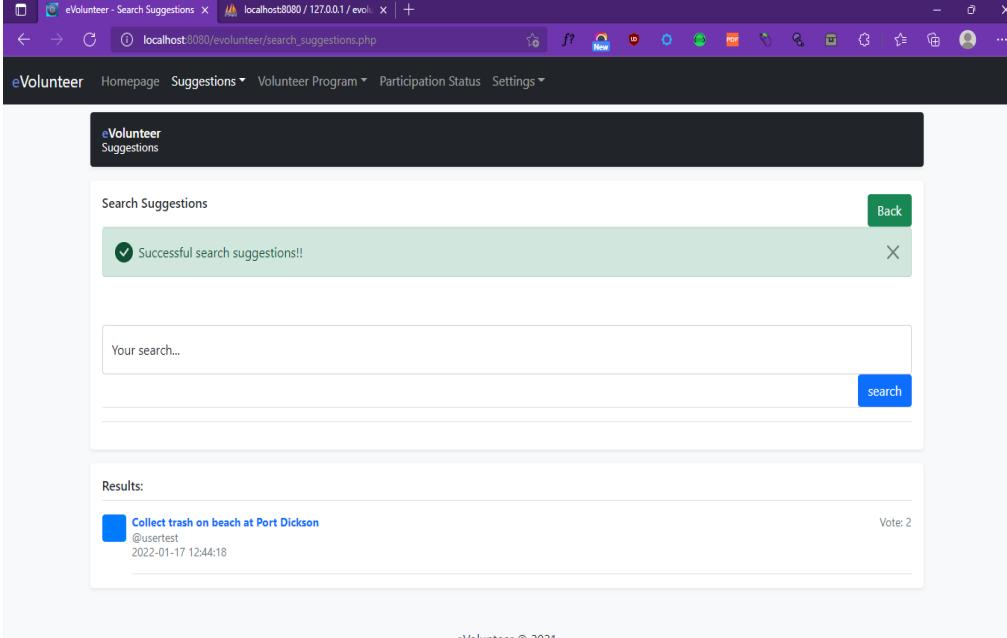
xi. New Volunteer Program Comment

The screenshot shows a Microsoft Edge browser window with the title bar "eVolunteer - Volunteer Program" and the address bar "localhost:8080 / 127.0.0.1 / evol...". The page header includes "eVolunteer", "Homepage", "Suggestions", "Volunteer Program", "Participation Status", and "Settings". A green success message box at the top right says "Successfully comment". Below it is a text input field with placeholder "Your comment..." and a blue "comment" button. Underneath is a user profile section with a blue icon, "ADMINISTRATOR", and "@hyglobalbd". A comment text area contains "This is a great program!". To the right is the timestamp "2022-01-19 09:45:03" and a "Change" link. At the bottom left is a "Comment Pages: 1 Go" dropdown, and at the bottom right is the copyright notice "eVolunteer © 2021".

xii. Edit/Delete Volunteer Program Comment

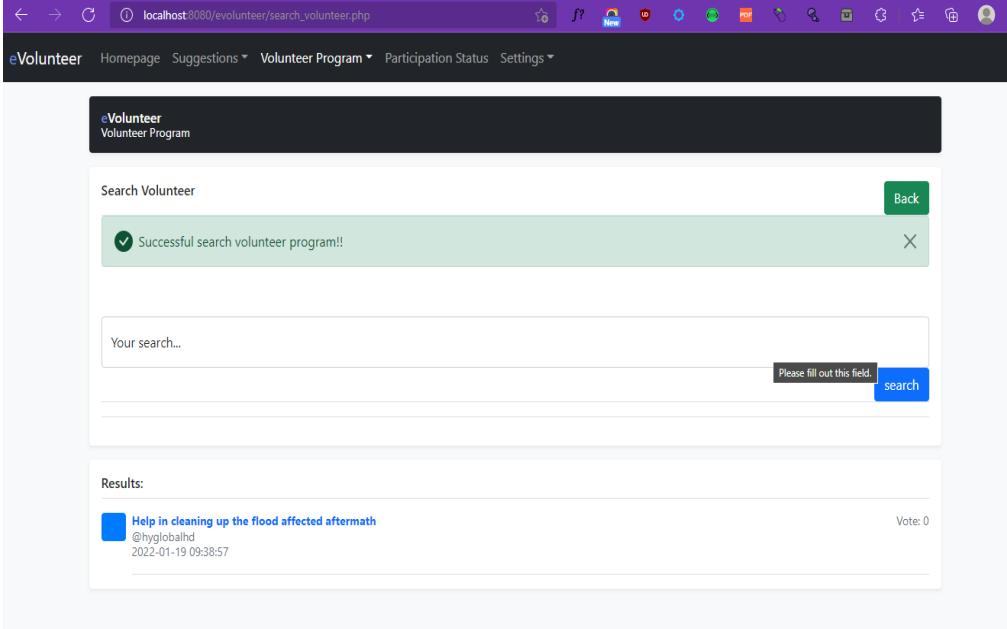
The screenshot shows a Microsoft Edge browser window with the title bar "eVolunteer - Volunteer Program" and the address bar "localhost:8080 / 127.0.0.1 / evol...". The page header includes "eVolunteer", "Homepage", "Suggestions", "Volunteer Program", "Participation Status", and "Settings". A green success message box at the top right says "Successful update comment!!". Below it is a text input field with placeholder "Your comment..." containing "This is a great program! Let's Participate!" and two buttons: "update" (blue) and "delete" (red). At the bottom right is the copyright notice "eVolunteer © 2021".

xiii. Search Suggestions



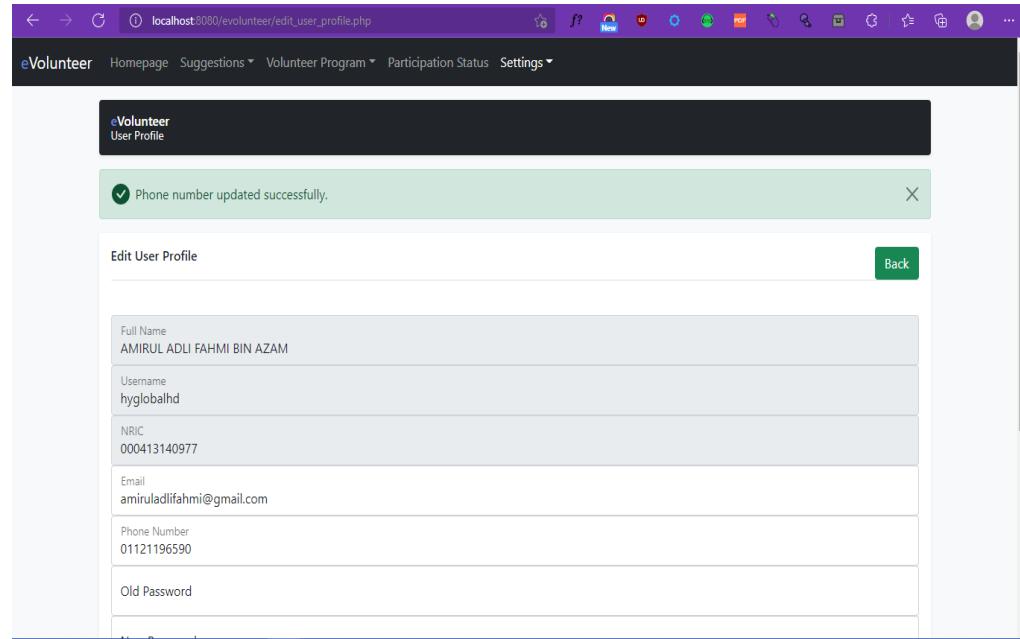
The screenshot shows a web browser window for the eVolunteer application at localhost:8080. The title bar says "eVolunteer - Search Suggestions". The main content area has a header "eVolunteer Suggestions". Below it is a green success message box containing "Successful search suggestions!!". A search input field with placeholder "Your search..." and a blue "search" button are present. Under "Results:", there is a card for a suggestion: "Collect trash on beach at Port Dickson" by user @user1-test, dated 2022-01-17 12:44:18, with a "Vote: 2" link. At the bottom right of the page is the copyright notice "eVolunteer © 2021".

xiv. Search Volunteer Program

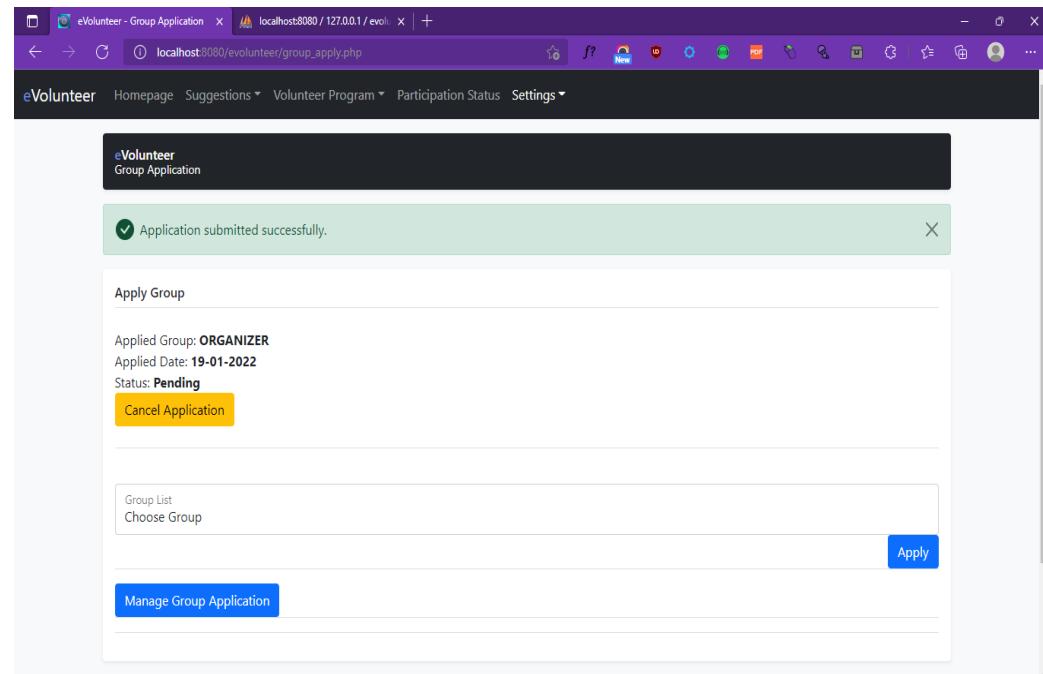


The screenshot shows a web browser window for the eVolunteer application at localhost:8080. The title bar says "localhost:8080/evolunteer/search_volunteer.php". The main content area has a header "eVolunteer Volunteer Program". Below it is a green success message box containing "Successful search volunteer program!!". A search input field with placeholder "Your search..." and a blue "search" button is present. The search button has a tooltip "Please fill out this field.". Under "Results:", there is a card for a suggestion: "Help in cleaning up the flood affected aftermath" by user @hyglobalhd, dated 2022-01-19 09:38:57, with a "Vote: 0" link. At the bottom right of the page is the copyright notice "eVolunteer © 2021".

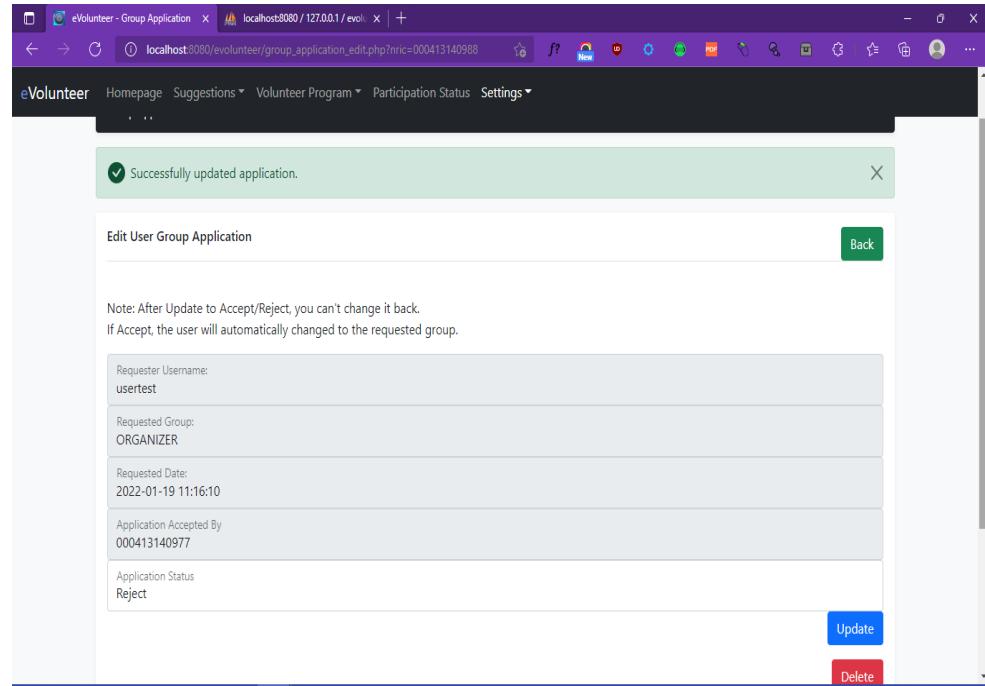
xv. Update User Profile



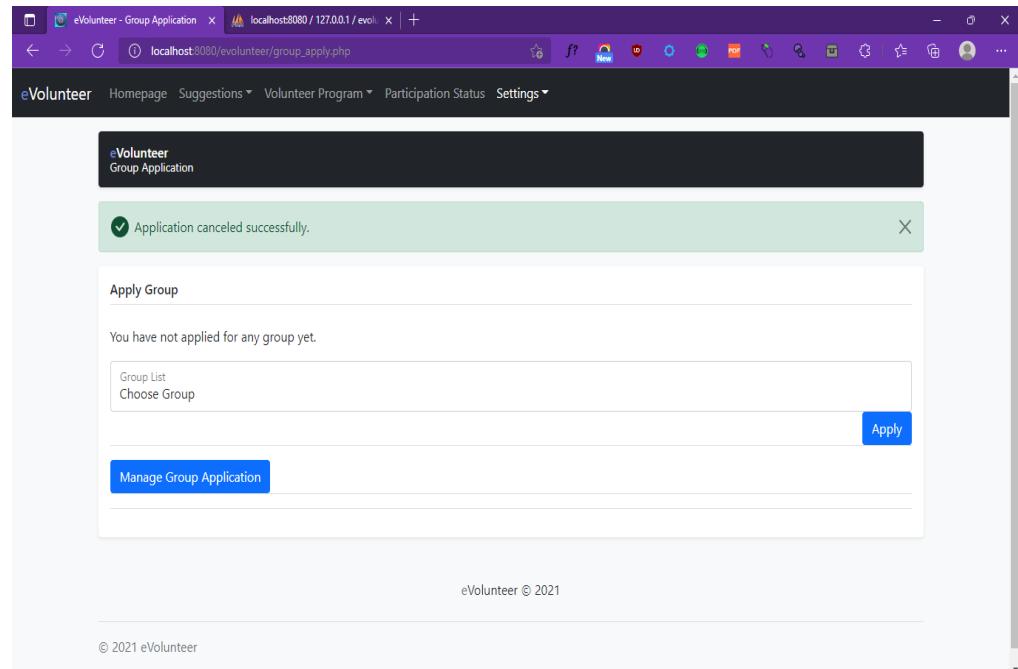
xvi. Group Application Apply



xvii. Admin Group Application Edit



xviii. User Group Application Cancel



xix. Homepage

The screenshot shows the eVolunteer homepage with three tabs open in the browser: 'eVolunteer - Homepage' (active), 'localhost:8080 / 127.0.0.1 / evol...' (Suggestions), and 'localhost:8080 / 127.0.0.1 / evol...' (Participation Status). The main content area displays 'Top 3 Suggestions' and 'Recent Suggestions'. Each suggestion includes a thumbnail, title, author, date, and vote count.

Suggestion Type	Title	Author	Date	Vote
Top 3 Suggestions	This is an example title	@hyglobalhd	2021-12-28 10:07:15	2
Top 3 Suggestions	Collect trash on beach at Port Dickson	@usertest	2022-01-17 12:44:18	2
Top 3 Suggestions	Help Cleaning Up River	@hyglobalhd	2022-01-19 12:12:34	0
Recent Suggestions	Help Cleaning Up River	@hyglobalhd	2022-01-19 12:12:34	0
Recent Suggestions	Collect trash on beach at Port Dickson	@usertest		2

xx. Top Suggestions

The screenshot shows the 'Top Suggestions' page of the eVolunteer application. It features a header with three tabs: 'eVolunteer - Top Suggestions' (active), 'localhost:8080 / 127.0.0.1 / evol...' (Homepage), and 'localhost:8080 / 127.0.0.1 / evol...' (Suggestions). The main content area displays 'Top Suggestions' with a pagination control. Each suggestion includes a thumbnail, title, author, date, and vote count.

Suggestion Type	Title	Author	Date	Vote
Top Suggestions	This is an example title	@hyglobalhd	2021-12-28 10:07:15	2
Top Suggestions	Collect trash on beach at Port Dickson	@usertest	2022-01-17 12:44:18	2
Top Suggestions	Help Cleaning Up River	@hyglobalhd	2022-01-19 12:12:34	0

xxi. Recent Suggestions

The screenshot shows a Microsoft Edge browser window with three tabs open. The active tab displays the 'Recent Suggestions' page of the eVolunteer application. The page has a header with the eVolunteer logo and navigation links for 'Homepage', 'Suggestions', 'Volunteer Program', 'Participation Status', and 'Settings'. Below the header is a dark navigation bar with the text 'eVolunteer Suggestions'. The main content area is titled 'Recent Suggestions' and lists three items:

- Help Cleaning Up River** by @hyglobalhd, posted on 2022-01-19 12:12:34. It has 0 votes.
- Collect trash on beach at Port Dickson** by @usertest, posted on 2022-01-17 12:44:18. It has 2 votes.
- This is an example title** by @hyglobalhd, posted on 2021-12-28 10:07:15. It has 2 votes.

Pagination controls 'Pages: 1 Go' are located at the top and bottom of the list. The footer contains the copyright notice 'eVolunteer © 2021' and a link to '© 2021 eVolunteer'.

xxii. View Suggestions

The screenshot shows a Microsoft Edge browser window displaying a detailed view of a suggestion from the eVolunteer application. The active tab is 'localhost:8080/evol...view_suggestions.php?id=61e4f199bbc132.31331970'. The page header includes the eVolunteer logo and navigation links. The main content is centered around a suggestion titled '**Collect trash on beach at Port Dickson**'. The text states: 'I am suggesting that we made a volunteer program for collecting trash at Port Dickson.' Below this, it says 'Suggested day taken: 2 and half day.' and 'Suggested minimum participant: 5 people.' Two images are shown: a close-up photo of a sandy beach covered in various pieces of trash like plastic bottles and containers, and a wider photo showing a long stretch of beach with people and greenery in the background.

xxiii. All Volunteer Program

The screenshot shows a web browser window with three tabs open, all titled "eVolunteer - Volunteer Program". The active tab displays a list of volunteer programs. The header includes the "eVolunteer" logo and navigation links for "Homepage", "Suggestions", "Volunteer Program", "Participation Status", and "Settings". The main content area is titled "Volunteer Program" and lists three items:

- Help in cleaning up the flood affected aftermath**
@hyglobalhd
2022-01-19 09:38:57
Pages: 1 Go
Vote: 1
Participant: 1
- vp teststs**
@hyglobalhd
2022-01-17 14:59:29
Pages: 1 Go
Vote: 0
Participant: 2
- setse**
@hyglobalhd
2021-12-29 15:00:05
Pages: 1 Go
Vote: 0
Participant: 1

The footer contains the copyright notice "eVolunteer © 2021" and the year "© 2021 eVolunteer".

xxiv. View Volunteer Program

The screenshot shows a web browser window with three tabs open, all titled "eVolunteer - Volunteer Program". The active tab displays a detailed view of a volunteer program. The header includes the "eVolunteer" logo and navigation links for "Homepage", "Suggestions", "Volunteer Program", "Participation Status", and "Settings". The main content area is titled "Help in cleaning up the flood affected aftermath" and contains the following information:

I am organizing volunteer program for helping cleaning up the flood affected aftermath

For a period of 3 Weeks

Stay Safe

Estimated Start Date: 2022-01-27
Estimated End Date: 2022-01-31
Minimum Participant: 20
Original Suggestions Post: [Click Here](#)
View Participant: [Click here](#)

Picked by: @hyglobalhd
Volunteer Program picked on: 2022-01-19 09:38:57
Original Vote: 1

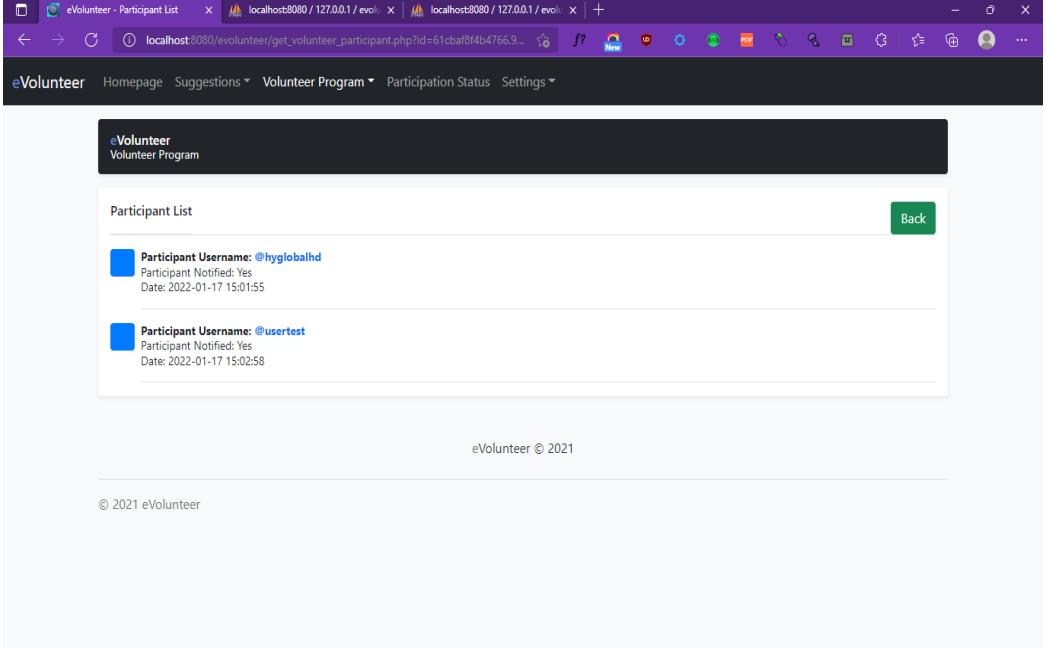
Like the volunteer program?? Participate Now!!

[unParticipate](#)

Current Participate Count: 1
[Edit Volunteer Program...](#)

Comment

xxv. View Participant List

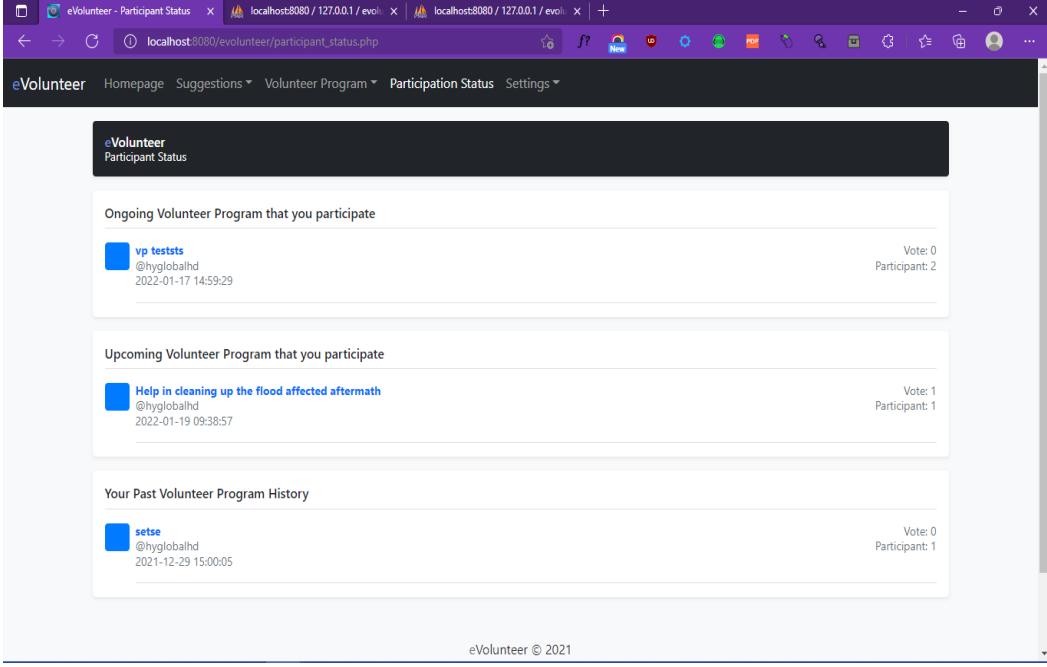


The screenshot shows a web browser window with three tabs open. The active tab is titled "eVolunteer - Participant List" and displays the "Participant List" page. The page header includes the "eVolunteer" logo and navigation links for "Homepage", "Suggestions", "Volunteer Program", "Participation Status", and "Settings". The main content area is titled "Participant List" and contains two entries:

- Participant Username: @hyglobalhd**
Participant Notified: Yes
Date: 2022-01-17 15:01:55
- Participant Username: @usertest**
Participant Notified: Yes
Date: 2022-01-17 15:02:58

A green "Back" button is located in the top right corner of the content area. At the bottom of the page, there is footer text: "eVolunteer © 2021" and "© 2021 eVolunteer".

xxvi. View Participant Status



The screenshot shows a web browser window with three tabs open. The active tab is titled "eVolunteer - Participant Status" and displays the "Participation Status" page. The page header includes the "eVolunteer" logo and navigation links for "Homepage", "Suggestions", "Volunteer Program", "Participation Status", and "Settings". The main content area is titled "eVolunteer Participant Status" and contains three sections:

- Ongoing Volunteer Program that you participate**
 - vp teststs**
@hyglobalhd
2022-01-17 14:59:29
- Upcoming Volunteer Program that you participate**
 - Help in cleaning up the flood affected aftermath**
@hyglobalhd
2022-01-19 09:38:57
- Your Past Volunteer Program History**
 - setsa**
@hyglobalhd
2021-12-29 15:00:05

At the bottom of each section, there are "Vote: 0" and "Participant: 2" or "1" counts. The footer text at the bottom of the page is "eVolunteer © 2021".

xxvii. View User Profile

The screenshot shows a Microsoft Edge browser window with three tabs open. The active tab is 'localhost:8080 / 127.0.0.1 / eVolunteer / volunteer/user_profile.php'. The page title is 'eVolunteer - User Profile' and the sub-page title is 'User Profile - hyglobalhd'. A message box at the top says 'All the listed below are only part of it and not all of it.' Below this, the 'User Details:' section lists the following information:

- Full Name:** AMIRUL ADLI FAHMI BIN AZAM
- Username:** hyglobalhd
- Created On:** 2022-01-19 10:03:36
- Total login:** 31
- Current Status:** Active
- Group Type:** ADMINISTRATOR

At the bottom right of this section is a blue 'Edit Profile' button. Below this is a 'List of Suggestions Given:' section. Under 'Top Voted Suggestions:', there is one entry: 'This is an example title @hyglobalhd 2021-12-28 10:07:15'. To the right of this entry is a small blue square icon and the text 'Vote: 2'.

xxviii. View Achievement

The screenshot shows a Microsoft Edge browser window with three tabs open. The active tab is 'localhost:8080 / 127.0.0.1 / eVolunteer / volunteer/view_achievement.php'. The page title is 'eVolunteer - Achievement' and the sub-page title is 'Homepage'. A message box at the top says 'Your Achievement'. Below this, the 'Achievement List' section displays three entries:

- Login 1**
Login for 10 times
Received on 2021-12-30 16:57:57
- Login 2**
Login for 30 times
Received on 2022-01-18 17:32:41
- Login 3**
Login for 50 times
Created on 2021-12-30 16:32:22

At the top right of the achievement list is a blue 'Create Achievement' button.

xxix. Ban/UnBan User

User Details:

Full Name: Amirul Fahmi
Username: userstest
Created On: 2022-01-19 12:31:14
Total login: 5
Current Status: Banned
Group Type: USER

[unBan User](#)

xxx. Create Achievement

Your Achievement

Login 1
Login for 10 times
Received on 2021-12-30 16:57:57

Login 2
Login for 30 times
Received on 2022-01-18 17:32:41

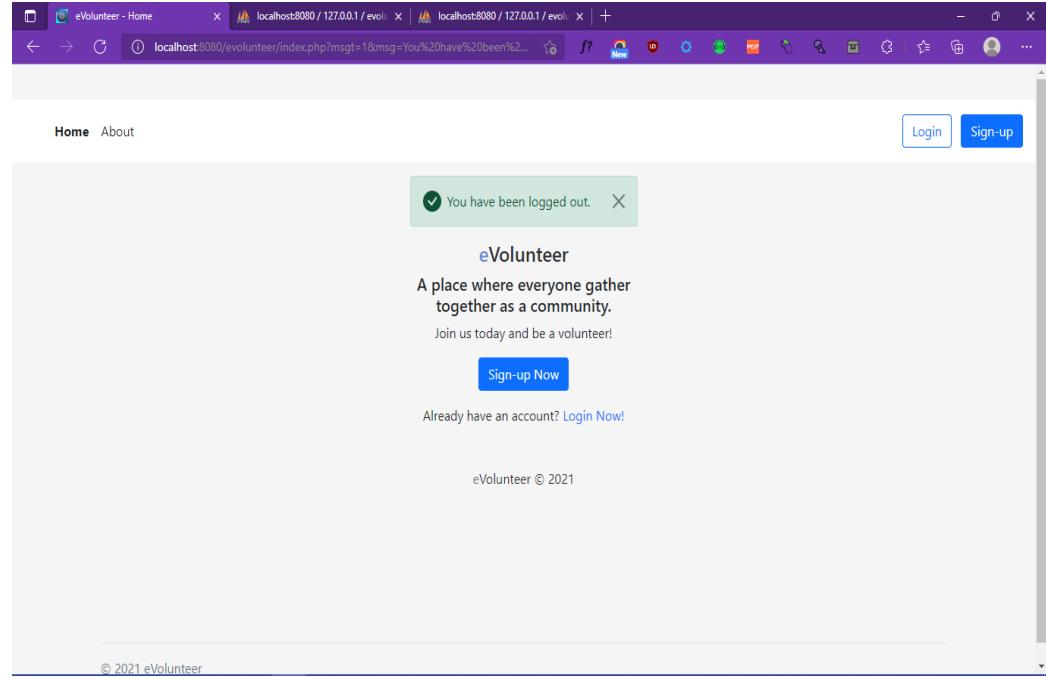
Achievement List

[Create Achievement](#)

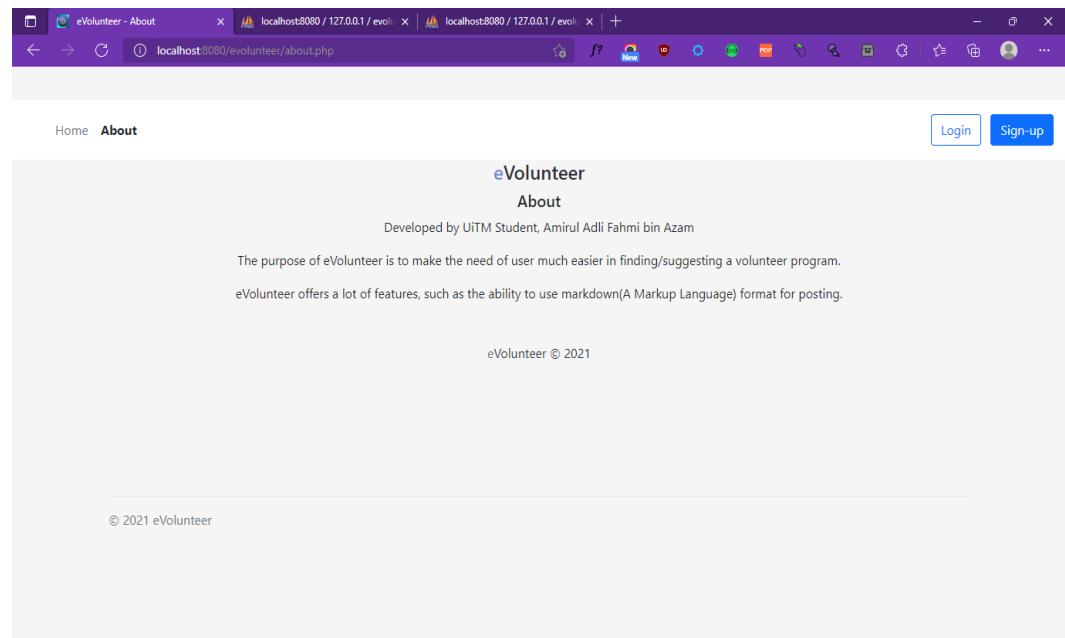
Login 1
Login for 10 times
Created on 2021-12-30 16:31:00

Login 2
Login for 30 times
Created on 2021-12-30 16:32:22

xxxii. Logout

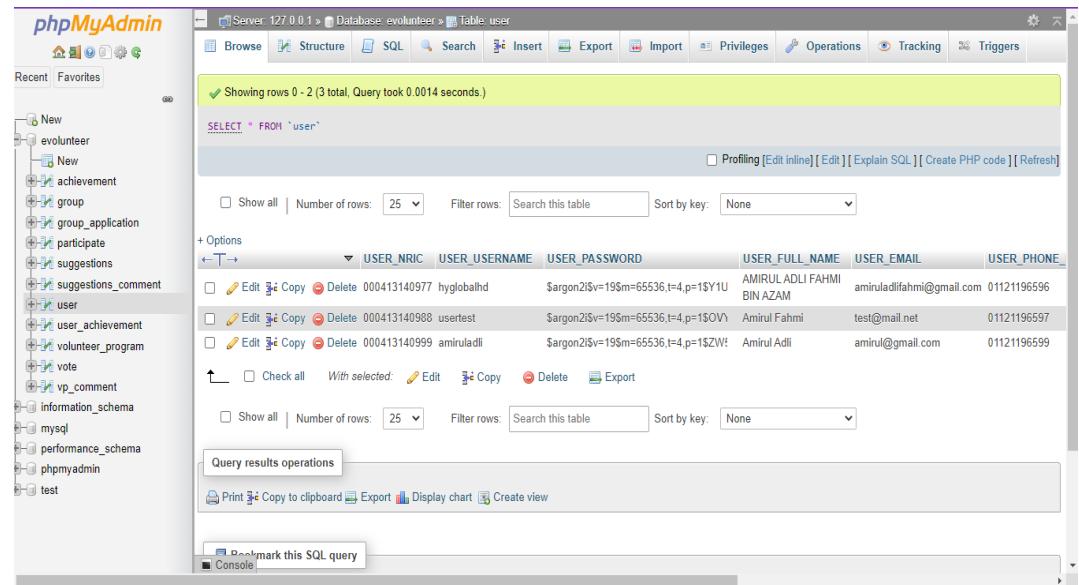


xxxiii. About



5.3 Process Interface

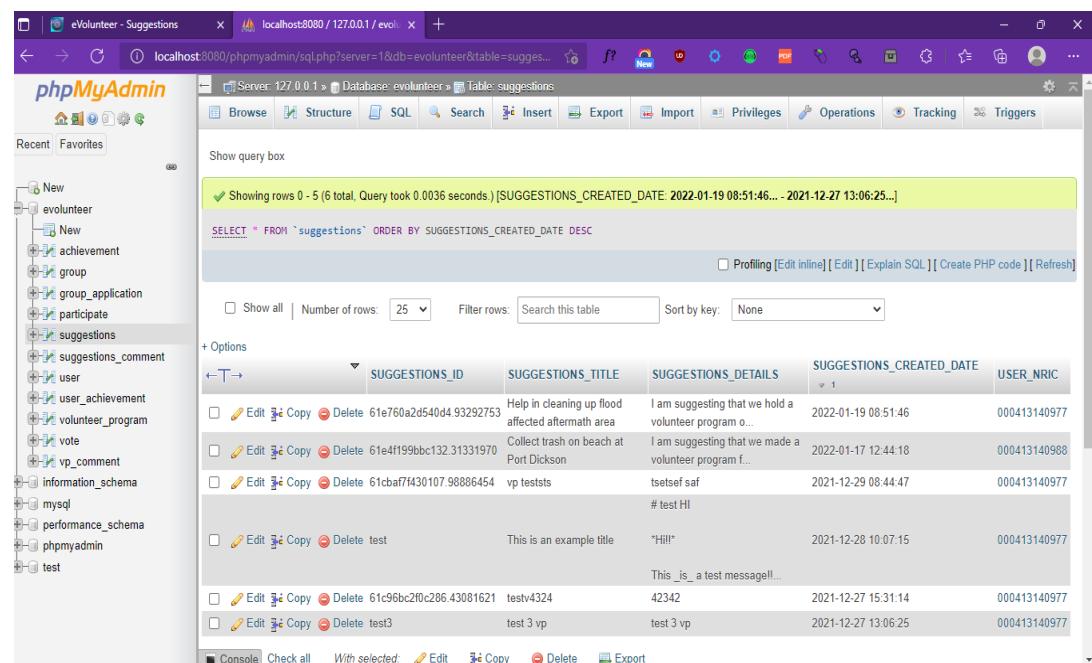
i. Registration



The screenshot shows the phpMyAdmin interface for the 'user' table in the 'evolunteer' database. The table contains three rows of data:

	USER_NRIC	USER_USERNAME	USER_PASSWORD	USER_FULL_NAME	USER_EMAIL	USER_PHONE
<input type="checkbox"/>	000413140977	hyglobalhd	\$argon2\$v=19\$m=65536,t=4,p=1\$Y1U	AMIRUL ADLI FAHMI BIN AZAM	amiruladlifahmi@gmail.com	01121196596
<input type="checkbox"/>	000413140988	userstest	\$argon2\$v=19\$m=65536,t=4,p=1\$OV!	Amirul Fahmi	test@mail.net	01121196597
<input type="checkbox"/>	000413140999	amiruladli	\$argon2\$v=19\$m=65536,t=4,p=1\$ZW!	Amirul Adli	amirul@gmail.com	01121196599

ii. Create Suggestions



The screenshot shows the phpMyAdmin interface for the 'suggestions' table in the 'evolunteer' database. The table contains several rows of data:

	SUGGESTIONS_ID	SUGGESTIONS_TITLE	SUGGESTIONS_DETAILS	SUGGESTIONS_CREATED_DATE	USER_NRIC
<input type="checkbox"/>	61e760a2d540da4.93292753	Help in cleaning up flood affected aftermath area	I am suggesting that we hold a volunteer program o...	2022-01-19 08:51:46	000413140977
<input type="checkbox"/>	61e4f199bbc132.31331970	Collect trash on beach at Port Dickson	I am suggesting that we made a volunteer program f...	2022-01-17 12:44:18	000413140988
<input type="checkbox"/>	61cba7f430107.98886454	vp teststs	tsetsef saf	2021-12-29 08:44:47	000413140977
<input type="checkbox"/>	test	This is an example title	*Hill*	2021-12-28 10:07:15	000413140977
			This _is_ a test message!!		
<input type="checkbox"/>	61c96bc2f0c286.43081621	testv4324	42342	2021-12-27 15:31:14	000413140977
<input type="checkbox"/>	test3	test 3 vp	test 3 vp	2021-12-27 13:06:25	000413140977

iii. Edit/Delete Suggestions

The screenshot shows the 'suggestions' table in phpMyAdmin. The table has columns: SUGGESTIONS_ID, SUGGESTIONS_TITLE, SUGGESTIONS_DETAILS, SUGGESTIONS_CREATED_DATE, and USER_NRIC. There are 6 rows of data:

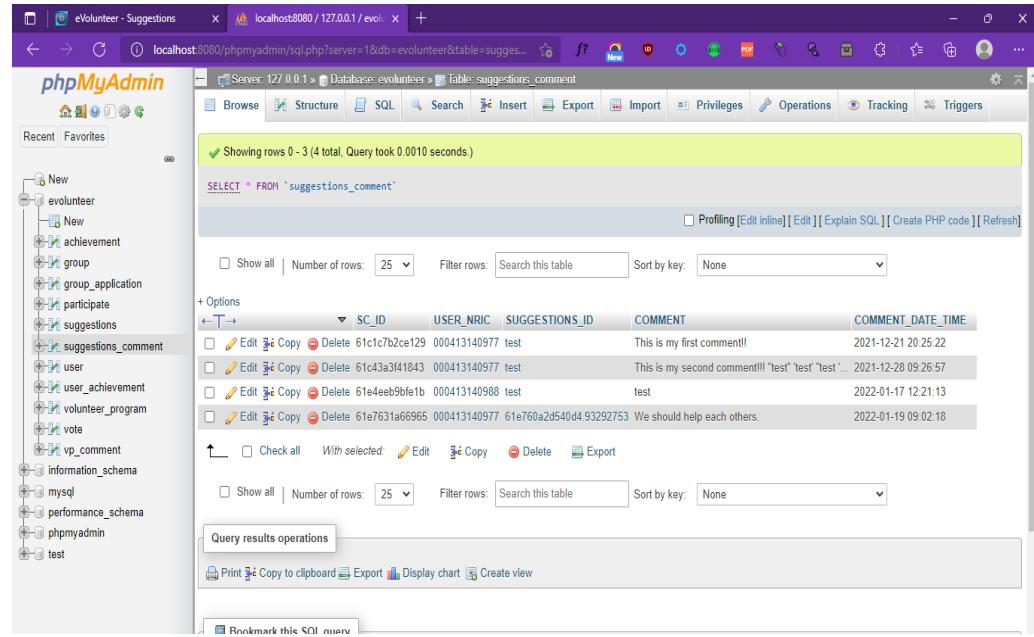
SUGGESTIONS_ID	SUGGESTIONS_TITLE	SUGGESTIONS_DETAILS	SUGGESTIONS_CREATED_DATE	USER_NRIC
61e760a2d540d4 93292753	Help in cleaning up the flood affected aftermath a	I am suggesting that we hold a volunteer program o...	2022-01-19 08:55:43	000413140977
61e4f199bbc132 31331970	Collect trash on beach at Port Dickson	I am suggesting that we made a volunteer program f...	2022-01-17 12:44:18	000413140988
61cbaf7f430107 98886454	vp testst	tself saf # test HI	2021-12-29 08:44:47	000413140977
test	This is an example title	'Hill'	2021-12-28 10:07:15	000413140977
61c96bc2f0c286 43081621	testv4324	This _is_ a test message!!	42342	2021-12-27 15:31:14
test3	test 3 vp	test 3 vp	2021-12-27 13:06:25	000413140977

iv. Vote/UnVote

The screenshot shows the 'vote' table in phpMyAdmin. The table has columns: USER_NRIC, SUGGESTIONS_ID, and VOTE_DATE. There are 5 rows of data:

USER_NRIC	SUGGESTIONS_ID	VOTE_DATE
000413140977	61e4f199bbc132 31331970	2022-01-17 15:14:05
000413140977	61e760a2d540d4 93292753	2022-01-19 08:58:46
000413140977	test	2021-12-28 11:12:01
000413140988	61e4f199bbc132 31331970	2022-01-17 12:44:37
000413140988	test	2022-01-17 12:26:05

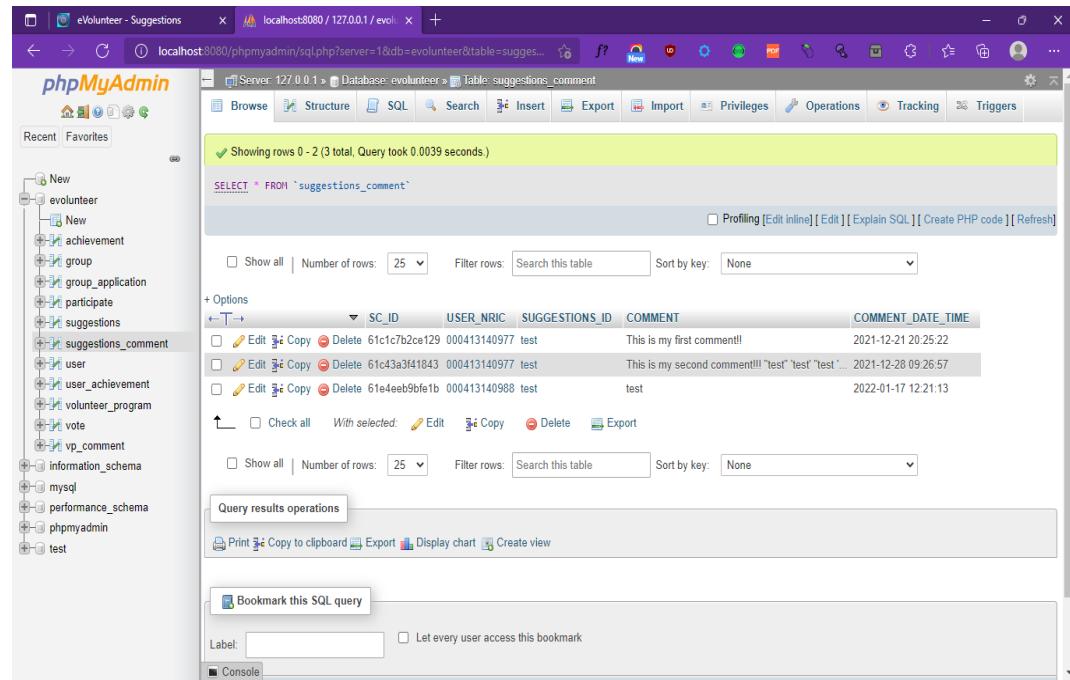
v. New Suggestions Comment



The screenshot shows the phpMyAdmin interface for the 'suggestions_comment' table. The table has columns: SC_ID, USER_NRIC, SUGGESTIONS_ID, COMMENT, and COMMENT_DATE_TIME. The data is as follows:

SC_ID	USER_NRIC	SUGGESTIONS_ID	COMMENT	COMMENT_DATE_TIME
61c1c7b2ce129	000413140977	test	This is my first comment!!	2021-12-21 20:25:22
61c43a3f41843	000413140977	test	This is my second comment!!! "test" "test" "test"	2021-12-28 09:26:57
61e4eeb9bf1b	000413140988	test	test	2022-01-17 12:21:13
61e7631a66965	000413140977	61e760a2d540d4 93292753	We should help each others.	2022-01-19 09:02:18

vi. Edit/Delete Suggestions Comment



The screenshot shows the phpMyAdmin interface for the 'suggestions_comment' table. The table has columns: SC_ID, USER_NRIC, SUGGESTIONS_ID, COMMENT, and COMMENT_DATE_TIME. The data is as follows:

SC_ID	USER_NRIC	SUGGESTIONS_ID	COMMENT	COMMENT_DATE_TIME
61c1c7b2ce129	000413140977	test	This is my first comment!!	2021-12-21 20:25:22
61c43a3f41843	000413140977	test	This is my second comment!!! "test" "test" "test"	2021-12-28 09:26:57
61e4eeb9bf1b	000413140988	test	test	2022-01-17 12:21:13

vii. Create Volunteer Program

The screenshot shows the phpMyAdmin interface for the 'volunteer' database. The left sidebar lists various tables, and the main area displays the 'volunteer_program' table. A green status bar at the top indicates 'Showing rows 0 - 2 (3 total, Query took 0.0013 seconds.)'. The table has columns: VP_ID, VP_TITLE, VP_DETAILS, VP_START_DATE, VP_END_PROGRAM, VP_MINIMUM_PARTICIPANT, and VP_PICKED. Three rows are listed:

VP_ID	VP_TITLE	VP_DETAILS	VP_START_DATE	VP_END_PROGRAM	VP_MINIMUM_PARTICIPANT	VP_PICKED
61cba8f4b4766.97973631	vp tests	tsetself saf	2022-01-18	2022-01-21	2	2022-01-17
61e76531007603.07660329	Help in cleaning up	I am organizing volunteer program for the flood affected aftermath	2022-01-26	2022-01-31	20	2022-01-19
test	setse	tsetw	2021-12-29	2022-01-03	3	2021-12-29

viii. Edit/Delete Volunteer Program

This screenshot is identical to the previous one, showing the phpMyAdmin interface for the 'volunteer' database. The 'volunteer_program' table is displayed with the same three rows. The third row, which contains the 'test' entry, is selected. The status bar at the top shows 'Showing rows 0 - 2 (3 total, Query took 0.0032 seconds.)'. The table structure and data remain the same.

ix. Participate/UnParticipate Volunteer Program

Showing rows 0 - 3 (4 total). Query took 0.0012 seconds.

```
SELECT * FROM `participate`
```

	USER_NRIC	VP_ID	PARTICIPATE_DATE	PARTICIPATE_NOTIFIED
<input type="checkbox"/>	000413140977	61cbaf8f4b4766.97973631	2022-01-17 15:01:55	1
<input type="checkbox"/>	000413140977	61e76531007603.07660329	2022-01-19 09:41:03	0
<input type="checkbox"/>	test		2022-01-17 09:15:33	0
<input type="checkbox"/>	000413140988	61cbaf8f4b4766.97973631	2022-01-17 15:02:58	1

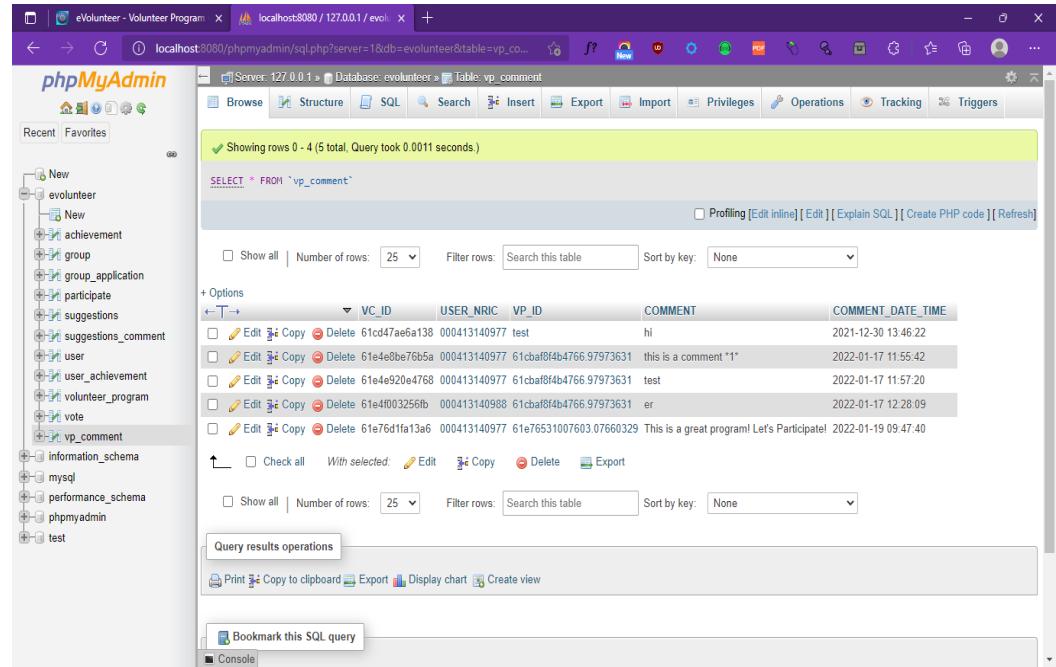
x. New Volunteer Program Comment

Showing rows 0 - 4 (5 total). Query took 0.0016 seconds.

```
SELECT * FROM `vp_comment`
```

	VC_ID	USER_NRIC	VP_ID	COMMENT	COMMENT_DATE_TIME
<input type="checkbox"/>	61cd47aaea138	000413140977	test	hi	2021-12-30 13:46:22
<input type="checkbox"/>	61e4e80be76b5a	000413140977	61cbaf8f4b4766.97973631	this is a comment *1*	2022-01-17 11:55:42
<input type="checkbox"/>	61e4e920e4768	000413140977	61cbaf8f4b4766.97973631	test	2022-01-17 11:55:20
<input type="checkbox"/>	61e4f003256b	000413140988	61cbaf8f4b4766.97973631	er	2022-01-17 12:28:09
<input type="checkbox"/>	61e76d1fa13a6	000413140977	61e76531007603.07660329	This is a great program!	2022-01-19 09:45:03

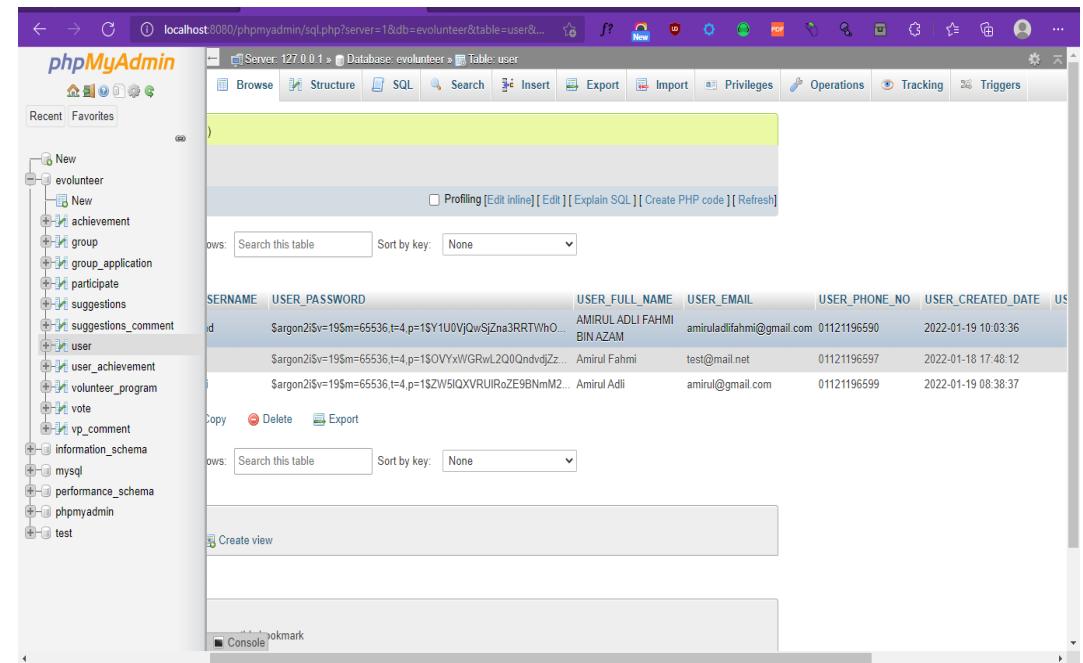
xi. Edit/Delete Volunteer Program Comment



The screenshot shows the phpMyAdmin interface for the vp_comment table in the volunteer database. The table has columns: VC_ID, USER_NRIC, VP_ID, COMMENT, and COMMENT_DATE_TIME. There are five rows of data:

VC_ID	USER_NRIC	VP_ID	COMMENT	COMMENT_DATE_TIME
61cd47ae6a138	000413140977	test	hi	2021-12-30 13:46:22
61e4e8be76b5a	000413140977	61caba0f4b4766	this is a comment *1*	2022-01-17 11:55:42
61e4e920a4768	000413140977	61caba0f4b4766	test	2022-01-17 11:57:20
61e4f00325fb	000413140988	61caba0f4b4766	er	2022-01-17 12:28:09
61e76d1fa13a6	000413140977	61e76531007603.07660329	This is a great program! Let's Participate!	2022-01-19 09:47:40

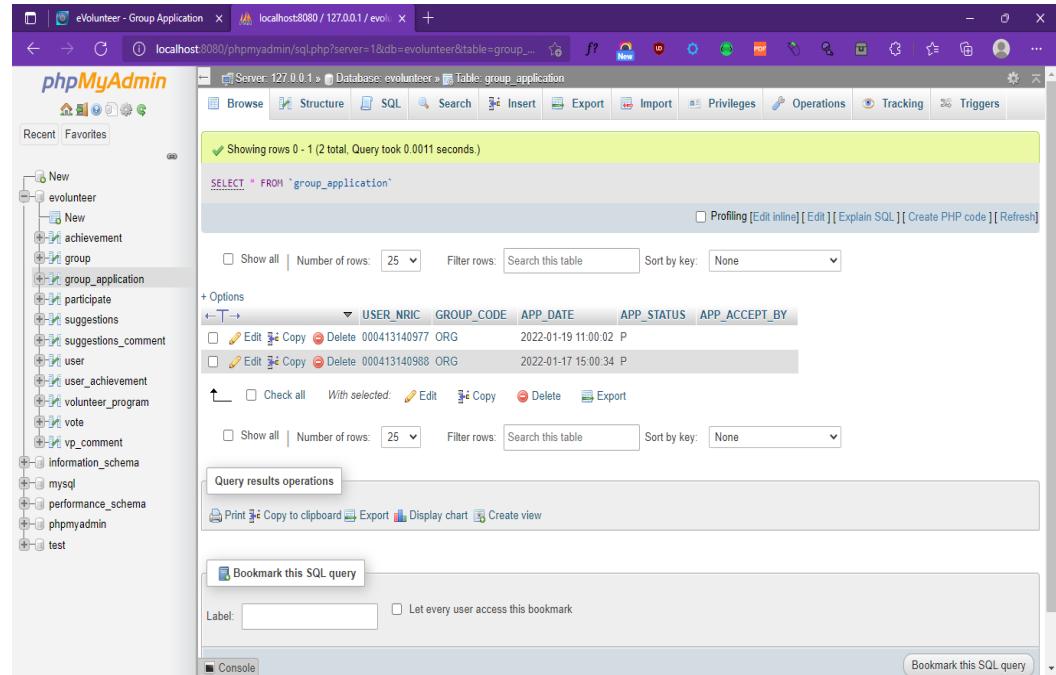
xii. Update User Profile



The screenshot shows the phpMyAdmin interface for the user table in the volunteer database. The table has columns: SERNAME, USER_PASSWORD, USER_FULL_NAME, USER_EMAIL, USER_PHONE_NO, USER_CREATED_DATE, and US. There are three rows of data:

SERNAME	USER_PASSWORD	USER_FULL_NAME	USER_EMAIL	USER_PHONE_NO	USER_CREATED_DATE	US
Sargon2\$y=19\$m=65536;t=4,p=1\$Y1U0VjQwSjZna3RRTWhO...	\$argon2\$y=19\$m=65536,t=4,p=1\$Y1U0VjQwSjZna3RRTWhO...	AMIRUL ADLI FAHMI BIN AZAM	amiruladlifahmi@gmail.com	01121196590	2022-01-19 10:03:36	
Sargon2\$y=19\$m=65536;t=4,p=1\$OVVyxWGRvL2Q0QndvdjZ...	Sargon2\$y=19\$m=65536;t=4,p=1\$OVVyxWGRvL2Q0QndvdjZ...	Amirul Fahmi	test@mail.net	01121196597	2022-01-18 17:48:12	
Sargon2\$y=19\$m=65536;t=4,p=1\$ZW5IQXVRUIRoZE9NmM2...	Sargon2\$y=19\$m=65536;t=4,p=1\$ZW5IQXVRUIRoZE9NmM2...	Amirul Adli	amirul@gmail.com	01121196599	2022-01-19 08:38:37	

xiii. Group Application Apply



The screenshot shows the phpMyAdmin interface for the 'evolunteer' database. The left sidebar lists tables: New, achievement, group, group_application, participate, suggestions, suggestions_comment, user, user_achievement, volunteer_program, vote, vp_comment, information_schema, mysql, performance_schema, phpmyadmin, and test. The 'group_application' table is selected. The main area displays the following SQL query:

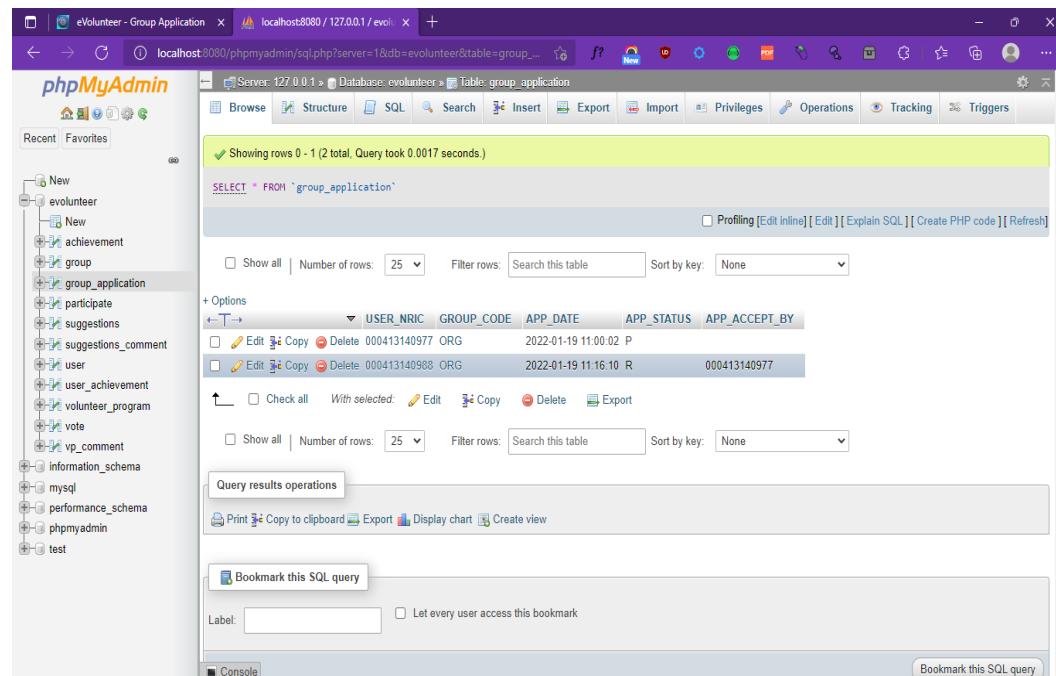
```
SELECT * FROM `group_application`
```

The results show two rows:

	USER_NRIC	GROUP_CODE	APP_DATE	APP_STATUS	APP_ACCEPT_BY
<input type="checkbox"/>	000413140977	ORG	2022-01-19 11:00:02	P	
<input type="checkbox"/>	000413140988	ORG	2022-01-17 15:00:34	P	

Below the table, there are buttons for Edit, Copy, Delete, and Export. The bottom of the screen shows a 'Query results operations' section with options like Print, Copy to clipboard, Export, Display chart, Create view, and a 'Bookmark this SQL query' button.

xiv. Admin Group Application Edit



The screenshot shows the phpMyAdmin interface for the 'evolunteer' database. The left sidebar lists tables: New, achievement, group, group_application, participate, suggestions, suggestions_comment, user, user_achievement, volunteer_program, vote, vp_comment, information_schema, mysql, performance_schema, phpmyadmin, and test. The 'group_application' table is selected. The main area displays the following SQL query:

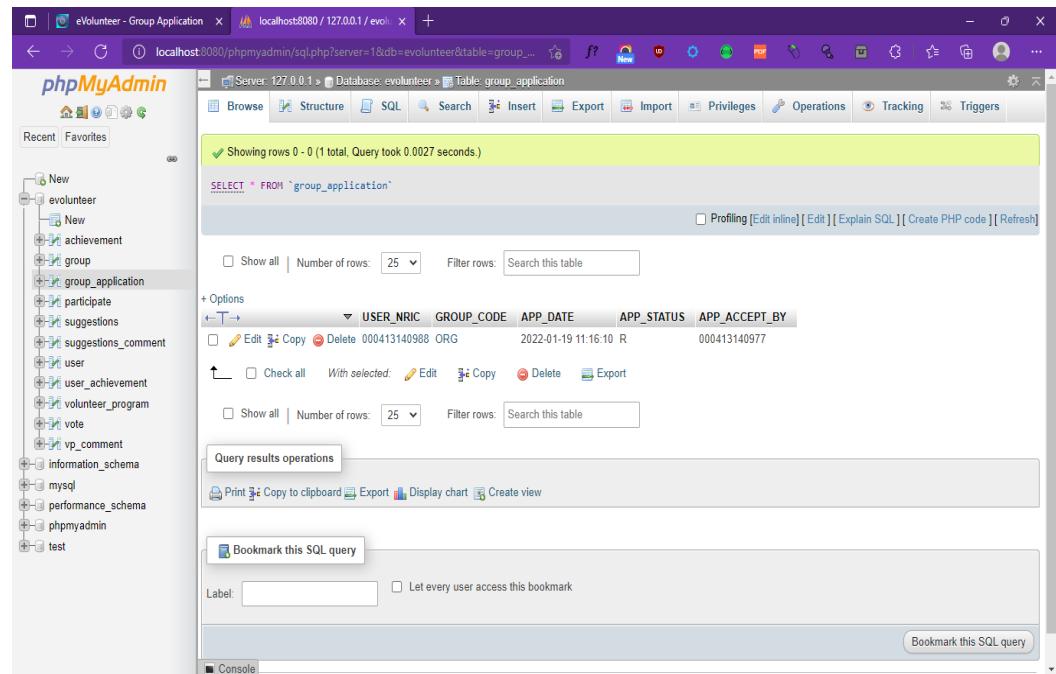
```
SELECT * FROM `group_application`
```

The results show two rows, but the second row has been modified:

	USER_NRIC	GROUP_CODE	APP_DATE	APP_STATUS	APP_ACCEPT_BY
<input type="checkbox"/>	000413140977	ORG	2022-01-19 11:00:02	P	
<input checked="" type="checkbox"/>	000413140988	ORG	2022-01-19 11:16:10	R	000413140977

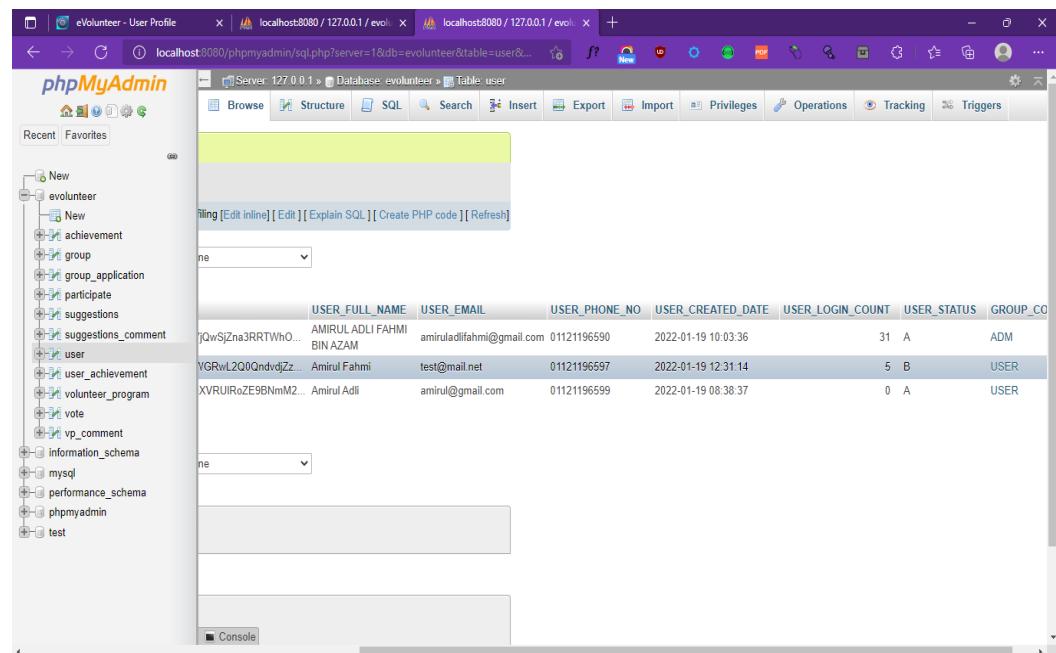
Below the table, there are buttons for Edit, Copy, Delete, and Export. The bottom of the screen shows a 'Query results operations' section with options like Print, Copy to clipboard, Export, Display chart, Create view, and a 'Bookmark this SQL query' button.

xv. User Group Application Cancel



The screenshot shows the phpMyAdmin interface for the 'evolunteer' database. The left sidebar lists tables: New, achievement, group, group_application, participate, suggestions, suggestions_comment, user, user_achievement, volunteer_program, vote, vp_comment, information_schema, mysql, performance_schema, phpmyadmin, and test. The 'group_application' table is selected. The main area displays the table structure with columns: USER_NRIC, GROUP_CODE, APP_DATE, APP_STATUS, and APP_ACCEPT_BY. A single row is shown with values: 000413140988, ORG, 2022-01-19 11:16:10 R, and 000413140977. Below the table are buttons for Edit, Copy, Delete, Check all, and With selected. The bottom section contains a 'Query results operations' panel with Print, Copy to clipboard, Export, Display chart, and Create view options.

xvi. Ban/UnBan User



The screenshot shows the phpMyAdmin interface for the 'evolunteer' database. The left sidebar lists tables: New, achievement, group, group_application, participate, suggestions, suggestions_comment, user, user_achievement, volunteer_program, vote, vp_comment, information_schema, mysql, performance_schema, phpmyadmin, and test. The 'user' table is selected. The main area displays the table structure with columns: USER_FULL_NAME, USER_EMAIL, USER_PHONE_NO, USER_CREATED_DATE, USER_LOGIN_COUNT, USER_STATUS, and GROUP_CODE. Three rows are listed:

	USER_FULL_NAME	USER_EMAIL	USER_PHONE_NO	USER_CREATED_DATE	USER_LOGIN_COUNT	USER_STATUS	GROUP_CODE
JQwSjZna3RRTWh0...	AMIRUL ADLI FAHMI	amiruladlifahmi@gmail.com	01121196590	2022-01-19 10:03:36	31	A	ADM
VGRwL2Q0QndvdjZz...	Amirul Fahmi	test@mail.net	01121196597	2022-01-19 12:31:14	5	B	USER
XVRUIRoZE9BNmM2...	Amirul Adli	amirul@gmail.com	01121196599	2022-01-19 08:38:37	0	A	USER

xvii. Create Achievement

The screenshot shows the phpMyAdmin interface for the 'evolunteer' database. The left sidebar lists tables such as achievement, group, user, and achievement. The main area displays the 'achievement' table with the following data:

	ACHIEVEMENT_ID	ACHIEVEMENT_NAME	ACHIEVEMENT_DESCRIPTION	ACHIEVEMENT_CREATED_DATE	USER_NRIC
<input type="checkbox"/>	Edit Copy Delete	login_1	Login 1 Login for 10 times	2021-12-30 16:31:00	000413140977
<input type="checkbox"/>	Edit Copy Delete	login_2	Login 2 Login for 30 times	2021-12-30 16:32:22	000413140977
<input type="checkbox"/>	Edit Copy Delete	login_3	Login 3 Login for 50 times	2021-12-30 16:33:11	000413140977
<input type="checkbox"/>	Edit Copy Delete	suggestion_1	Suggestion 1 Create suggestion a total of 10 post	2021-12-30 16:35:58	000413140977
<input type="checkbox"/>	Edit Copy Delete	suggestion_2	Suggestion 2 Create suggestion a total of 30 post	2021-12-30 16:36:47	000413140977
<input type="checkbox"/>	Edit Copy Delete	suggestion_3	Suggestion 3 Create suggestion a total of 50 post	2021-12-30 16:37:08	000413140977
<input type="checkbox"/>	Edit Copy Delete	test	testing testing achievement input	2022-01-19 12:39:13	000413140977
<input type="checkbox"/>	Edit Copy Delete	volunteer_1	Participate in volunteer program for a total of 10...	2021-12-30 16:42:15	000413140977
<input type="checkbox"/>	Edit Copy Delete	volunteer_2	Participate in volunteer program for a total of 30...	2021-12-30 16:43:22	000413140977
<input type="checkbox"/>	Edit Copy Delete	volunteer_3	Participate in volunteer program for a total of 50...	2021-12-30 16:42:55	000413140977
<input type="checkbox"/>	Edit Copy Delete	vote_1	Vote 1 Vote for suggestion for a total of 10 times	2021-12-30 16:39:46	000413140977
<input type="checkbox"/>	Edit Copy Delete	vote_2	Vote 2 Vote for suggestion for a total of 30 times	2021-12-30 16:40:04	000413140977
<input type="checkbox"/>	Edit Copy Delete	vote_3	Vote 3 Vote for suggestion for a total of 50 times	2021-12-30 16:40:21	000413140977

6.0 System Testing

6.1 Introduction

To make sure the project is presentable for deployment, we have run system testing to ensure that the system is not vulnerable with the security flaws, fixing bugs that does not output the required results, fix logic errors, make sure validation is correct, and test all the functions to ensure there is no bugs.

6.2 Test summary

6.2.1 Unit Testing

The test for unit testing has been conducted by taking a part of the essentials functions for testing and have been checked to accomplish the anticipated results.

6.2.2 Integration Testing

For the integration testing, we have done the test on the module to see if the system integrating properly or otherwise, by combining the module and test it as a group.

6.2.3 System testing

For the system testing, we have tested the whole web-application system to check whether the system is properly working or otherwise as per requirement set.

6.3 Test assessment

Organization Responsibility	Signature	Date
<i>Customer/customer representative (if applicable)</i>		
<i>Project Manager</i>		
<i>Software Tester #1</i>		
<i>Software Tester #2 (if applicable)</i>		
<i>Software Tester #3 (if applicable)</i>		
<i>Software Tester #4 (if applicable)</i>		
<i>Software Tester #5 (if applicable)</i>		
<i>Examiner/Lecturer #1</i>		24 th January 2022
<i>Examiner/Lecturer #2 (if applicable)</i>	Norasmah Jaafar	

6.4 Test result

Test Case #: 1	Test Case Name: Registration
System: eVolunteer	Subsystem:
Designed by: Amirul Adli Fahmi bin Azam	Design Date: 19 January 2022
Executed by: Amirul Adli Fahmi bin Azam	Execution Date: 19 January 2022
Short Description: To test registration system functions and input filters	

Step	Action	Expected System Response	Pass/Fail	Comment
1	Click Sign-Up Button	Direct user to user registration page	Pass	
2	Click Register Button	Does not do anything, and highlight user to input data	Pass	
3	Enter existing data into the input and try to register	Shows an error that the user is already registered and recommend user to login instead.	Pass	
4	Input a wrong input format for email	It highlights the input box, and tells user that the input is in wrong format	Pass	
5	Put input not the same as confirm password	Tells the user that the password is not matched.	Pass	
6	Put input except one input box and submit the input	Highlight the missing input, and ask the user to input the data	Pass	
7	Input unregistered data and register the user	Will process the data and try to input the user data into the database, and if successful it will tell the user that their registration is successful and give a link to login.	Pass	

7.0 Findings And Observations

7.1 System strengths

After many runs, testing and observations, I have found the system strengths, such as:

- a) Security in user inputs, it checks the user input and required the user to enter the required format.
- b) Unique ability of using Markdown(Markup Language) to enhance the user experience in making a post.
- c) Simple and user-friendly interfaces, that allow user to understand on how to use it after a few runs.
- d) Innovative features, such as achievements and commenting subsystems.
- e) Input security, where the ability to allow and accept unique characters such as single colon and double colon and can't have security flaws like SQL injections.
- f) Security checker where user without enough permission, can't access the pages. (E.g., Normal user trying to edit other user information).

7.2 System weaknesses

Even the most secured places have their own weaknesses, and after some detailed researched on the systems, I have found the system weakness, such as:

- a) The use message in the URL, that directly can put a message to the pages.
This can be a major flaw, as it could be used for people to put a bad message.
- b) Because of using NRIC number as a unique identifier, the user scope is limited to user with NRIC only.
- c) There is no user confirmation that the user is the one with the said NRIC number.
- d) Doesn't have any confirmation or verifications to the email and phone numbers.

7.3 Recommendation for future works

The web-application project, eVolunteer, could expands furthers and have many features. Some of the recommendation I would love to see for the future is that.

- a) The ability to preview the user post, before creating a new post.
- b) Word filter and malicious link checker, or moderator to check on user.
- c) Leveling subsystem, where user can have their own level, and shows their level next to their username. To level, user must do specific tasks beforehand (E.g., Obtain achievements, join many programs, and posting). This is to make the application more engaging for user.
- d) To also allow Markdown(Markup Language) to be enable for comment sections.
- e) To push a notification to user email, and phone.
- f) If wanting to make the web-application more international, it is recommended to use username for the primary key, and not use NRIC number.
- g) Make a report subsystem, to allow user to report another user for misbehaviors.
- h) Add more details on about page, for example, give a user manual on how to use the web-application.
- i) Add a subcategory system, to filter out the post via regions, to ensure that user can find post based on their regions.
- j) If the future has plans on having server room, it is recommended to allow user to have their own user profile.
- k) Enhance the communication for organizer and their participants, add a communication subsystem.
- l) Give more features for organizer, such as the ability to mark the participant is present or not.
- m) Add a verification, to verify the user email and phone numbers.
- n) Add latest news section, where it takes from news media, to give user an idea on the latest news.

7.4 Conclusion

After many runs, and observations, I have come to the conclusions. The system has a lot of potentials in how it operates and design, the systems have great strengths that could also be improved, and the weakness can be easily overcome by doing some changes. The system also could potentially hold greats features, for it to become more complete and allow the best user experience. The system idea itself is very helpful and useful for the society, let take the recent accidents with floods, with the systems, we can easily gather people to volunteer and let user have a platform where they could help each other's.

8.0 REFERENCES

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Appendix

achievement

Column	Type	Nul l	Default	Links to	Commen ts	Media (MIM E) type
ACHIEVEMENT_ID (<i>Primary</i>)	varchar(15)	No				
ACHIEVEMENT_NAME	varchar(50)	No				
ACHIEVEMENT_DESCRIPTION	varchar(150)	Yes	NULL			
ACHIEVEMENT_CREATED_DATE	timestamp	No	current_timestamp()			
USER_NRIC	varchar(12)	No		user -> USER_NRIC		

Indexes

Keyname	Type	Uniqu e	Packe d	Column	Cardinalit y	Collatio n	Nul l	Commen t
PRIMARY	BTRE E	Yes	No	ACHIEVEMENT_ID	11	A	No	

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
achievement_ibfk_1	BTREE	No	No	USER_NRIC	2	A	No	

group

Column	Type	Null	Default	Links to	Comments	Media (MIME) type
GROUP_CODE (<i>Primary</i>)	varchar(15)	No				
GROUP_NAME	varchar(50)	Yes	NULL			
GROUP_REMARKS	varchar(100)	Yes	NULL			
GROUP_CREATED_BY	varchar(12)	No				
GROUP_CREATED_DATE	timestamp	No	current_timestamp()			

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	GROUP_CODE	2	A	No	

group_application

Column	Type	Nul l	Default	Links to	Comment s	Media (MIME) type
USER_NRIC (<i>Primary</i>)	varchar(12)	No		user -> USER_NRIC		
GROUP_CODE (<i>Primary</i>)	varchar(15)	No		group -> GROUP_CODE		
APP_DATE	timestamp	No	current_timestamp()			
APP_STATUS	varchar(10)	No				
APP_ACCEPT_BY	varchar(12)	Yes	NULL			

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	USER_NRIC	1	A	No	

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
				GROUP_CODE	1	A	No	
GROUP_CODE	BTREE	No	No	GROUP_CODE	1	A	No	

participate

Column	Type	Nul l	Default	Links to	Comment s	Media (MIME) type
USER_NRIC (<i>Primary</i>)	varchar(12)	No		user -> USER_NRIC		
VP_ID (<i>Primary</i>)	varchar(25)	No		volunteer_progra m -> VP_ID		
PARTICIPATE_DATE	timestamp	No	current_timestamp ()			
PARTICIPATE_NOTIFI ED	tinyint(1)	No				

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	USER_NRIC	2	A	No	
				VP_ID	2	A	No	

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
VP_ID	BTREE	No	No	VP_ID	2	A	No	

suggestions

Column	Type	Nul l	Default	Links to	Commen ts	Media (MIM E) type
SUGGESTIONS_ID (<i>Primary</i>)	varchar(25)	No				
SUGGESTIONS_TITLE	varchar(50)	No				
SUGGESTIONS_DETAILS	longtext	No				
SUGGESTIONS_CREATED_DATE	timestamp	No	current_timestamp()			
USER_NRIC	varchar(12)	No		user -> USER_NRIC		

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Nul	Comment
PRIMARY	BTREE	Yes	No	SUGGESTIONS_ID	5	A	No	
suggestions_ibfk_1	BTREE	No	No	USER_NRIC	2	A	No	

suggestions_comment

Column	Type	Nul	Default	Links to	Comments	Media (MIME) type
SC_ID (<i>Primary</i>)	varchar(15)	No				
USER_NRIC	varchar(12)	No		user -> USER_NRIC		
SUGGESTIONS_ID	varchar(25)	No		suggestions -> SUGGESTIONS_ID		
COMMENT	text	No				
COMMENT_DATE_TIME	timestamp	No	current_timestamp()			

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Nul	Comment
PRIMARY	BTREE	Yes	No	SC_ID	3	A	No	
SUGGESTIONS_ID	BTREE	No	No	SUGGESTIONS_ID	3	A	No	
suggestions_comment_ib_fk_2	BTREE	No	No	USER_NRIC	3	A	No	

user

Column	Type	Null	Default	Links to	Comments	Media (MIME) type
USER_NRIC (<i>Primary</i>)	varchar(12)	No				
USER_USERNAME	varchar(50)	No				
USER_PASSWORD	char(100)	No				
USER_FULL_NAME	varchar(150)	No				
USER_EMAIL	varchar(100)	No				
USER_PHONE_NO	varchar(15)	No				

USER_CREATED_DATE	timestamp	No	current_timestamp()			
USER_LOGIN_COUNT	int(11)	No				
USER_STATUS	char(5)	No				
GROUP_CODE	varchar(15)	No		group -> GROUP_CODE		

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	USER_NRIC	3	A	No	
GROUP_CODE	BTREE	No	No	GROUP_CODE	3	A	No	

user_achievement

Column	Type	Null	Default	Links to	Comments	Media (MIME) type
USER_NRIC (Primary)	varchar(12)	No		user -> USER_NRIC		

ACHIEVEMENT_ID (<i>Primary</i>)	varchar(15)	No		achievement -> ACHIEVEMENT_ID		
RECEIVED_DATE	timestamp	No	current_timestamp	p()		

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Nul	Comme
PRIMARY	BTREE	Yes	No	USER_NRIC	0	A	No	
				ACHIEVEMENT_ID	0	A	No	
ACHIEVEMENT_ID	BTREE	No	No	ACHIEVEMENT_ID	0	A	No	

volunteer_program

Column	Type	Null	Default	Links to	Comments	Media (MIME) type
VP_ID (<i>Primary</i>)	varchar(25)	No				
VP_TITLE	varchar(50)	No				
VP_DETAILS	longtext	No				
VP_START_DATE	date	No				

VP_END_PROGRAM	date	No				
VP_MINIMUM_PARTICIPANT	int(11)	No				
VP_PICKED_DATE	timestamp	No	current_timestamp p()			
USER_NRIC	varchar(12)	No		user -> USER_NRIC		
SUGGESTIONS_ID	varchar(25)	No		suggestions -> SUGGESTIONS_ID		

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Nul	Comment
PRIMARY	BTREE	Yes	No	VP_ID	2	A	No	
USER_NRIC	BTREE	No	No	USER_NRIC	2	A	No	
volunteer_program_ibfk_2	BTREE	No	No	SUGGESTIONS_ID	2	A	No	

vote

Column	Type	Nul l	Default	Links to	Commen ts	Media (MIM E) type
USER_NRIC (<i>Primary</i>)	varchar(12)	No		user -> USER_NRIC		
SUGGESTIONS_ID (<i>Primary</i>)	varchar(25)	No		suggestions -> SUGGESTIONS_ID		
VOTE_DATE	timestamp	No	current_timestamp()			

Indexes

Keyname	Type	Uniqu e	Packe d	Column	Cardinalit y	Collatio n	Nul l	Commen t
PRIMARY	BTRE E	Yes	No	USER_NRIC	4	A	No	
				SUGGESTIONS_ID	4	A	No	
SUGGESTIONS_ID	BTRE E	No	No	SUGGESTIONS_ID	4	A	No	

vp_comment

Column	Type	Nul l	Default	Links to	Comment s	Media (MIME) type
VC_ID (<i>Primary</i>)	varchar(15)	No				
USER_NRIC	varchar(12)	No		user -> USER_NRIC		
VP_ID	varchar(25)	No		volunteer_program -> VP_ID		
COMMENT	text	No				
COMMENT_DATE_TI ME	timestamp	No	current_timestamp ()			

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	VC_ID	3	A	No	
VP_ID	BTREE	No	No	VP_ID	3	A	No	
vp_comment_ibfk_1	BTREE	No	No	USER_NRIC	3	A	No	