



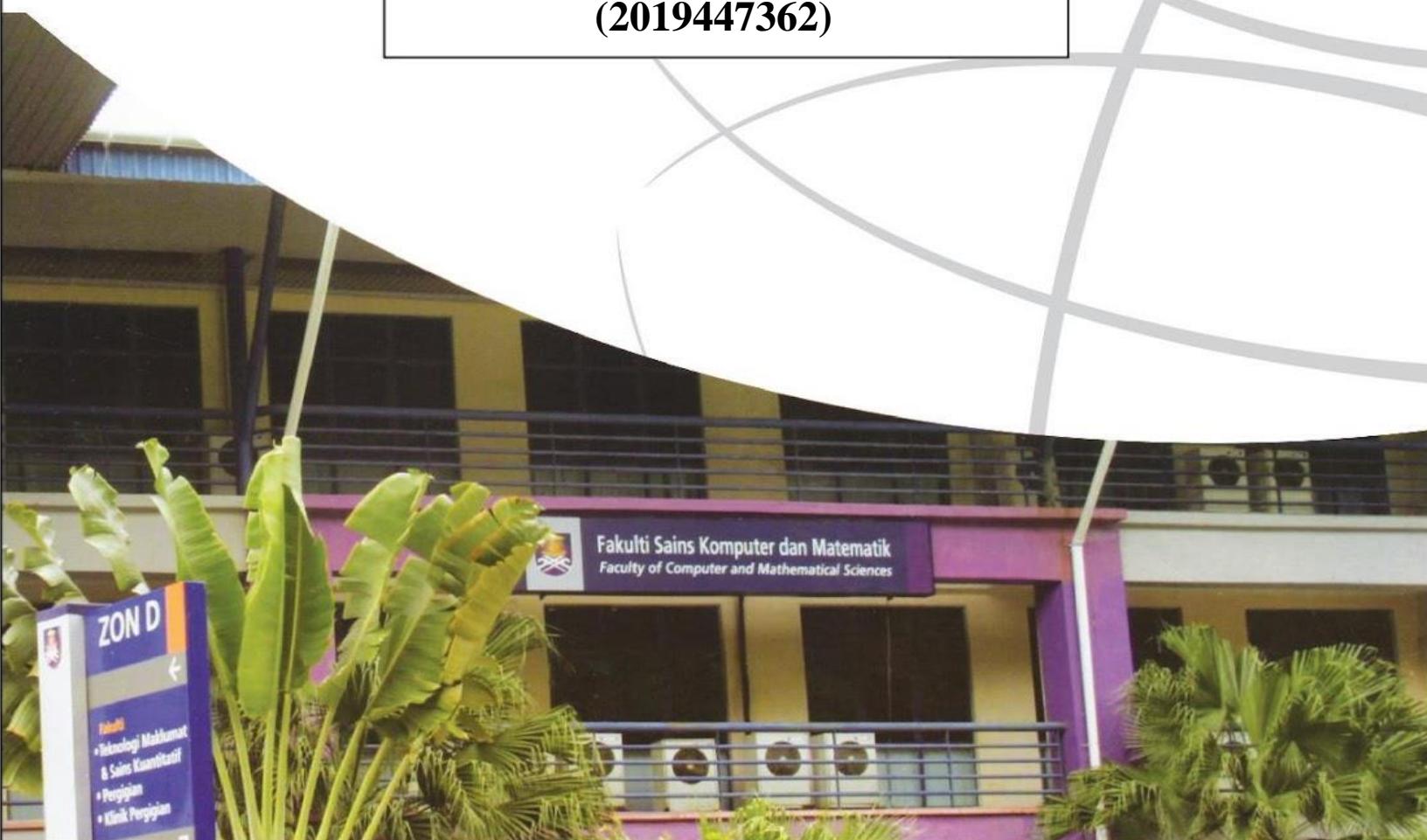
جامعة تكنولوجى مارا
UNIVERSITI
TEKNOLOGI
MARA

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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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

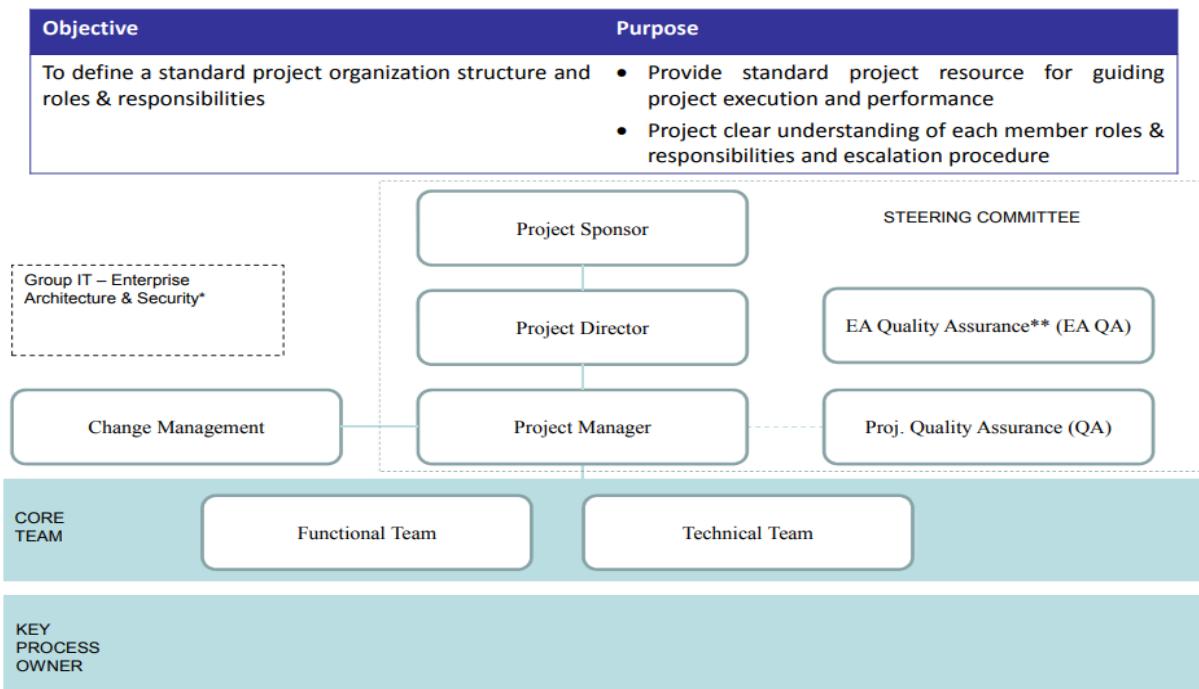
Sime Darby Plantation Berhad vision is to be a leading multinational cooperation delivering sustainable value to all stakeholders.

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)

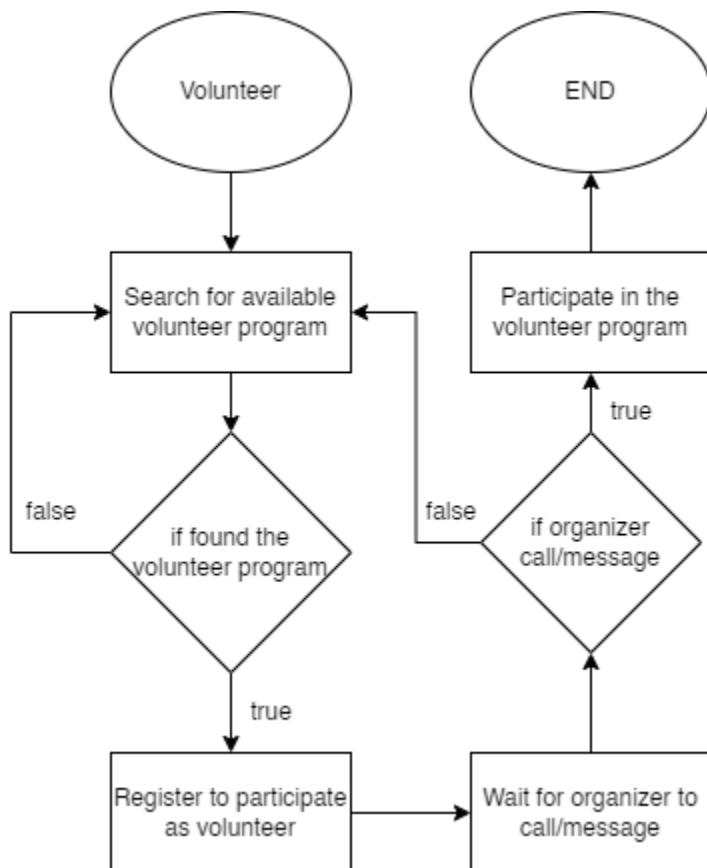
3.0 System Planning

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.

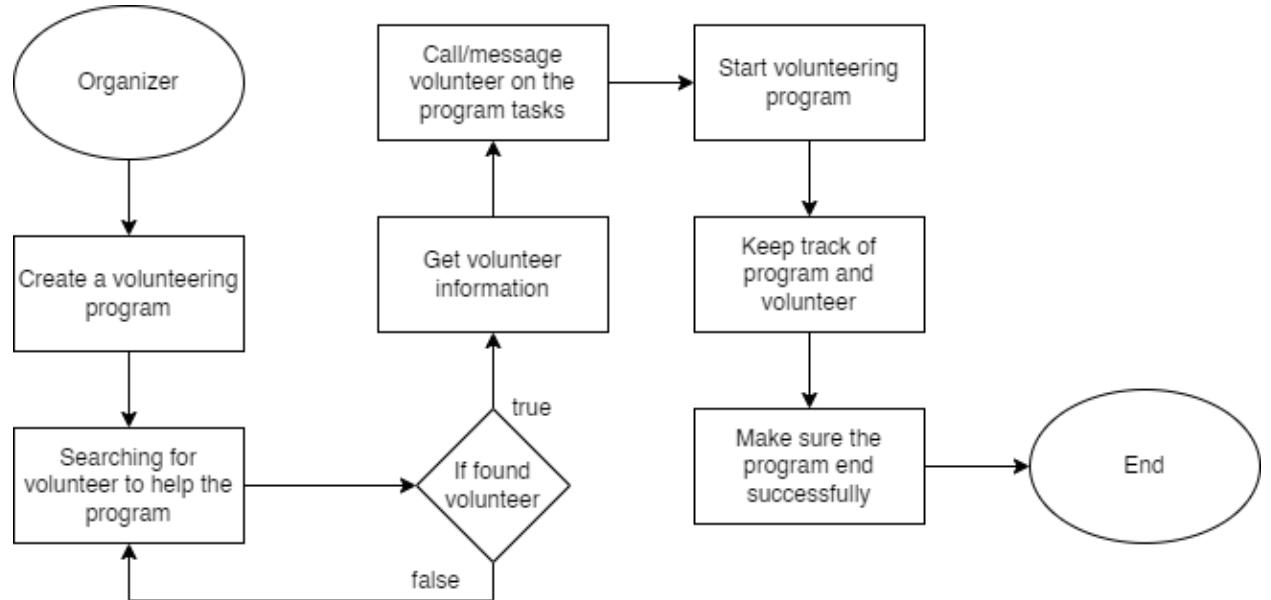
3.1 Description of the Current/Existing System

- 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

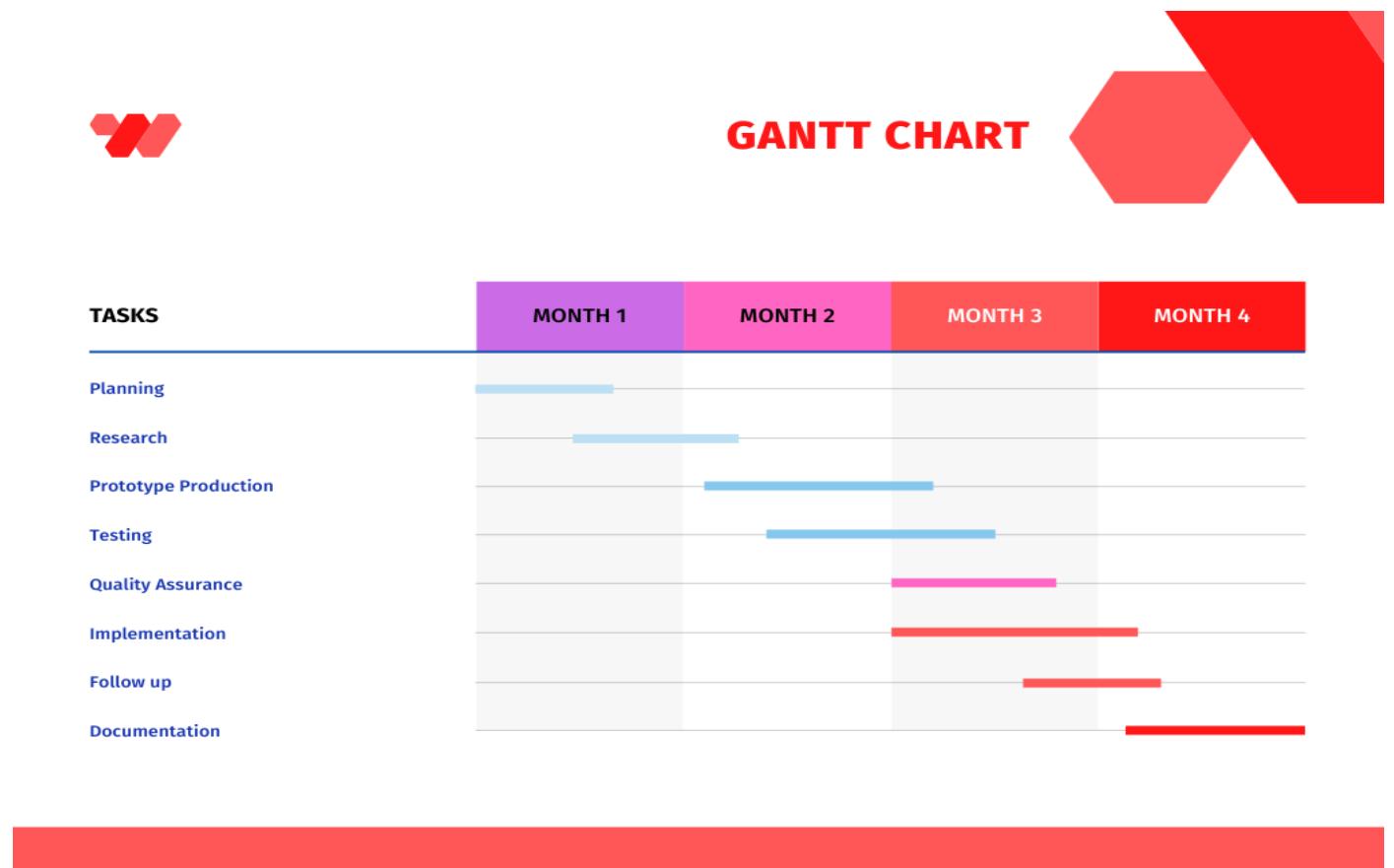
Recurring other costs(annual): RM 1,000

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

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

4.2.2.2 Functional requirements

- User friendly interface:
 1. Clean user interface without non-informative information.
 2. Minimalist and simplicity for the user interface, to make user feels at ease to use.
 3. User interface theme that is very attractive and fresh for user.
- Security:
 1. Every user password is encrypted and stored securely into the database system.
 2. User inputs are strictly monitored by the input function to ensure attackers can't harm the system.
 3. Making sure the system is being accessed from browser instead of other platforms, to put extra security.
 4. 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

- Doesn't accept special characters for user credentials (login).
- User can use the markdown features to make their posts much more attractive and informational.
- 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

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

4.2.3.3 Process Requirement

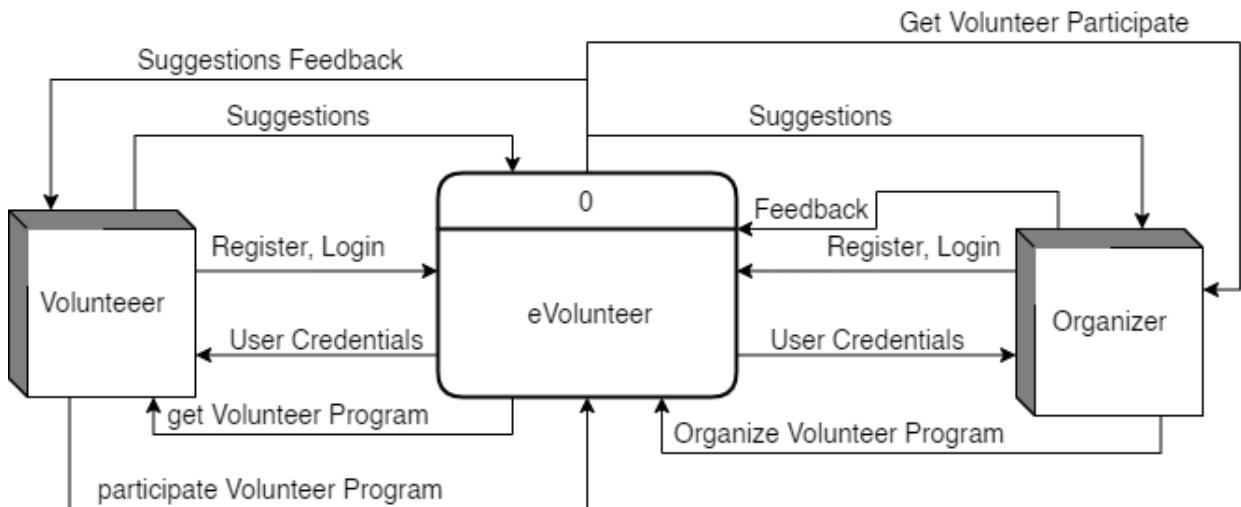
- Process is to make sure the data type is correct before processing it.
- Process must be accurate and functioning.
- Process must be fast.

4.2.3.4 Security and control requirement

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

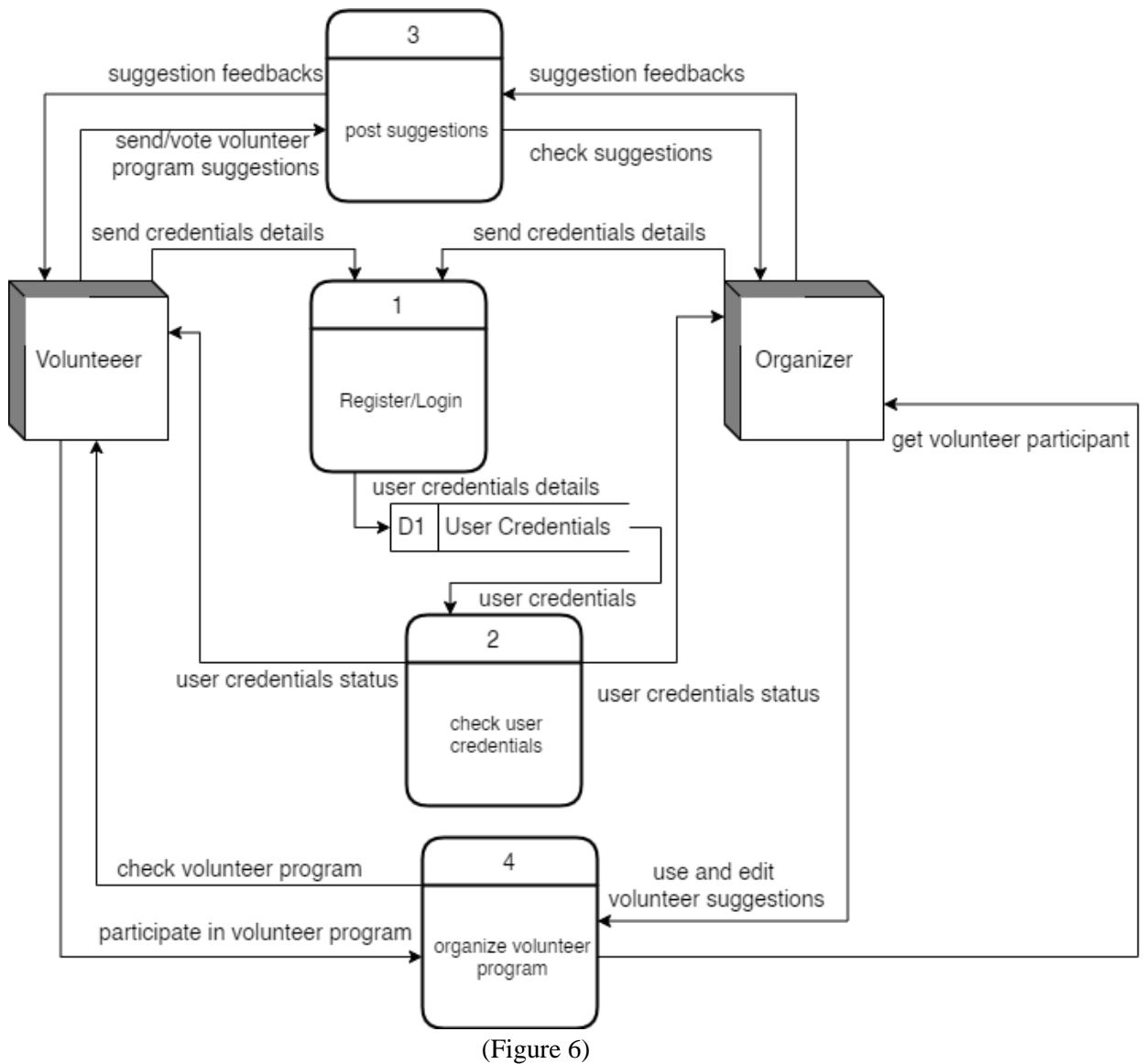
4.3 Process Modelling

4.3.1 Context Diagram



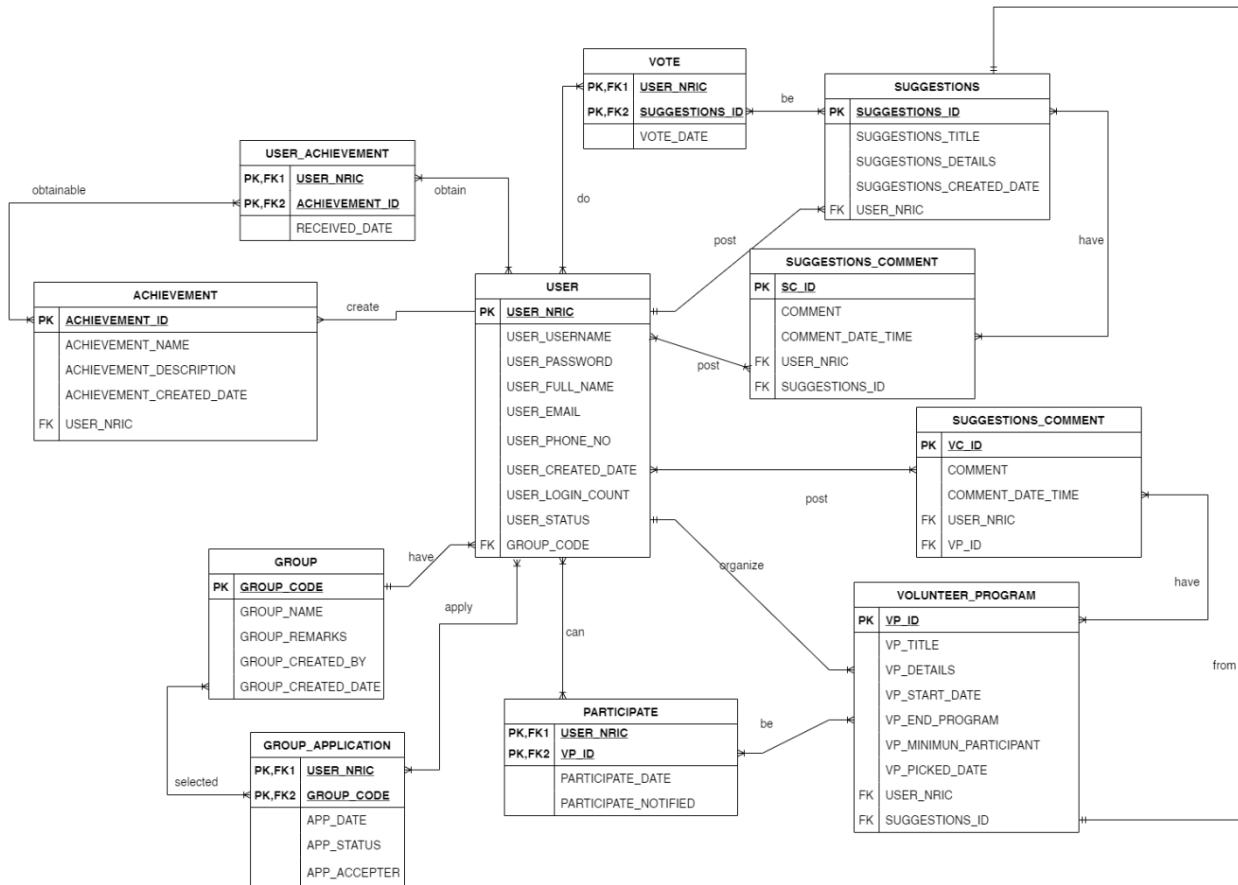
(Figure 5)

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 the 'eVolunteer - Register' page at localhost:8080/evolunteer/user_register.php. The form fields are as follows:

- 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: *****

A checkbox labeled "Agree with our Terms & Conditions and our Privacy Policy." is checked. Below the form, a link "Existing user? Click here to login." and a blue "Sign Up" button are visible.

ii. Login

The screenshot shows the 'eVolunteer - Login' page at localhost:8080/127.0.0.1/evolunteer/user_login.php. The form fields are as follows:

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

Links for "Home" and "About" are at the top right, along with "Login" and "Sign-up" buttons. Below the form, a link "New user? Click here to register." and a blue "Sign In" button are visible. The footer contains the text "eVolunteer © 2021" and "© 2021 eVolunteer".

iii. Create Suggestions

The screenshot shows a web browser window titled "eVolunteer - New Suggestions" with the URL "localhost:8080/127.0.0.1/evol...". The page has a dark header with the "eVolunteer" logo and navigation links for "Homepage", "Suggestions", "Volunteer Program", "Participation Status", and "Settings". The main content area is titled "New Suggestions" and contains a form. The title field is pre-filled with "Help in cleaning up flood affected aftermath area". The "Your suggestions..." text area contains the text "I am suggesting that we hold a volunteer program on helping places that are affected by flood." Below the text area, there are two validation messages: "*Suggested Participant:* 20" and "*Suggested Period:* 3 Weeks".

iv. Edit/Delete Suggestions

The screenshot shows a web browser window titled "eVolunteer - Edit Suggestions" with the URL "localhost:8080/127.0.0.1/evol...". The page has a dark header with the "eVolunteer" logo and navigation links for "Homepage", "Suggestions", "Volunteer Program", "Participation Status", and "Settings". The main content area is titled "Edit Suggestions" and contains a form. The title field is pre-filled with "Help in cleaning up the flood affected aftermath area". The "Your suggestions..." text area contains the text "I am suggesting that we hold a volunteer program on helping places that are affected by flood." Below the text area, there are two validation messages: "*Suggested Participant:* 20" and "*Suggested Period:* 3 Weeks". A "Back" button is visible in the top right corner of the content area.

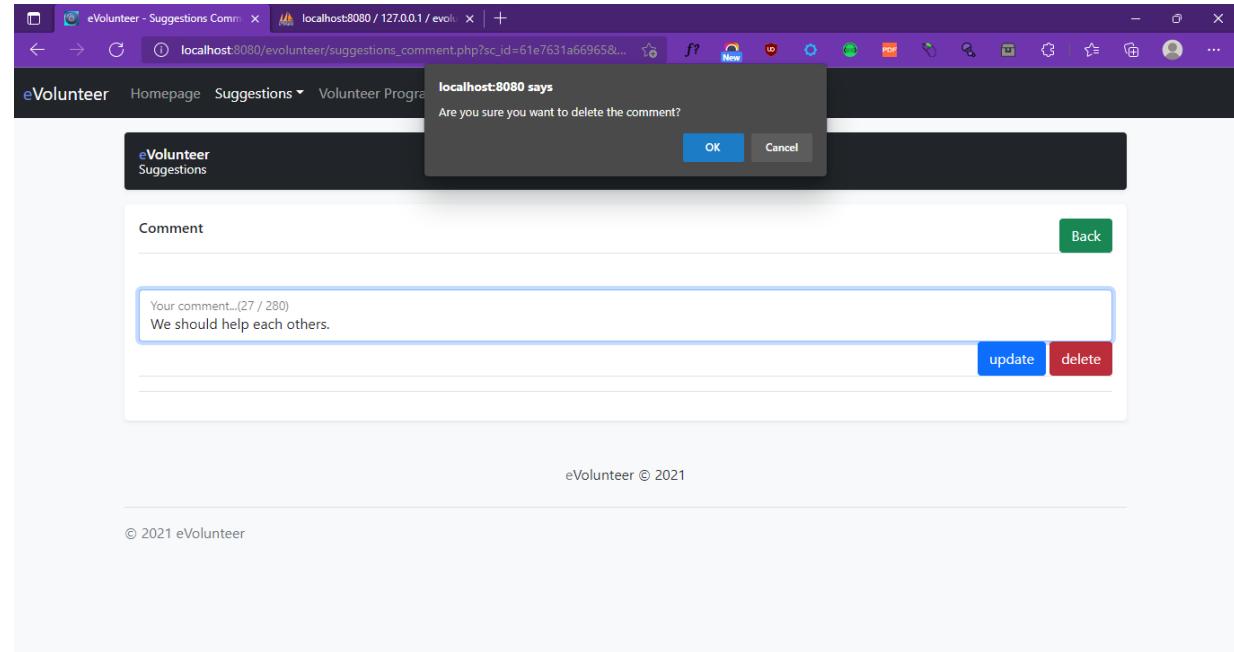
v. Vote/UnVote

The screenshot shows a browser window with the URL `localhost:8080/evol...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 "Suggest by: @hyglobalhd" section with the date "Suggestion create on: 2022-01-19 08:55:43" and a "Vote: 0" button. A blue link "Edit Suggestions..." is also present. Below this, 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 states "There is no available comment...".

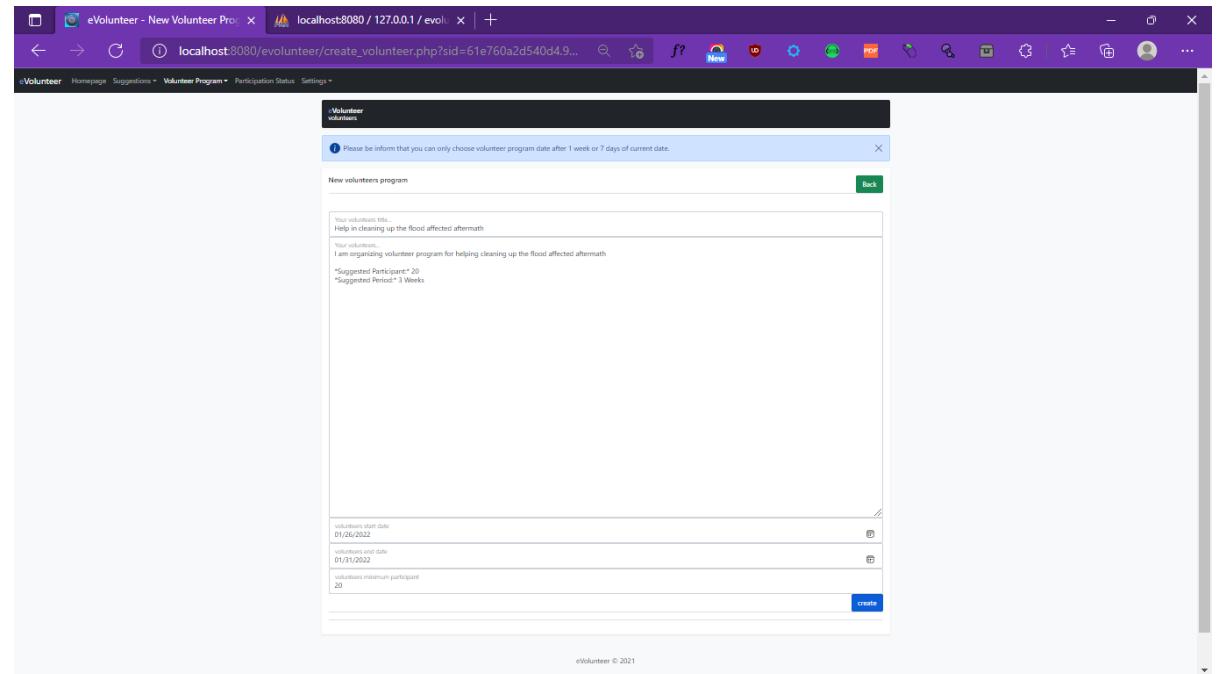
vi. New Suggestions Comment

The screenshot shows a browser window with the same URL as the previous screenshot. A green success message box appears at the top left with the text "Successfully voted!" and a checkmark icon. The main content area shows the same suggestion details as before. Below the "Comment" section, a message box contains the text "Your comment...(27 / 280)" followed by "We should help each others.". A blue "comment" button is to the right of the message box. At the bottom of the page, there is a note "There is no available comment..." and a "Comment Pages: 1 Go" dropdown. The footer of the page includes the text "eVolunteer © 2021" and "© 2021 eVolunteer".

vii. Edit/Delete Suggestions Comment



viii. Create Volunteer Program



ix. Edit/Delete Volunteer Program

The screenshot shows a web browser window with the URL `localhost:8080/evolunteer/edit_volunteer.php?id=61e76531007603.07660329`. The page title is "eVolunteer - Edit Volunteer Prog". The main content area is titled "New volunteers program". It contains a text input field with placeholder text "Your volunteers title... Help in cleaning up the flood affected aftermath". Below the input field, there is a text area containing the following text:

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

A green "Back" button is located in the top right corner of the content area.

x. Participate/UnParticipate Volunteer Program

The screenshot shows a web browser window with the URL `localhost:8080/evolunteer/view_volunteers.php?id=61e76531007603.07660329`. The page title is "eVolunteer - Volunteer Program". The main content area features a large heading Help in cleaning up the flood affected aftermath. Below the heading, it says "I am organizing volunteer program for helping cleaning up the flood affected aftermath". It also displays "For a period of 3 Weeks" and "Stay Safe". Under "Stay Safe", it lists "Estimated Start Date: 2022-01-26", "Estimated End Date: 2022-01-31", "Minimum Participant: 20", and "Original Suggestions Post: [Click Here](#)". It also says "View Participant: [Click here](#)". To the right, it shows "Picked by: @hyglobalhd", "Volunteer Program picked on: 2022-01-19 09:16:32", and "Original Vote: 1". Below this, it says "Current Participate Count: 0" and "Edit Volunteer Program...". A green "Participate" button is located at the bottom left. A "Comment" input field is at the very bottom.

xi. New Volunteer Program Comment

The screenshot shows a web browser window for the eVolunteer application. The URL is `localhost:8080/evolunteer/view_volunteers.php?id=61e76531007603.07660329`. The page title is "eVolunteer - Volunteer Program". The main content area displays a green success message box with the text "Successfully Participated! X". Below it is a green "unParticipate" button. To the right, there is a status indicator: "Original Vote: 1" and "Current Participate Count: 1" with a link "Edit Volunteer Program...". A large text input field labeled "Comment" contains the placeholder "Your comment...(24 / 280)" and the text "This is a great program!". To the right of the input field is a blue "comment" button. Below the input field, a message says "There is no available comment..." and shows "Comment Pages: 1 Go". At the bottom of the page, the copyright notice "eVolunteer © 2021" and "© 2021 eVolunteer" are visible.

xii. Edit/Delete Volunteer Program Comment

The screenshot shows a web browser window for the eVolunteer application. The URL is `localhost:8080/evolunteer/vp_comment.php?vc_id=61e76d1fa13a6&sid=61e7...`. The page title is "eVolunteer - Volunteer Program". The main content area displays a black header bar with the text "eVolunteer" and "Volunteer Program". Below it is a "Comment" section with a "Back" button. A text input field labeled "Comment" contains the placeholder "Your comment...(43 / 280)" and the text "This is a great program! Let's Participate!". To the right of the input field are two buttons: a blue "update" button and a red "delete" button. At the bottom of the page, the copyright notice "eVolunteer © 2021" and "© 2021 eVolunteer" are visible.

xiii. Search Suggestions

The screenshot shows a web browser window with the URL `localhost:8080/evolunteer/search_suggestions.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 contains the text "Port Dickson". 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 a copyright notice: "eVolunteer © 2021" and "© 2021 eVolunteer".

xiv. Search Volunteer Program

The screenshot shows a web browser window with the URL `localhost:8080/evolunteer/search_volunteer.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 contains the text "Flood". 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 a copyright notice: "eVolunteer © 2021" and "© 2021 eVolunteer".

xv. Update User Profile

The screenshot shows a Microsoft Edge browser window with the URL `localhost:8080/evolunteer/edit_user_profile.php`. The page title is "eVolunteer User Profile". The main content area is titled "Edit User Profile" and contains the following fields:

- Full Name: AMIRUL ADLI FAHMI BIN AZAM
- Username: hyglobalhd
- NRIC: 000413140977
- Email: amiruladlifahmi@gmail.com
- Phone Number: 01121196590 (highlighted with a blue border)
- Old Password (empty field)
- New Password (empty field)
- Confirm Password (empty field)

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

xvi. Group Application Apply

The screenshot shows a Microsoft Edge browser window with the URL `localhost:8080/evolunteer/group_apply.php`. The page title is "eVolunteer - Group Application". The main content area is titled "Apply Group" and displays the following message:
You have not applied for any group yet.

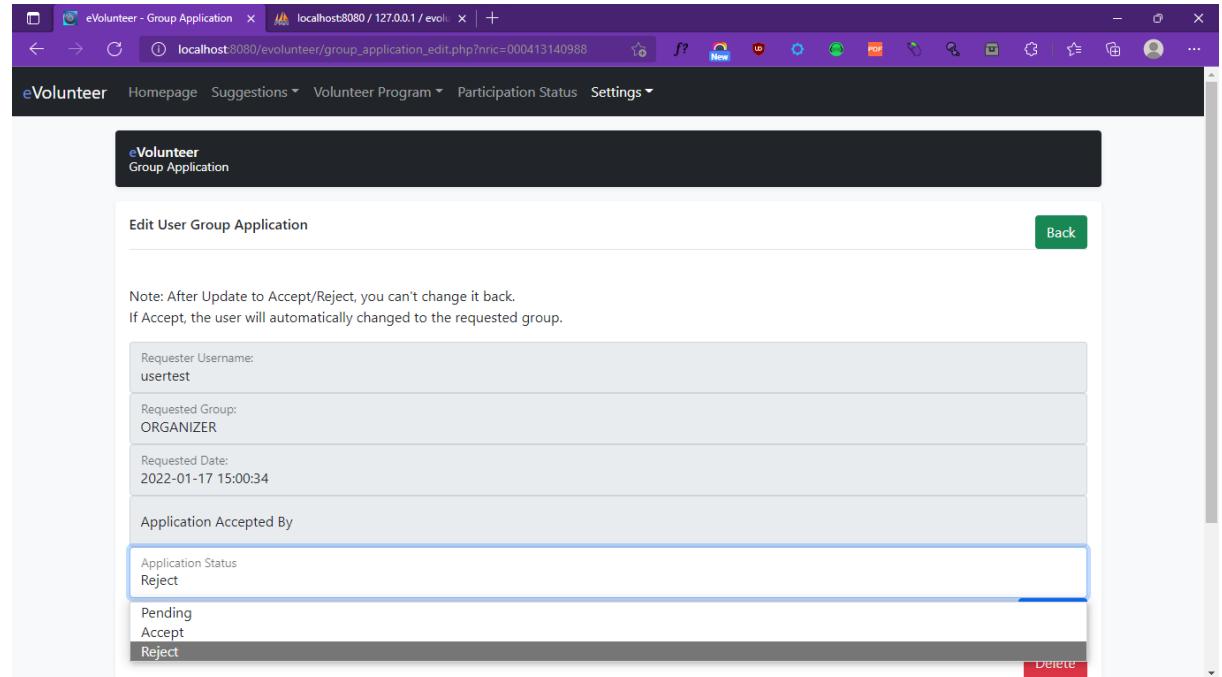
Below this message is a "Group List" section containing the text:
ORGANIZER - People who organize volunteer program events based on the suggestions.

A blue "Apply" button is located on the right side of the "Group List" section. At the bottom of the page is a blue "Manage Group Application" button.

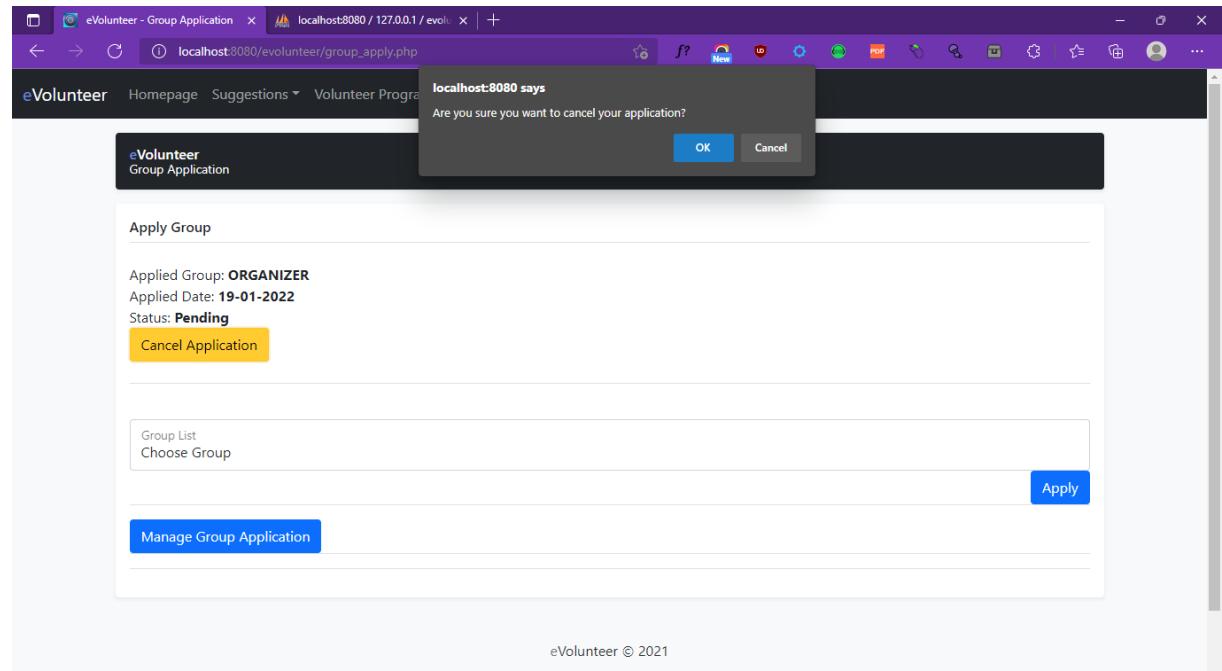
eVolunteer © 2021

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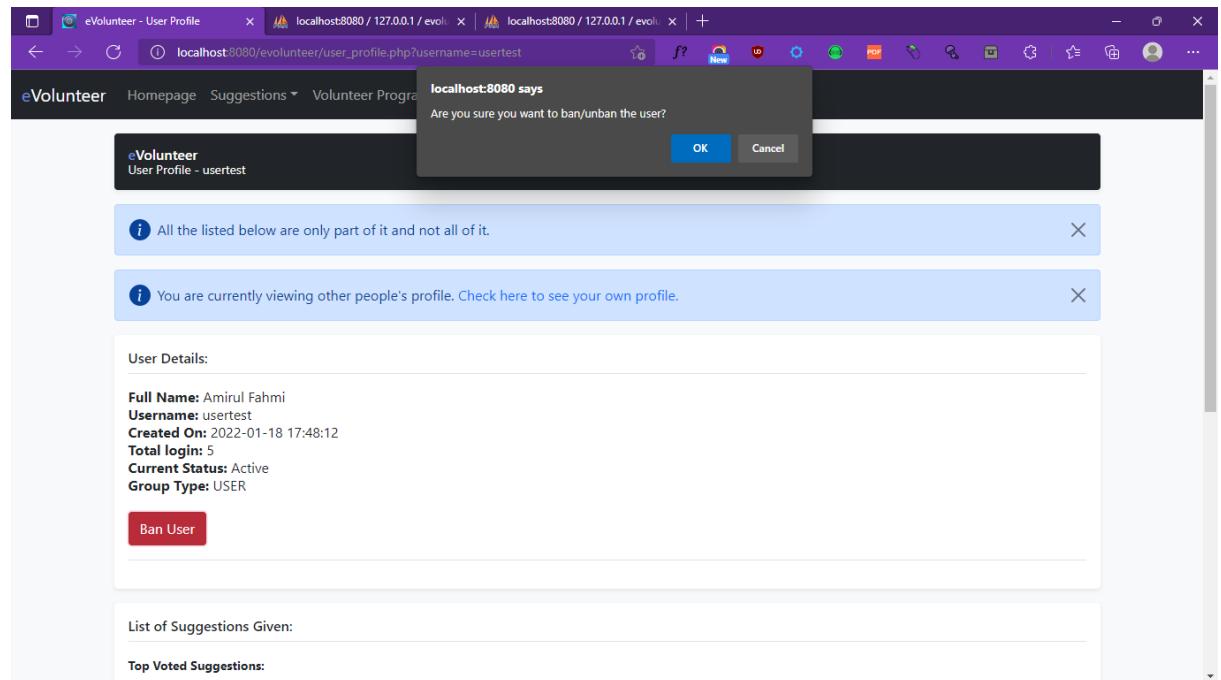
xvii. Admin Group Application Edit



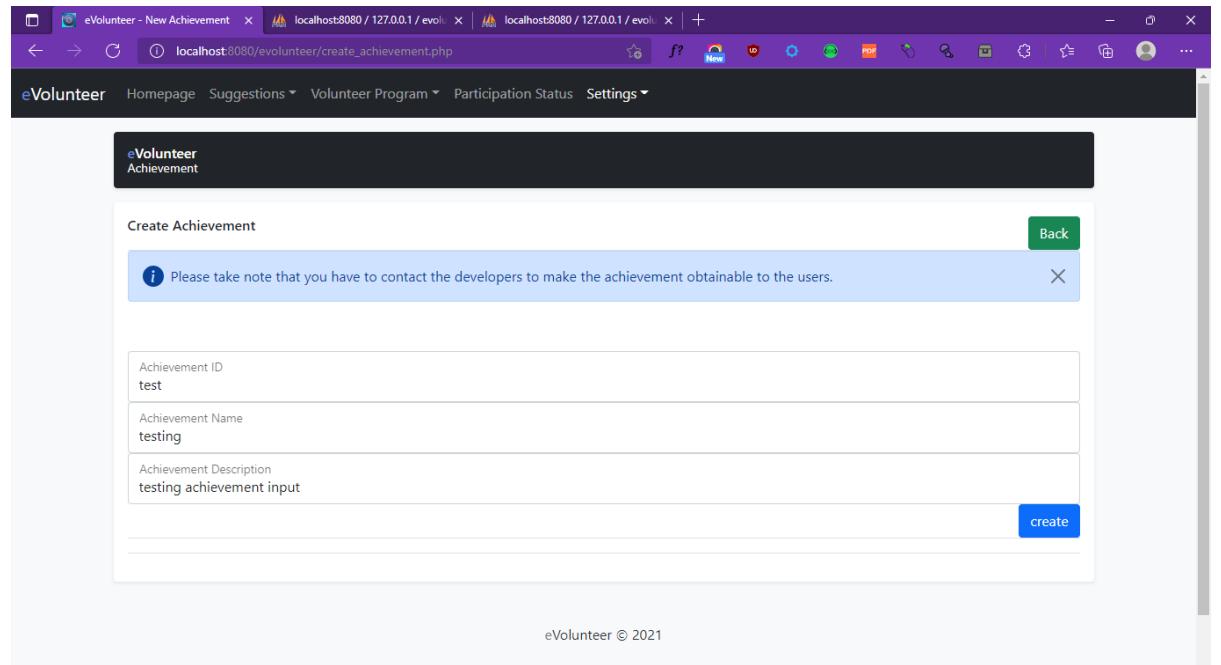
xviii. User Group Application Cancel



xix. Ban/UnBan User



xxx. Create Achievement



xxxii. Logout

The screenshot shows a Microsoft Edge browser window with three tabs open, all titled 'localhost:8080 / 127.0.0.1 / evol...'. The main content area displays the 'eVolunteer Homepage' with sections for 'Top 3 Suggestions' and 'Recent Suggestions', each listing three items. A dropdown menu is open over the 'Logout' link in the top right corner, containing options: Profile, Achievement, Group Application, and Logout (which is highlighted in red).

Top 3 Suggestions

- 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
- Help Cleaning Up River**
@hyglobalhd
2022-01-19 12:12:34 Vote: 0

[See more top suggestions](#)

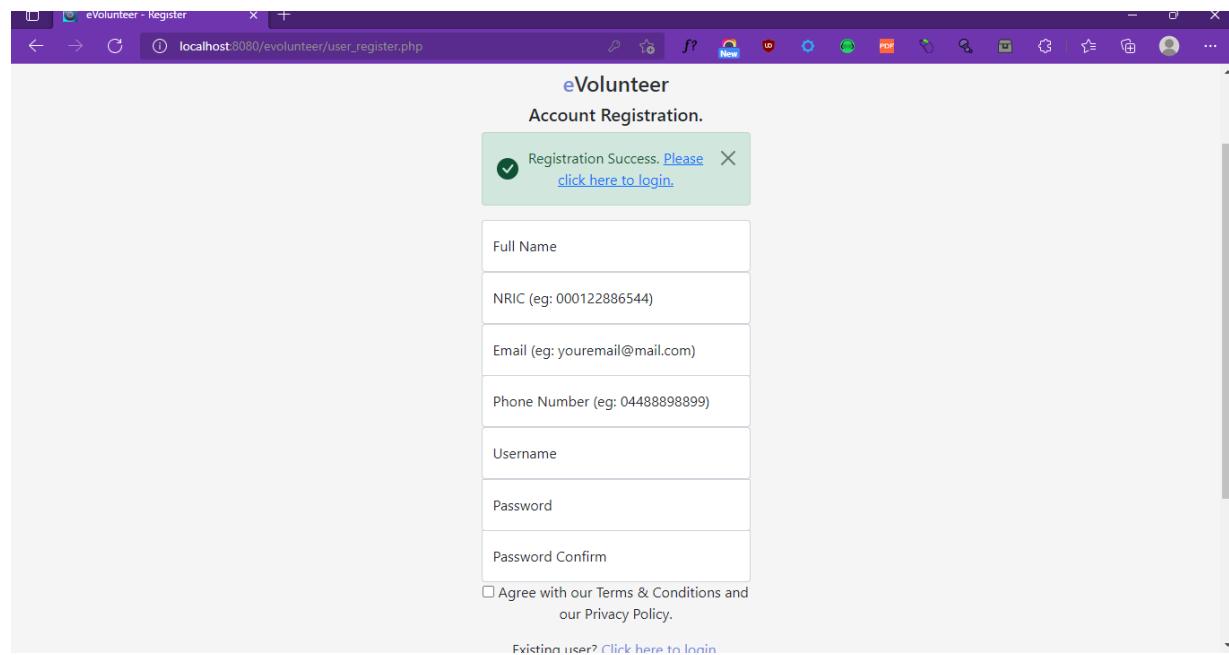
Recent Suggestions

- Help Cleaning Up River**
@hyglobalhd
2022-01-19 12:12:34 Vote: 0

localhost:8080/evolunteer/logout.php Vote: 2

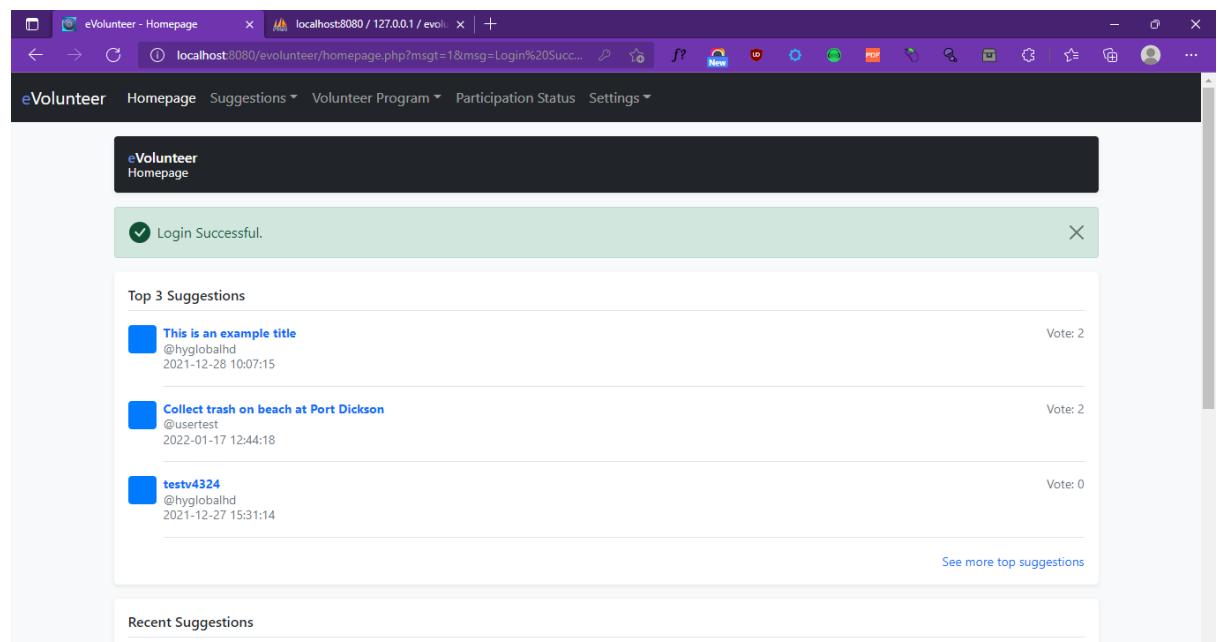
5.2 Output Interface

i. Registration



The screenshot shows a web browser window titled "eVolunteer - Register" with the URL "localhost:8080/evolunteer/user_register.php". The page has a header "eVolunteer" and "Account Registration.". A green success message box displays "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: 04488898899)", "Username", "Password", and "Password Confirm". There is also a checkbox for agreeing to terms and conditions and a link for existing users to log in.

ii. Login



The screenshot shows a web browser window titled "eVolunteer - Homepage" with the URL "localhost:8080/evolunteer/homepage.php?msgt=1&msg=Login%20Succ...". The page features a navigation bar with links for "Homepage", "Suggestions", "Volunteer Program", "Participation Status", and "Settings". A black header bar says "eVolunteer Homepage". A green success message box says "Login Successful.". Below it is a section titled "Top 3 Suggestions" listing 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 visible. Below the suggestions is a section titled "Recent Suggestions".

iii. Create Suggestions

The screenshot shows a web browser window for the eVolunteer application. The URL is `localhost:8080/evolunteer/view_suggestions.php?id=61e760a2d540d4.93292753`. The page title is "Suggestions". A success message "Successful create suggestions!!" is displayed. The main content area shows a suggestion titled "Help in cleaning up flood affected aftermath area". The description states: "I am suggesting that we hold a volunteer program on helping places that are affected by flood." Below this, it says "Suggested Participant: 20 Suggested Period: 3 Weeks". There are two buttons: "vote" and "choose as volunteer program". To the right, there is information about the suggestion: "Suggest by: @hyglobalhd", "Suggestion create on: 2022-01-19 08:51:46", "Vote: 0", and a link "Edit Suggestions...". At the bottom, there is a "Comment" section with a placeholder "Your comment...".

iv. Edit/Delete Suggestions

The screenshot shows a web browser window for the eVolunteer application. The URL is `localhost:8080/evolunteer/edit_suggestions.php?id=61e760a2d540d4.93292753`. The page title is "Edit Suggestions". A success message "Successful update the suggestions!!" is displayed. The main content area shows the suggestion details: "Your suggestions title... Help in cleaning up the flood affected aftermath a". The description is: "I am suggesting that we hold a volunteer program on helping places that are affected by flood." Below the description, there are two lines of text: "*Suggested Participant: 20" and "*Suggested Period: 3 Weeks". In the top right corner, there is a "Back" button.

v. Vote/UnVote

The screenshot shows a web browser window for the eVolunteer application. The URL is `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 a "Vote: 1". Below the message, there are two buttons: "unvote" and "choose as volunteer program". At the bottom of the suggestion card, there is a link "Edit Suggestions...".

vi. New Suggestions Comment

The screenshot shows a web browser window for the eVolunteer application. The URL is `localhost:8080/evolunteer/view_suggestions.php?id=61e760a2d540d4.93292753`. The page title is "eVolunteer - Suggestions". The main content area displays a comment section for a suggestion. A message from "ADMINISTRATOR @hyglobalhd" dated "2022-01-19 09:02:18" with a "Change" link is shown. The message content is "We should help each others.". Below the message, there is a "comment" button. At the bottom of the comment section, there is a "Comment Pages: 1 Go" link. The footer of the page includes "eVolunteer © 2021" and "© 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, a message states: "I am suggesting that we hold a volunteer program on helping places that are affected by flood." Underneath, it says "Suggested Participant: 20 Suggested Period: 3 Weeks". To the right, there is a "Suggest by: @hyglobalhd" section with "Suggestion create on: 2022-01-19 08:55:43" and "Vote: 1". There are buttons for "unvote" and "choose as volunteer program". A green success message at the top says "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 at the bottom 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, a message states: "I am organizing volunteer program for helping cleaning up the flood affected aftermath". Underneath, it says "Suggested Participant: 20 Suggested Period: 3 Weeks". It also lists "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](#)". To the right, there is a "Picked by: @hyglobalhd" section with "Volunteer Program picked on: 2022-01-19 09:11:13" and "Original Vote: 1". There is a "Participate" button. A green success message at the top says "Successful create volunteers program!!". Below the program, there is a "Comment" section with a text input field containing "Your comment..." and a "comment" button.

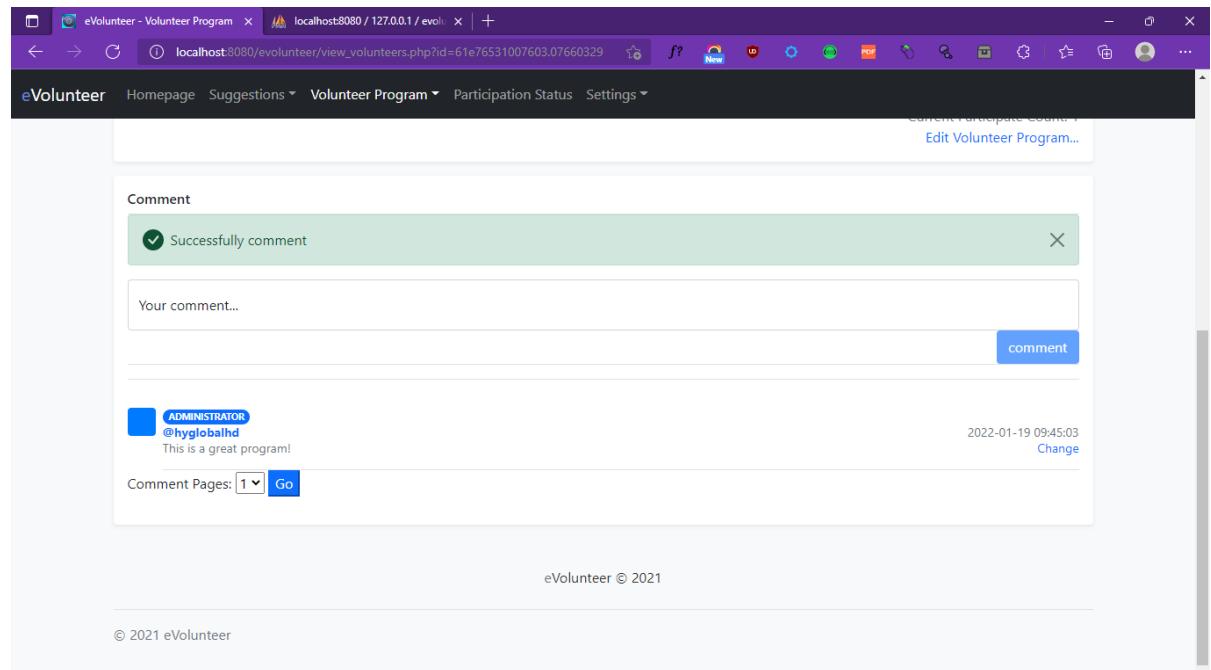
ix. Edit/Delete Volunteer Program

The screenshot shows a web browser window for the eVolunteer application at localhost:8080. The title bar says "eVolunteer - Edit Volunteer Prog" and the address bar shows "localhost:8080/evolunteer/edit_volunteer.php?id=61e76531007603.07660329". The main content area has a header "eVolunteer Volunteer Program". A green success message box displays "Successful update the suggestions!!". Below it, there's a form with fields: "Your volunteers title..." containing "Help in cleaning up the flood affected aftermath", "Your volunteers..." containing "I am organizing volunteer program for helping cleaning up the flood affected aftermath", "For a period of 3 Weeks**", and "Stay Safe**". A "Back" button is visible in the top right corner.

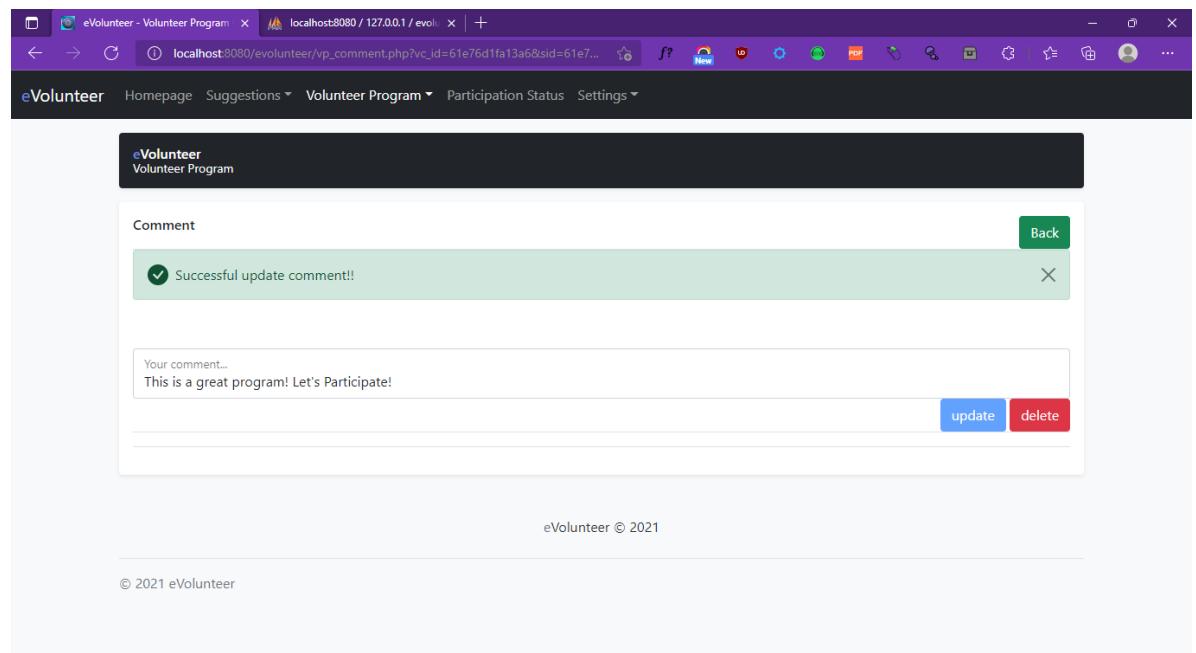
x. Participate/UnParticipate Volunteer Program

The screenshot shows a web browser window for the eVolunteer application at localhost:8080. The title bar says "eVolunteer" and the address bar shows "localhost:8080/evolunteer/view_volunteers.php?id=61e76531007603.07660329". The main content area has a header "eVolunteer Volunteer Program". It displays a section titled "Help in cleaning up the flood affected aftermath" with the subtext "I am organizing volunteer program for helping cleaning up the flood affected aftermath". Below this, it shows "For a period of 3 Weeks", "Stay Safe", and participant details: "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, it shows "Picked by: @hyglobalhd", "Volunteer Program picked on: 2022-01-19 09:38:57", and "Original Vote: 1". A message box at the bottom left says "Like the volunteer program?? Participate Now!!" with a green success message "Successfully Participated! X". A "unParticipate" button is also present. In the bottom right corner, it shows "Current Participate Count: 1" and "Edit Volunteer Program...".

xi. New Volunteer Program Comment



xii. Edit/Delete Volunteer Program Comment



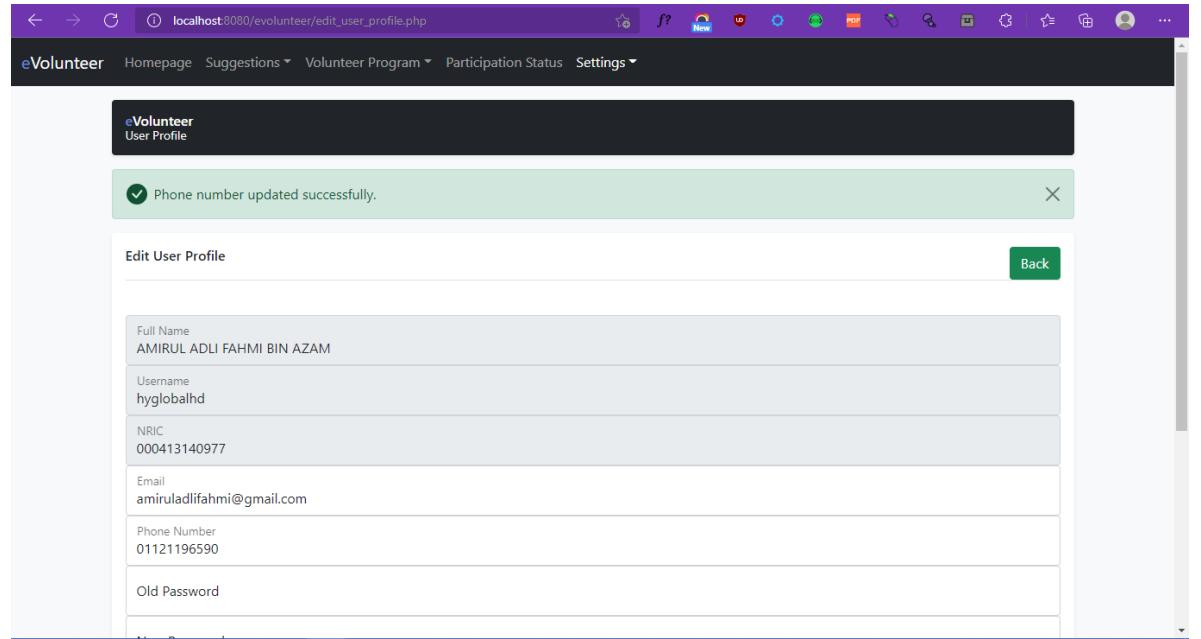
xiii. Search Suggestions

The screenshot shows a Microsoft Edge browser window with the URL `localhost:8080/evolunteer/search_suggestions.php`. The page title is "eVolunteer - Search Suggestions". The main content area is titled "Search Suggestions" and displays a success message: "Successful search suggestions!!". Below this is a search input field with placeholder text "Your search..." and a blue "search" button. A results section follows, containing a single item: "Collect trash on beach at Port Dickson" by user "usertest" on 2022-01-17 12:44:18, with a "Vote: 2" link. At the bottom right of the page is the copyright notice "eVolunteer © 2021".

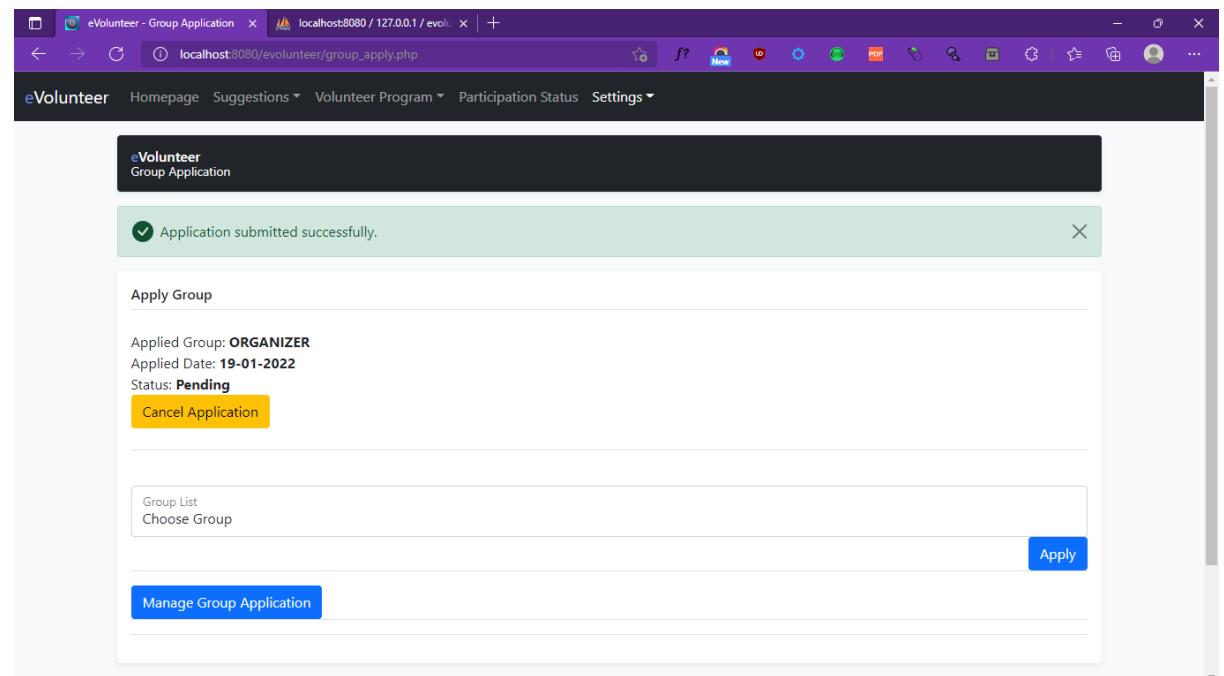
xiv. Search Volunteer Program

The screenshot shows a Microsoft Edge browser window with the URL `localhost:8080/evolunteer/search_volunteer.php`. The page title is "eVolunteer - Search Volunteer Program". The main content area is titled "Search Volunteer" and displays a success message: "Successful search volunteer program!!". Below this is a search input field with placeholder text "Your search..." and a blue "search" button. A tooltip on the search button says "Please fill out this field.". A results section follows, containing a single item: "Help in cleaning up the flood affected aftermath" by user "@hyglobalhd" on 2022-01-19 09:38:57, with a "Vote: 0" link. At the bottom right of the page is the copyright notice "eVolunteer © 2021".

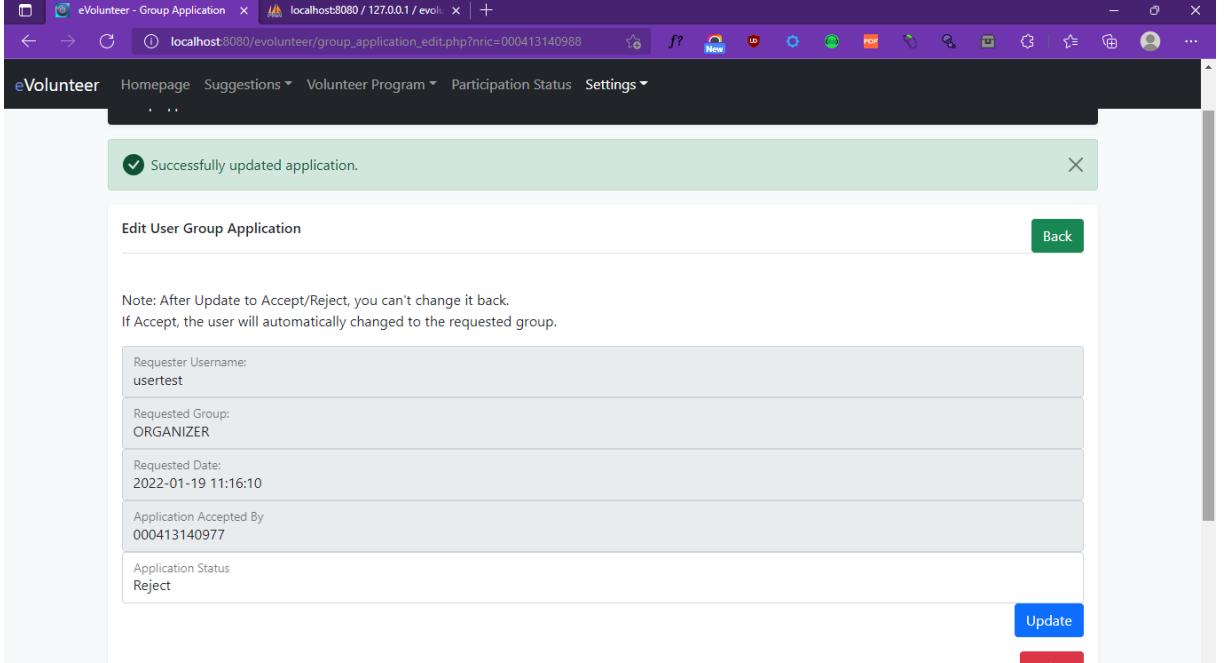
xv. Update User Profile



xvi. Group Application Apply



xvii. Admin Group Application Edit

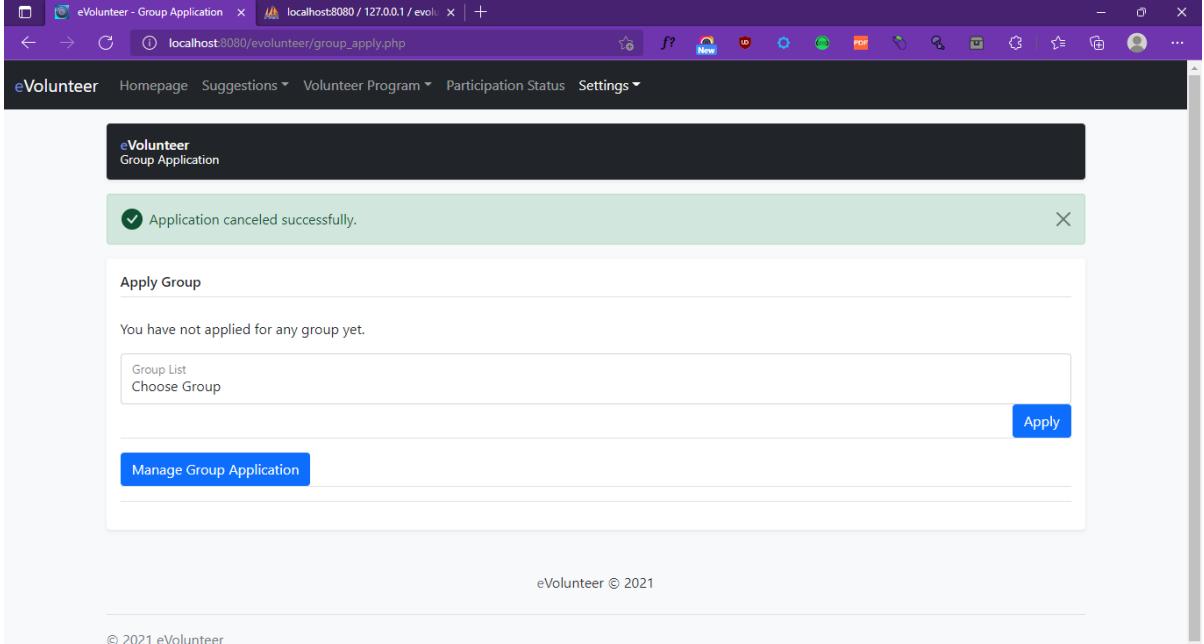


The screenshot shows a web browser window for the eVolunteer application. The URL is `localhost:8080/evolunteer/group_application_edit.php?nric=000413140988`. The page title is "Edit User Group Application". A green success message box at the top left says "Successfully updated application." The main form contains the following data:

Requester Username:	usertest
Requested Group:	ORGANIZER
Requested Date:	2022-01-19 11:16:10
Application Accepted By:	000413140977
Application Status:	Reject

At the bottom right of the form are two buttons: "Update" (blue) and "Delete" (red).

xviii. User Group Application Cancel



The screenshot shows a web browser window for the eVolunteer application. The URL is `localhost:8080/evolunteer/group_apply.php`. The page title is "Apply Group". A green success message box at the top left says "Application canceled successfully." The main form has the following sections:

- A header "eVolunteer Group Application".
- A message "You have not applied for any group yet."
- A "Group List" section with a "Choose Group" dropdown and an "Apply" button.
- A "Manage Group Application" button.

At the bottom of the page is a footer with the text "eVolunteer © 2021" and "© 2021 eVolunteer".

xix. Homepage

The screenshot shows the eVolunteer homepage with three tabs open in the browser: "eVolunteer - Homepage", "localhost:8080 / 127.0.0.1 / evol...", and "localhost:8080 / 127.0.0.1 / evol...". The main content area displays "Top 3 Suggestions" and "Recent Suggestions".

Top 3 Suggestions:

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

[See more top suggestions](#)

Recent Suggestions:

- Help Cleaning Up River** by @hyglobalhd, 2022-01-19 12:12:34, Vote: 0
- Collect trash on beach at Port Dickson** by @usertest, Vote: 2

xx. Top Suggestions

The screenshot shows the "Top Suggestions" page of the eVolunteer application. It has three tabs open: "eVolunteer - Top Suggestions", "localhost:8080 / 127.0.0.1 / evol...", and "localhost:8080 / 127.0.0.1 / evol...".

The main content area displays "Top Suggestions" with a pagination control.

Top Suggestions:

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

Pages:

eVolunteer © 2021

localhost:8080/evol...view_suggestions.php?id=61c96bc2f0c28643081621

xxi. Recent Suggestions

The screenshot shows a web browser window with three tabs open. The active tab is titled "eVolunteer - Recent Suggestions" and displays the URL "localhost:8080/evolunteer/recent_suggestions.php". The page content is as follows:

eVolunteer Suggestions ▾ Volunteer Program ▾ Participation Status Settings ▾

eVolunteer Suggestions

Recent Suggestions

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

Pages: Go

eVolunteer © 2021

© 2021 eVolunteer

xxii. View Suggestions

The screenshot shows a web browser window with three tabs open. The active tab is titled "eVolunteer - Suggestions" and displays the URL "localhost:8080/evolunteer/view_suggestions.php?id=61e4f199bbc132.31331970". The page content is as follows:

eVolunteer Homepage Suggestions ▾ Volunteer Program ▾ Participation Status Settings ▾

eVolunteer Suggestions

Collect trash on beach at Port Dickson

I am suggesting that we made a volunteer program for collecting trash at Port Dickson.

Suggested day taken: 2 and half day.

Suggested minimum participant: 5 people.

xxiii. All Volunteer Program

The screenshot shows a Microsoft Edge browser window with three tabs open. The active tab displays the 'eVolunteer - Volunteer Program' interface. The main content area is titled 'Volunteer Program' and lists three posts:

- Help in cleaning up the flood affected aftermath** by @hyglobalhd, posted on 2022-01-19 09:38:57. It has 1 vote and 1 participant.
- vp teststs** by @hyglobalhd, posted on 2022-01-17 14:59:29. It has 0 votes and 2 participants.
- setse** by @hyglobalhd, posted on 2021-12-29 15:00:05. It has 0 votes and 1 participant.

Pagination controls at the bottom of the list allow for navigating through multiple pages. The footer of the page includes the copyright notice 'eVolunteer © 2021' and the text '© 2021 eVolunteer'.

xxiv. View Volunteer Program

The screenshot shows a Microsoft Edge browser window with three tabs open. The active tab displays the 'eVolunteer - Volunteer Program' interface, specifically viewing a post titled 'Help in cleaning up the flood affected aftermath'.

The post details:

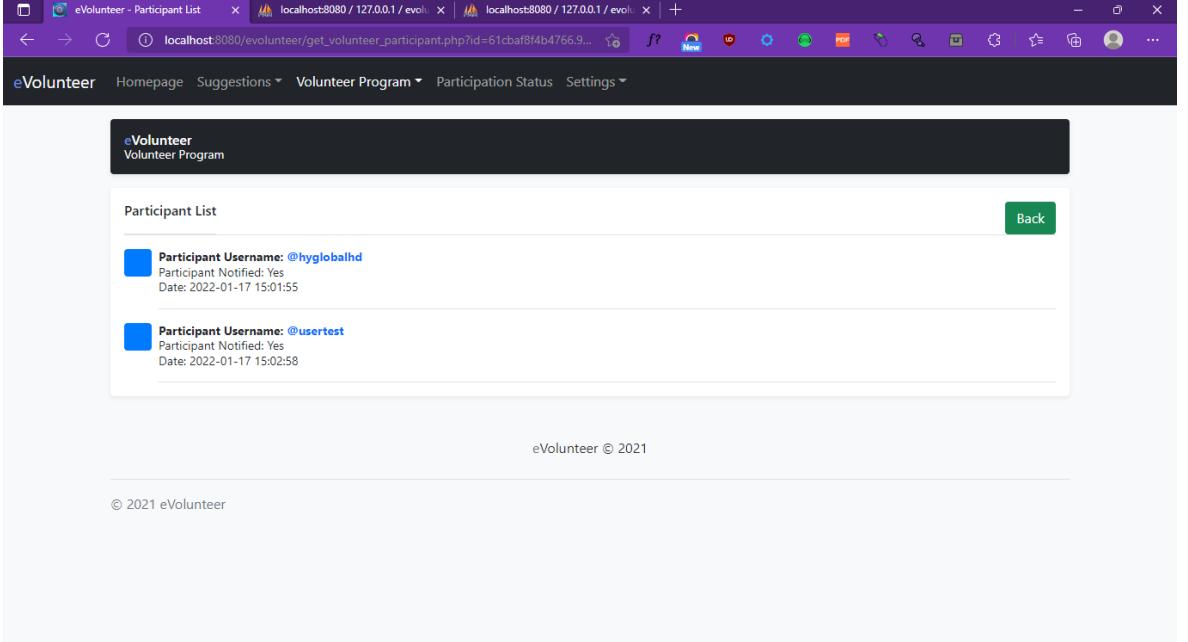
- I am organizing volunteer program for helping cleaning up the flood affected aftermath
- For a period of 3 Weeks
- Stay Safe**
- Estimated Start Date: 2022-01-27
- Estimated End Date: 2022-01-31
- Minimum Participant: 20
- Original Suggestions Post: [Click Here](#)
- View Participant: [Click here](#)

Below the post, there is a button to 'unParticipate'. To the right, status information is displayed:

- Picked by: @hyglobalhd
- Volunteer Program picked on: 2022-01-19 09:38:57
- Original Vote: 1
- Current Participate Count: 1
- [Edit Volunteer Program...](#)

A comment input field is also present at the bottom of the page.

xxv. View Participant List

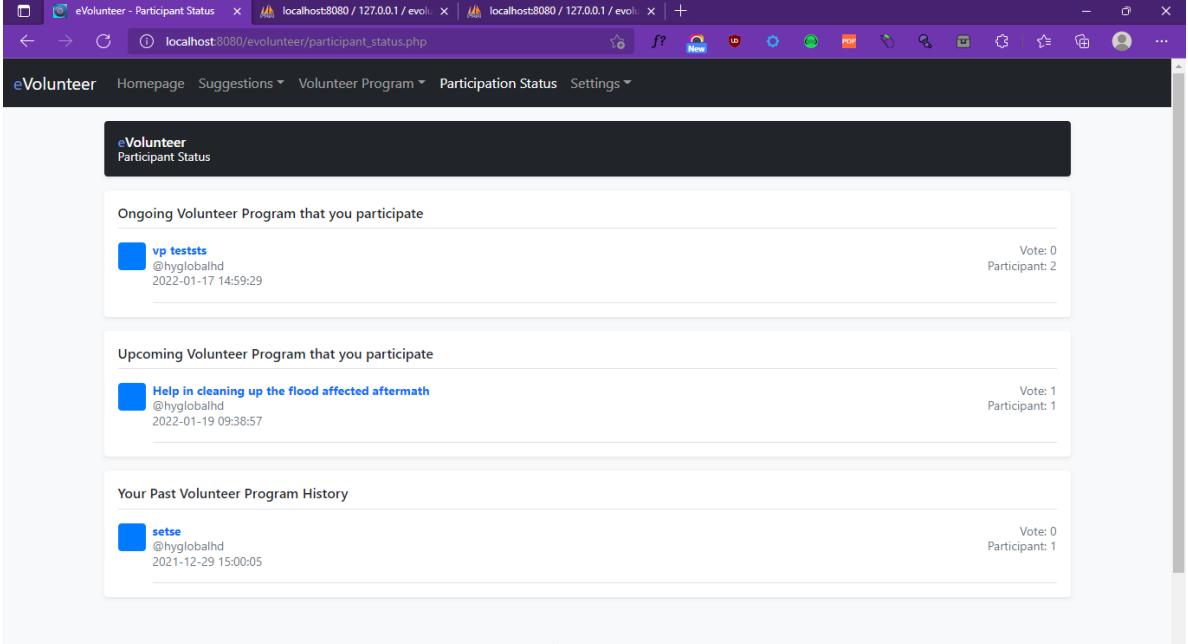


The screenshot shows a web browser window with three tabs open. The active tab is titled "eVolunteer - Participant List" and displays the URL "localhost:8080/evolunteer/get_volunteer_participant.php?id=61cbaf8f4b4766.9...". The browser's address bar also shows "localhost:8080 / 127.0.0.1 / evol..." and "localhost:8080 / 127.0.0.1 / evol...". The page content 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

At the bottom right of the page is a green "Back" button. The footer of the page includes the 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 URL "localhost:8080/evolunteer/participant_status.php". The browser's address bar also shows "localhost:8080 / 127.0.0.1 / evol..." and "localhost:8080 / 127.0.0.1 / evol...". The page content is divided into three main 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 09:58:57
- Your Past Volunteer Program History**
 - setse**
@hyglobalhd
2021-12-29 15:00:05

On the right side of the "Ongoing" section, there are "Vote: 0" and "Participant: 2" buttons. On the right side of the "Upcoming" section, there are "Vote: 1" and "Participant: 1" buttons. On the right side of the "Past" section, there are "Vote: 0" and "Participant: 1" buttons. The footer of the page includes the text "eVolunteer © 2021".

xxvii. View User Profile

The screenshot shows a Microsoft Edge browser window with three tabs open, all titled 'localhost:8080 / 127.0.0.1 / evol...'. The active tab is 'localhost:8080 / 127.0.0.1 / evol... / evol...', which displays the 'eVolunteer - User Profile' page. The URL in the address bar is 'localhost:8080/evolunteer/user_profile.php'. The page header includes the 'eVolunteer' logo and navigation links: 'Homepage', 'Suggestions ▾', 'Volunteer Program ▾', 'Participation Status', and 'Settings ▾'. A dark sidebar on the left contains the 'eVolunteer' logo and the text 'User Profile - hyglobalhd'. The main content area starts with a blue info box containing the message 'All the listed below are only part of it and not all of it.' Below this is a section titled 'User Details:' listing 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 the user details is a section titled 'List of Suggestions Given:' which is currently empty. Underneath this is a section titled 'Top Voted Suggestions:' showing a single entry:

Profile Picture	Title	Voter Count
	This is an example title @hyglobalhd 2021-12-28 10:07:15	Voter: 2

xxviii. View Achievement

The screenshot shows a Microsoft Edge browser window with three tabs open, all titled 'localhost:8080 / 127.0.0.1 / evol...'. The active tab is 'localhost:8080 / 127.0.0.1 / evol...', which displays the 'eVolunteer - Achievement' page. The URL in the address bar is 'localhost:8080/evolunteer/view_achievement.php'. The page header includes the 'eVolunteer' logo and navigation links: 'Homepage', 'Suggestions ▾', 'Volunteer Program ▾', 'Participation Status', and 'Settings ▾'. A dark sidebar on the left contains the 'eVolunteer' logo and the text 'Homepage'. The main content area starts with a section titled 'Your Achievement' listing two entries:

Achievement	Date Received
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	

Below this is a section titled 'Achievement List' showing three entries:

Achievement	Create Achievement
Login 1 Login for 10 times Created on 2021-12-30 16:31:00	Create Achievement
Login 2 Login for 30 times Created on 2021-12-30 16:32:22	
Login 3 Login for 50 times Created on 2021-12-30 16:33:11	

xxix. Ban/UnBan User

eVolunteer - User Profile

localhost:8080 / 127.0.0.1 / evol... | localhost:8080 / 127.0.0.1 / evol... | +

localhost:8080/evolunteer/user_profile.php?username=userstest

eVolunteer Homepage Suggestions Volunteer Program Participation Status Settings

eVolunteer
User Profile - userstest

✓ User banned successfully.

i All the listed below are only part of it and not all of it.

i You are currently viewing other people's profile. Check here to see your own profile.

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

eVolunteer - Achievement

localhost:8080 / 127.0.0.1 / evol... | localhost:8080 / 127.0.0.1 / evol... | +

localhost:8080/evolunteer/view_achievement.php?msg=1&msg=Successful%...

eVolunteer Homepage Suggestions Volunteer Program Participation Status Settings

eVolunteer
Homepage

✓ Successful 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

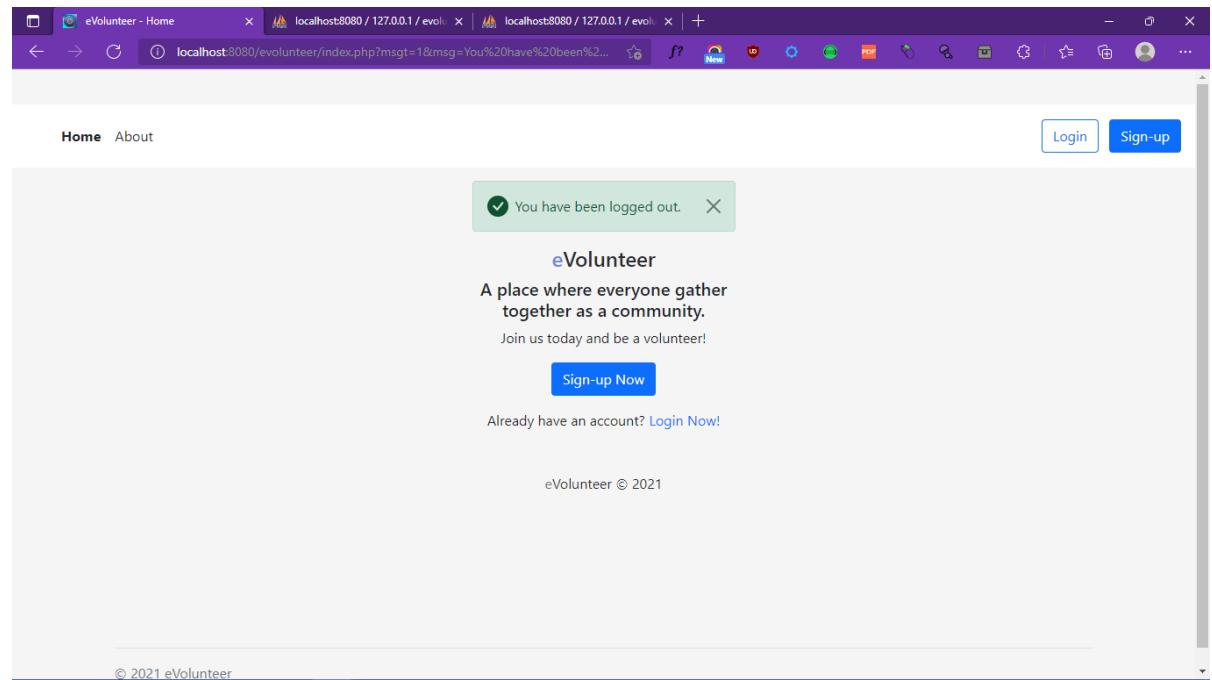
Achievement List

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

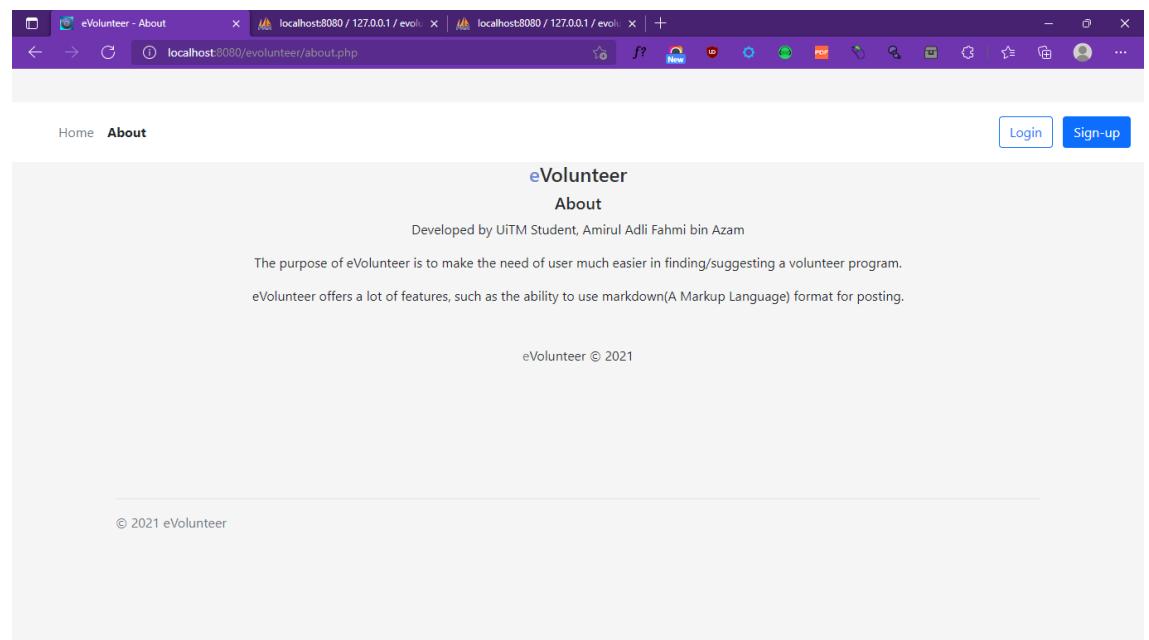
Login 2
Login for 30 times
Created on 2021-12-30 16:32:22

Create Achievement

xxxii. Logout

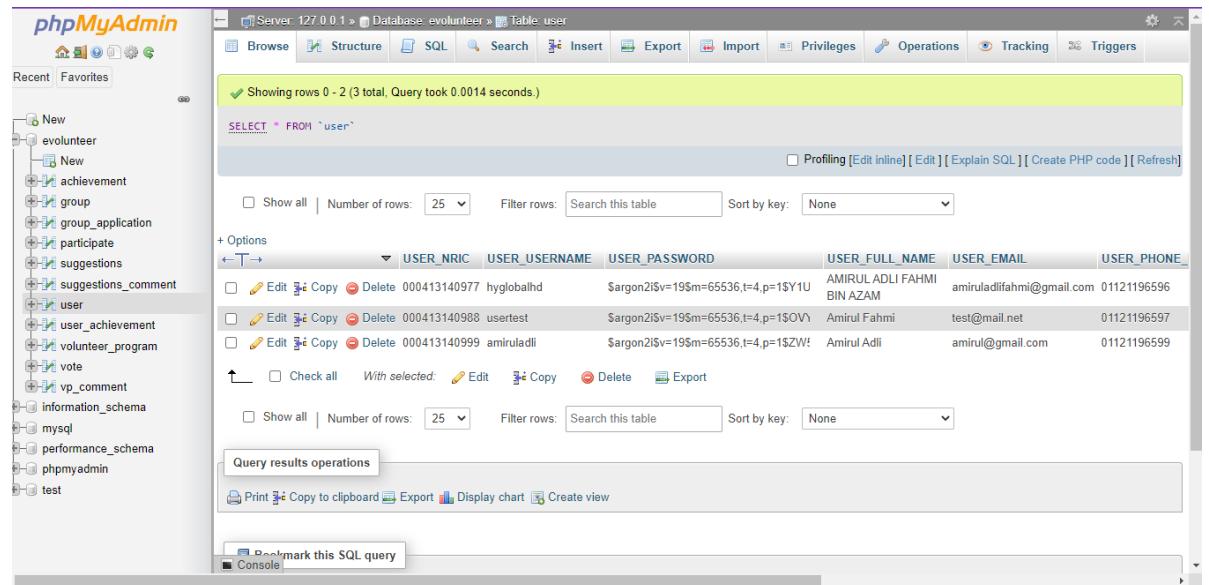


xxxiii. About



5.3 Process Interface

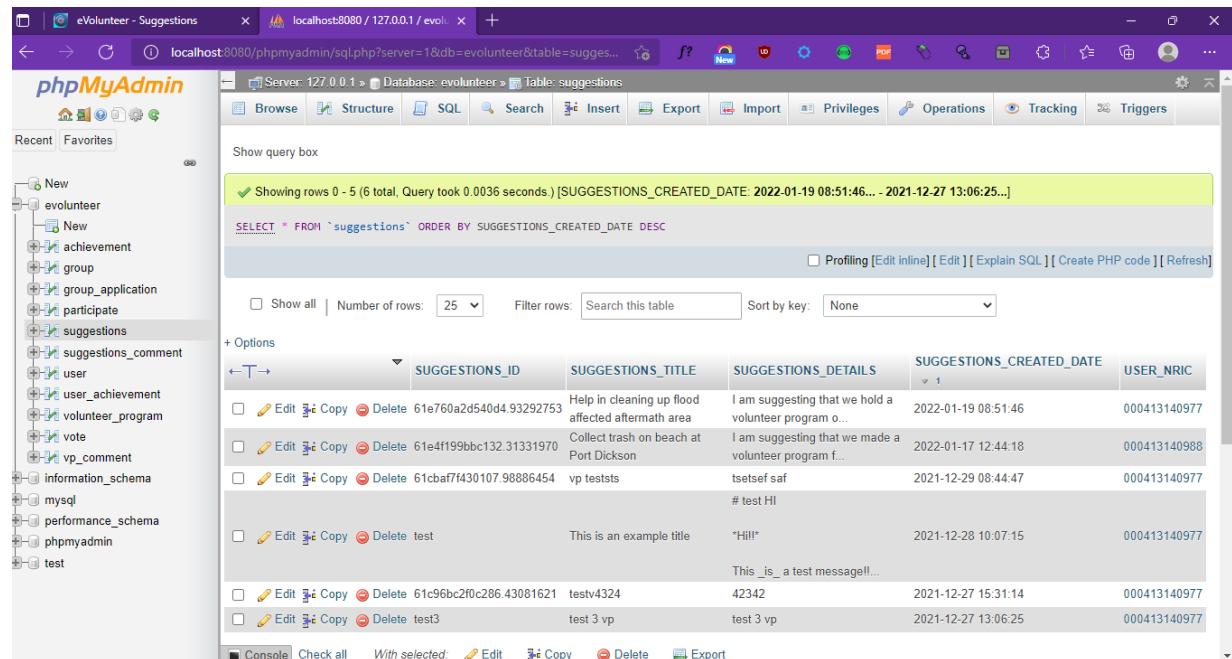
i. Registration



The screenshot shows the phpMyAdmin interface for the 'evolunteer' database. The left sidebar lists tables such as 'achievement', 'group', 'group_application', 'participate', 'suggestions', 'suggestions_comment', 'user', 'user_achievement', 'volunteer_program', 'vote', and 'vp_comment'. The main area displays the 'user' table with three rows of data:

	USER_NRIC	USER_USERNAME	USER_PASSWORD	USER_FULL_NAME	USER_EMAIL	USER_PHONE
<input type="checkbox"/>	000413140977	hyglobalhd	\$argon2i\$v=19\$m=65536,t=4,p=1\$Y1U	AMIRUL ADLI FAHMI BIN AZAM	amiruladlifahmi@gmail.com	01121196596
<input type="checkbox"/>	000413140988	usertest	\$argon2i\$v=19\$m=65536,t=4,p=1\$OVY	Amirul Fahmi	test@mail.net	01121196597
<input type="checkbox"/>	000413140999	amiruladli	\$argon2i\$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 'evolunteer' database. The left sidebar lists tables including 'suggestions'. The main area displays the 'suggestions' table with several rows of data:

	SUGGESTIONS_ID	SUGGESTIONS_TITLE	SUGGESTIONS_DETAILS	SUGGESTIONS_CREATED_DATE	USER_NRIC
<input type="checkbox"/>	61e760a2d540d4.93292753	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"/>	61cbaf7f430107.98886454	vp teststs	tsetsef saf	2021-12-29 08:44:47	000413140977
<input type="checkbox"/>	test	This is an example title	# test HI	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

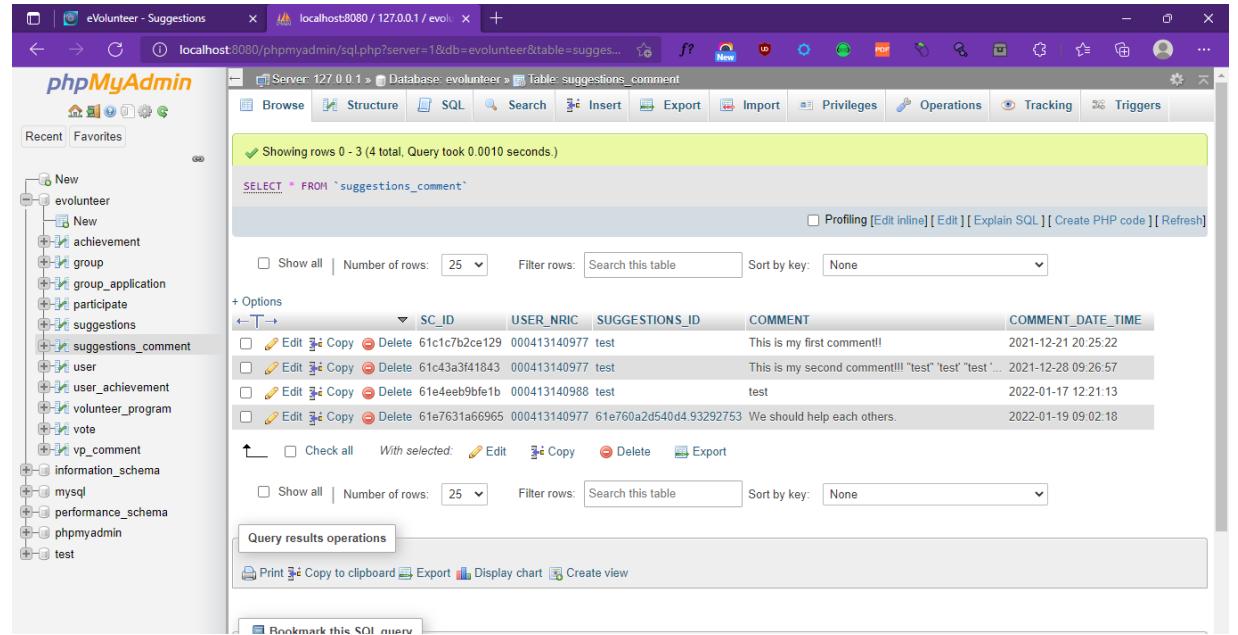
iii. Edit/Delete Suggestions

SUGGESTIONS_ID	SUGGESTIONS_TITLE	SUGGESTIONS_DETAILS	SUGGESTIONS_CREATED_DATE	USER_NRIC	
61e760a2d540d4 93292753	Help in cleaning up the flood affected aftermath a volunteer program o...	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 tests1	tsetself saf	2021-12-29 08:44:47	000413140977	
		# test HI			
61e760a2d540d4 93292753	test	This is an example title	*Hill*	2021-12-28 10:07:15	000413140977
			This _is_ a test message!!..		
61c96bc2f0c286.43081621	testv4324		42342	2021-12-27 15:31:14	000413140977
	test3	test 3 vp	test 3 vp	2021-12-27 13:06:25	000413140977

iv. Vote/UnVote

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

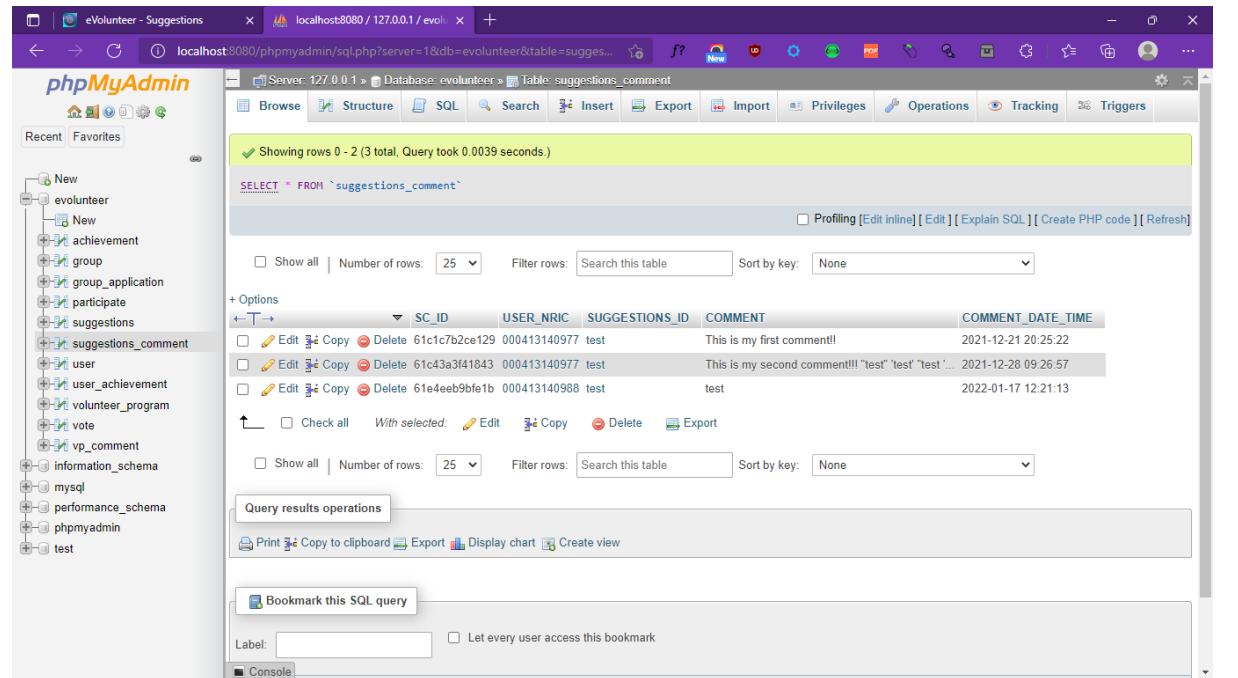
v. New Suggestions Comment



The screenshot shows the phpMyAdmin interface for the 'evolunteer' database. The left sidebar lists various tables, including 'suggestions_comment'. The main area displays the 'suggestions_comment' table with the following data:

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
61e4eeb9bfe1b	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 'evolunteer' database. The left sidebar lists various tables, including 'suggestions_comment'. The main area displays the 'suggestions_comment' table with the same data as the previous screenshot:

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
61e4eeb9bfe1b	000413140988	test	test	2022-01-17 12:21:13

vii. Create Volunteer Program

The screenshot shows the phpMyAdmin interface for the 'evolunteer' database. The left sidebar lists tables: achievement, group, group_application, participate, suggestions, suggestions_comment, user, user_achievement, and volunteer_program. The 'volunteer_program' table is selected. The main area displays the table structure with 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 teststs	tsetsef saf	2022-01-18	2022-01-21	2	2022-01-17
61e76531007603.07660329	Help in cleaning up the flood affected aftermath	I am organizing volunteer program for helping clea...	2022-01-26	2022-01-31	20	2022-01-19
test	setse	tsetw	2021-12-29	2022-01-03	3	2021-12-29

Below the table, there are buttons for Edit, Copy, Delete, and Export.

viii. Edit/Delete Volunteer Program

The screenshot shows the phpMyAdmin interface for the 'evolunteer' database, similar to the previous one. The 'volunteer_program' table is selected. The main area displays the same table structure and three rows. The third row, labeled 'test', is selected, indicated by a blue highlight. Below the table, there are buttons for Edit, Copy, Delete, and Export.

ix. Participate/UnParticipate Volunteer Program

The screenshot shows the phpMyAdmin interface for the 'evolunteer' database. The 'participate' table is selected. The table structure includes columns: USER_NRIC, VP_ID, PARTICIPATE_DATE, and PARTICIPATE_NOTIFIED. The data shows four rows of participation records.

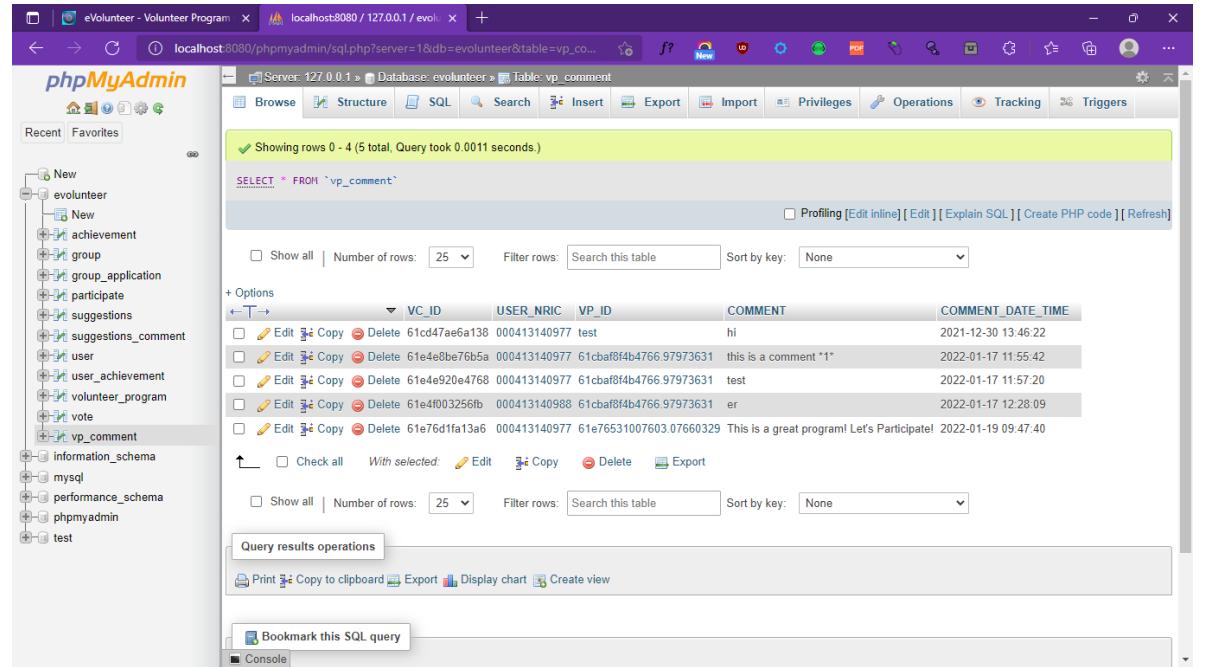
	USER_NRIC	VP_ID	PARTICIPATE_DATE	PARTICIPATE_NOTIFIED
1	000413140977	61cbaf8f4b4766.97973631	2022-01-17 15:01:55	1
0	000413140977	61e76531007603.07660329	2022-01-19 09:41:03	0
0	000413140977	test	2022-01-17 09:15:33	0
1	000413140988	61cbaf8f4b4766.97973631	2022-01-17 15:02:58	1

X. New Volunteer Program Comment

The screenshot shows the phpMyAdmin interface for the 'evolunteer' database. The 'vp_comment' table is selected. The table structure includes columns: VC_ID, USER_NRIC, VP_ID, COMMENT, and COMMENT_DATE_TIME. The data shows five comments posted by different users.

	VC_ID	USER_NRIC	VP_ID	COMMENT	COMMENT_DATE_TIME
1	61cd47ae6a138	000413140977	test	hi	2021-12-30 13:46:22
2	61e4e8be76b5	000413140977	61cbaf8f4b4766.97973631	this is a comment *1*	2022-01-17 11:55:42
3	61e4e920e4768	000413140977	61cbaf8f4b4766.97973631	test	2022-01-17 11:57:20
4	61e4f003256fb	000413140988	61cbaf8f4b4766.97973631	er	2022-01-17 12:28:09
5	61e76d1fa13a6	000413140977	61e76531007603.07660329	This is a great program!	2022-01-19 09:45:03

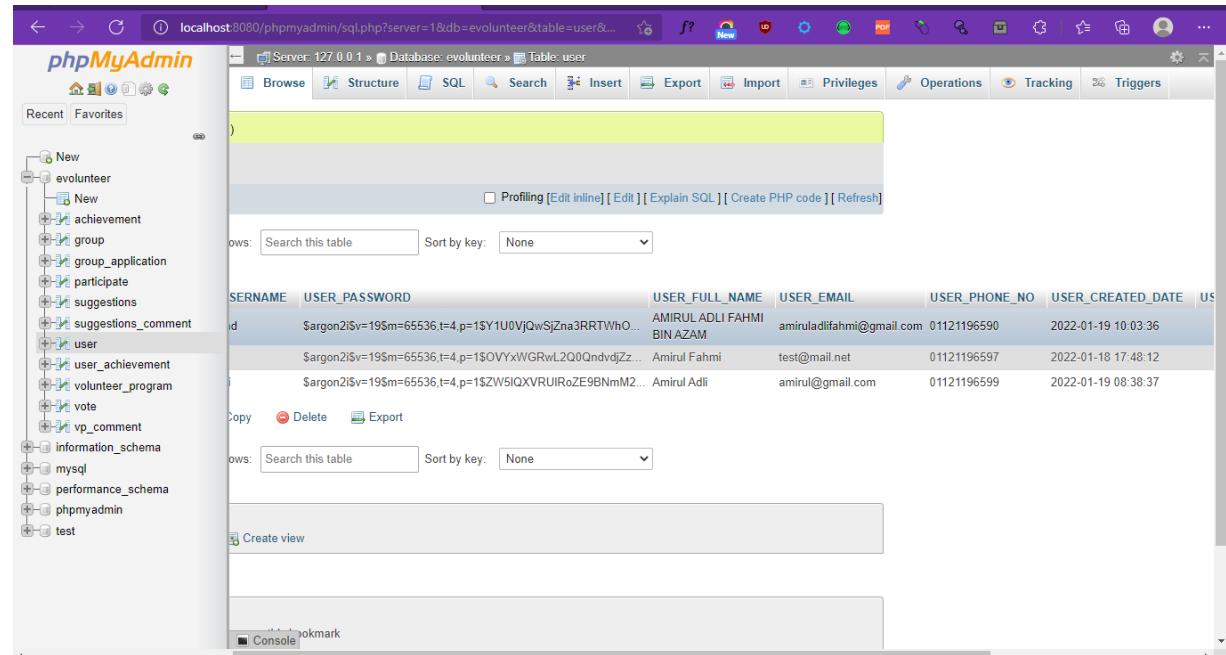
xi. Edit/Delete Volunteer Program Comment



The screenshot shows the phpMyAdmin interface for the 'evolunteer' database. The left sidebar lists tables: achievement, group, group_application, participate, suggestions, suggestions_comment, user, user_achievement, volunteer_program, vote, and vp_comment. The right panel displays the 'vp_comment' table with the following data:

VC_ID	USER_NRIC	VP_ID	COMMENT	COMMENT_DATE_TIME
61cd47ae6a138	000413140977	test	hi	2021-12-30 13:46:22
61e4e8be76b5a	000413140977	61cbaf0f4b4766.97973631	this is a comment *1*	2022-01-17 11:55:42
61e4e920e4768	000413140977	61cbaf8f4b4766.97973631	test	2022-01-17 11:57:20
61ef0f03256fb	000413140988	61cbaf8f4b4766.97973631	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

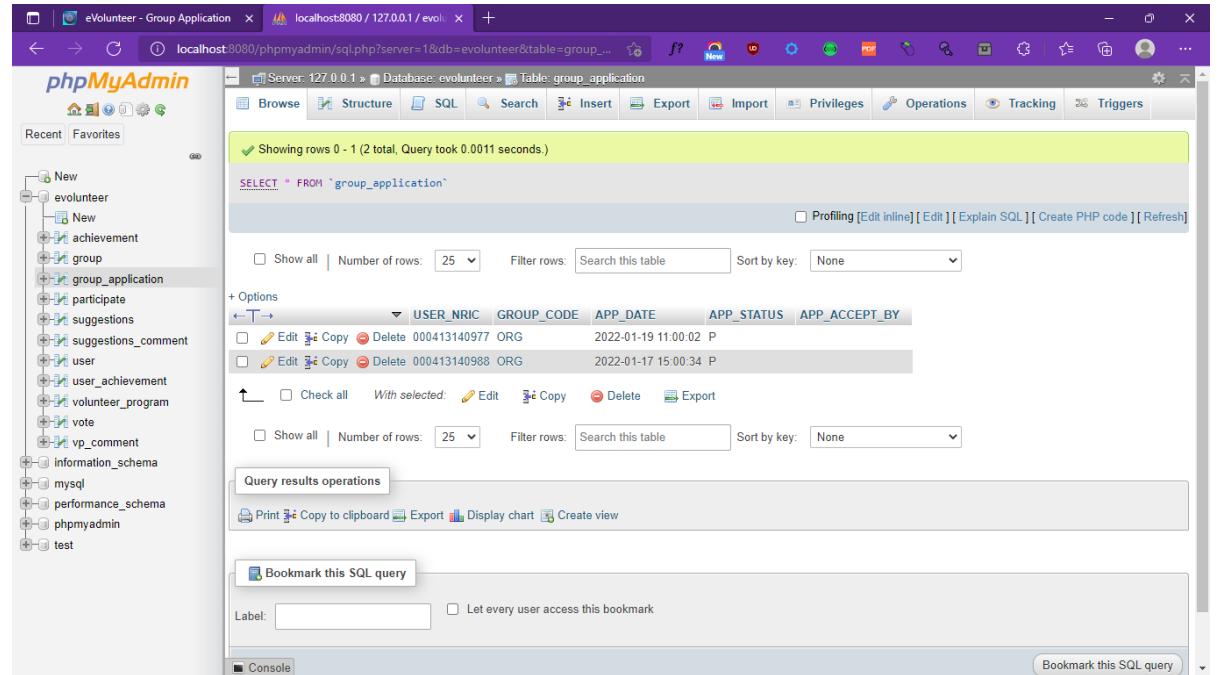
xii. Update User Profile



The screenshot shows the phpMyAdmin interface for the 'evolunteer' database. The left sidebar lists tables: achievement, group, group_application, participate, suggestions, suggestions_comment, user, user_achievement, volunteer_program, vote, and vp_comment. The right panel displays the 'user' table with the following data:

USERNAME	USER_PASSWORD	USER_FULL_NAME	USER_EMAIL	USER_PHONE_NO	USER_CREATED_DATE
Sargon2i\$y=19\$=65536.t=4,p=1\$Y1U0VjQwSjZna3RRTWhO...	Sargon2i\$y=19\$=65536.t=4,p=1\$OVOYxWGRwL2Q0QndvdjZz...	AMIRUL ADLI FAHMI BIN AZAM	amiruladlifahmi@gmail.com	01121196590	2022-01-19 10:03:36
Sargon2i\$y=19\$=65536.t=4,p=1\$OVOYxWGRwL2Q0QndvdjZz...	Sargon2i\$y=19\$=65536.t=4,p=1\$ZW5IQXVRUIRoZE9BNmM2...	Amirul Fahmi	test@mail.net	01121196597	2022-01-18 17:48:12
Sargon2i\$y=19\$=65536.t=4,p=1\$ZW5IQXVRUIRoZE9BNmM2...	Sargon2i\$y=19\$=65536.t=4,p=1\$ZW5IQXVRUIRoZE9BNmM2...	Amirul Adli	amirul@gmail.com	01121196599	2022-01-19 08:38:37

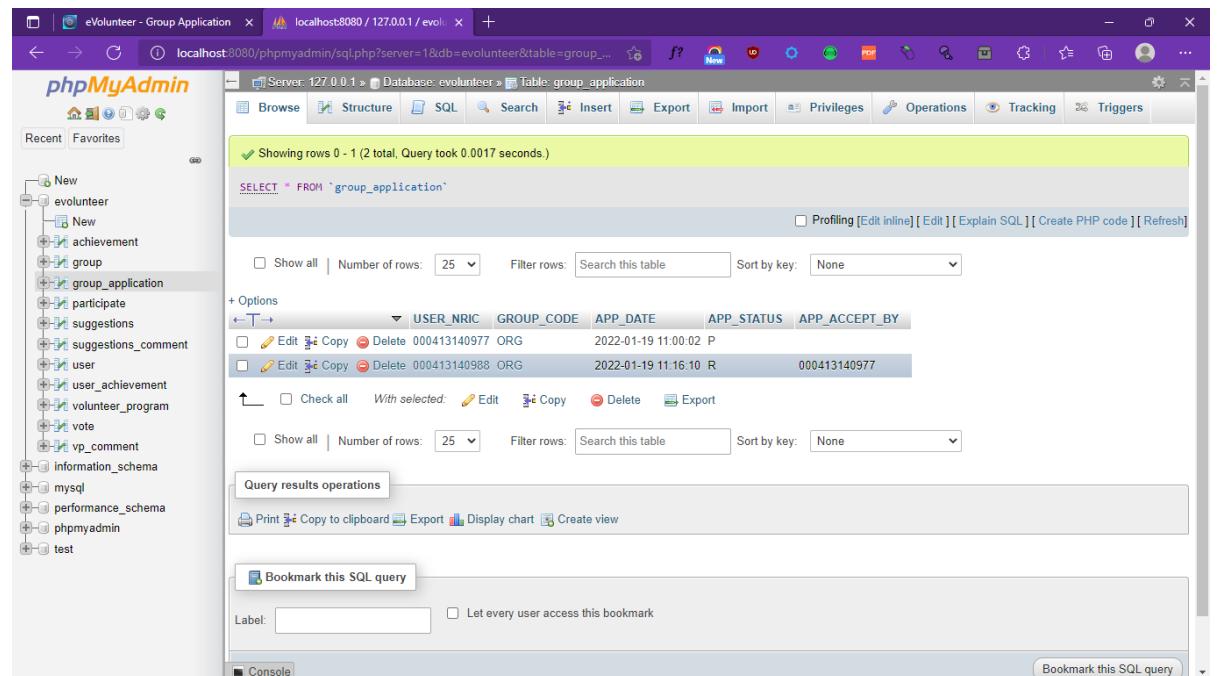
xiii. Group Application Apply



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 data:

USER_NRIC	GROUP_CODE	APP_DATE	APP_STATUS	APP_ACCEPT_BY
000413140977	ORG	2022-01-19 11:00:02	P	
000413140988	ORG	2022-01-17 15:00:34	P	

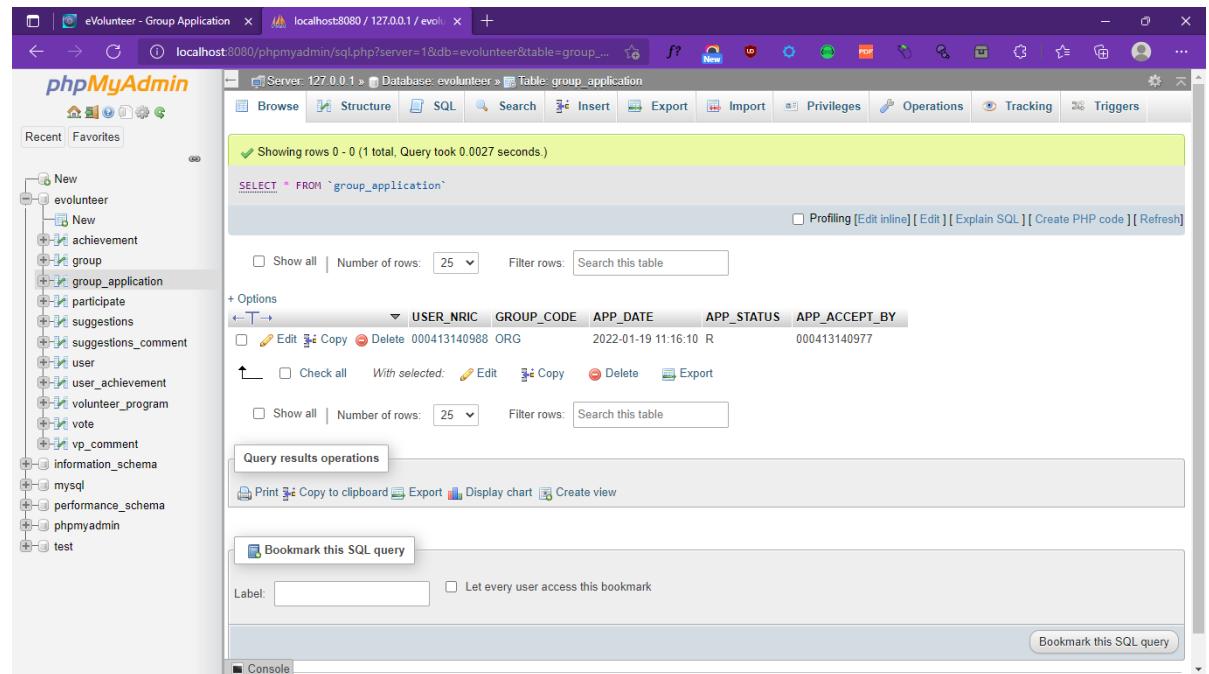
xiv. Admin Group Application Edit



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 data:

USER_NRIC	GROUP_CODE	APP_DATE	APP_STATUS	APP_ACCEPT_BY
000413140977	ORG	2022-01-19 11:00:02	P	
000413140988	ORG	2022-01-19 11:16:10	R	000413140977

xv. User Group Application Cancel

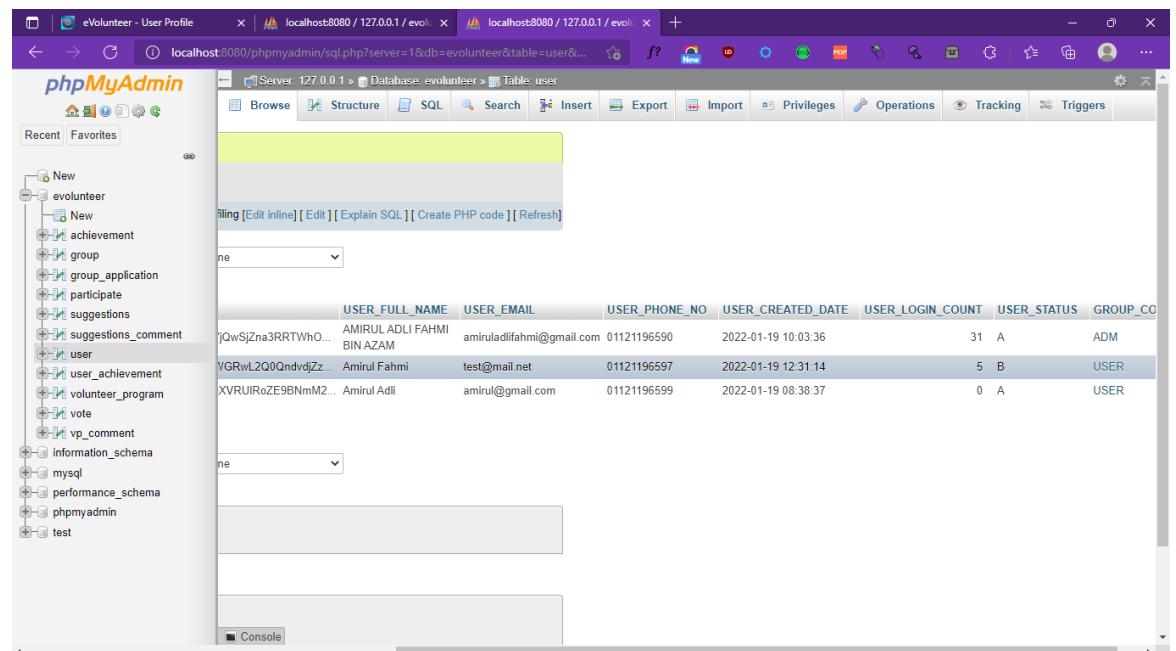


The screenshot shows the phpMyAdmin interface for the 'evolunteer' database. The left sidebar lists various tables under the 'evolunteer' schema, including 'achievement', 'group', 'group_application', 'participate', 'suggestions', 'suggestions_comment', 'user', 'user_achievement', 'volunteer_program', 'vote', and 'vp_comment'. The 'group_application' table is selected and displayed in the main pane. A single row is selected for viewing:

USER_NRIC	GROUP_CODE	APP_DATE	APP_STATUS	APP_ACCEPT_BY
000413140988	ORG	2022-01-19 11:16:10	R	000413140977

Below the table, there are buttons for Edit, Copy, Delete, and other operations. The bottom right corner of the interface has a 'Bookmark this SQL query' button.

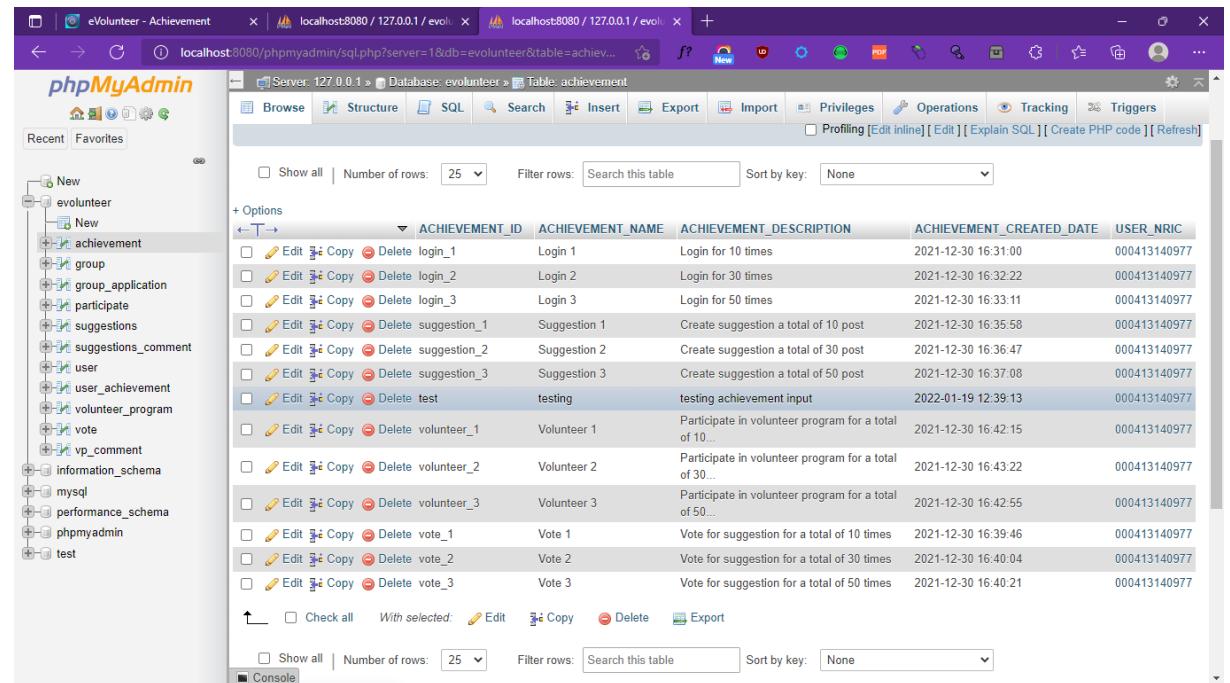
xvi. Ban/UnBan User



The screenshot shows the phpMyAdmin interface for the 'evolunteer' database. The left sidebar lists various tables under the 'evolunteer' schema. The 'user' table is selected and displayed in the main pane. The table structure includes columns for USER_ID, USER_FULL_NAME, USER_EMAIL, USER_PHONE_NO, USER_CREATED_DATE, USER_LOGIN_COUNT, USER_STATUS, and GROUP_CODE. Three user records are listed:

USER_ID	USER_FULL_NAME	USER_EMAIL	USER_PHONE_NO	USER_CREATED_DATE	USER_LOGIN_COUNT	USER_STATUS	GROUP_CODE
jQwSjZna3RRTWhO...	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
XVRUIRoZE9NmM2...	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 various tables: 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 'achievement' table is selected in the main pane. The table structure includes columns: ACHIEVEMENT_ID, ACHIEVEMENT_NAME, ACHIEVEMENT_DESCRIPTION, ACHIEVEMENT_CREATED_DATE, and USER_NRIC. The data grid displays 15 rows of achievement records, each with a checkbox, edit, copy, and delete link. The last row, 'Vote 3', is currently selected.

	ACHIEVEMENT_ID	ACHIEVEMENT_NAME	ACHIEVEMENT_DESCRIPTION	ACHIEVEMENT_CREATED_DATE	USER_NRIC
<input type="checkbox"/>	Edit Copy Delete	login_1	Login 1	2021-12-30 16:31:00	000413140977
<input type="checkbox"/>	Edit Copy Delete	login_2	Login 2	2021-12-30 16:32:22	000413140977
<input type="checkbox"/>	Edit Copy Delete	login_3	Login 3	2021-12-30 16:33:11	000413140977
<input type="checkbox"/>	Edit Copy Delete	suggestion_1	Suggestion 1	2021-12-30 16:35:58	000413140977
<input type="checkbox"/>	Edit Copy Delete	suggestion_2	Create suggestion a total of 10 post	2021-12-30 16:36:47	000413140977
<input type="checkbox"/>	Edit Copy Delete	suggestion_3	Create suggestion a total of 30 post	2021-12-30 16:37:08	000413140977
<input type="checkbox"/>	Edit Copy Delete	test	testing	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	2021-12-30 16:39:46	000413140977
<input type="checkbox"/>	Edit Copy Delete	vote_2	Vote for suggestion for a total of 10 times	2021-12-30 16:40:04	000413140977
<input type="checkbox"/>	Edit Copy Delete	vote_3	Vote for suggestion for a total of 30 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>		
<i>Examiner/Lecturer #2 (if applicable)</i>		

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:

- Security in user inputs, it checks the user input and required the user to enter the required format.
- Unique ability of using Markdown(Markup Language) to enhance the user experience in making a post.
- Simple and user-friendly interfaces, that allow user to understand on how to use it after a few runs.
- Innovative features, such as achievements and commenting subsystems.
- 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.
- 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:

- 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.
- Because of using NRIC number as a unique identifier, the user scope is limited to user with NRIC only.
- There is no user confirmation that the user is the one with the said NRIC number.
- 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.

- The ability to preview the user post, before creating a new post.
- Word filter and malicious link checker, or moderator to check on user.
- 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.
- To also allow Markdown(Markup Language) to be enable for comment sections.
- To push a notification to user email, and phone.
- If wanting to make the web-application more international, it is recommended to use username for the primary key, and not use NRIC number.
- Make a report subsystem, to allow user to report another user for misbehaviors.
- Add more details on about page, for example, give a user manual on how to use the web-application.
- Add a subcategory system, to filter out the post via regions, to ensure that user can find post based on their regions.
- If the future has plans on having server room, it is recommended to allow user to have their own user profile.
- Enhance the communication for organizer and their participants, add a communication subsystem.
- Give more features for organizer, such as the ability to mark the participant is present or not.
- Add a verification, to verify the user email and phone numbers.
- 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

- i. PA Thoits, LN Hewitt - Journal of health and social behavior, 2001
<https://www.jstor.org/stable/3090173>
- ii. RB Freeman - Journal of Labor Economics, 1997 – <https://www.journals.uchicago.edu>
- iii. Markedjs. (2021, October 1). Marked Documentation <https://marked.js.org/>
- iv. Bootstrap team (2021, April 10). Bootstrap Documentation <https://getbootstrap.com/>

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(15 0)	Yes	NULL			
ACHIEVEMENT_CREATED_DATE	timestamp	No	current_timestamp() p()			
USER_NRIC	varchar(12)	No		user -> USER_NRIC		

Indexes

Keyname	Type	Uniqu e	Packe d	Column	Cardinalit y	Collatio	Nul l	Commen t
PRIMARY	BTRE E	Yes	No	ACHIEVEMENT_ID	11	A	No	
achievement_ibfk_1	BTRE E	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	<i>NULL</i>			
GROUP_REMARKS	varchar(100)	Yes	<i>NULL</i>			
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	Null	Default	Links to	Comments	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	
				GROUP_CODE	1	A	No	
GROUP_CODE	BTREE	No	No	GROUP_CODE	1	A	No	

participate

Column	Type	Null	Default	Links to	Comments	Media (MIME) type
USER_NRIC (<i>Primary</i>)	varchar(12)	No		user -> USER_NRIC		
VP_ID (<i>Primary</i>)	varchar(25)	No		volunteer_program -> VP_ID		
PARTICIPATE_DATE	timestamp	No	current_timestamp()			
PARTICIPATE_NOTIFIED	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	
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	Uniqu e	Packe d	Column	Cardinalit y	Collatio n	Nul l	Commen t
PRIMARY	BTRE E	Yes	No	SUGGESTIONS_ID	5	A	No	
suggestions_ibfk_1	BTRE E	No	No	USER_NRIC	2	A	No	

suggestions_comment

Column	Type	Nul l	Default	Links to	Comment s	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	Uniqu e	Packe d	Column	Cardinali ty	Collatio n	Nul l	Comme nt
PRIMARY	BTRE E	Yes	No	SC_ID	3	A	No	
SUGGESTIONS_ID	BTRE E	No	No	SUGGESTIONS_ID	3	A	No	
suggestions_comment_ib_fk_2	BTRE E	No	No	USER_NRIC	3	A	No	

user

Column	Type	Nul l	Default	Links to	Comment s	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	Nul l	Default	Links to	Commen ts	Media (MIM E) type
USER_NRIC (<i>Primary</i>)	varchar(12)	No		user -> USER_NRIC		
ACHIEVEMENT_ID (<i>Prim ary</i>)	varchar(15)	No		achievement -> ACHIEVEMENT_ID		
RECEIVED_DATE	timestam p	No	current_timestam p()			

Indexes

Keyname	Type	Uniqu e	Packe d	Column	Cardinalit y	Collatio n	Nul l	Comme nt
PRIMARY	BTRE E	Yes	No	USER_NRIC	0	A	No	
				ACHIEVEMENT_I D	0	A	No	
ACHIEVEMENT_I D	BTRE E	No	No	ACHIEVEMENT_I D	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()			
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	Comme
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	Default	Links to	Commens	Media (MIME) 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	Unique	Packed	Column	Cardinality	Collation	Nul	Comment
PRIMARY	BTREE	Yes	No	USER_NRIC	4	A	No	
				SUGGESTIONS_ID	4	A	No	
SUGGESTIONS_ID	BTREE	No	No	SUGGESTIONS_ID	4	A	No	

vp_comment

Column	Type	Nul	Default	Links to	Comment	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_TIME	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	