### 1 Navigation Module

The navigation module is located at the top of the page, which is convenient for users to directly select the content they want to know and jump to. It includes several functions such as "Volunteer Project", "Volunteer News", "Help Center", "Login" and "Registration".

This module adopts a horizontal layout, with the app-specific logo on the far left, and the above functions from left to right. (as the picture shows)



Figure 1 Schematic diagram of the layout of the navigation module

### 2 User Login Module

The login module of the system is responsible for the user's login function, including the verification of the user's e-mail account and password when logging in.

This module adopts a centered and vertical layout interface. From top to bottom in the interface, there is a Testview at the top to remind the user that the current interface is a sign in interface. The center is staggered and displayed as follows: Two Testviews are used to prompt the user to enter an email address and password; two Textarea text input boxes are used to enter information for the user. At the bottom is a button for the user to confirm the information and log into the app and call the background database to verify the login personnel. If the verification is successful, the corresponding jump can be performed. If it is unsuccessful, a prompt will be displayed on the interface: "The account or password is incorrectly entered, please re-enter!" (as shown in the figure).

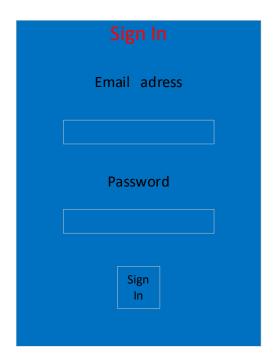


Figure 2 Schematic diagram of user login interface layout

## 3 New User Registration Module

The new user registration module is responsible for information registration of new users who use the system for the first time. If a new user wants to enter the system, they needs to register first, complete the registration information (including name, email, mobile phone number, birthday, gender, password, etc.), and then log in according to the just registered account and password. This involves calling the background database SqLite, receiving the data entered by the user to execute the command and returning the result.

The module layout is also centered and vertical, with a Testview at the top prompting the user that the current interface is the registration interface (Create Account). Below is the upper and lower cross layout of Testview and Textarea, and the bottom is the confirmation button.

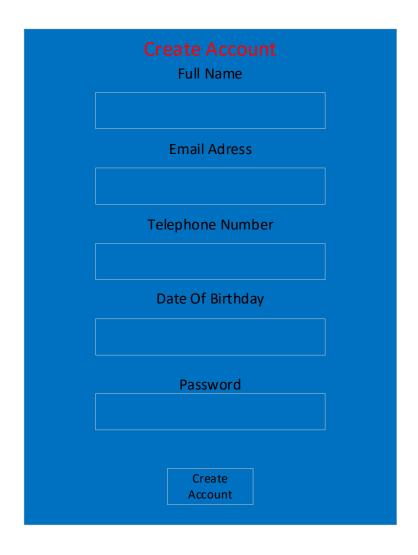


Figure 3 Schematic diagram of the layout of the new user registration interface

### 4 Volunteer Activity Selection Module (main interface)

A very important function of the system is to facilitate users to choose the one that suits them from numerous volunteer activities, so in this interface, users need to refine the volunteer activities that suit them by selecting various requirements and conditions. The selection criteria include: form of volunteering (remote volunteering, face-to-face volunteering), type of volunteering (respecting the elderly and helping the disabled, helping the poor, children and youth education, environmental protection, etc.), and volunteering locations (province, city, district). This module contains two sub-functions, query and display functions. The query function can receive the user's options for various conditions and transmit them to the background, call SqLite through Java to query, and return the results to the foreground interface for display. Returns an empty result set if the query result is empty.

The layout of this module is:

The overall vertical layout is adopted: the navigation is kept at the top of the interface, a testview in the middle is used to prompt the current interface function (such as:

seeking volunteer opportunities), and the lower interface adopts a horizontal layout: from left to right, the above selection conditions are for users to choose. At the bottom of the interface is the confirmation button. After the user clicks the confirmation button, if there is a volunteer service that meets the user's needs in the background database, the interface will jump to the volunteer activity introduction module. If there are no volunteer activities that meet the user's criteria in the backend database, a text label of "Sorry, we could not find opportunities that match your search." will be displayed on the current interface. (as the picture shows)



Figure 4 Schematic diagram of the layout of the volunteer activity selection interface

#### 5 Volunteer Activities Introduction Module

When reaching this module, the user has already screened the volunteer activities. This interface is used to display some detailed information of the volunteer activities for the user to further select, including: activity time, activity duration, activity detailed address, contact person, contact information, registration Restrictions, how to sign up, etc. In this way, users can choose the most suitable volunteer activities for them to contact and register.

Layout of this module: keep the topmost, use vertical layout between activities, and use horizontal layout inside a single activity introduction box, from left to right: activity photo display; the above detailed information introduction (here, a vertical layout is used). (as the picture shows)



Figure 5 Schematic diagram of the interface layout of volunteer activities introduction

### 6 Volunteer News Module

This module is mainly used to introduce the photos and development of some volunteer activities that have been carried out. In the form of pictures and articles, the content can include: the reasons for the volunteer activities, the situation of the people involved, the results and gains, etc. Mainly in the form of pictures and texts, as a display of results, to attract more volunteers to join the next activity.

The layout of the module is: vertical layout. Navigation is at the top of the interface, and an article title below occupies a row. After the user clicks on the article of interest, the page will jump to the entire article for the user to read. Just close the page after reading it.

# 7 Help Center Module

This module is mainly aimed at various problems involved in the user's use process. The user can click on the help center in the navigation to inquire about the solution. The problems are listed by the developer according to the category, which saves the user's time. The problem categories can be divided into: registration problems, account problems, activity problems, and other problems. The problems that specific users may encounter can be selected according to the above categories.

The module layout is; Navigation is on top. The rest is horizontally laid out, with the above-mentioned question types on the left (vertical layout) and the specific questions listed on the right (vertical layout). Users can search for the problems they encounter on the right after clicking the problem type on the left, and seek solutions. (as the picture shows)

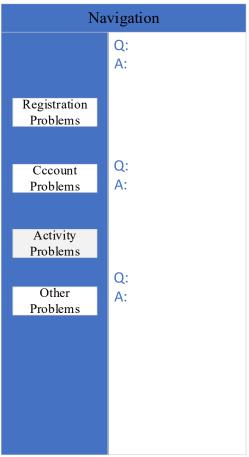


Figure 6 Schematic diagram of the layout of the help center interface