Version 2.1

PHC User Manual

Android Application for PHC Health Data Collection (PHC_HDC_V-1.8)

GramHealth

GLOBAL COMMUNICATION CENTER
GRAMEEN COMMUNICATIONS

Table of Contents

Introduction

Portable Health Clinic (PHC) aims to build an affordable, usable and sustainable preventive healthcare system for unreached people. It helps to produce technologies to provide healthcare service to the doors of the unreached. The portable clinic is a health checkup booth or a box with necessary diagnostic tools. A certified nurse will collect health record of an individual of each family in a village/urban area and upload them to a centralized database. There are two platforms (web & android) that aid this project technically. This document will guide what are the functionalities of PHC Health Data Collection android application and how to operate it.

Functionalities – In a Nutshell

The android application is basically used to store (locally) and submit the health data of a subject/member to the remote database server through internet which are checked using the tools of portable health box. A new member can be registered by this application individually or family wise. Therefore the application can do the following:

- ✓ Check Up Data Entry & Prescription Printing
- ✓ New Family Registration
- ✓ New Member Registration (With or without family)
- ✓ Offline data synchronization

Initial Setup

As this is a private android application of GCC for PHC project still now, it is not available in "Google play store" or any public domain. The authorized users will get this application through their mail. He/she has to install the application by keeping that in their device's storage location. Before installing he/she has to ensure that his/her device allows installation of apps that are from unknown source (device Settings → Security→ Unknown Sources).
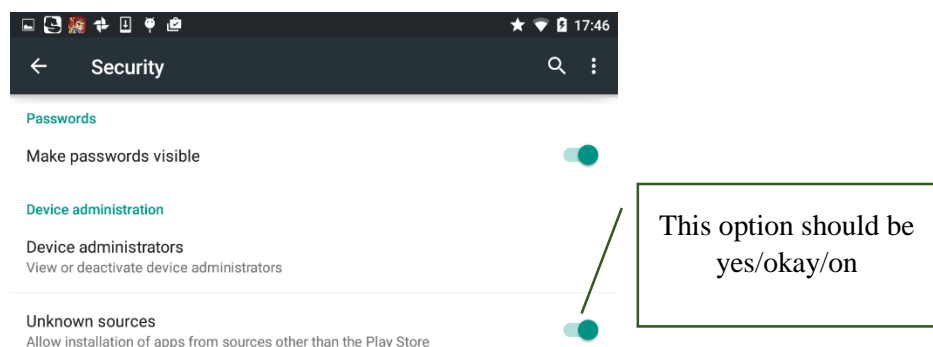

This option should be yes/okay/on

Fig: Allowing installation of any unknown sources' applications

For the very first time, the user has to load initial backup data from remote server using internet. This option will be appeared when the user launches the application for the first time. He/she has to press okay button to load the initial synchronization. Internet is required for this process.
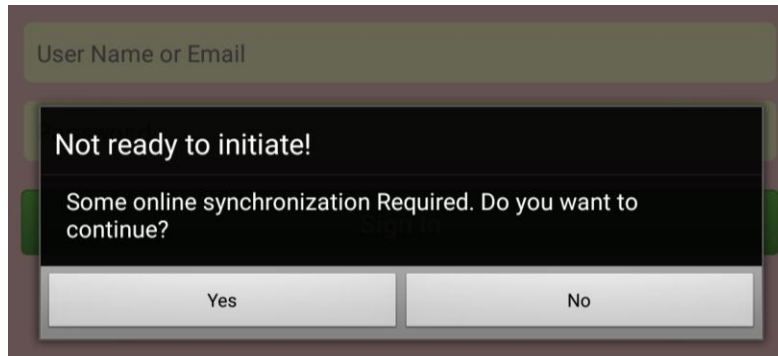
Fig: Initial Pop Up for offline data synchronization

And then the user has to login to the system using internet (***Offline login is not available in the current version***). Once a user logged in to the system, the application will be stayed as logged in state until the user press the "logout" button. Even, if the application is closed, it will be in logged in state whenever it will be re-opened.
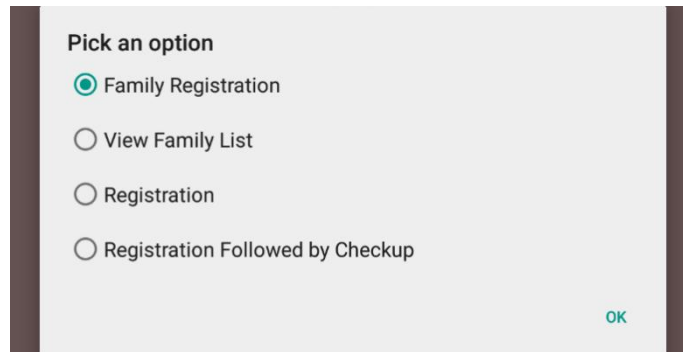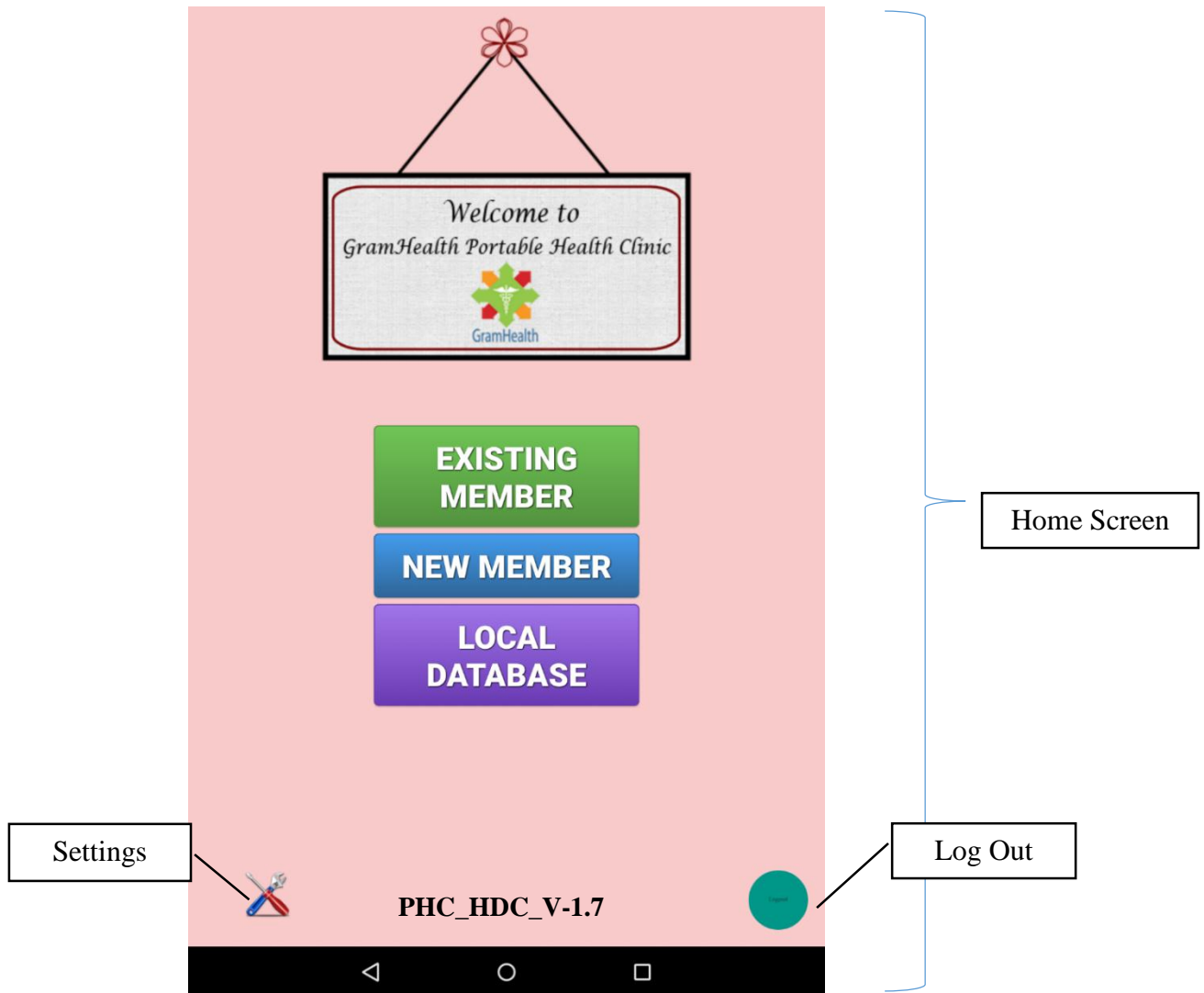
After doing all the above, the application won't be ready yet to start data entry. The user has to set the site and some optional values from the settings screen by clicking the settings icon which resided at the bottom-right corner of the home screen.
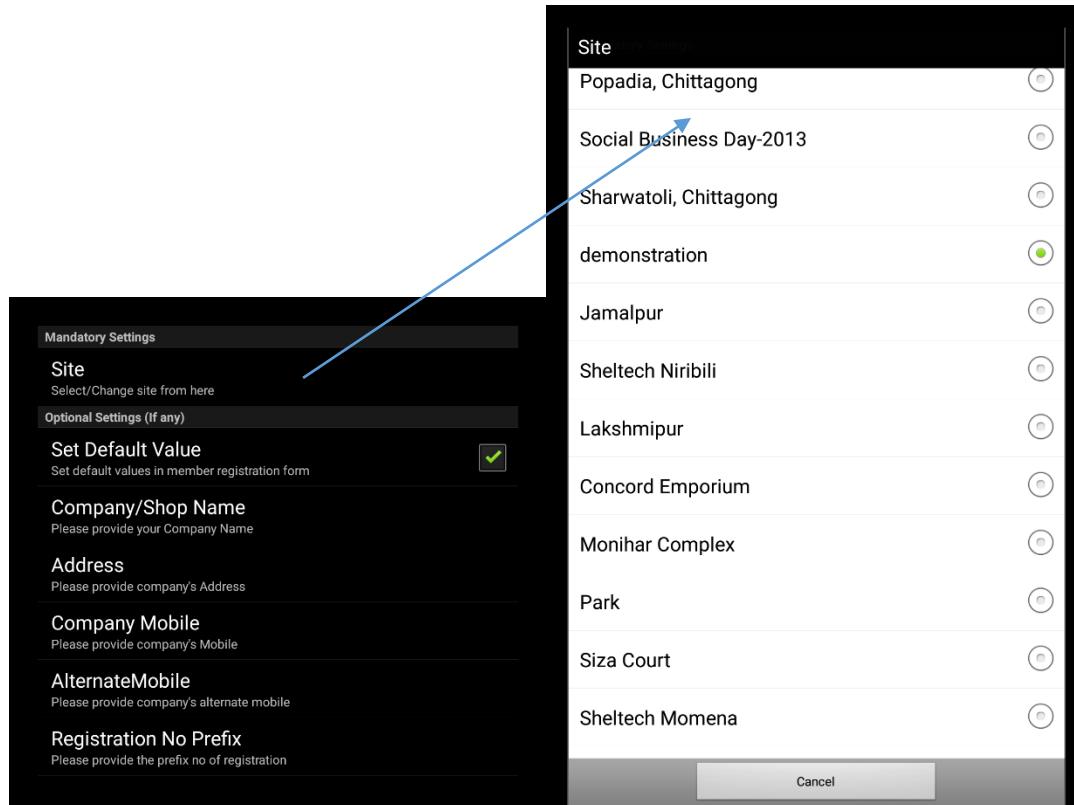
New Member Registration

A member/patient/subject is treated as a new member if he/she comes for the first time to get the PHC service and is not being registered into our system. In our current system, we have another process which is "Family Registration". So, a new member can be registered under a family also. In that case, his/her family has to be registered first. After that, he/she will be registered as a member of that family. Multiple members can be added under a family.

A member can be registered without family registration also. So basically, to register a new member there will be one of the following four situations:
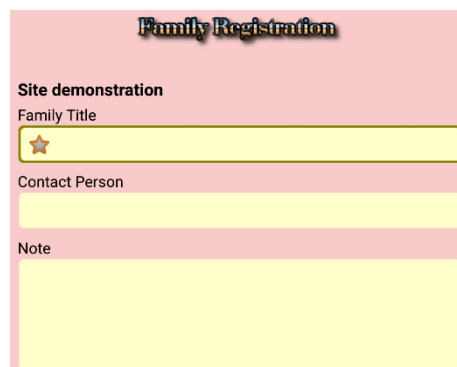

a. Family wise registration required, but family is not registered

Solution: Select "Family Registration" option

Steps:

1. Go to Home → New Member → Family Registration
2. Fill up the fields of "Family Registration" form (only "Family Title" field is required)
3. Click Save → Member Registration Screen
4. Fill up all the fields (All are required) *
5. Click Save and register another member (if any) of that family.

*Tips of Member registration screen are given in the third situation

Fig: Family Registration Screen

b. Single/Multiple member registration with family is required and family is registered already

Solution: Select "Family Registration" option

Steps:

1. Go to Home → New Member →View Family List
2. Select the particular family and click on "Add Member"
3. Fill up all the fields (All are required) *
4. Click Save and register another member (if any) of that family.

*Tips of Member registration screen are given in the third situation
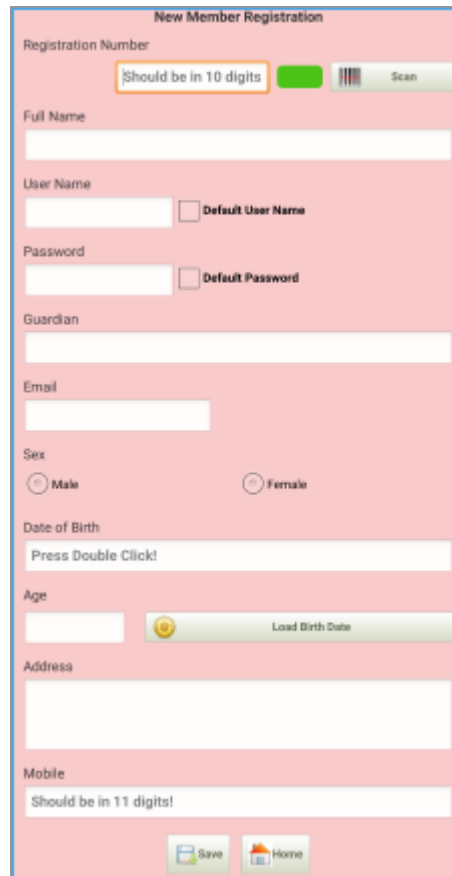

Fig: Family List Screen

c. Single/Multiple member registration without family and not followed by checkup

Solution: Select "Registration" option

Steps:

1. Go to Home → New Member →Registration
2. Fill up all the fields (All are required)
3. Click Save and register another member (if any).

Fig: Member Registration Screen

Tips:

1. If there is any common part of the pre determined barcodes for registration number, the common part can be set as registration prefix from "Settings" menu of Home screen.
2. Registration Number can be entered using barcode scanning feature. To do that, click on Scan button.
   N.B. This scanning feature won't work when any prefix is given
3. User name will be disabled during offline state by
4. Checking "Default Password" checkbox, password will be automatically placed in password box. Similar process can applied in "Email" field also.
   N.B. The checkbox for email will be visible after providing full registration number
5. If anyone knows only age or date of birth, the other value will be automatically calculated. For date of birth calculation, user has to click the load birth date button after giving age value.
6. In order to, set the default values automatically without clicking any checkbox, use the settings option. (Home→Settings→Set Default Value --Checked)

d. Single member registration without family and followed by checkup

Solution: Select "Registration Followed by Checkup" option

Steps:

1. Go to Home → New Member →Registration Followed by Checkup
2. Fill up all the fields (All are required)
3. Click Save and check up screen will be appeared.
4. Provide checkup data and click "submit" button. Detail is given in next chapter.

Check Up Data Entry

New Check up

In order to enter any member's check up data into the system, at first, the user has to determine whether the member is registered or not. If the member is registered, then follow the bellow's steps to go the check-up screen.

Home → Existing Member → New Check Up → Check Up Data Screen

If the member is not registered, then use the last option of New Member (described in the option "d" from the last chapter).

The entry fields are categorized into six categorized which are illustrated as below:

Some Instructions for checkup data entry
1. Member/patient's personal information can be viewed through "profile" button
2. In some cases, unit can be altered
3. Whenever any unusual value is entered into any field, an "exclamatory" sign will be appeared. In that kind of cases, user has to re check those entries.
4. Before submitting check up data, please check the data from "Preview" screen.
*** From "Preview Screen" a person's check up data can be printed or can be sumbitted to doctor's mobile when internet is unavailbale or interrupting. This printing can be done in both A4 and A5 size. By default A4 size is selected, but from printer application, the page setup can be changed to A5.

Fig: Preview Screen

Check Up Editing
Conditions for editing check up

1. Only present date's data can be edited for both offline and online mode
2. The checkup which are already submitted to online cannot be edited locally
3. In case of online editing, prescribed check up data cannot be edited

Steps: Home→Existing Member→Edit Check-Up
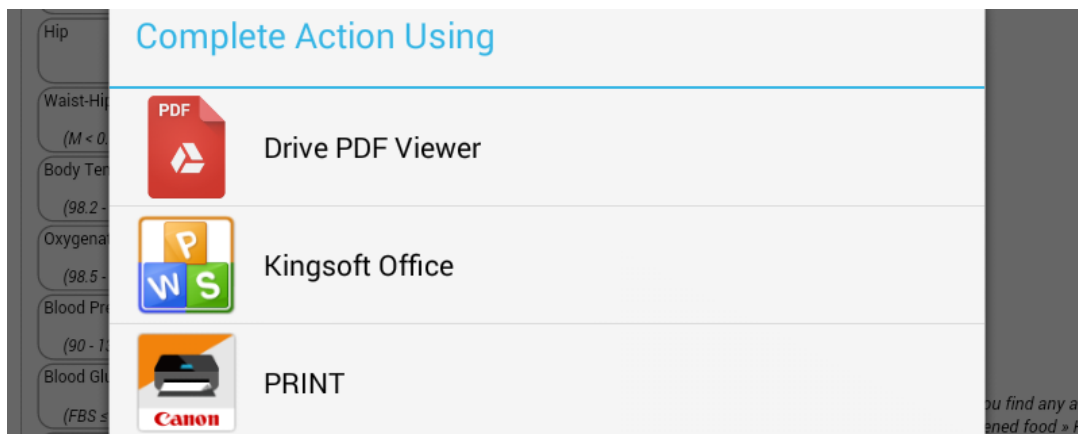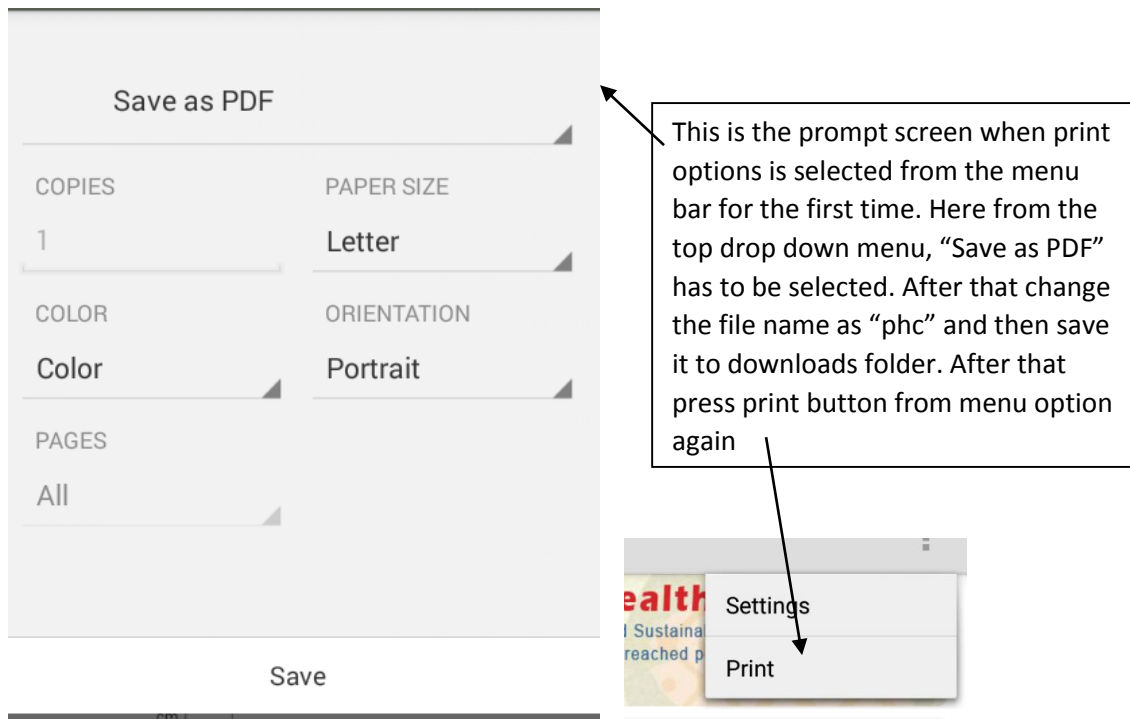
Prescription Printing

The prescription can be printed from this application using wifi-hotspot technology (for the nonce). Later, Bluetooth/wired technology will be used for printing prescriptions. This feature can be done through online only.

Steps:

1. Complete and submit check up data entry to the remote server.
2. Follow Home→Existing Member→Type Registration No→Click Submit
3. If one or more prescriptions are prepared on behalf of that patient, a dropdown menu will be appeared showing the list of those prescription date & time
4. Select the desired date & time and click "Print Prescription"
5. First scroll the prescription screen to the rightmost segment and click on "Print" button which redirects the page into print preview.
6. After that, click the device's option menu and click on "print" option two times. First time, it will tell you to save the prescription as PDF. Rename the pdf as "phc" and must save it in the device default "Downloads" folder. Then again click "print" option which shows pop up including the application list. From that list, select the specific printer app to print the application.


At first, this button has to be clicked from presciption screen to view the print preview

This is the prompt screen when print options is selected from the menu bar for the first time. Here from the top drop down menu, "Save as PDF" has to be selected. After that change the file name as "phc" and then save it to downloads folder. After that press print button from menu option again

This prompt sreen will be appeared after clicking the print option for the second time. From here select the specific printer application. And then print the prescription.

Database Synchronization

The user has to check the local database status periodically whenever the device has the net connectivity. And if any undelivered registration/checkup/family data is found, click the respective button to submit/sync that data to the remote database server.
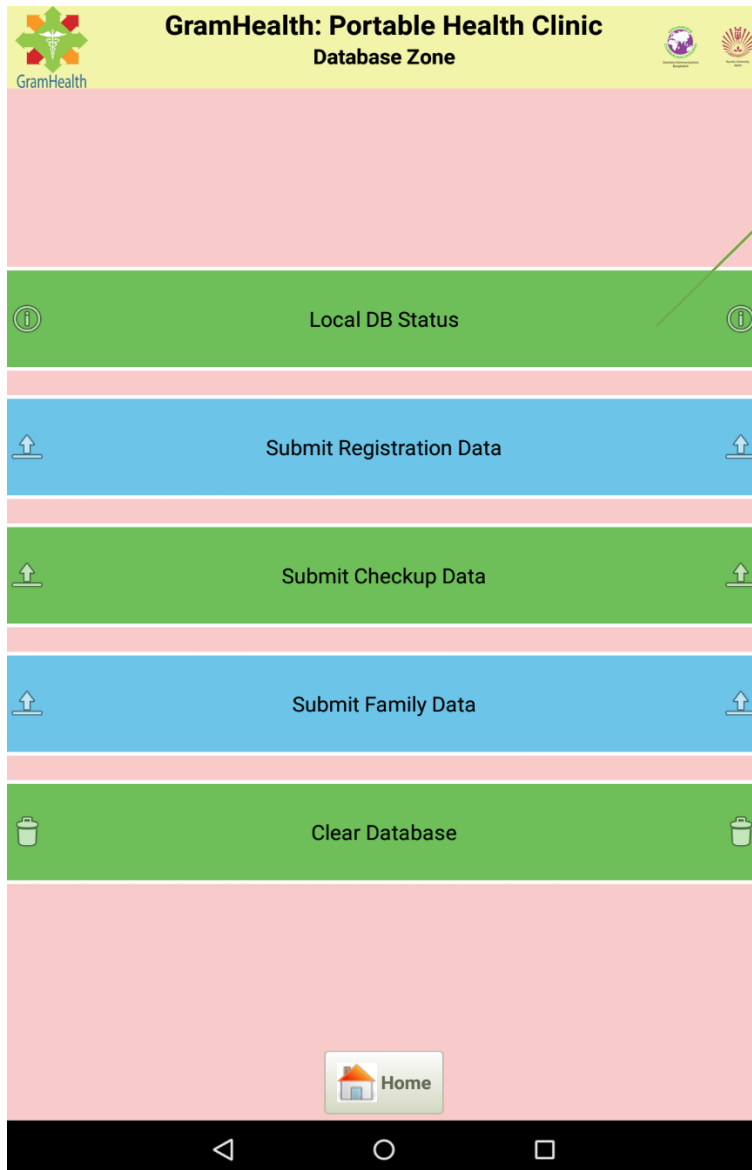
View the statistical info of local data

Conclusion

The android application will be upgraded periodically due to new requirements. So, whenever any new version of this application will be released, the user manual will also be updated accordingly. The application has multilingual feature. So, if any user changes his/her device's language from settings, the application's buttons' as well as options' titles will be converted to that specific language. However, the new version of the application can be downloaded from the user dashboard of the PHC website.