Close To Me user manual

1. Introduction.

Close To Me is an application for Android aimed to find new friends on Facebook using bluetooth.
You can use it to enlarge your "Graph".
Close To Me collects bluetooth name and mac address of devices it founds when makes a scan.
It is possible to make a manual scan or an automatic scan performed at regular intervals.
It is not necessary to be connected to Internet to make it works.
Internet is needed only to find new friends on Facebook.
So you can collect bluetooth information even where no networks are available.
All the information are stored inside an SQLite database.
Some simple functions to manage the database are provided.
After a scan, or manually, through the button on the main screen, if internet is available, the search for new friends on Facebook is performed.
Following is explained how Close To Me is able to find new friends on Facebook.
To avoid battery draining no bluetooth pairing is performed (also because it is not necessary), the mac address should be necessary to do all the things.
Unfortunately, as far as I know, it is not possible to add a new field on Facebook's tables, and also fql queries can be performed only on indexable fields.
So, to be able to find persons on Facebook, Close To Me uploads a picture of a QR barcode inside the application's album. This process returns a unique number which will be used as the bluetooth name of the phone on which Close To Me is installed.
This unique number is preceded by a tag to understand that on this device is installed Close To Me.
When a new friend is found on Facebook, it is added to the main screen and it will possible to visit its profile and ask for friendship.
When a new friend is found a new activity feed is added to your Facebook profile (this feature can be disabled).
Close To Me is derived by Hackbook, it uses ZXing lib for QR barcodes. Also some pieces of code are took from BluetoothChat and from ApiDemo and many pieces of source code found on Internet.

2. Initialization.

2.1. Splash screen

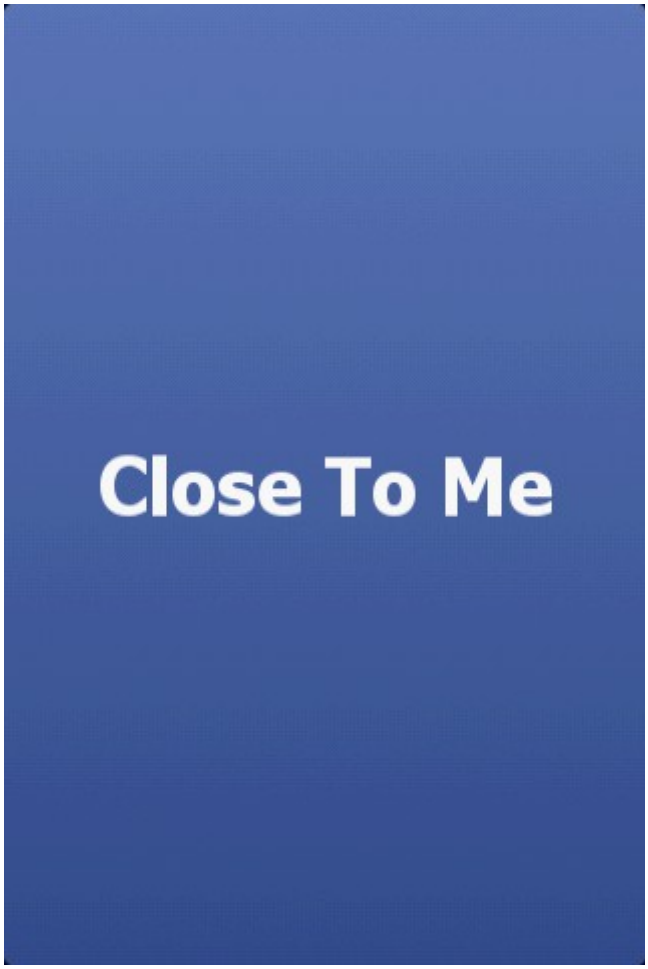

Fig. 1: Splash screen

The application starts with a splash screen which shows the name of the application.

2.2. Main screen

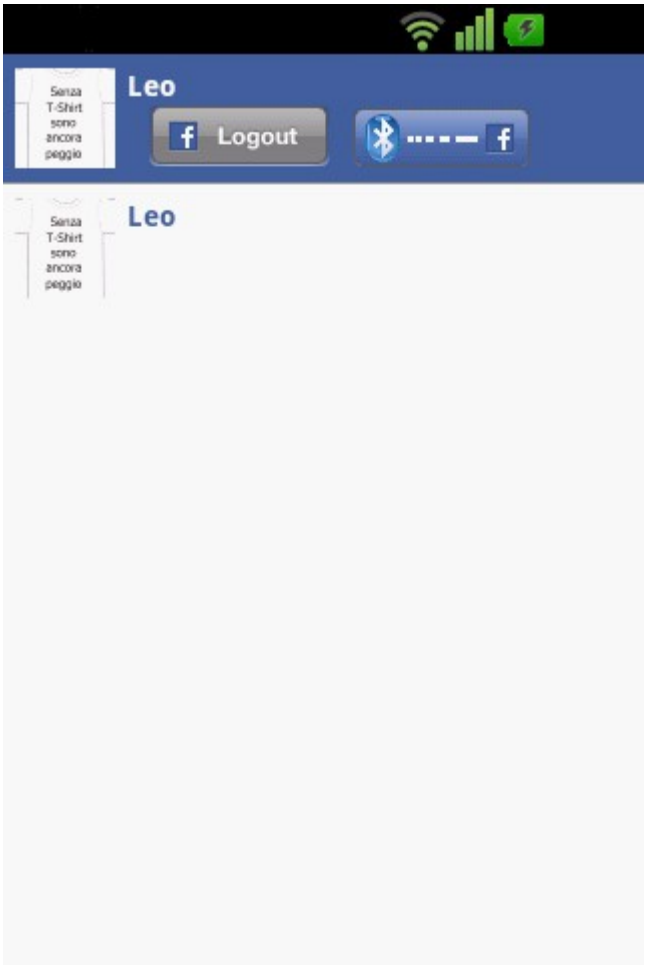

Fig. 2: The main screen

The upper side of the main screen contains the profile image of the current logged in user.

If no connection is available or no user is already logged no picture will be shown.

Close to the user profile image there is the login button, which allow to log into Facebook with the SSO technology.

The first thing to do after the installation is to go online and to press this button to login into Facebook and grant all the permission the application needs to work.

Please accept all the permission as is, specially the application needs to publish a picture of a Qr barcode that has to be visible to everybody (otherwise nobody will be able to find you).

The last button is used to find new friends on Facebook manually.

After a manual scan or an automatic scan, if an internet connection is available, the search for new person on Facebook is automatically done, but in case of problems it is possible to retry the operation through this button.

The lower part of the main screen contains the list of person found on Facebook.

A short click on one of the element will bring you to the Facebook user's profile page.

A long click will allow you to delete the currently selected item.

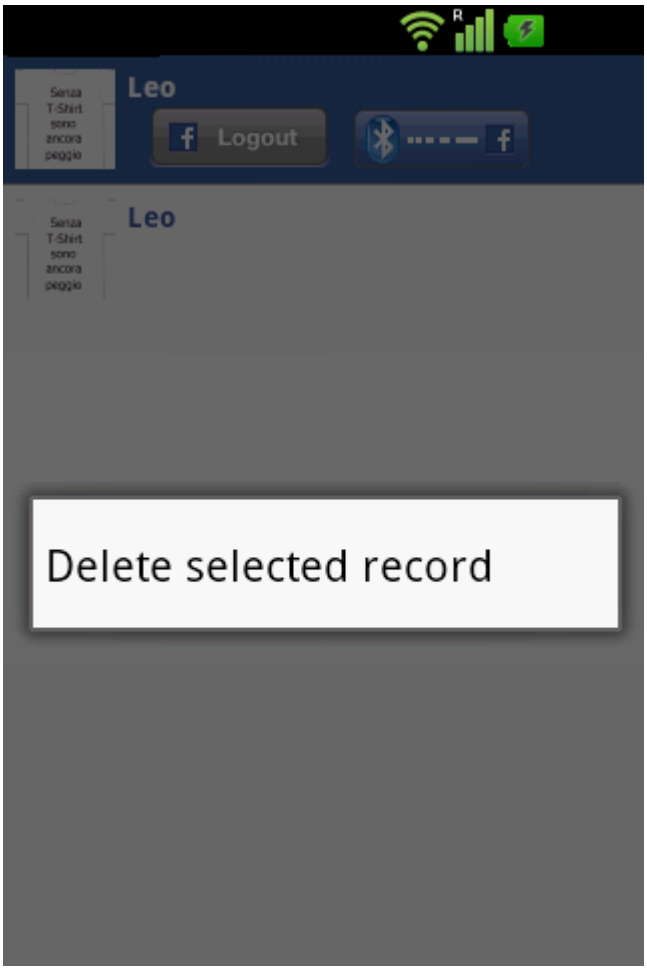

Fig. 3: Long click on an item in the list.

The first time you launch the application the following will be shown:

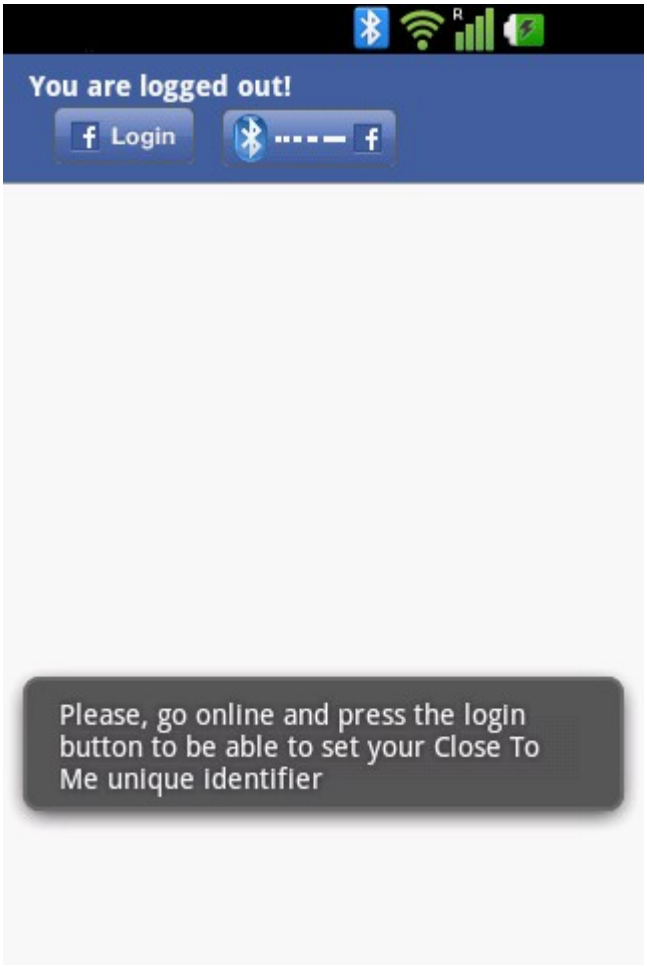

Fig. 4: First execution of the application.

You need to login into Facebook using the Login button, in this case is necessary to be connected to internet.

Pressing the button you will be redirected to the Facebook mobile web page or to the Android native Facebook application, if it is installed.

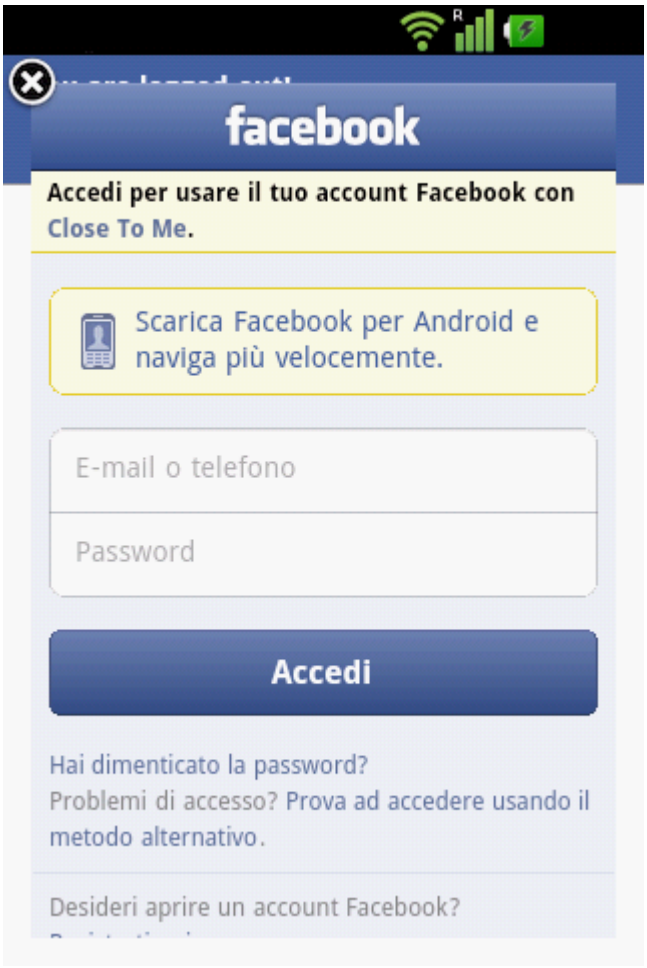

Fig. 5: Facebook login

Here you can enter you access credentials.

After the login you will be prompted to for doing the application installation:

Fig. 6: application installation request

Press on the install button.

Then will be prompted to accept the Facebook permission requested by the application.

Fig. 7: Permissions request

As said, please accept all the permission as is, specially the application needs to publish a picture of a Qr barcode that has to be visible to everybody (otherwise nobody will be able to find you).

After a successful initialization the main screen will assume this shape:

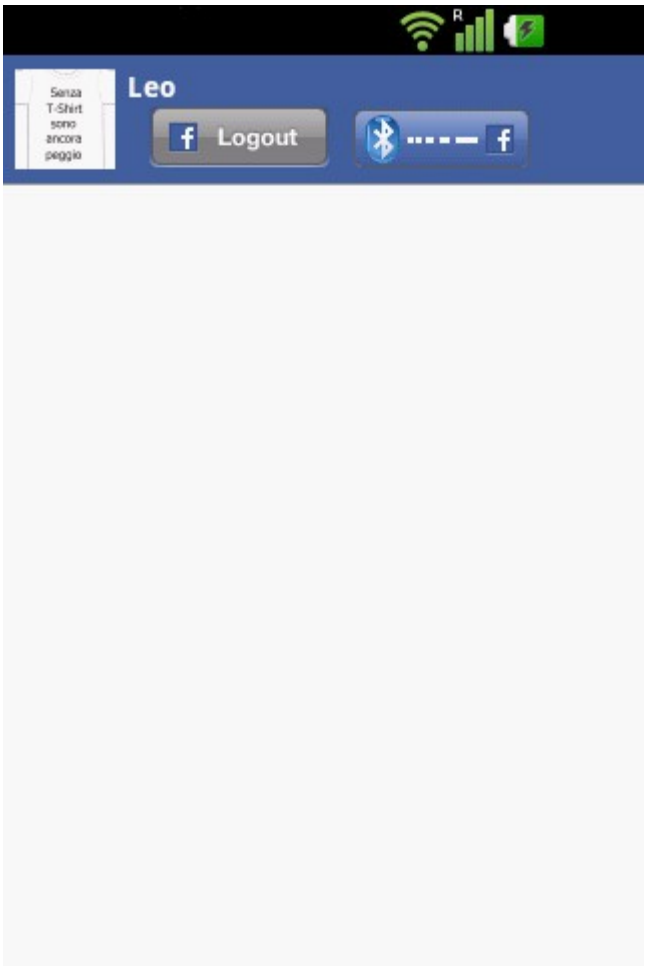

Fig. 8: First login

Here you see your profile picture and your name.

This operation does also a very important thing, that is, it loads inside the application's album a picture:

Fig. 9: QR Code loaded inside the application's album

The action of loading a picture returns to the application a number which will be used as the name of you phone.

In fact each time a search action is performed by the bluetooth, the name of the phone is checked and it is set to the proper value.

Note: since Close To Me needs that this name remains always as initially set, if you modify the name, the application will bring it back as set at the initialization.

To be sure that all the necessary thing have been set correctly you can check the settings page. Pressing the menu button this screen will appear:

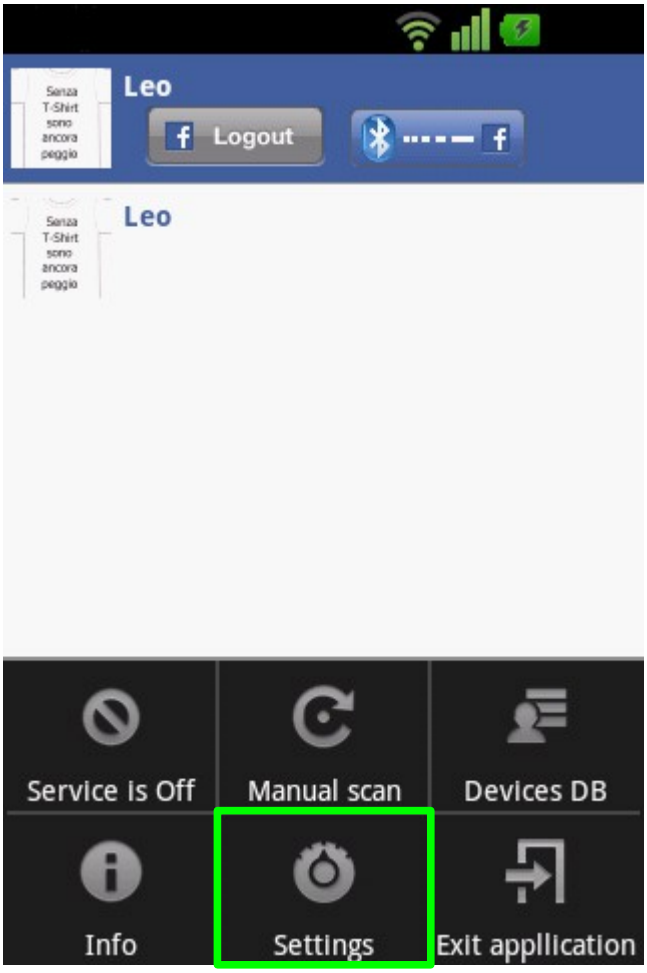

Fig. 10: Main menu

Choosing settings, the following page will be shown:

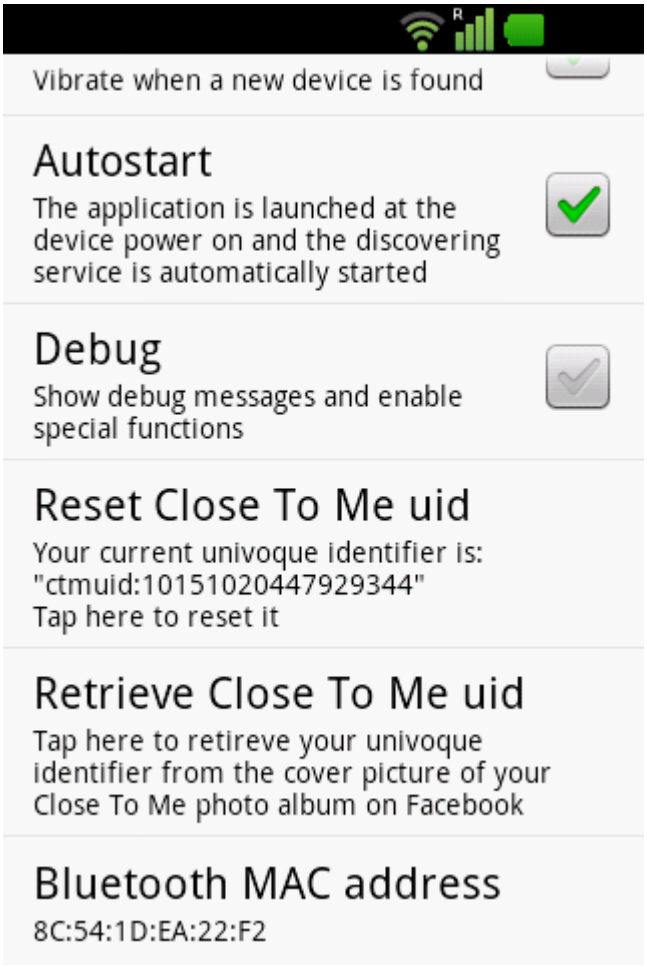

Fig. 11: Settings

If everything went well, at the end of this screen you will find your current unique identified "ctmuid:....." and the mac address of you bluetooth.

If the mac address is present, means that Close To Me was able to successfully retrieve its value.

Now you are ready to use Close To Me.

3. Usage

To begin to use Close To Me, press the menu button and choose between “Manual scan”: or the button to enable the background service which automatically perform a scan a regular intervals.

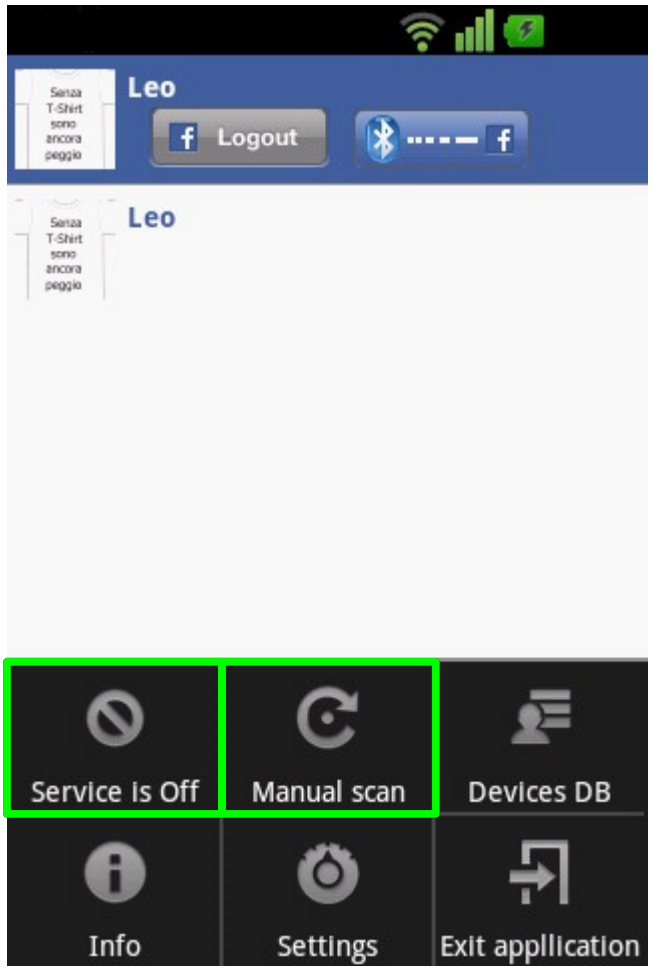

Fig. 12: Main menu

If you press the Service button it will change in this way:

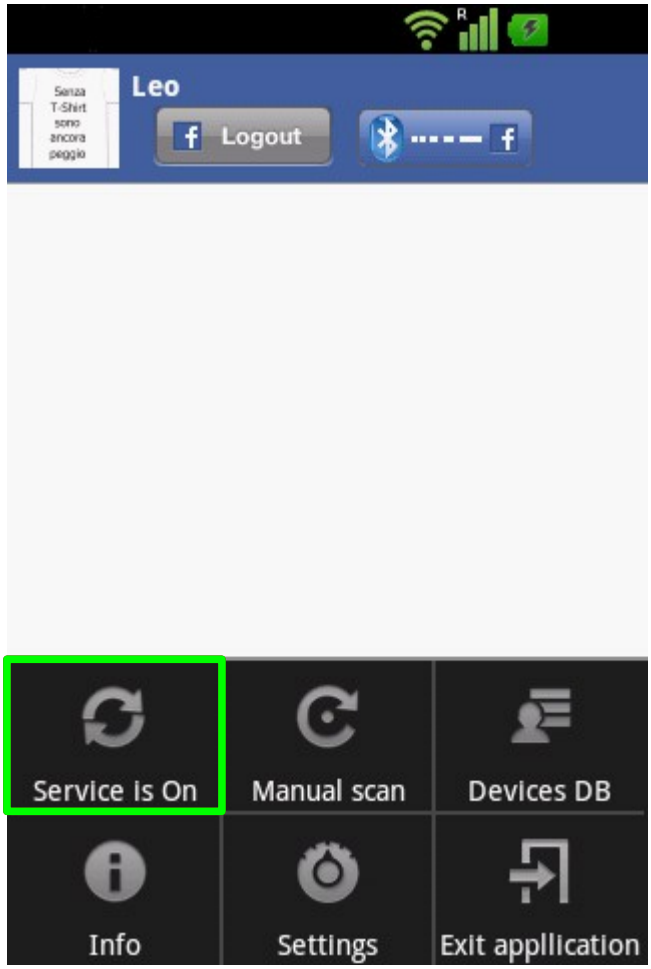

Fig. 13: Service turned on

That means that the service is now running.

The frequency on which the service will perform a bluetooth scan is regulated through a parameter defined inside the settings page:

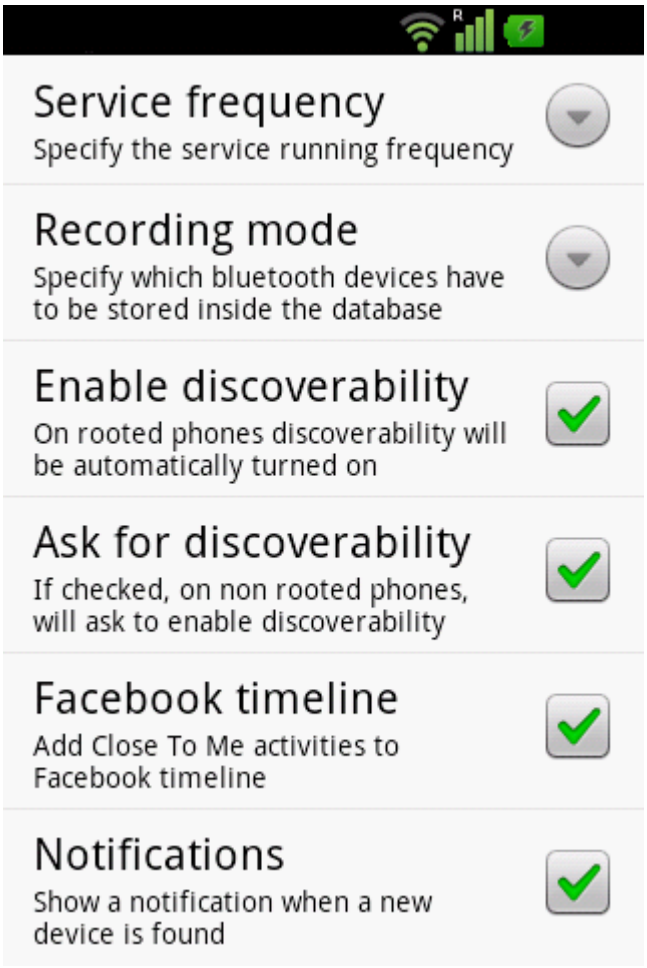

Fig. 14: Service frequency

The default value is 5 minutes, but you can range from 1 minute to 60 minutes:

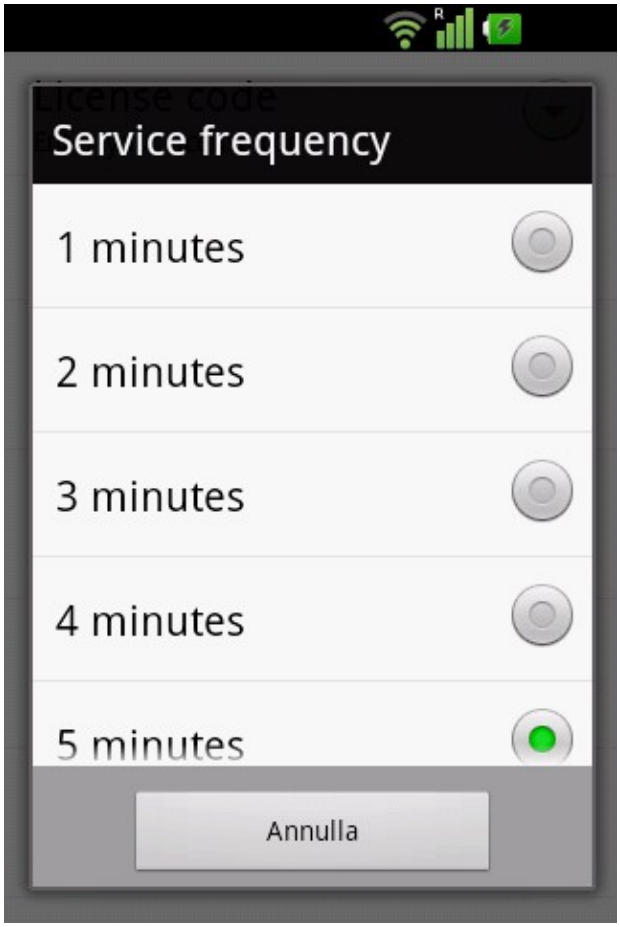

Fig. 15: Service frequency

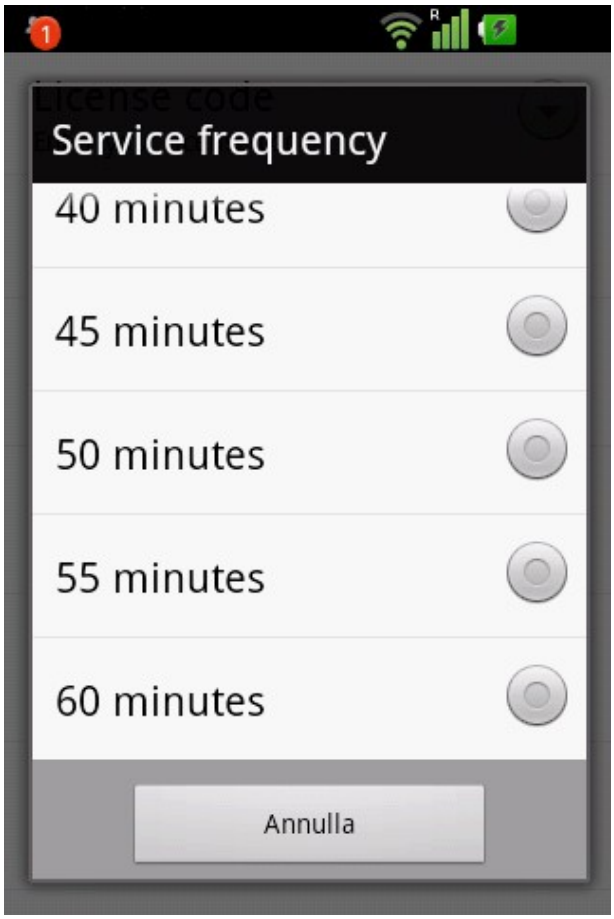

Fig. 16: Service frequency

As you can see, while I was writing the user's manual the service was running on my test device and it found a new bluetooth.

Dragging the header bar you'll see the notification:

Fig. 17: Notification

Clicking on it a new activity will be shown, inside which there will be the list of found devices:

Fig. 18: Found devices list