The ancient Greek god Hermes as the application's logo.

## <APPLICATION NAME>
mfSMS lite(Multifunction sms) v1.14, by Christos Tzoumakis

<LICENSE/PRIVACY POLICY>

<DESCRIPTION>
mfSms is an application which handles incoming and outgoing smses so far. No mmses handling available.The application is compatible(as match as possible) with the current android's unofficial sqlite db sms infrastructure. The application supports encryption/decryption, smilies(31 codes), GSM sms transmition, smpp sms transmition, two specific http API transmition sms providers, the English and the Hellenic locales so far. After opening the application, the main screen appears on the display(*figure 1*).
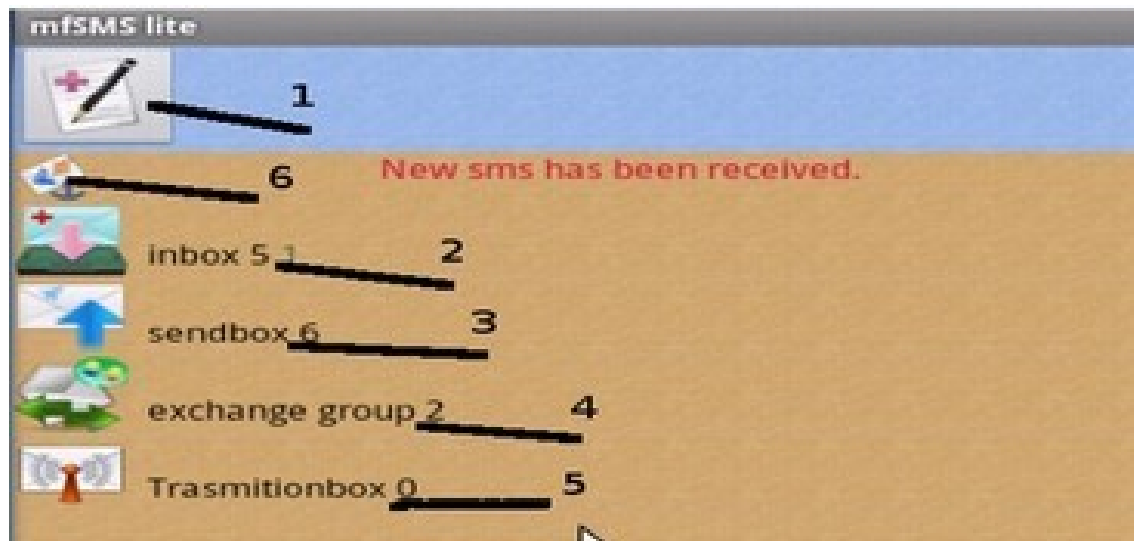
figure 1

Main screen(figure1)
In the blue section you could see the button(No1) which creates an sms for sending. At section No2 the incoming smses are displayed. Beside the number of smses appears with green text the number of the new smses in the box. At section No3 are displayed the number of sent smses. At section No4 are displayed messages grouped by recipient. At section No5 are displayed all messages which currently are being sent off. In case you wish a more detailed view of every section, you could just press the relevant area. On the area No6 are displayed shortly all information, concerning the application. In the beginning of every sector is displayed an icon describing it's functionality.

Create sms(figure2), read it carefully!
After pressing the button(No1) for creating a message, appears the screen in *figure 2*. The screen is divided in three main sectors. In the blue sector there are four buttons. Button No1 for encrypting/decrypting the message, in case you decide to secure it. Parameters in the application

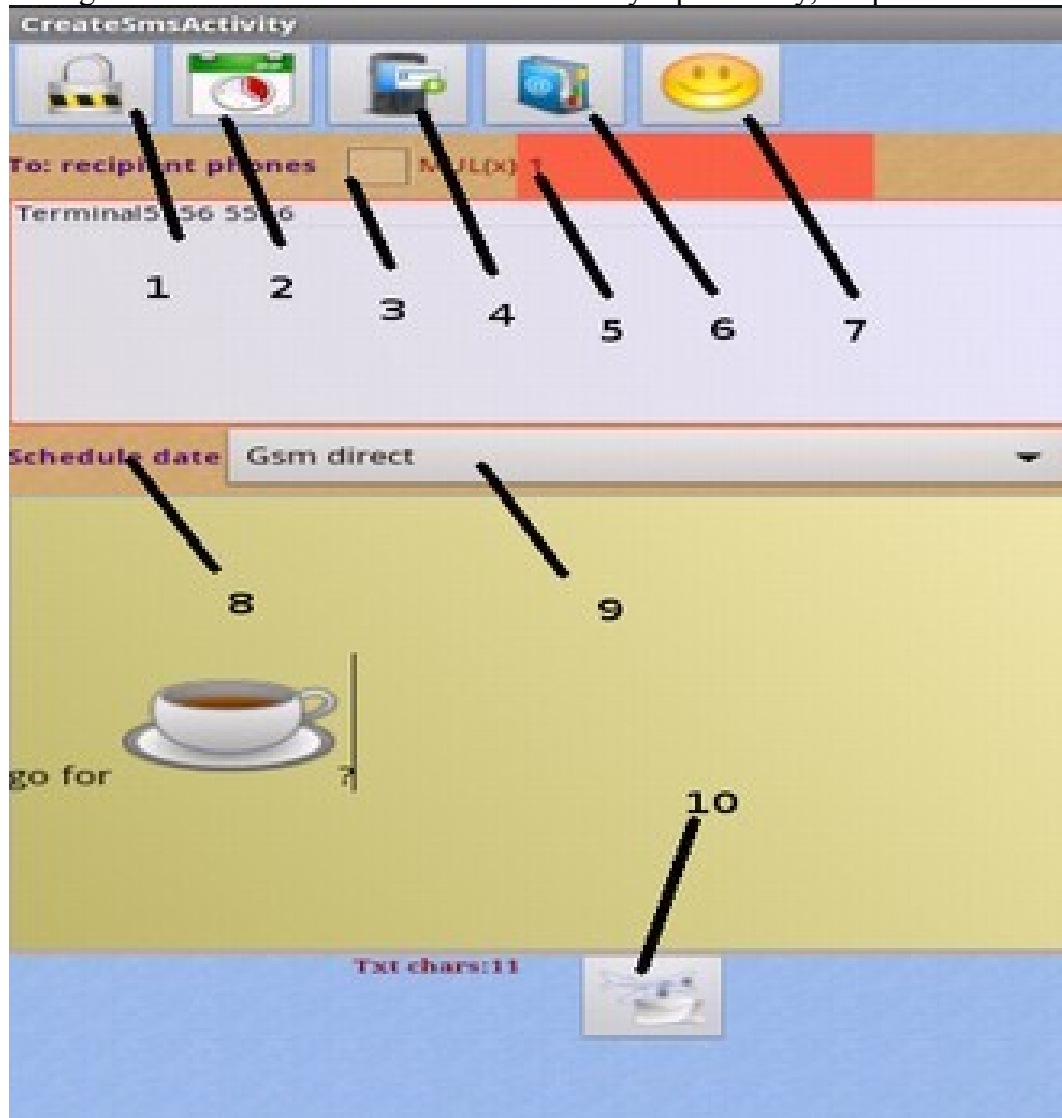settings area are connected with this functionality. Specifically, the password.

Figure2

In case you encrypt the message, the message must be received with the some application and the application parameters concerning the security must be matched(password) in order to be decrypted. Button No2, scheduling the sms message. Use it only with Http providers, otherwise it is not supported. For Smpp it depends from provider. It is needed to be tested. Button No4, for inserting manually a recipient phone. Button No6, for inserting a recipient phone from the system contacts. Button No7 for inserting a smiley into text. Button No10 for message transmission.

At the next sector, checkbox No3, for enabling multiple times transmission. After checking this box, you must insert in area No5, the number of transmission count. After entering this number, the message will be transmitted, such times as you have instructed, to all recipients you have selected.
In the field recipient phone, all recipients of the message are being displayed. You could remove any of them in case you press on it. In the filed 'sms' text, you have to write your message. Sms must be maximum up to 160 characters length. After finishing the message, press the button No10 in order to send off the message.

At next next sector you see the indication No8. There, it is displayed the scheduling date of a message. In case you did a mistake, press on this label to delete the scheduling date. Drop down menu No9. Press it when you want to select via which path(provider) message will be transmitted. There are

3 choices so far. Choice 1, Gsm direct, send this message normally via your mobile's phone. Choice 2, Smpp, send this message via a web provider which supports the smpp protocol. Choise 3, http, send this message via a specific http provider.

      Important notice1: Bear in mind that for choises 2 and 3 above, you must have an internet connection via WiFi or your mobile provider. Additionally, from **system settings menu**, you must set up the connection details, as the login Id, passwords etc. Especially for http providers, except for settings per provider, you must select the **active provider**. This could be done by just entering the provider settings. After exiting from a specific provider, the indication of the active provider changes.

      Important notice2: The Smpp provider settings must be set up according to your provider. That means, the current settings are appropriate for the globalsms provider. Check your providers technical specification settings.

      Important notice3: After pressing the send off button(No10), the application transmits the messages and insert them in the transmission box folder. During transmission a progress window appears on the screen. In case you have multiple transmissions, you could disable this window(by pressing the back button) and return back to previous screen or exiting the application. In case you aboard the application before transmission finishes, all untranslated messages remain in transmission box folder. If you enter in this folder you could delete or retransmit all remaining messages.

      Important notice4: The above description(notice3) is valid only for gsm transmission, the web transmissions(smpp,http) are executed immediately after pressing the send of button(No10). **Receipts** for web transmissions are **valid only for the current application session**. In practice, only one of the providers offers receipts which are supported by the current application. If you don't want receipts, just disable them. No receipts on schedule messages at all.

Main sectors(figure3)

On every box in the main sector(figure1) after pressing it, all messages appear detaily. See figure 3. At point No1, appears the icon referring to message direction(in/out). The icon No3 appears only on send messages and it shows if a message has been delivered or not. In case it has not been delivered, a small icon with a man who pushes a mail with a question mark, appears. Otherwise a hand keeping a mail appears instead, at point No3. Point No3 indicates a scheduled message. A scheduled message is after the current date/time.

Figure 3

Main sectors details(figure4)

In case you press on every message in every sector box a bundle of actions is being displayed, see figure 4. You could delete a message, decrypt it, copy sms body to clipboard(only above api 11), copy phone number to clipboard (only above api 11), cancel the action or delete all messages.
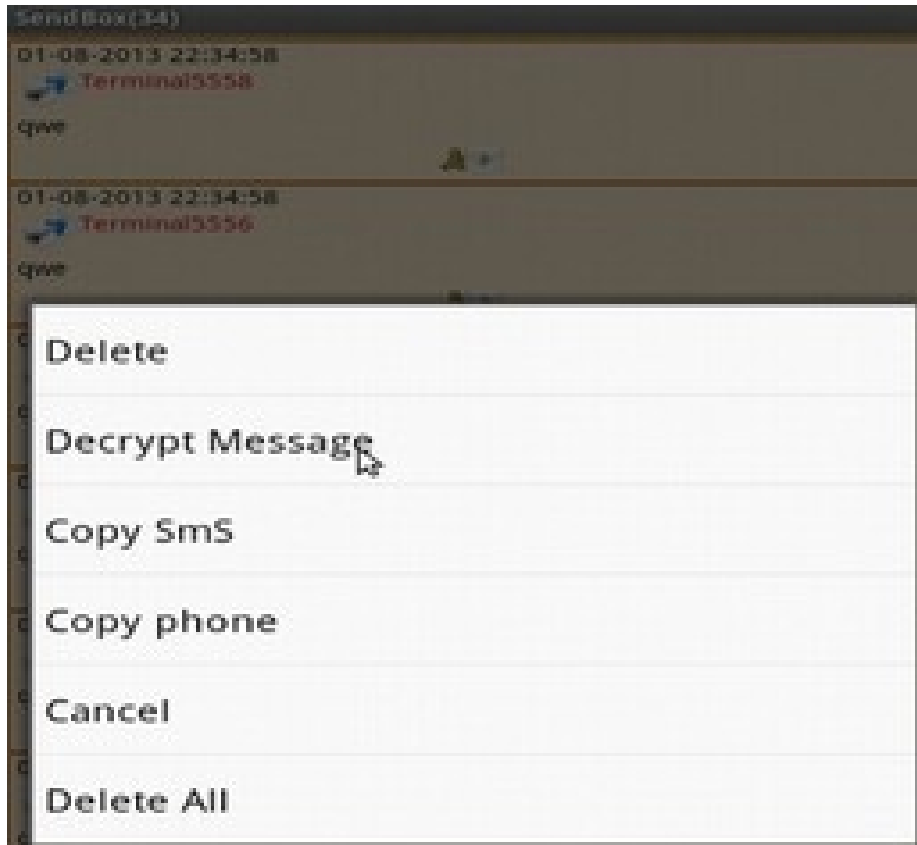
figure4

Message decryption(figure5)

In case you select to decrypt an encrypted message the following window will appear on the screen, figure5.

Figure5

Select *system* in case you want to use the system password to decrypt the message or the *custom* button in case you want to enter a custom password , in password fields at the figure 5, to decrypt it.

System menu(figure6)

The system menu appears at the bottom of the main screen(figure6). The are four options there. *Central settings area,* the main application settings. *Information* area, information about application developer and application version. *Help*, html online help. Pdf help, when you press this area, appear web links which point to web sites including help about the application.

Figure6

System menu central settings(figure7)

System settings panel at figure 6 includes the following options.

In security section: *Password option*, insert a password in order to set up the default system password for message encryption/decryption.

In general section: *Enable smilies*, in order to enable smilies interpretation and visualization. *Smilies double size*, increase the visual size of a smiley to double. *Issue notifications*, in order you want to issue a notification when a new sms has been received. This is useful mostly when the application is

closed. *Vibration*, follows the notification. *Sound*, follows the notification. *Light,* follows the notification. *Permanent decryption setting*, in case you select this option after you decrypt a message, it remains as it is(decrypted) in database. Otherwise you must decrypt it every time you want to see it. *Date format*, select the date format which is included in every message. *Sms center*, in case you want to change it to a custom one instead of a system's operator one.
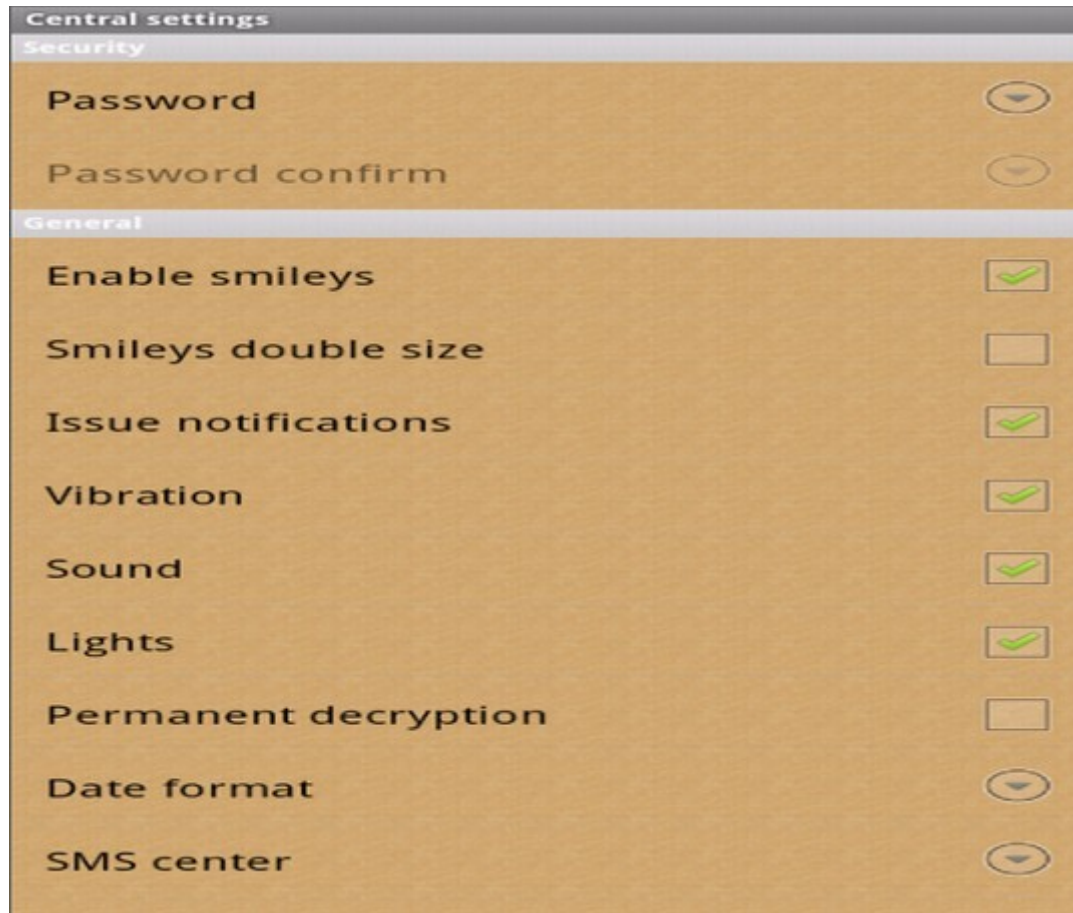

Figure7

At figure 8, **Smpp Settings***,*afftect the Smpp protocol. *Local smpp db logging*, store the messages in android sms database in order to be seen in send box folder. If you sent massive sms it saves you space. *Enable receipts*, whether receipts will be received. Better keep this option off, I really don't know which provider supports SM_QUERY command for receipts. *Phone number processing*, clears the phone number from non digit characters (example 0030-34354-4444-444) and removes the '00' prefix in front of a number. Some providers don't accept the '00' prefix in front of an international number. Usually, this option is useful if you select your numbers from your contacts book. *Special prefix*, adds a custom selected prefix in front of a number. If your address book consists of local mobile numbers the you need to add an international dial prefix in front of the number. The Smpp protocol has generic settings. That means it works with any available provider. You need just only to put the correct settings. You need at least to provide the login and the password settings.

Http providers, Actually there are only three available and predefined providers. EZ4USMS in Greece ,GlobalSMS in Australia and bulkSMS in England. In case you find other providers which match their settings you would probably be able to send smses via them. First option(EZ4USMS) just indicates the **active** provider. This provider will be used when you transmit the message in case you select the option for http transmission in create sms activity. In case you want to change the provider just select the preferred provider from the options below, enter in specific provider option and get out. You must

enter in your preferred provider and **set up the login and password option**, in order **to transfer** the messages.


Figure8

Important notice: Smiley interpretation overloads application's processing time. If you don't use smilies, just disable it. Additionally, smiley processing could be change on the fly.

Providers supported by HTTP/SMPP sms api

Application implements a generic form of SMPP, that means it could possibly connected to any SMPP provider. Hower, it has been tested and initially set up on **https://www.smsglobal.com**
About Http API it implements only three(3) fixed providers which are reffered below. In case you find any provider who matches their settings, it is possible to send smses via them.

http://ez4usms.com
https://www.smsglobal.com
http://bulksms.vsms.net/

Included Libraries

For the smpp transmition is used the jsmpp libray(http://code.google.com/p/jsmpp/) and the relevant dependency libraries.

Credits

The program has been developed with the eclipse IDE(http://www.eclipse.org/). All images have been

elaborated with Gimp(www.gimp.org). Most of the icons have been taken from the Open Icon Library(http://openiconlibrary.sourceforge.net) and some from http://www.iconarchive.com and www.codicode.com. Smpp protocol from http://code.google.com/p/jsmpp. Documentation created with LibreOffice Writter 4.1.2.3. OS system Lubuntu(http://www.lubuntu.net/). The primary application icon(logo) has been taken from http://myths101.tumblr.com/post/1364071057/hermes-was-the-greek-god-of-theives-messengers and represents the ancient Greek god Hermes. The god of messengers.

The ancient Greek god Hermes.