

Android Technical Assessment (ATA)

Developer: Sibusiso Ntshangase

Tech Stack: Java 7, Android Studio, Microsoft SQL Server, API, Fragment, Activity

Compatibility: Android API Level 17(4.2) and above

Overview: This is simply to give Bloodhound an idea of **Android** skill level.

What to do: Requirement: Design an application that enables a user to capture and view locations.

Language: Java

API compatibility: 17+

Design: Make use of the material design support library, themes (chosen Layout types are important), design pattern of your choice, dependency injection where applicable.

Views / Screens, ability to:

1. Capture and edit locations(**Auto captured on login if new location**)
2. View locations, as a list is fine (please provide a sample data set, 1000 locations, can be duplicates, not worried about the integrity of data, this is purely to see performance of the list)

Persistence: Use datastore of your choice to persist the captured data (RealmDB / Room etc.)

Additional requirements:

- Retrieve weather information (just the degrees Celsius is fine) for a city (Cape Town?) and display on screen accompanied with time of retrieval (using something like <https://openweathermap.org/api> or whatever you choose)
- **Update weather information on the minute**, so refresh it every minute.

Please find the project in: GitHub Repository:

<https://github.com/sntshangase3/BloodHound>

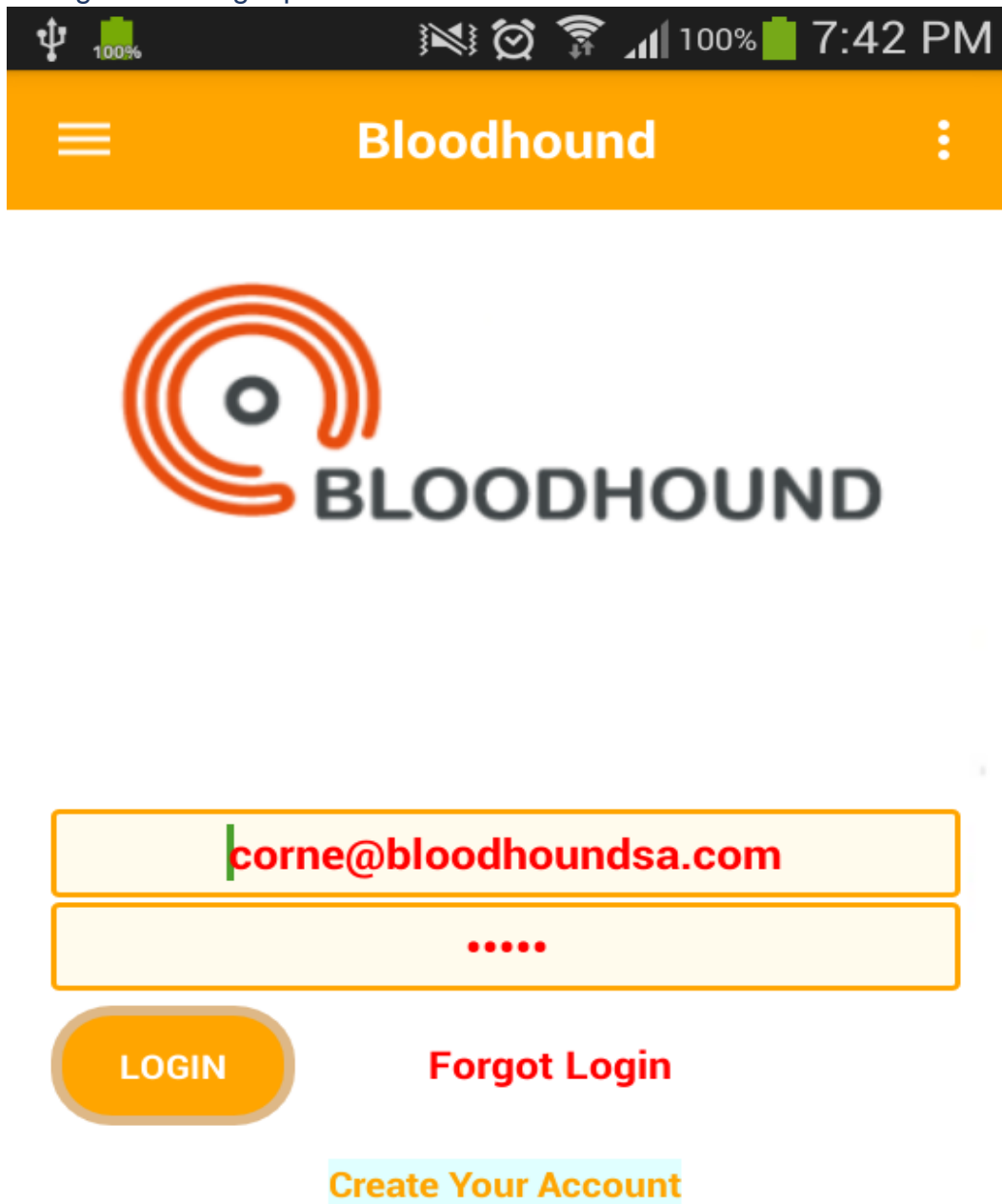
App Walkthrough

1. Loading / Splash Screen



Sibusiso Assessment

2. Login /User Signup



The image shows a mobile application interface for 'Bloodhound'. At the top is an orange header bar with a hamburger menu icon on the left, the word 'Bloodhound' in the center, and a vertical ellipsis icon on the right. Below the header is the 'Bloodhound' logo, which consists of a stylized orange circular icon with concentric arcs and the word 'BLOODHOUND' in bold, dark grey capital letters. The main content area is white and contains two yellow input fields with orange borders. The first field contains the email address 'corne@bloodhoundsa.com' in red text. The second field contains five red dots, representing a password. Below these fields are three buttons: an orange rounded rectangle with the word 'LOGIN' in white, a red text link 'Forgot Login', and a light blue rounded rectangle with the text 'Create Your Account' in orange.

100% 7:42 PM

Bloodhound

BLOODHOUND

corne@bloodhoundsa.com

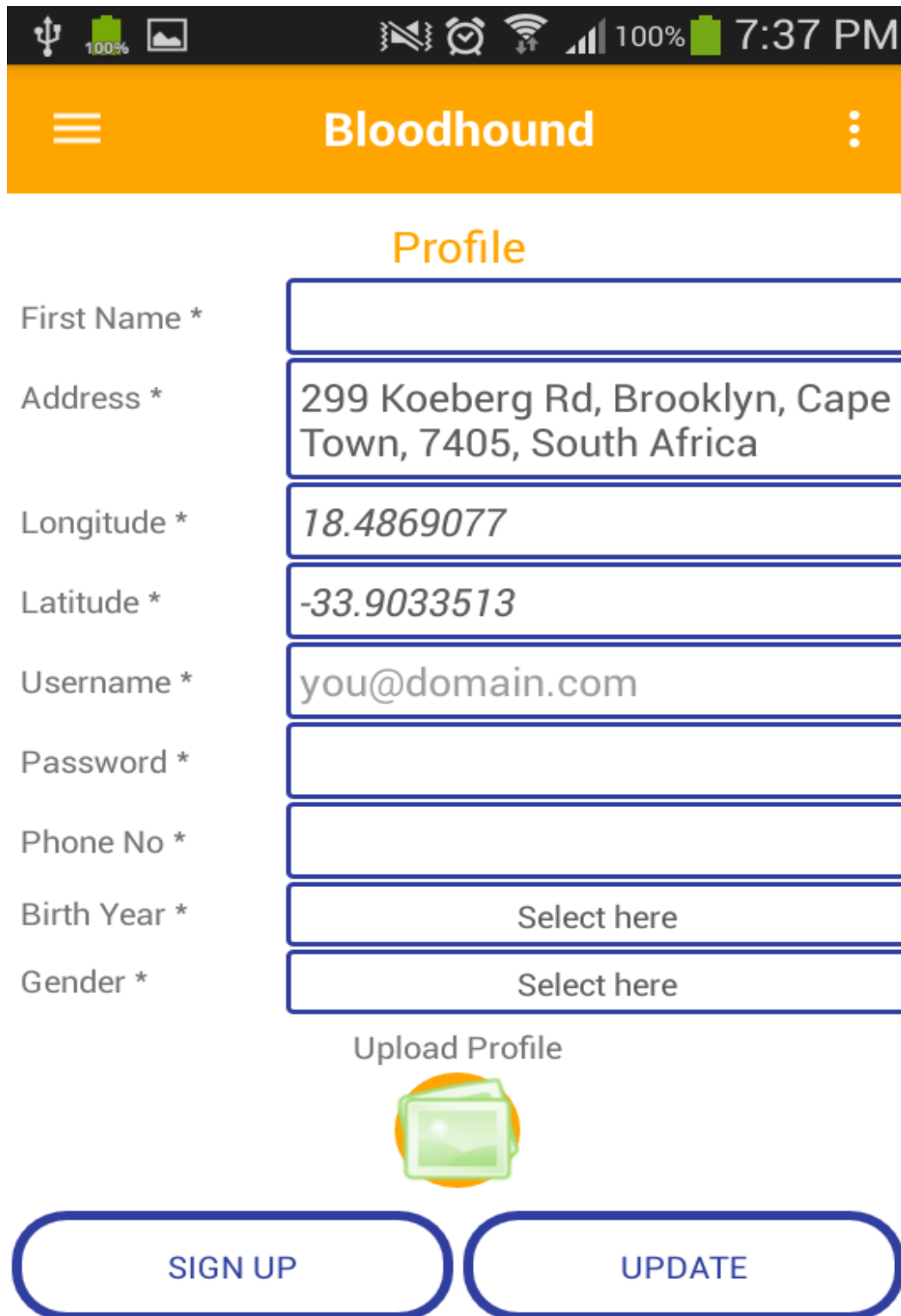
.....

LOGIN

Forgot Login

Create Your Account

On New User Registration, Address, Longitude and Latitude is auto populated based on current location.



The image shows a mobile application interface for a user profile. At the top is an orange header bar with a hamburger menu icon on the left, the text "Bloodhound" in the center, and a vertical ellipsis icon on the right. Below the header, the title "Profile" is centered in orange. The form consists of several input fields, each with a label and an asterisk indicating it is required. The fields are: "First Name *", "Address *" (pre-filled with "299 Koeberg Rd, Brooklyn, Cape Town, 7405, South Africa"), "Longitude *" (pre-filled with "18.4869077"), "Latitude *" (pre-filled with "-33.9033513"), "Username *" (pre-filled with "you@domain.com"), "Password *", "Phone No *", "Birth Year *" (a dropdown menu showing "Select here"), and "Gender *" (a dropdown menu showing "Select here"). Below the form fields is the text "Upload Profile" followed by a green icon of a photo gallery. At the bottom are two rounded rectangular buttons: "SIGN UP" and "UPDATE".

100% 7:37 PM

Bloodhound

Profile

First Name *

Address * 299 Koeberg Rd, Brooklyn, Cape Town, 7405, South Africa

Longitude * 18.4869077

Latitude * -33.9033513

Username * you@domain.com


Password *

Phone No *

Birth Year * Select here

Gender * Select here

Upload Profile



SIGN UP **UPDATE**



Profile

First Name *

Sibusiso

Address *

299 Koeberg Rd, Brooklyn, Cape Town, 7405, South Africa

Longitude *

18.4869077

Latitude *

-33.9033513

Username *

sntsha

Password *

Phone No *



Android status bar: 100% battery, 7:37 PM, various icons.

App header: Bloodhound

Profile

First Name *	<input type="text" value="Sibusiso"/>
Address *	<input type="text" value="299 Koeberg Rd, Brooklyn, Cape Town, 7405, South Africa"/>
Longitude *	<input type="text" value="18.4869077"/>
Latitude *	<input type="text" value="-33.9033513"/>
Username *	<input type="text" value="sntshangase3@gmail.com"/>
Password *	<input type="password"/>
Phone No *	<input type="text"/>
Birth Year *	<input type="text" value="Select here"/>
Gender *	<input type="text" value="Select here"/>

Upload Profile



SIGN UP UPDATE




Android status bar: 100% battery, 7:38 PM





Bloodhound

Profile

First Name *	<input type="text" value="Sibusiso"/>
Address *	<input type="text" value="299 Koeberg Rd, Brooklyn, Cape Town, 7405, South Africa"/>
Longitude *	<input type="text" value="18.4869077"/>
Latitude *	<input type="text" value="-33.9033513"/>
Username *	<input type="text" value="sntshangase3@gmail.com"/>
Password *	<input type="password" value="....."/>
Phone No *	<input type="text"/>
Birth Year *	<input type="text" value="Select here"/>

1	2 ABC	3 DEF	⬅ x
4 GHI	5 JKL	6 MNO	Next
7 PQRS	8 TUV	9 WXYZ	Sym
*	0 +	#	📄 ⚙







100%

100%

7:38 PM



Bloodhound



Profile

First Name *

Address *

Longitude *

Latitude *

Username *

Password *

Phone No *

Birth Year *

Gender *

Select here


1938

1939

1940








1941



Upload Profile



SIGN UP

UPDATE


7:38 PM

**Bloodhound**

Profile

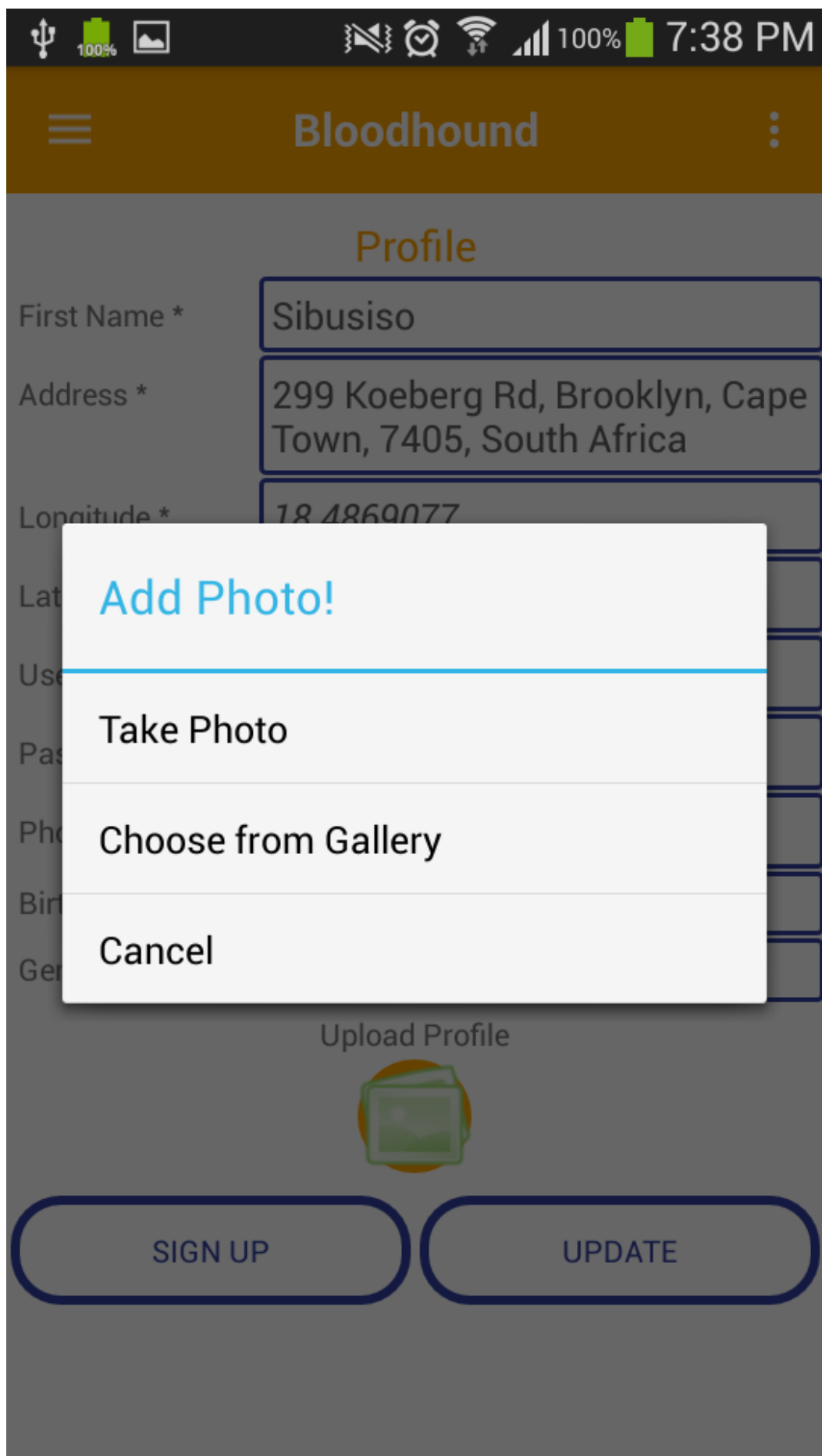
First Name *	<input type="text" value="Sibusiso"/>
Address *	<input type="text" value="299 Koeberg Rd, Brooklyn, Cape Town, 7405, South Africa"/>
Longitude *	<input type="text" value="18.4869077"/>
Latitude *	<div>Select here</div> <div>Male</div> <div>Female</div>
Username *	
Password *	
Phone No *	
Birth Year *	
Gender *	

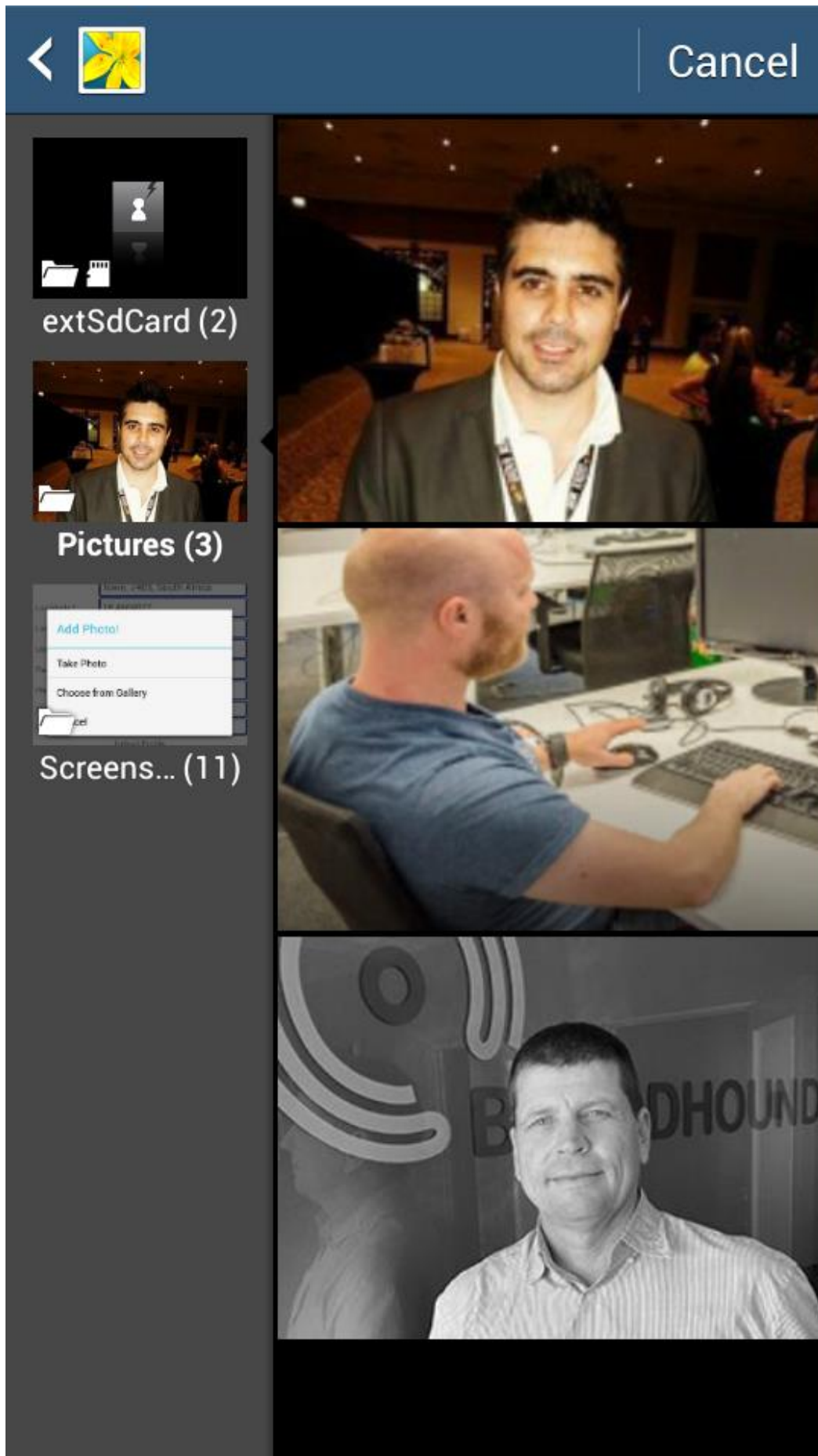
Upload Profile



SIGN UP

UPDATE







Profile

First Name *

Sibusiso

Address *

299 Koeberg Rd, Brooklyn, Cape Town, 7405, South Africa

Longitude *

18.4869077

Latitude *

-33.9033513

Username *

sntshangase3@gmail.com

Password *

.....

Phone No *

075357393

Birth Year *

1940

Gender *

Male

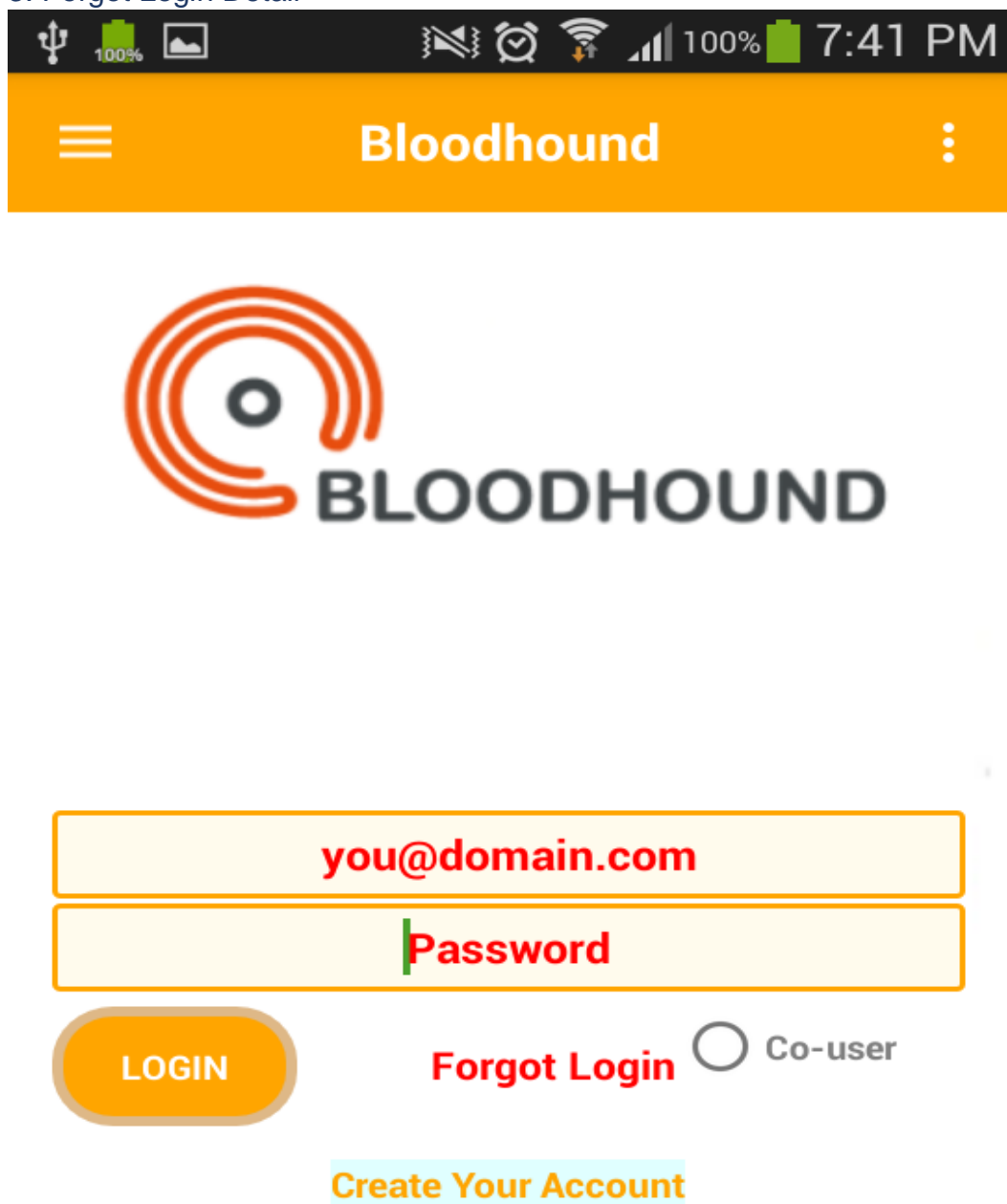
Upload Profile



SIGN UP

UPDATE

3. Forgot Login Detail



The image shows a mobile application interface for 'Bloodhound'. At the top is an orange header bar with a hamburger menu icon on the left, the word 'Bloodhound' in the center, and a vertical ellipsis icon on the right. Below the header is the 'Bloodhound' logo, which consists of an orange circular icon with concentric lines and the word 'BLOODHOUND' in bold, dark grey capital letters. The main content area contains two yellow input fields with orange borders. The first field contains the text 'you@domain.com' in red. The second field contains the text 'Password' in red, with a green vertical cursor line at the beginning. Below these fields are three elements: a yellow rounded rectangular button with the text 'LOGIN' in white; the text 'Forgot Login' in red, followed by a radio button and the text 'Co-user' in grey; and a light blue rectangular button with the text 'Create Your Account' in orange.

you@domain.com

Password

LOGIN

Forgot Login ☐ Co-user

Create Your Account



you@domain.com

Password

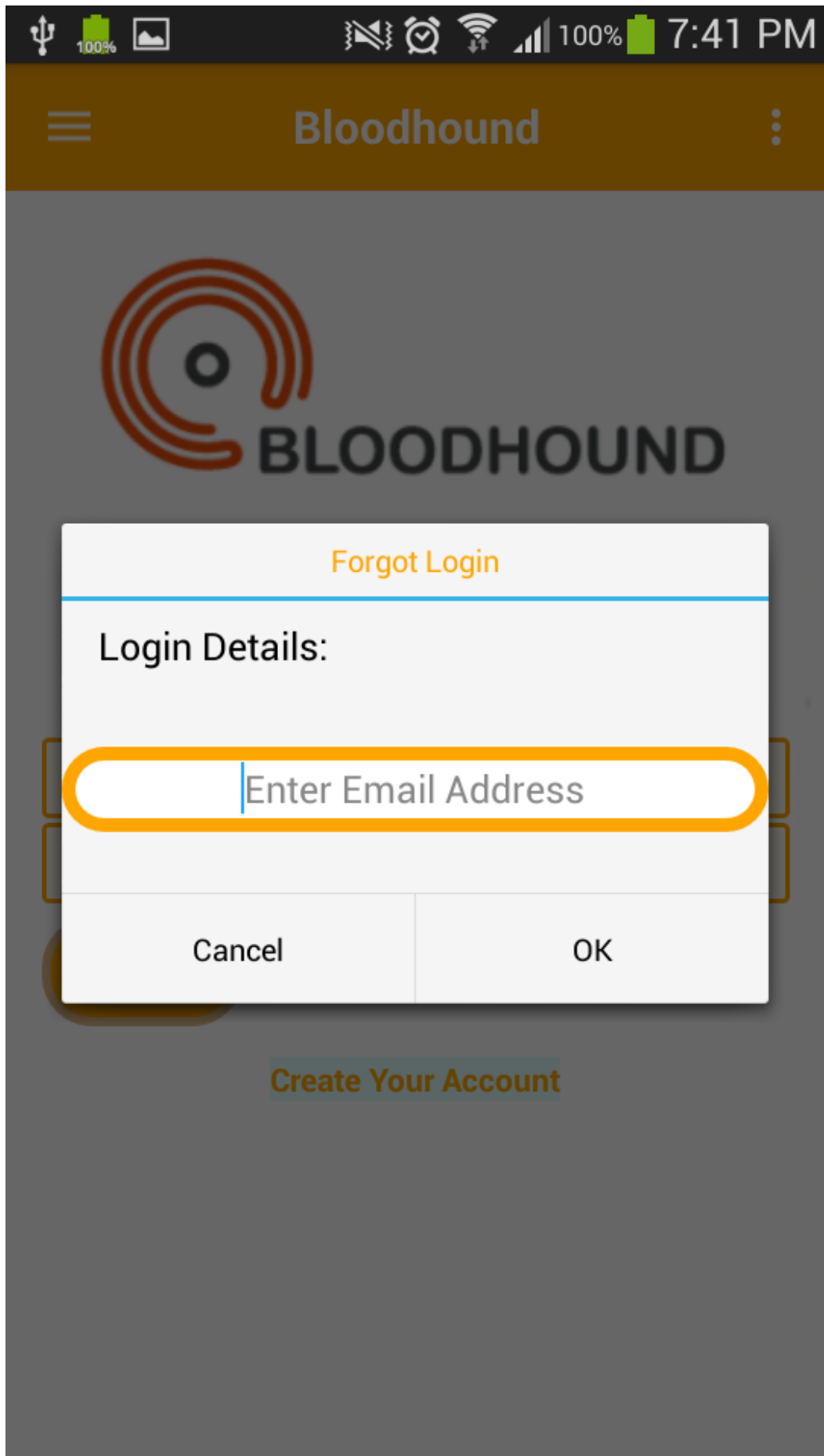
LOGIN

Forgot Login



Co-user

Create Your Account



5. User Profile- As a user change address field, lat/lon are auto updated.

Bloodhound

Profile

First Name *	<input type="text" value="Corne"/>
Address *	<input type="text" value="452 Koeberg Rd, Brooklyn, Cape Town, 7405, South Africa"/>
Longitude *	<input type="text" value="18.507559999999998"/>
Latitude *	<input type="text" value="-33.86918"/>
Username *	<input type="text" value="corne@bloodhoundsa.com"/>
Password *	<input type="password" value="....."/>
Phone No *	<input type="text" value="0716858265"/>
Birth Year *	<input type="text" value="1982"/>
Gender *	<input type="text" value="Male"/>

Upload Profile

SIGN UP

UPDATE

100% 100% 7:34 PM

☰ Bloodhound ☰

Profile

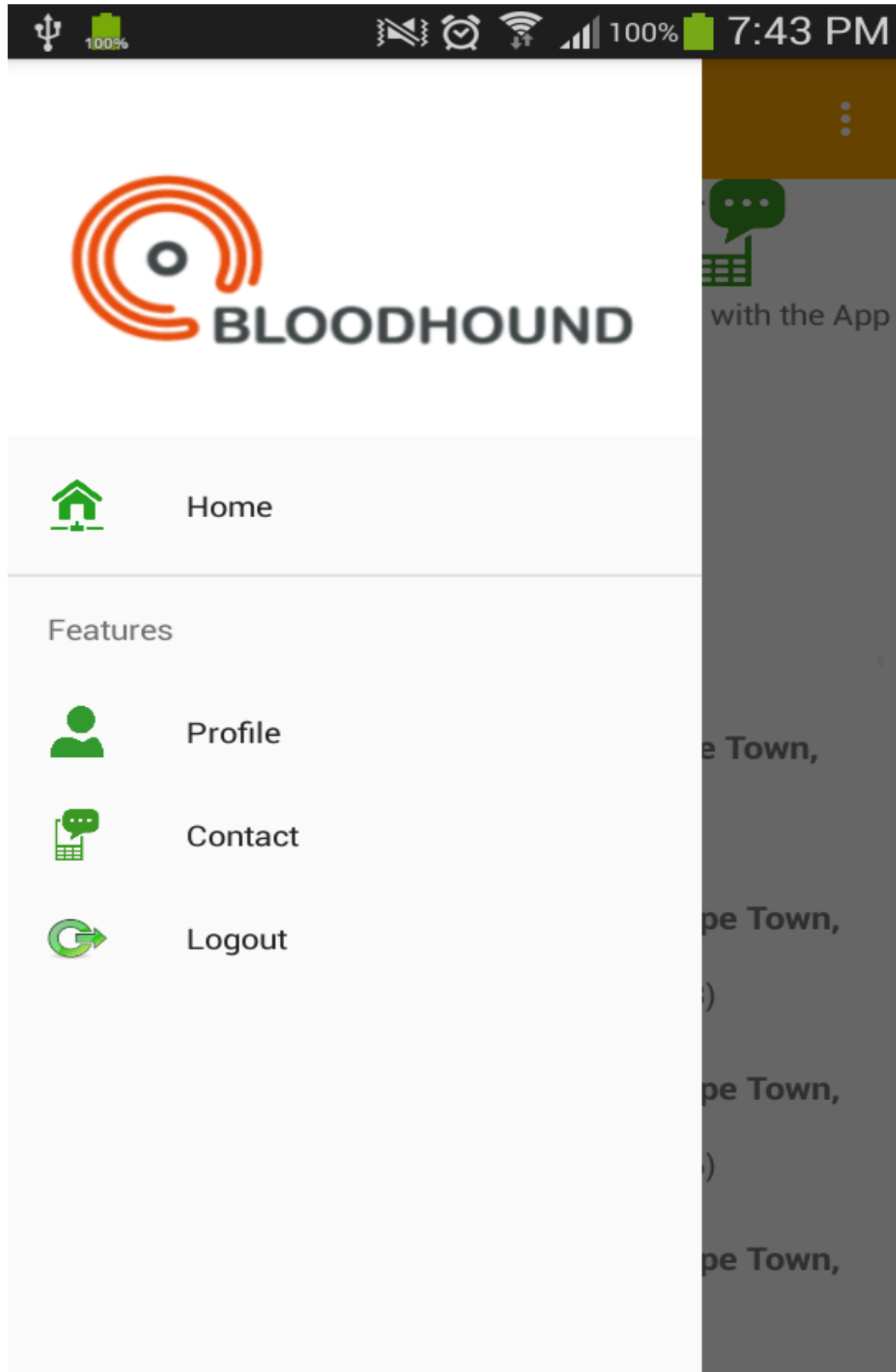
First Name *	Corne
Address *	452 Koeberg Rd, Brooklyn, Cape Town, 7405, South Africa
Longitude *	18.507559999999998
Latitude *	-33.86918
Username *	corne@bloodhoundsa.com
Password *	•••••
Phone No *	0716858265
Birth Year *	1982
Gender *	Male

Upload Profile

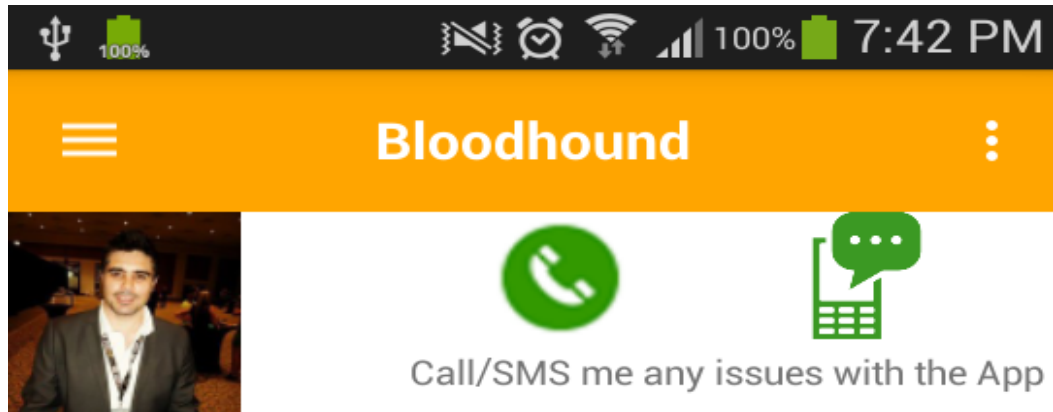






SIGN UP Updated Successfully UPDATE

6. Main

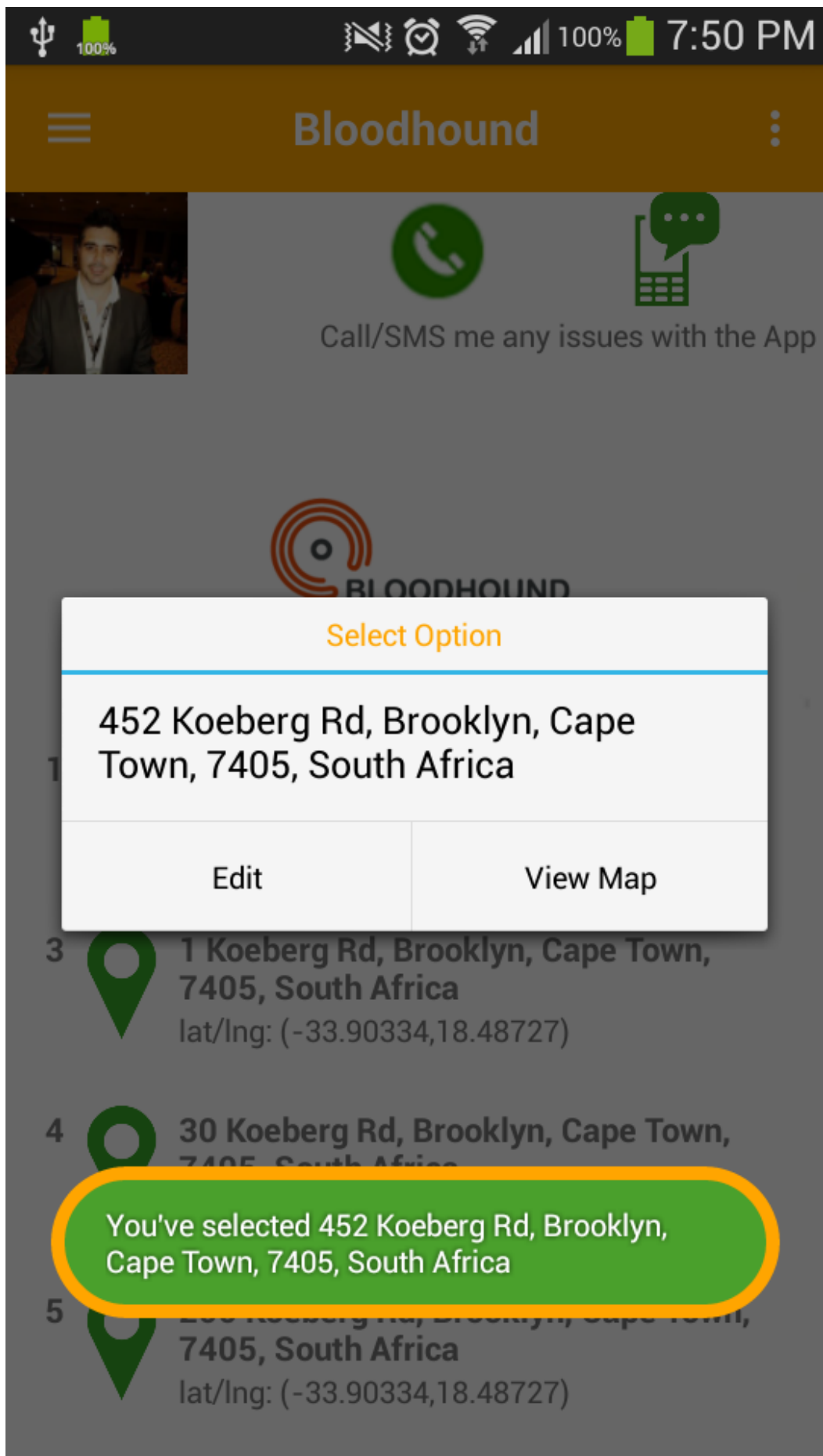


7. Address List








- 1  **452 Koeberg Rd, Brooklyn, Cape Town, 7405, South Africa**
lat/Ing: (-33.86918,18.507559999999998)
- 3  **1 Koeberg Rd, Brooklyn, Cape Town, 7405, South Africa**
lat/Ing: (-33.90334,18.48727)
- 4  **30 Koeberg Rd, Brooklyn, Cape Town, 7405, South Africa**
lat/Ing: (-33.90334,18.48727)
- 5  **200 Koeberg Rd, Brooklyn, Cape Town, 7405, South Africa**
lat/Ing: (-33.90334,18.48727)

8. Selected Address




9. Edit Selected Address


 100%

 100%

8:23 PM




Bloodhound



Profile

First Name *	Corne
Address *	452 Koeberg Rd, Brooklyn, Cape Town, 7405, South Africa
Longitude *	18.507559999999998
Latitude *	-33.86918
Username *	corne@bloodhoundsa.com
Password *
Phone No *	0716858265
Birth Year *	1982
Gender *	Male

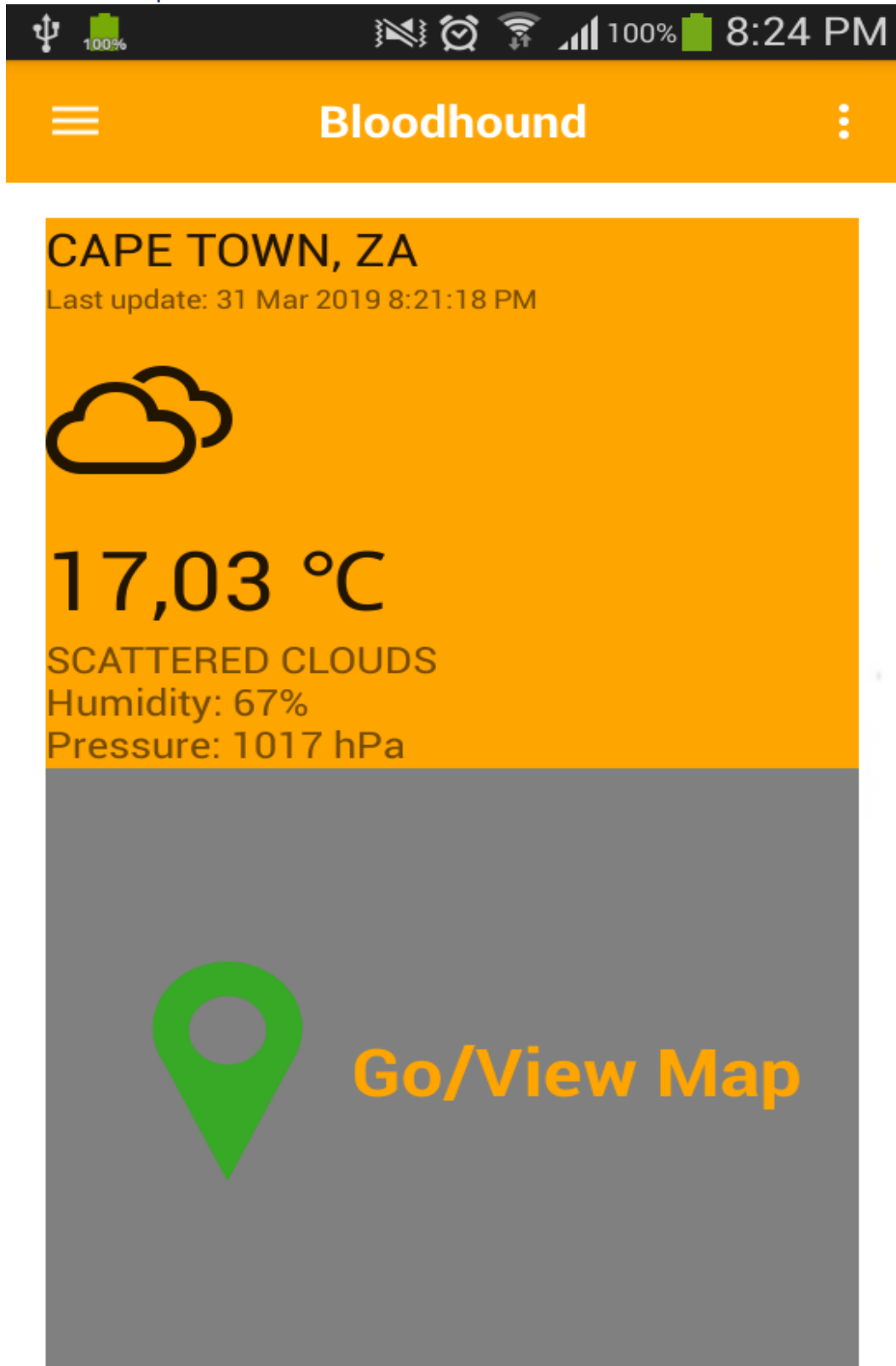
Upload Profile

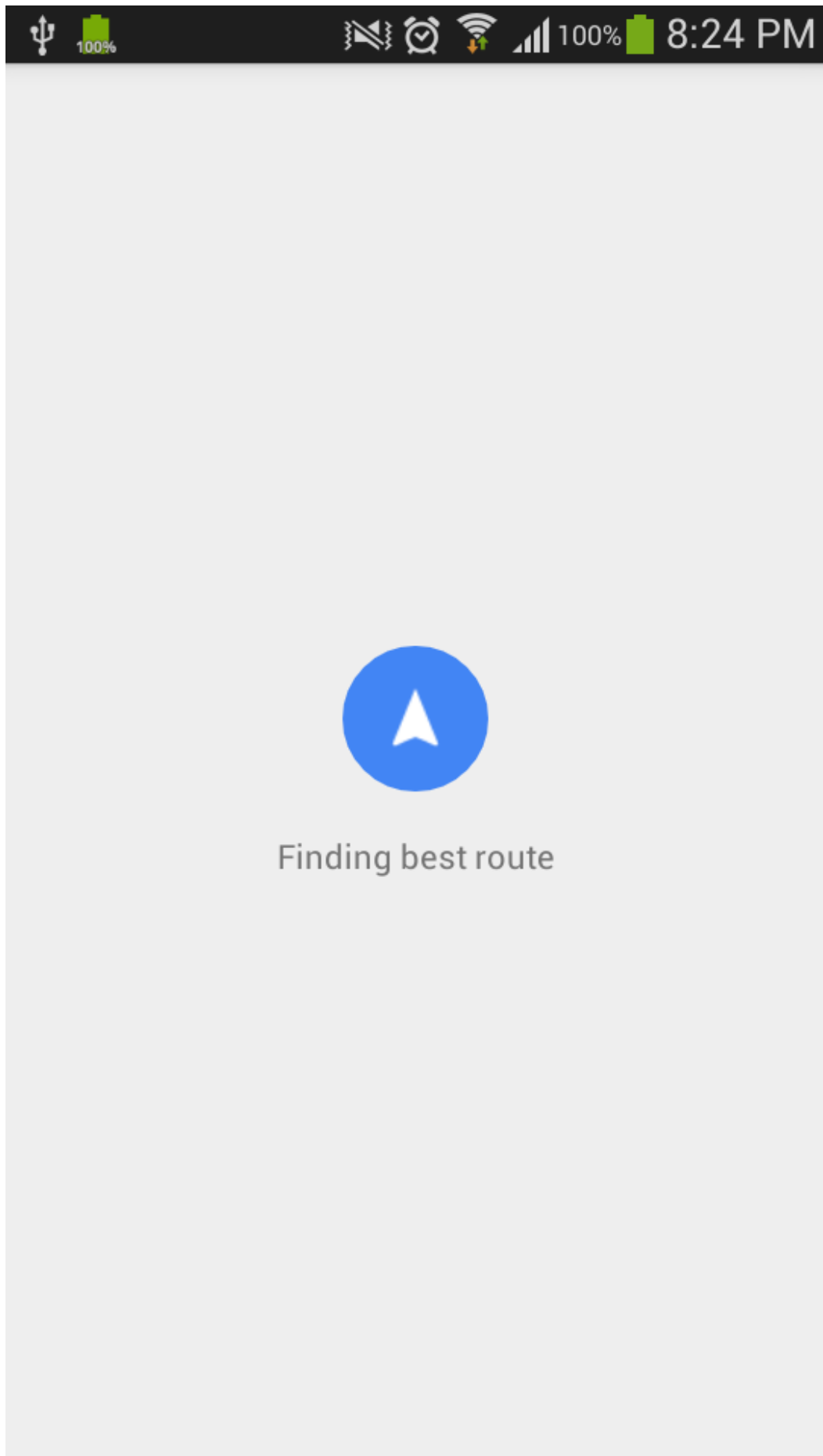


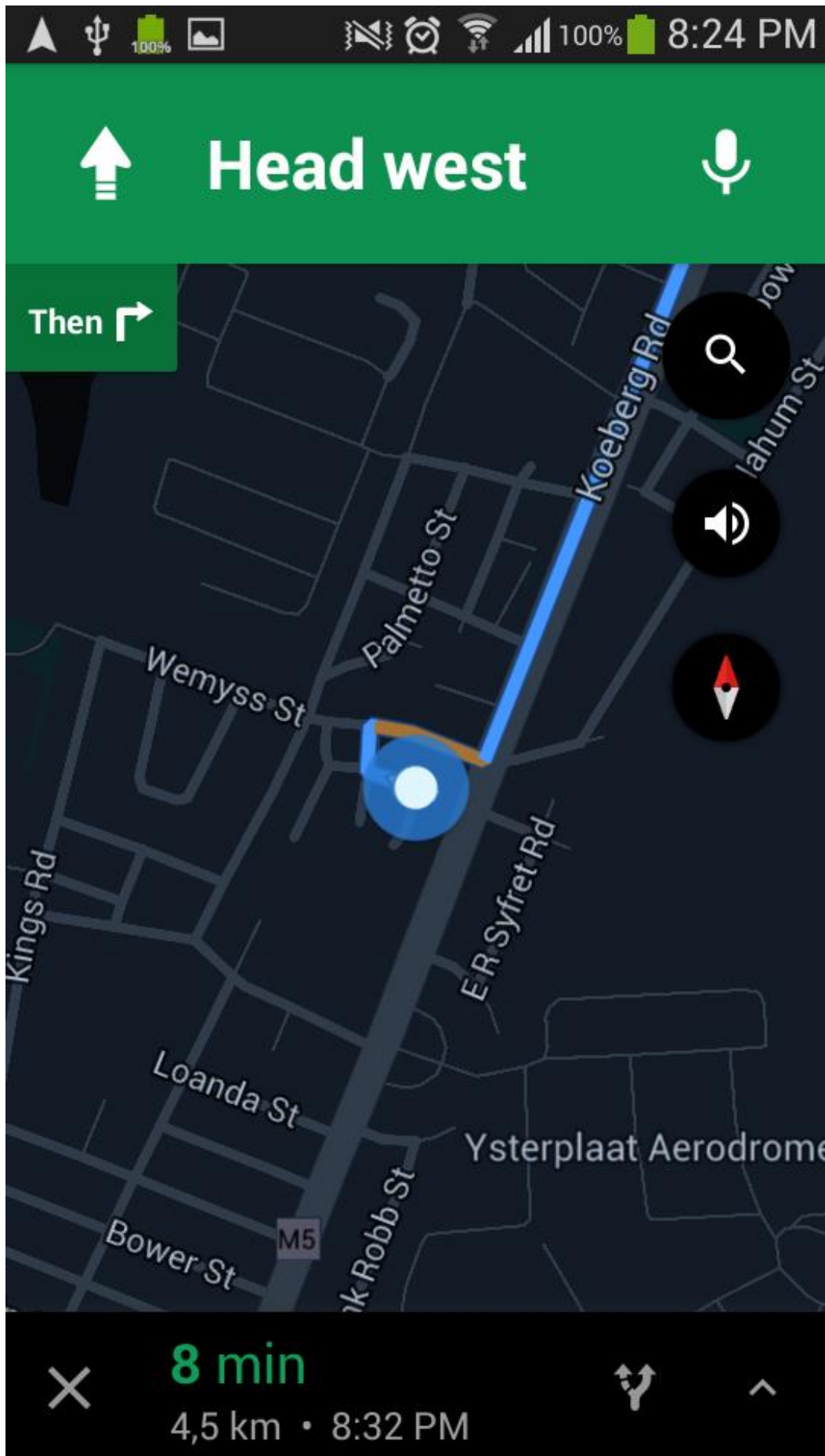
SIGN UP

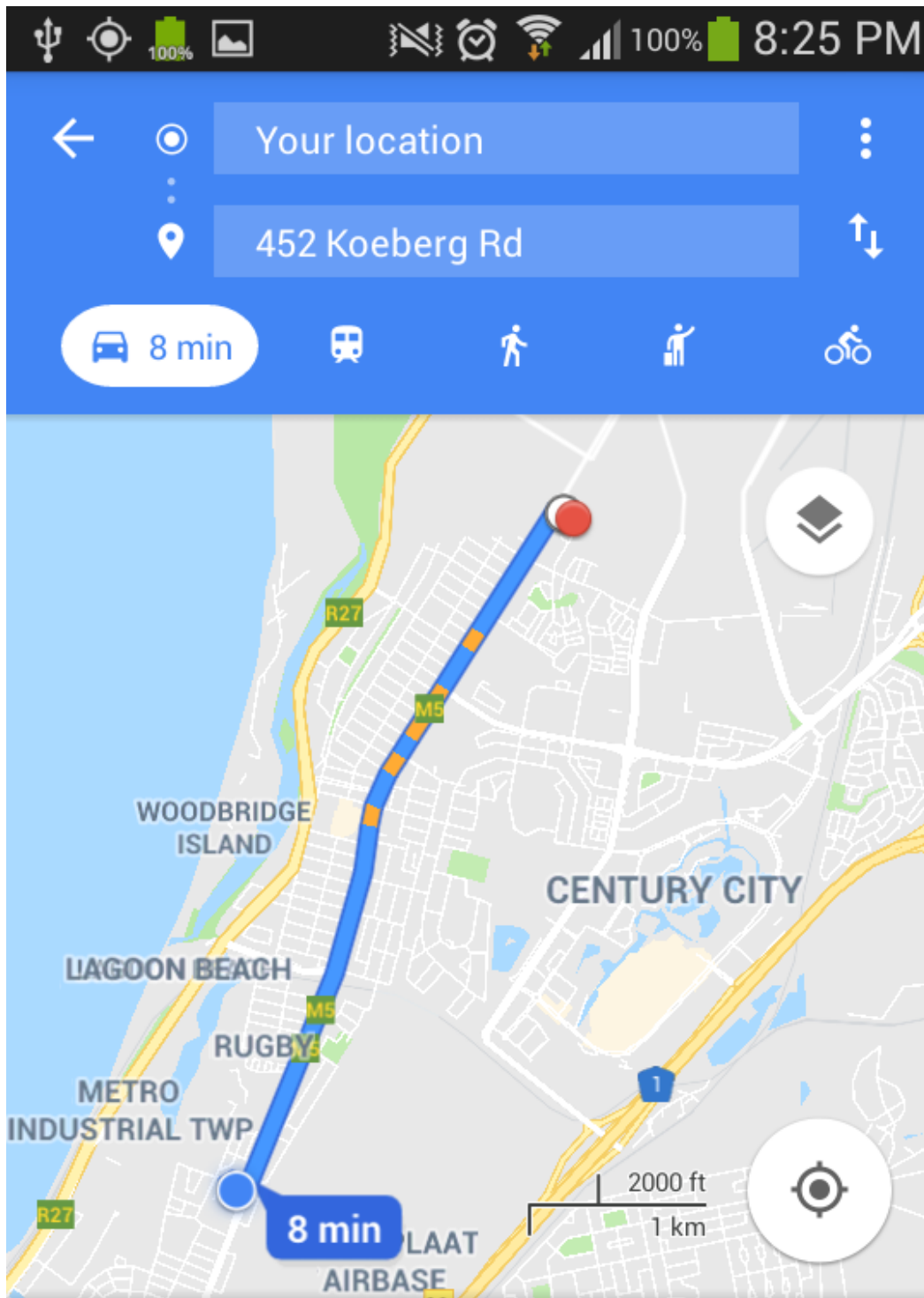
UPDATE

10. View Map









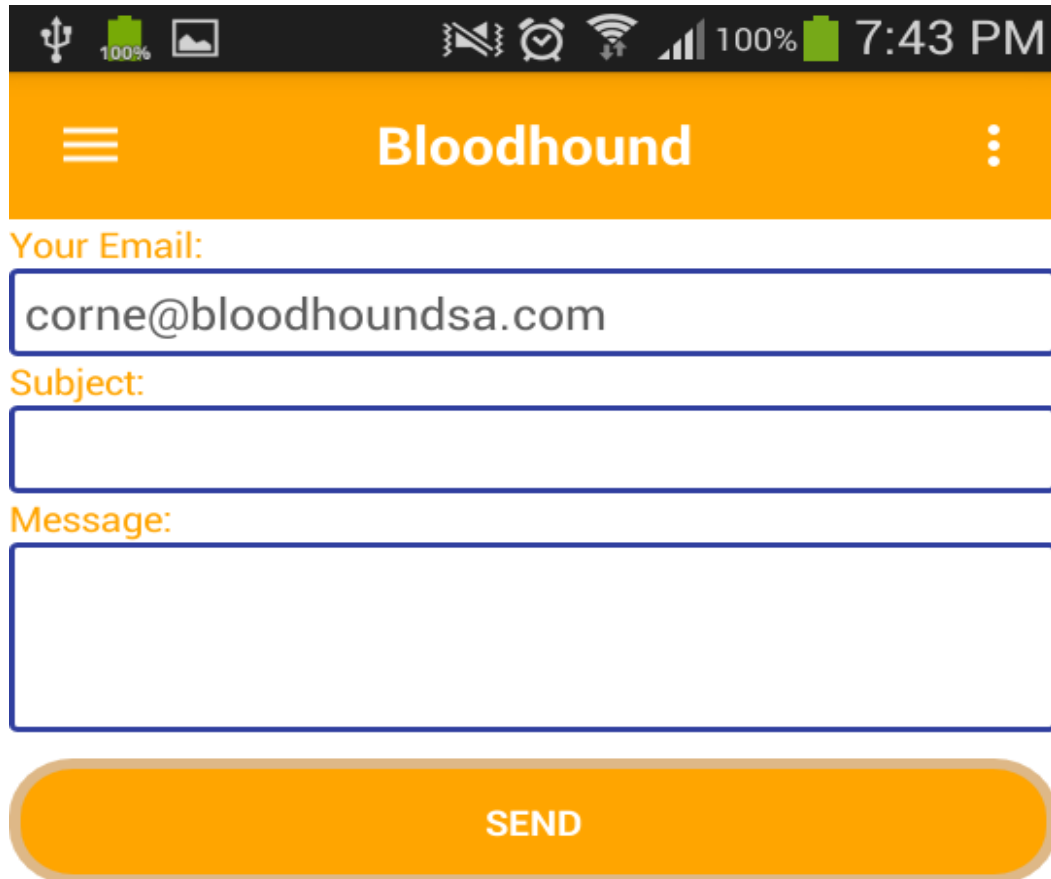
8 min (4,5 km)

Fastest route, the usual traffic

☰ STEPS & MORE

▲ START

9. Contact Us



A mobile app contact form for 'Bloodhound'. The app's status bar at the top shows various icons and the time 7:43 PM. The app's header is orange with a menu icon, the name 'Bloodhound', and a settings icon. The form includes three input fields: 'Your Email:' (containing 'corne@bloodhoundsa.com'), 'Subject:', and 'Message:'. A large orange 'SEND' button is at the bottom.

100% 100% 7:43 PM

☰ **Bloodhound** ⋮

Your Email:

corne@bloodhoundsa.com

Subject:

Message:

SEND

Connect with us on

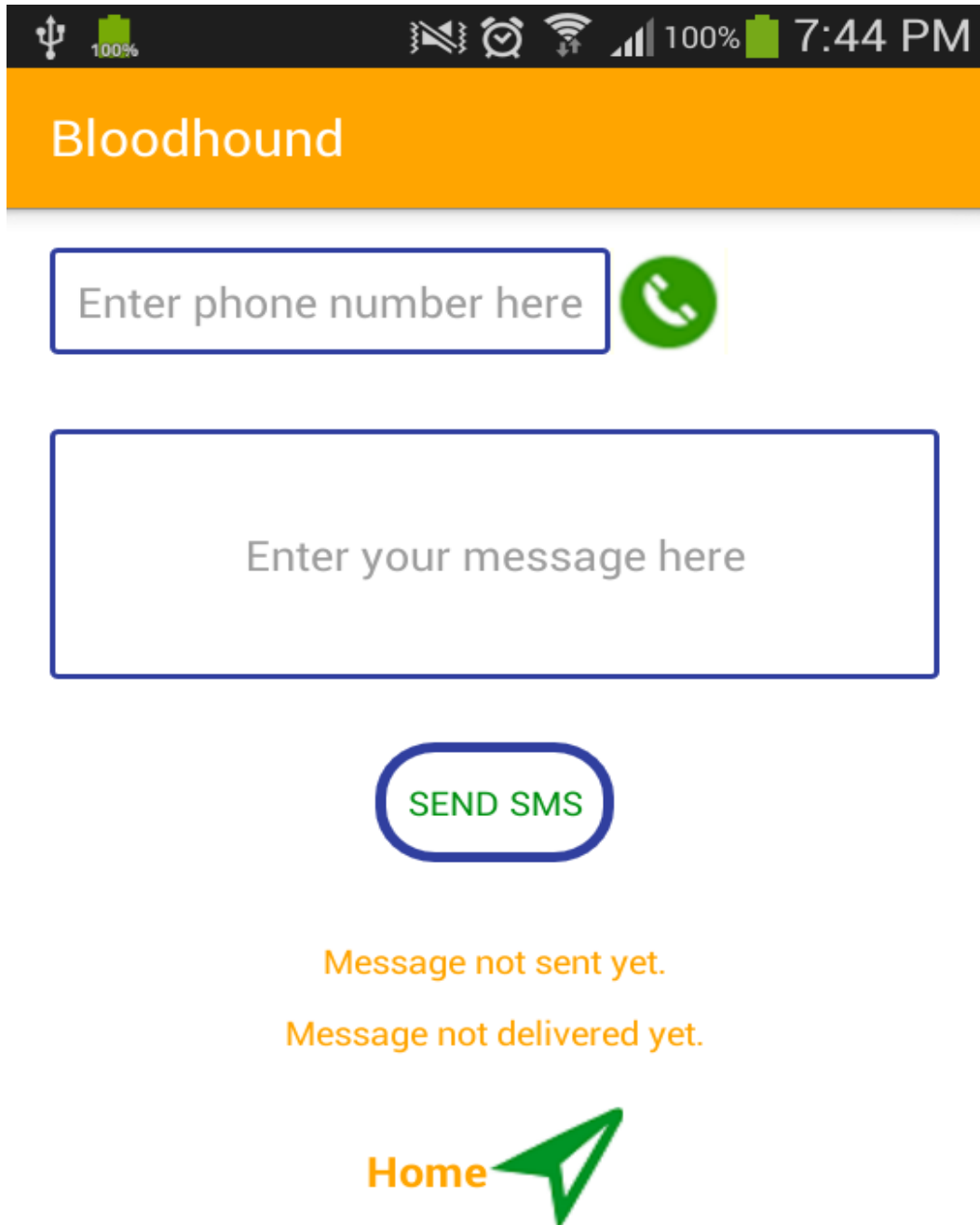


Cape Town - Milnerton

Unit 46 Woodbridge Business Park
Koeberg Road

Powered by Sibusiso

10.Send SMS



The screenshot shows a mobile application interface for sending SMS. At the top is a black status bar with icons for USB, 100% battery, silent mode, alarm, Wi-Fi, cellular signal, 100% battery, and the time 7:44 PM. Below the status bar is an orange header with the text "Bloodhound". The main content area has a white background. It features a text input field with the placeholder "Enter phone number here" and a green circular icon with a white telephone handset. Below this is a larger text input field with the placeholder "Enter your message here". Underneath the message field is a green rounded rectangular button with the text "SEND SMS". Below the button, there are two lines of orange text: "Message not sent yet." and "Message not delivered yet.". At the bottom, the word "Home" is written in orange, followed by a green arrow icon pointing towards the top right.

Bloodhound

Enter phone number here

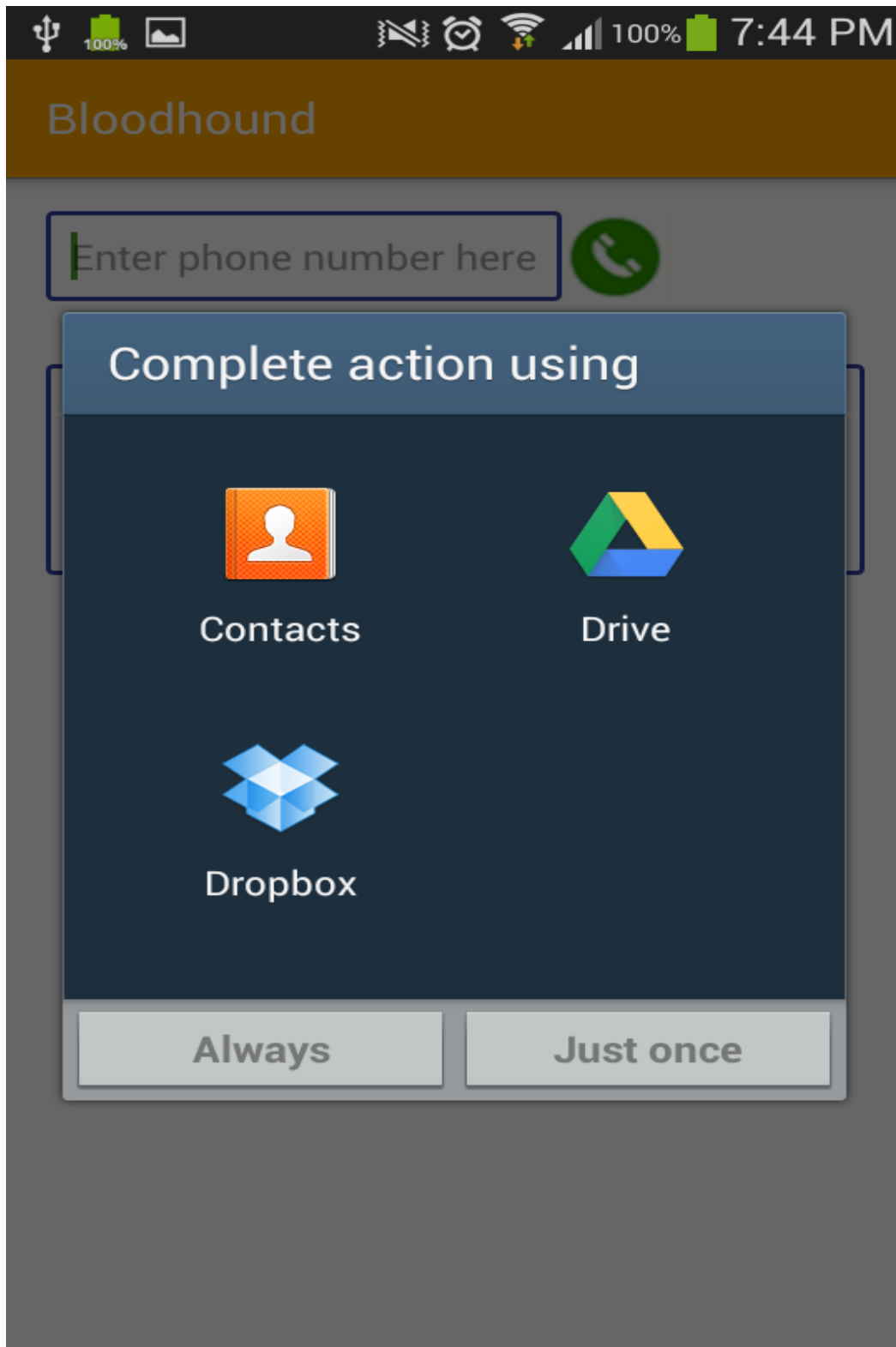
Enter your message here

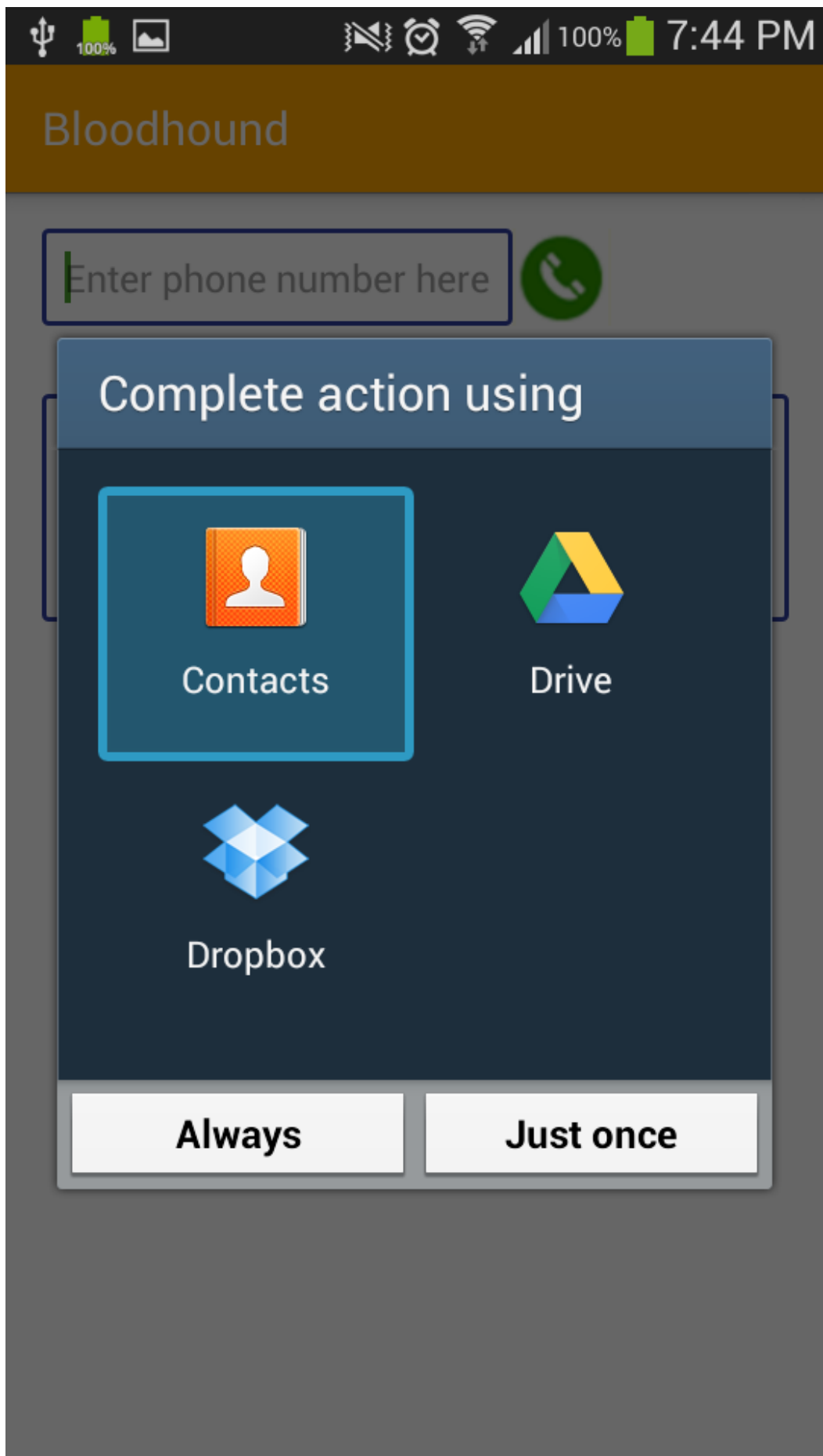
SEND SMS

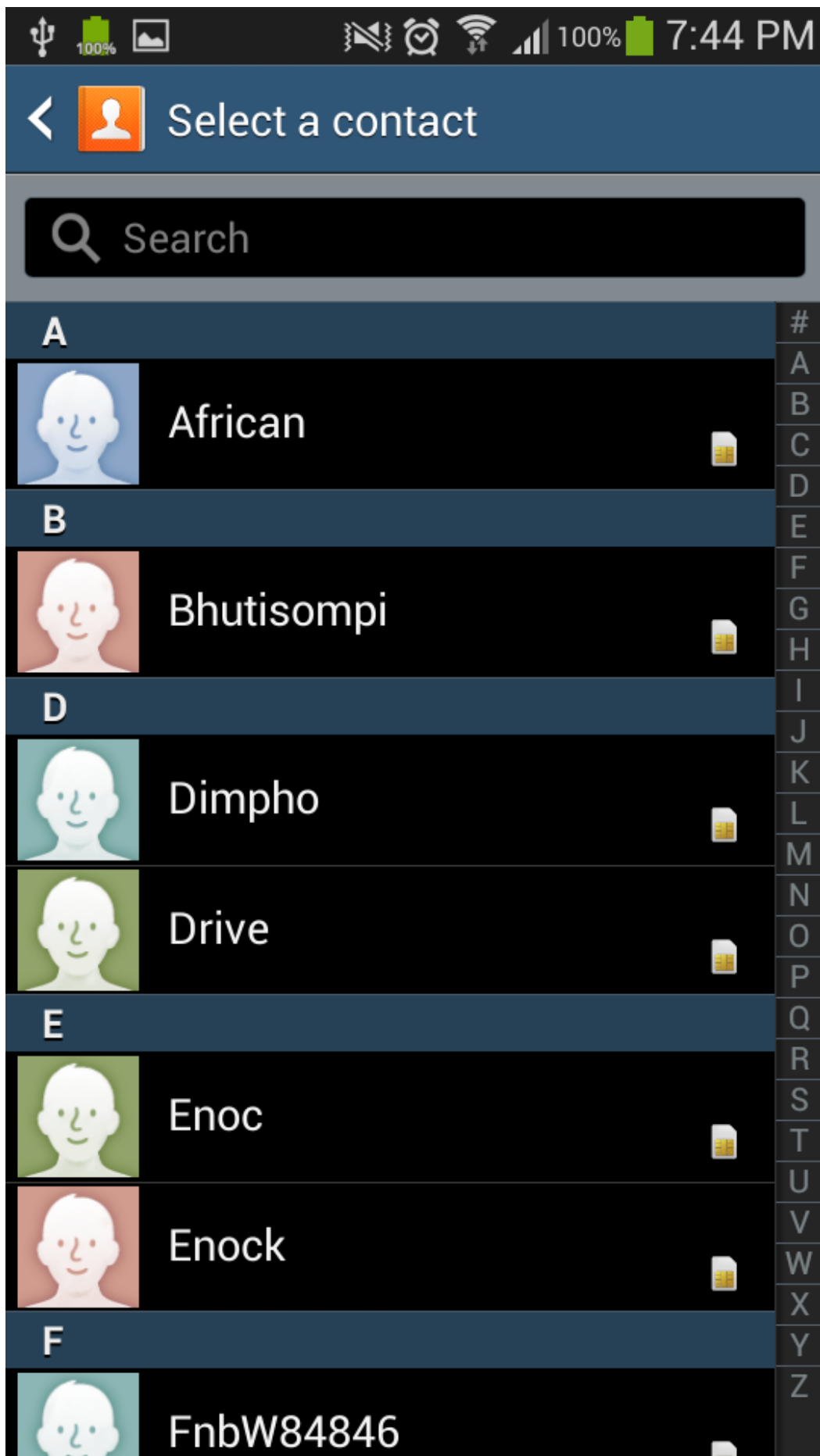
Message not sent yet.

Message not delivered yet.

Home









Bloodhound

0783317825



Testing sms

SEND SMS

Message not sent yet.

Message not delivered yet.

Home



