Users Manual

for the TUMap application

Adama Coulibaly Willy Lulciuc David Mason Sean Moogan Ben Walker

Date: December 7, 2012

Contents

1. System Overview	3
2. Document Overview	3
2.1 Introduction	3
3. Quick Start Guide	3
3.1 Simple Routing From Menu	3
3.2 Simple Routing From Map	3
4. Installation	3
4.1 Install from Play Store	3
4.2 Install From Eclipse	3
5. Distribution	4
5. Configuration	4
6. Security	4
7. Database	4
8. Application Functions	4
8.1 Static Routing Through Menu	4
8.2 G.P.S. Routing Through Menu	4
8.2 Viewing and Navigating Map	4
9. Backup and Recovery	
10. Error Messages	5
11. Troubleshooting	5
12. Support	5
13. References	
14. Glossary	
15 Index	-

1. System Overview

TUmap is a highly customized campus specific Android application that aims to ease navigation around campus for new students and guests. It will be Android based and levy Google Maps API for routing and an open source mapping toolkit for our custom map. The interface will include a simple drop down menu of buildings on campus. Once a building is selected, a user's location will be automatically polled and a route will be traced to their destination. As the user moves, the phone will update the GPS location and the route if necessary.

2. Document Overview

This document describes how to use the system.

2.1 Introduction

It explains how to install the application from multiple sources. This document gives a basic introduction to using the interface and navigating throughout the application. It details it's functions and how to properly use them. It also covers issues related to error messages and troubleshooting.

3. Quick Start Guide

3.1 Simple Routing from Menu

Open application. Press "Get Directions". Enter a starting location and ending location. If you want to route from your current location. Press "Route" button. Follow directions.

3.2 Simple Routing from Map

Open application. Select "View Map". Press on map the location you want to use as starting location. Press on map the location you want to use as ending location.

4. Installation

4.1 Install from Play Store

Ensure that you have an internet connection. Go to Google Play Store at http://play.google.com/store/apps. Search for TUmap. Select "Install". Wait for installation to finish. At this point, an internet connection is no longer necessary.

4.2 Install from Eclipse (For Developers)

With the source code open in Eclipse, and your device connected to the computer, run the project. An "Android Device Chooser" dialog box will appear. It should give you the option to select your device. When finished click "OK" and wait for code to be finished installing.

5. Distribution

Devices will need the templeuniversitymapapp.apk file to install the application to their phone. This apk can be downloaded directly to the device from the phone using the Google Play Store (as stated in section 4). To add and manage an application with the Google Play Store, follow instructions at http://developer.android.com/distribute/index.html.

5. Configuration

When the user first opens the application, they will need to add a temple username, other than that, configuration is automatic. If you need more assistance with understanding the app please view the Quick Start Guide.

6. Security

The application does not track any sensitive data and only sends out locations to route between. This information is linked with the application and does not identify any individual user.

7. Database

The database is installed and managed by the application. The database files can be viewed using Eclipse through the File Explorer. If there are any issues with the database please contact Tumapcontact@gmail.com.

8. Application Functions

8.1 Static Routing Through Menu

- From main menu, select "Routing"
- Search for start location using name, description, or building code
- Search for end location using name, description, or building code
- Click "Get Route"

8.2 GPS Routing Through Menu

- From main menu, select "Routing"
- Select "Use Current Location" as starting location
- Search for end location using name, description, or building code
- Click "Get Route"

8.3 Viewing and Navigating Map

- From main menu, select "View Map"
- To move map, press one finger to the screen and drag map.
- To zoom map using interface
 - o Tap Screen
 - Use magnifying glasses to zoom out and in.
- To zoom map using multitouch
 - o press two fingers to the screen and move fingers apart to zoom in
 - o press two fingers to the screen and move fingers together to zoom out

9. Backup and Recovery

With the exception of a list of recent locations, the application does not store anything on the device. Since a list of recent locations is not considered important, any recovery necessary should be done by reinstalling the application.

10. Error Messages

Map not found.	This will occur if the user renames, moves, or deletes the map from the "/sdcard/TUmap" directory and does not have Wi-Fi enabled. A restart may fix this but will most likely require a reinstallation of the application.
Location not found.	Ensure that Location services are enabled.

11. Troubleshooting

Unable to route from GPS location.	Ensure that you have enabled "Google's location service" under your phones settings in
	the "Location Services" submenu.

If troubleshooting does not fix a problem try restarting the application. If that does not work try reinstalling the application. If you are still experiencing issues contact Tumapcontact@gmail.com

12. Support

Contacts: <u>Tumapcontact@gmail.com</u>.

13. References

http://developers.cloudmade.com/

User Manual December 7, 2012 Version 1.1

http://code.google.com/p/osmdroid/ http://developer.android.com/index.html

14. Glossary

Eclipse: Development environment for more experienced users.

Play Store: Google's online market for searching and downloading Android applications.

Found at http://play.google.com/store/apps.

GPS Location: Global Positioning System Location. Uses the phone's location to enable

routing from current location.