

## SpatialGuide App User Manual

### System Specifications

To run SpatialGuide on your smartphone, it should have the following minimum specifications:

- Android OS, with version 4.4 (KitKat) or later
- Minimum RAM: 512 MB
- Storage Size: 512 MB
- Bluetooth
- GPS Sensor
- Wi-fi / Data connection
- Headphone jack plug

### Installation

To install the SpatialGuide app on your smartphone, as the app is not available on Google Play Store, you will have to download the “.apk” file provided on our website, and install it through your file manager of choice.

After the successful installation, you will be able to run your app and be part of a wide travelling community that are already using SpatialGuide.

### First Run


On the first run of the app, the user will be prompted with the initial screen to sign-in on SpatialGuide system. In order to use the system, it requires the creation of a user account. This account is needed in order to customize system use for each user, and to store details such as favorited routes and points, the history of points visited, as well as to display the comments information to other users.

## Register Account

To register and use SpatialGuide, you can click on the text on the initial sign-in screen, and enter all details asked, such as first and last name, username, password and email. That details are the minimum required to create your account on SpatialGuide. The data inserted on the registration screen is validated before creation, to make sure it complies with the requested data from user. We check for duplicated data such as the email, username and password must have length between 4 and 10 characters for security issues.

After the successful registration, the user will be redirected to the initial screen to sign-in and use the app. It will also receive an email to inform of the registration on the system.

Register your account on SpatialGuide!

 SpatialGuide

Username

First Name

Last Name

Email

Re-enter Email

Last Name

Email

Re-enter Email

Password

Re-enter Password

CREATE ACCOUNT

[Already member? Sign in now!](#)

## Sign-in

The sign-in screen is the first to appear on the app execution, for user to enter the credentials created upon registration in order to use the app. It requires the username or email of the user and their password.

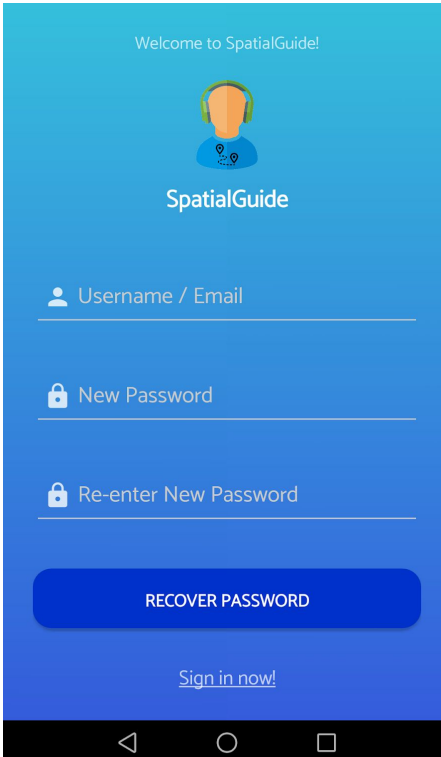
It's also possible to store the credentials, so that in the next executions of the app user won't have to fill it again, only needing to click on the Sign-in button to enter the app.

If the user doesn't remember the password, we offer the possibility of recover the password, by clicking in the link (Forgot password?) on the sign-in screen, which will redirect to that screen.


## Recover Password

If a user doesn't remember the password, it can be recovered by inserting their details such as their email and the new password.


On success, the user can sign-in on the respective screen and use the system.





Welcome to SpatialGuide!



SpatialGuide

 Username / Email

 New Password

 Re-enter New Password

RECOVER PASSWORD

[Sign in now!](#)

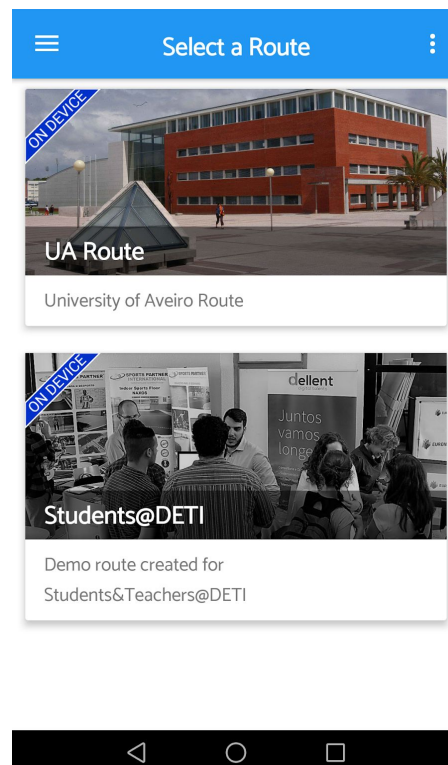
## Route Selection Screen

When user successfully signs-in in the system, it will be redirected for the route selection. As SpatialGuide is a audio-guiding app, it requires a tour route among the existing in the system to be selected and downloaded in order to navigate in it.

Each route available is displayed with their image, title and description for a quick and clear identification of the route. If the route is already available on the device, that information will be displayed on a blue-colored ribbon on the top-left corner of the route image.

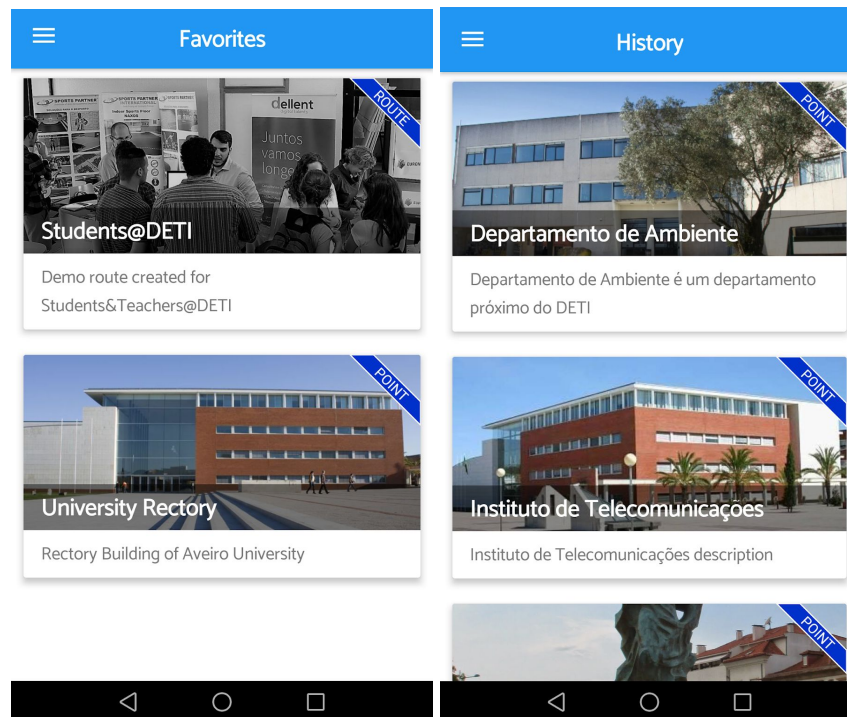
Upon selecting the route, their information and details will be displayed, such as the route description, the date the route was added, the number of downloads, the points of interest of the route and a brief image of the route, as well as the option to mark the route as a favorite.

To download and then use the route, one must click on the blue button on the bottom right corner of the screen (will display a download icon in case the route is not available on screen, and display a "GO" on the button in the opposite). User will be prompted on each action, and can also go back to the route selection screen by clicking on the back arrow on the screen top bar or navigate in the selected route by clicking on the "GO" button, which will redirect the user to the main app screen, the Map screen.



## Favorite Screen / History screen

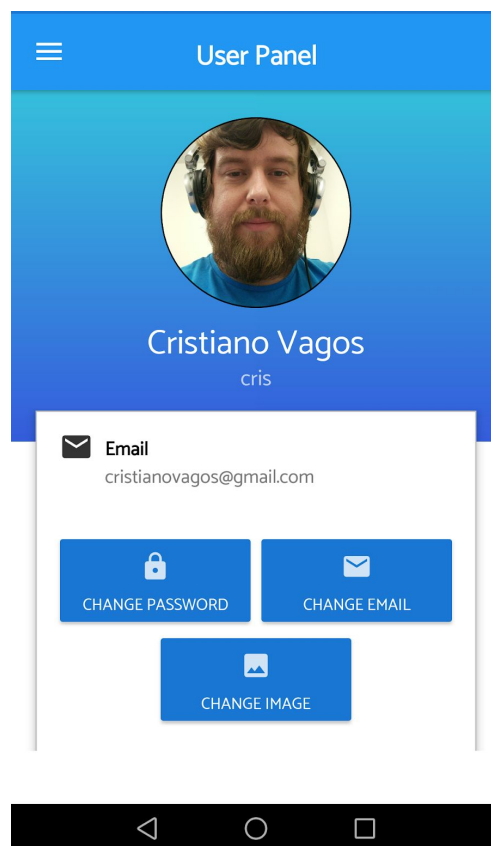
The favorite screen displays the points and routes user marked as favorite during the app execution, and the History screen displays the points the user has visited. Unfortunately (for now) it's not possible to view more details on these points/routes, but in a future release that should be possible to do, as we are aware of it.



## User Panel screen

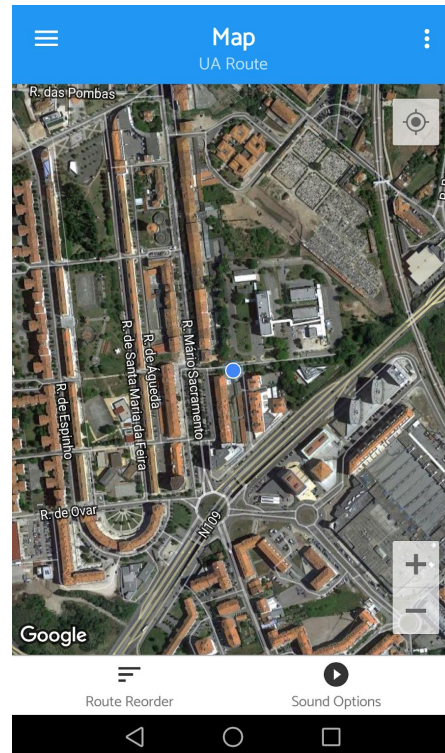
In the app we provide a user panel screen where user can manage their account, changing information such as the user image, the password and the email by clicking on the respective buttons assigned to the actions. The user image can be also changed by clicking on the current user image.

Upon changing user image, user can choose the image by selecting one of the two options available: capturing a photo from the device's camera, or choosing a existing image from the device's gallery. If successful, the image should be updated.



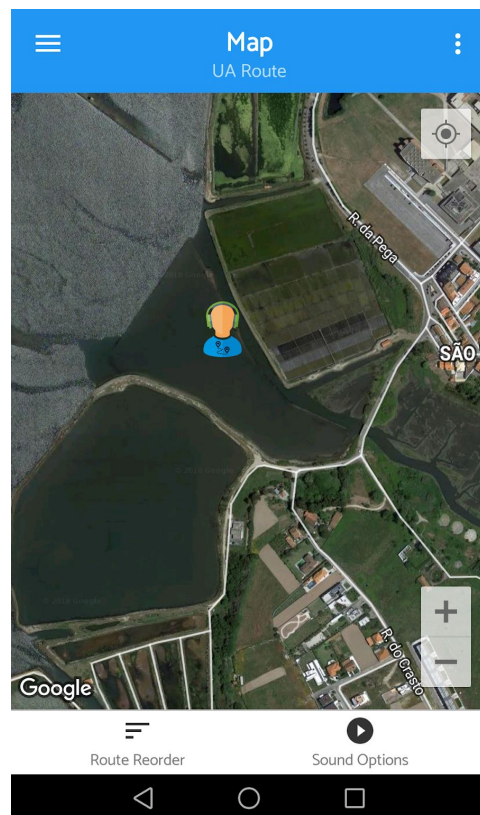
## Map Screen

The map screen is the screen that will interact most with the app users, and where the main features are. The map is a Google Map, which has the same functioning as the original Google Map, customized for this app. Initially, on first run, the app will ask for location permissions, as well as to require Bluetooth discoverability and to connect your headphones.



## Suggestion Point

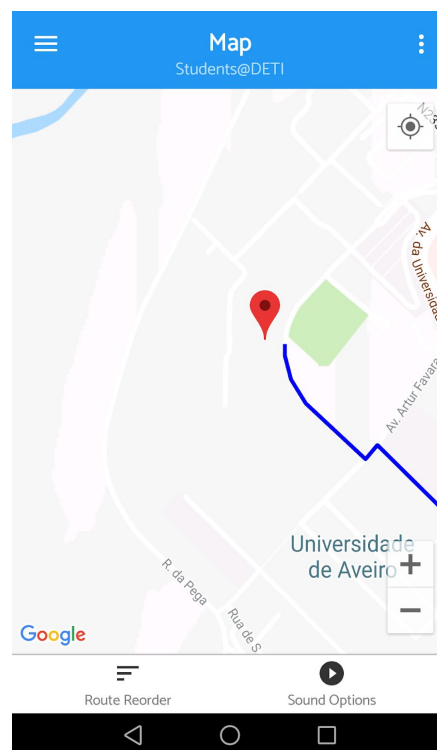
By clicking anywhere on the map a SpatialGuide logo will appear on the spot where the user pressed. The chosen point will be a suggestion for us to turn it into a point of interest or not. If the user press again (in the logo) a window will pop up and the user just have to wright a little suggestion for that point to be a point of interest in that route and send it to us.





## Point of interest

When the user starts a route (with the "GO" button in route section) he/she has some points of interest to visit. The user starts his adventure and when he/she is near a certain point (trigger area event) the app starts the audio and opens a window with a description about the point, a related image, a button ("LEARN MORE") that opens a page with more detailed description about the point of interest, a button that opens a comment section and an "OK" button that closes the window. The user also has the opportunity to mark the point as favorite by pressing the heart.

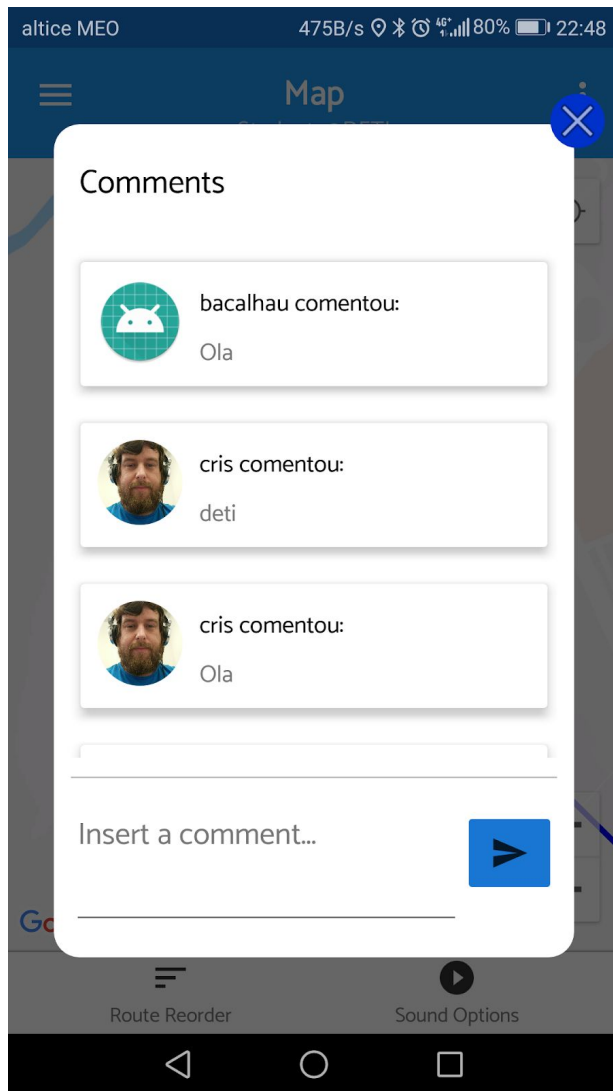


## Trigger Area Event

This event is related to the distance between the user and the point of interest. The user can choose the radius around him/her to detect a certain point on the settings section, this radius can be chosen between 0 and 100 meters. Once the user has chosen the radius when he/she reaches a point the audio starts playing and a window about the point of interest will pop up.

## Comment Section

Once the user pressed the comment button the app will open a new window with the comments of all users that passed through that point and commented about it. The user can also leave a comment of his/hers about the point.

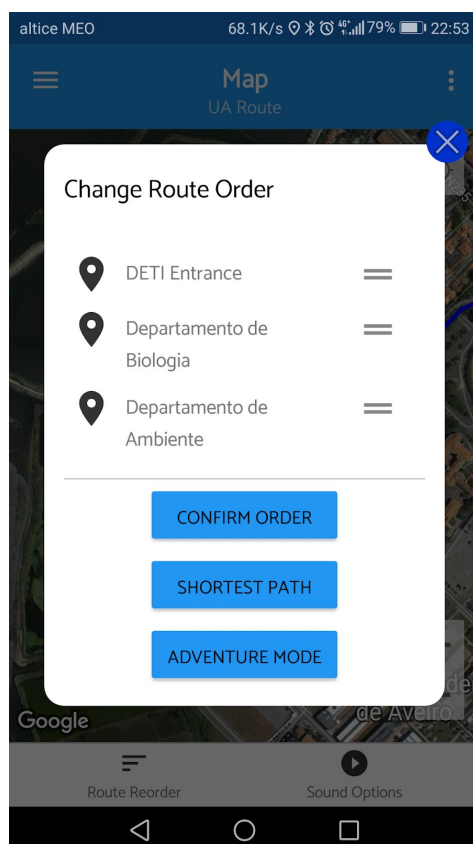


## Sound Options

When the user is listening the audio about a point of interest the app can provide the user a button that can manipulate the sound ("Sound Options"), by pressing it a new window opens and the user have two options, one button that starts the audio from the beginning and another button that can pause and play the sound.

## Route Options

The user have also another button on the map screen that provides him/her to choose how to make his trip ("Route Options"). By pressing it will open another window with all the points of the route and three other buttons. The last button gives the user a random trip through the points ("ADVENTURE MODE"), the middle button makes a shortest path through the points ("SHORTEST PATH"), the user has the opportunity to choose his own path, just by pressing each point (drag and drop) and rearrange the trip like he/she wants and by pressing the first button makes the confirmation about the arrangement chosen by the user ("CONFIRM ORDER").



## Website

Pressing this option the user will jump to our website where he can see more about our app.

## Settings

On the top right corner the user has a button that opens the settings section.

In “General Options” we can edit some aspects about the use of the app.

This settings has options like turning on and off the auralization engine, turning it on, the user will listen the audio coming from the point of interest, turning it off the user is telling that doesn't want to know from where the sound comes, it means that the app is not using any sensors and the user just listens the sound normally like he's listening some music on his/her phone.

Turning the auralization engine on, the user has another option right below about which IMU sensor he/she wants to use. If the user turn de option on ("External sensor"), the user is using the sensors in the smartphone above his head, the one that is trapped to the headphones, if this option is turned off, the user is using the sensors in the smartphone that is running the app.

There is another checkbox that deals with our heatmaps, if this checkbox is checked, the user is letting us know which points does he visit just for our statistics (tracking anonymously) so that we can see which point are most visited for each route in a general use of the app, by all users.

Travel mode, this option gives the user the opportunity to choose which kind of trip the user wants to take, he can choose traveling by car/bus, bicycle or by walking.

(Advice: If the user wants to have a car/bus experience, we recommend to increase the trigger area distance, because the distance between the vehicle and the point of interest may be a little far).

The location mode just refers to how accurate the users location is by choosing a mode: High Accuracy, using the GPS and internet; Balanced; Or GPS only;

Trigger Area Distance: provides the user to choose the radius around his position, value between 0 and 100 meters.

In the appearance options we can change the route appearance.

Map Type: can be hybrid, normal, satellite or terrain.

The user can also change some colors, the markers colors(the unvisited and/or visited points) and also the route direction color that appears on the map.

GENERAL

Toggle Auralization Engine ☒  
Auralization Engine is enabled

Use external Head Tracking sensor ☒  
Turn off to use this device as a sensor

Send my location anonymously ☐  
To track usage statistics (heatmaps)

Travel Mode  
Car/Bus, Walking, Bicycle

Location Mode  
How accurate your location is

Trigger Area Distance  
The maximum distance (in meters) from current location

How accurate your location is

Trigger Area Distance  
The maximum distance (in meters) from current location towards a point of interest that we consider you are at.

APPEARANCE

Map Type  
Type of map that will be shown

Marker Color (Unvisited)  
The color of the markers of points unvisited on the map

Marker Color (Visited)  
The color of the markers of points visited on the map

Route Direction Color  
The color of the direction on the map