

# **TagSwarm Requirements**

## **1. Current Requirements**

### **1.1. Functional Requirements**

- 1.1.1. A user will be able to choose a user name.
- 1.1.2. A user will be able to create a geographic tag/point.
- 1.1.3. A user will be able to give her tag a unique name.
- 1.1.4. A user will be able to fill in textual details relating to her tag.
- 1.1.5. The app will automatically associate a unique device ID with a user's tag when it is created.
- 1.1.6. The app will automatically associate a creation time with a user's tag when it is created.
- 1.1.7. The app will automatically associate device GPS coordinates with a user's tag when it is created.
- 1.1.8. A user will be able to associate a picture with her tag.
- 1.1.9. A user will be able to update her tag once it is created.
- 1.1.10. A user will be able to view a list of her tags and select from it.

### **1.2. Non-Functional Requirements**

- 1.2.1. The app will be available as a native Android app.
- 1.2.2. The app will be installed directly instead of through the Google Play Store. This is because the app is still under development at this stage, and it is not ready for public deployment.
- 1.2.3. The app will not interfere with phone calls, text messages, or other normal phone functionality.
- 1.2.4. The app will prompt the user to enable GPS functionality if it is not already enabled.
- 1.2.5. The app will limit picture sizes to a reasonable size.

## **2. Future Requirements**

### **2.1. Future Functional Requirements**

- 2.1.1. A user will be able to see a map view of her tags and select from it.
- 2.1.2. The app will automatically synch user tags with a cloud database.
- 2.1.3. Administrator users will be able to view and update all tags via a web-based interface.
- 2.1.4. Administrators will be able to create user groups.
- 2.1.5. Users will be able to join one or more user groups.
- 2.1.6. Users will be able to see other users' tags within their respective user groups.
- 2.1.7. Users will be able to comment on other users' tags.
- 2.1.8. Users will be able to export their tags as a .kmz file for use in other mapping programs.

### **2.2. Future Non-Functional Requirements**

- 2.2.1. Users will receive unique codes to join specific user groups. Administrators will create these codes and distribute them in any manner they choose. This will allow organizations to control their groups.
- 2.2.2. Users will authenticate to the app with a unique user name and password.
- 2.2.3. Users will not be able to update the name, location, device ID, picture, or initial text of other users' tags.
- 2.2.4. The app will be downloaded and installed via the Google Play Store. Anybody will be able to download the app for free.
- 2.2.5. The app will be available as an iOS app, and it will be downloaded and installed via the Apple App Store. Anybody will be able to download the app for free.
- 2.2.6. The app will be available as a mobile web site, user authentication will be required.