Duck Tracker 2.0
User Documentation

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6/1/2020

Table of Contents

1. Introduction

Duck Tracker 2.0's primary purpose is to collect real world geolocation data. The following sections will provide users a detailed step by step instruction to accomplish the given task. In order to accomplish these tasks users must have access to a live version of the system, see the installation process outlined in Installation_Instructions.pdf.

2. Normal Operation Mode (Passive Data Collection)

The following steps are needed for the user to access normal operation of Duck Tracker 2.0. Normal operation is defined as passive data collection mode.

1. The user has completed the installation and configuration instructions outlined in Installation_Instructions.pdf. OR has access to a live version of Duck Tracker 2.0

2. User opens Duck Tracker application on mobile device.

3. User allows Duck Tracker to use location services for geolocation tracking and storage.

4. Duck Tracker has green status light. This status light indicates valid connection with the database for data storage. See images below for visual aid.

5. If Duck Tracker has a red indicator light, this means that connection with the database in invalid. Users must refer to Installation_Instructions.pdf to ensure proper installation and configuration of Duck Tracker 2.0. See section 5 for visual aid.

6. For optimal performance the user may keep Duck Tracker 2 open and the phone in 'awake' mode.

7. The user may manually enter latitude and longitude and click the submit button for testing purposes (for example if the user does not have a sim card in the phone).

8. Users may now be able to view in accordance with section 4 outlined below.

3. Manual Location Update

The following steps are needed for the user to manually update geolocation of Duck Tracker 2.0.

1. The user has completed the installation and configuration instructions outlined in Installation_Instructions.pdf.

2. User opens Duck Tracker application on mobile device.

3. User allows Duck Tracker to use location services for geolocation tracking and storage.

4. Duck Tracker has green status light. This status light indicates valid connection with the database for data storage. See images below for visual aid.

5. If Duck Tracker has a red indicator light, this means that connection with the database in invalid. Users must refer to Installation_Instructions.pdf to ensure proper installation and configuration of Duck Tracker 2.0. See images below for visual aid.

6. Pressing the "Submit Data" button on the android application will send geolocation to the database as long as the status light indicates green.

7. Users may now be able to view in accordance with section 4 outlined below.

4. Viewing of Collected Data

The following steps are required for users to view database contents in a .txt file deliverable with the following format for each entry:

"User I.D.\tDate\tTime\tLatitude\tLongitude\tTime at Location\n"

1. The user has completed the installation and configuration instructions outlined in Installation_Instructions.pdf.

2. Once the php file is placed on a designated server by the user, it may be accessed via a web browser.

3. User opens up web browser of choice and access the following website, using their own username in place of '<username>' below:

    https://ix.cs.uoregon.edu/~<username>/duck_tracker_server/duck_track_gate.php

4. A download will prompt the user to save the file in a designated location.

5. Users may now view database contents by opening the previously downloaded file.

6. File will be formatted with the following format

5. Visual Aid

Image on the left display a valid connection with the php connection file with the message "CONNECTED OK" and a green status light indicator. Image on the left display a invalid connection with the php connection file with the message "NOT CONNECTED" and a red status light indicator.