BASIL - User Guide

Behavioral Assessment Software and Interactive Logging
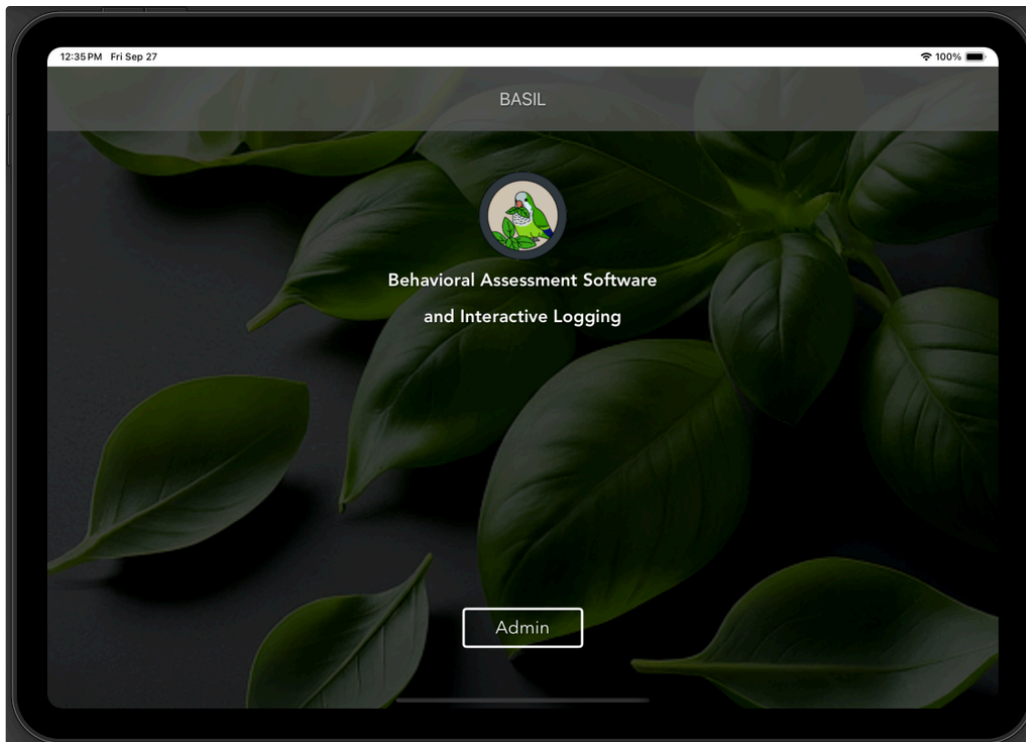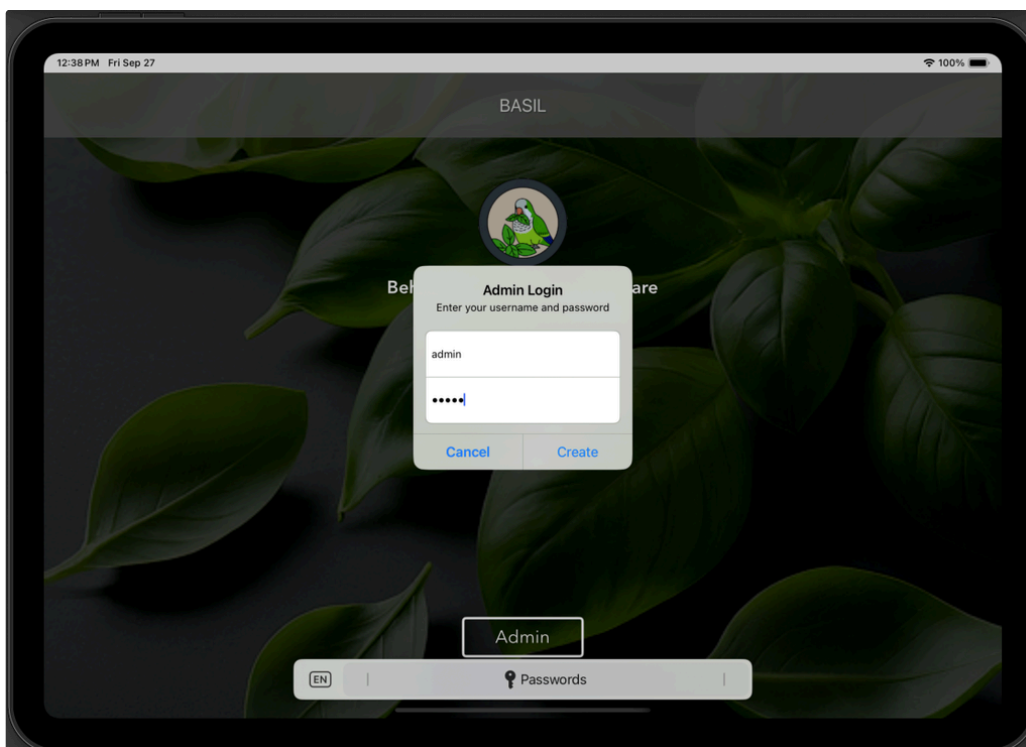
General Workflow

Home Screen

The user can enter the backend here to get started. When first installed, the only button available is "Admin". Once at least one flightpen group is configured, the "Observer Login" will become available.
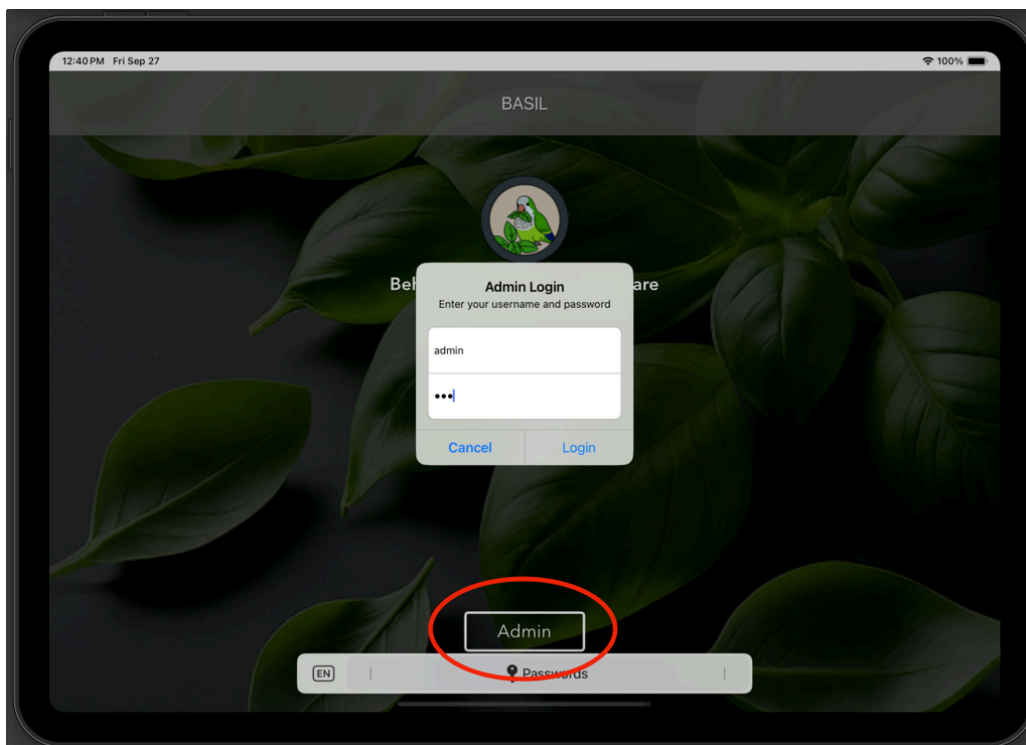
You need to create the admin user by clicking on the Admin button and entering your credentials

Admin User - Create

Store the credentials somewhere safe as you won't be able to retrieve them later. By clicking "Create" they will be saved and you have to click the "Admin" button again to login.

Admin Login

Once you hit "Create" the popup will be gone so you have to click the Admin button again and use those same credentials to Login. This procedure will only need to happen one time. Later on, you can enter your credentials by clicking the "Admin" button only once

Delete Admin User Credentials
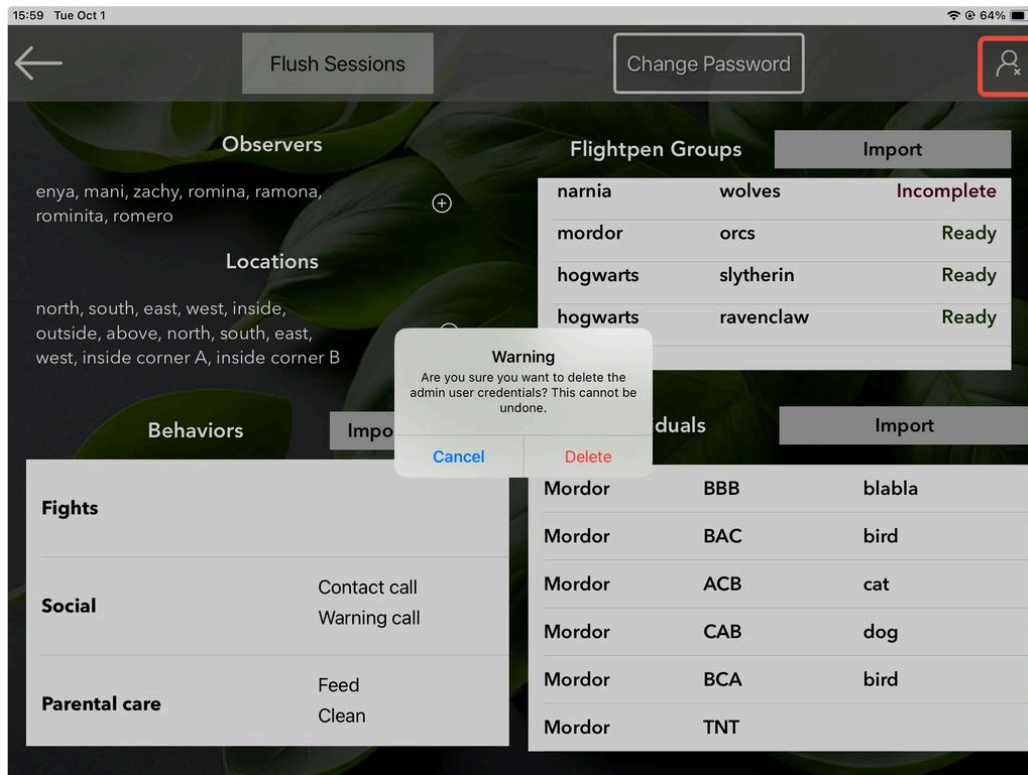
BASIL doesn't store user data other than the username and password you provide. To delete the credentials you can tap on the "delete admin account" button. The user will get a warning before proceeding
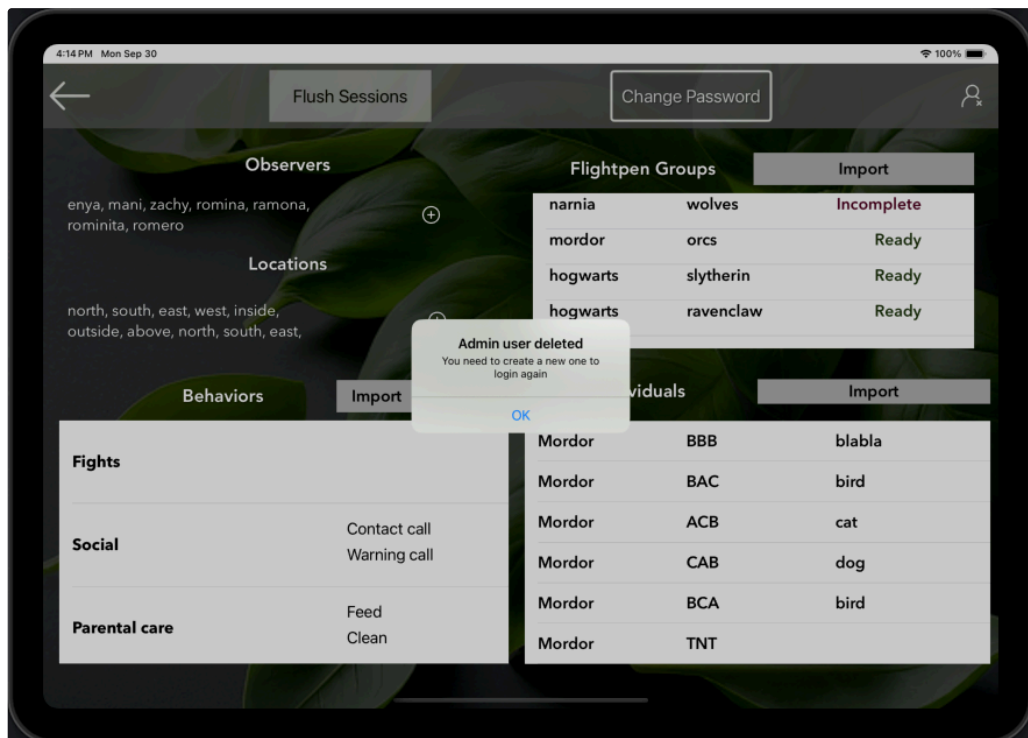
After tapping 'Delete' The user will have to create a new admin user to access the admin settings screen

Backend Configuration
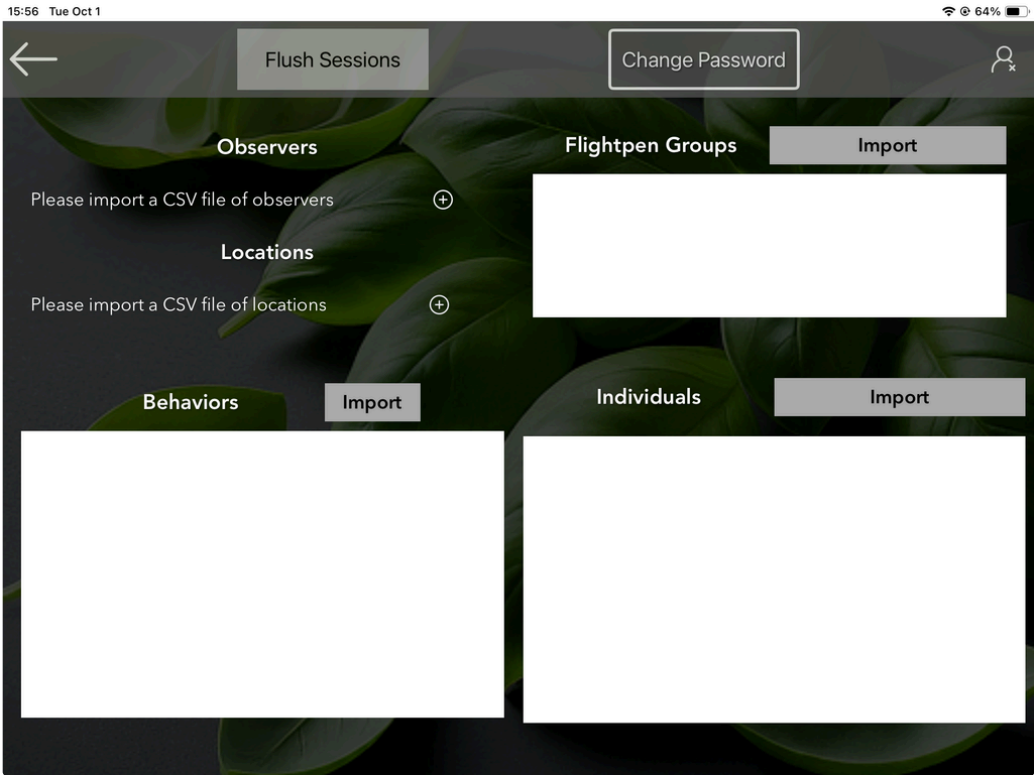
After login successfully to the admin section for the first time, you will see empty tables. The user can always go back to the home screen by clicking the left arrow button

Change Admin Password

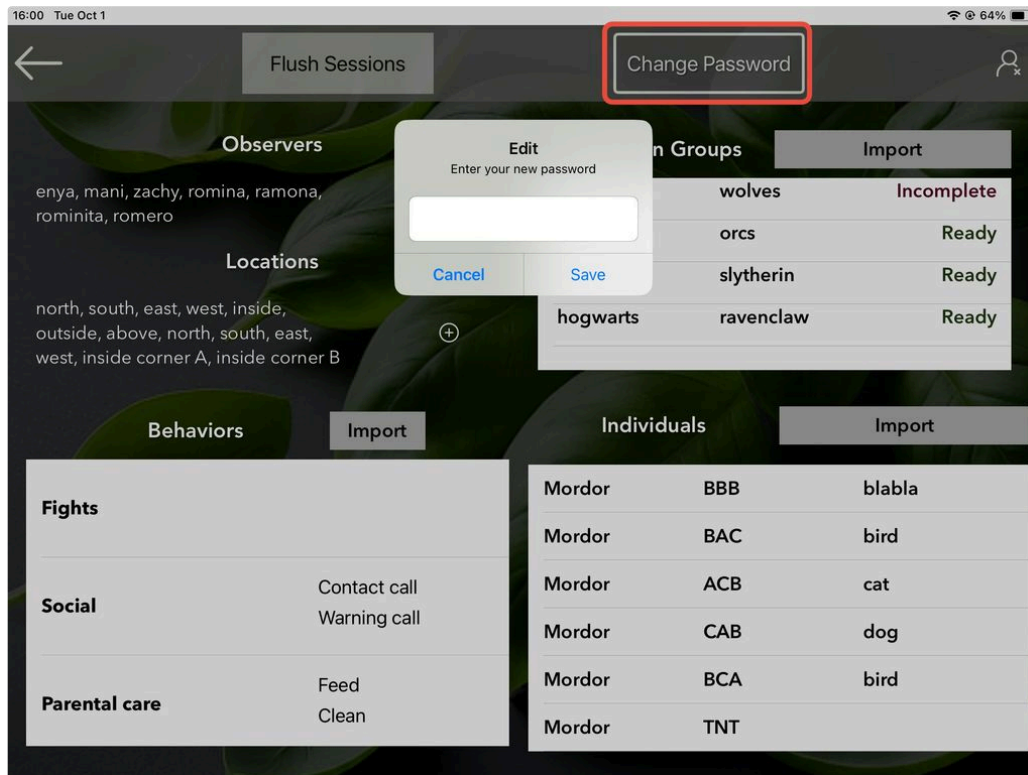The admin user can change the password as many times they want by clicking "Change Password". No verification needed. Always write down your latest password somewhere safe as you won't be able to retrieve it. By clicking "Save" you will be required to enter the same password the next time to login as an admin

Flush Sessions

The admin user can delete all the observation entities by clicking "Flush Sessions". This functionality will remove all the rows from the observations table from each observer. This won't delete any files in the folder BASIL_Data, only the observations persisted data. A popup will inform the admin user how many observation entities got deleted

Import CSV files
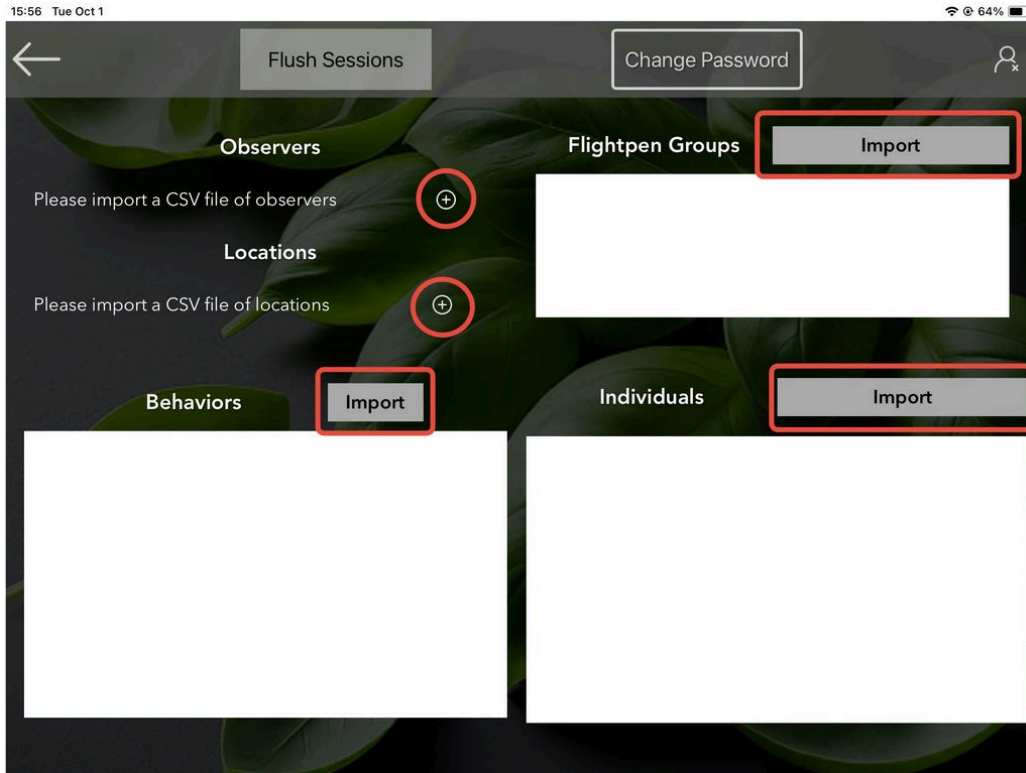
The admin user should import all entities (observers, locations, flightpens, individuals, behaviors) by clicking on each entity's import button. You can find sample CSV files to import here:
https://lastralab.github.io/BASIL/#csv
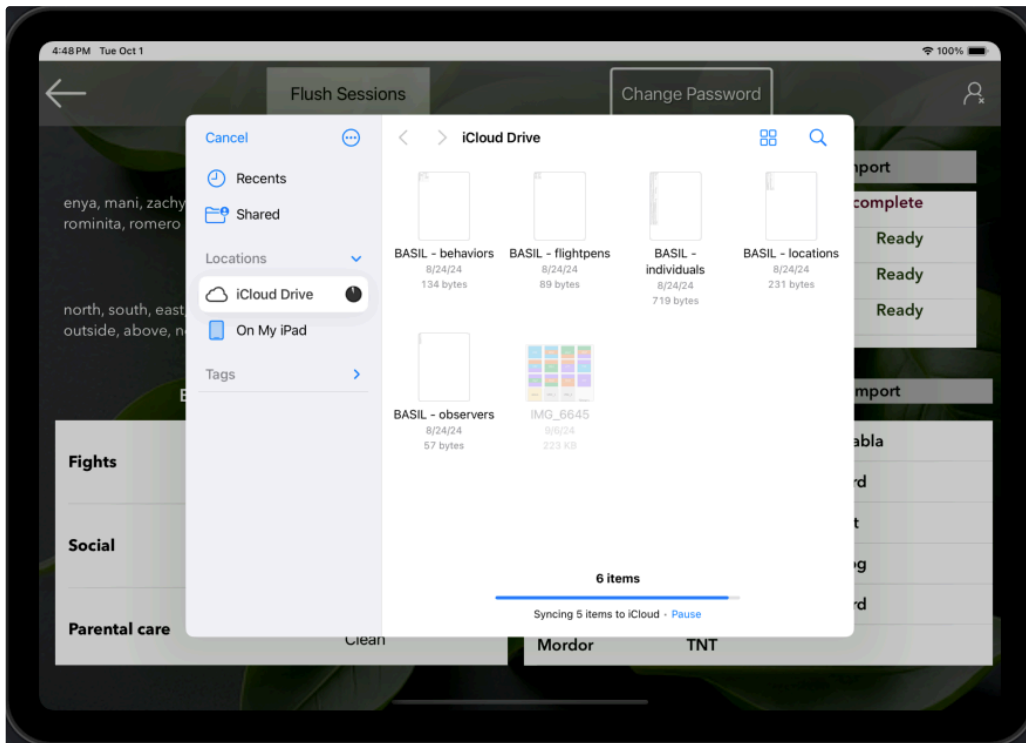
Every time the admin imports new data, the previous data (if any) will be overwritten entirely
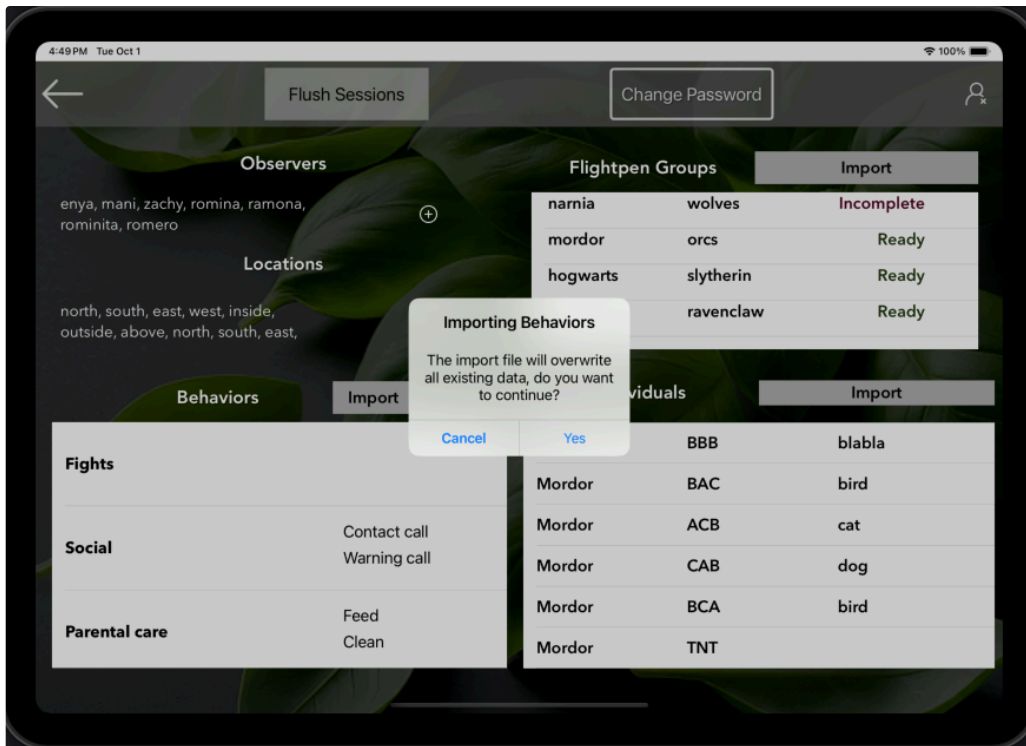
A warning popup will notify the user which entity is being imported so the user can click "Cancel" if they think they selected the wrong CSV file. By clicking "Yes" the new data will be imported and visible

Flightpen group configuration
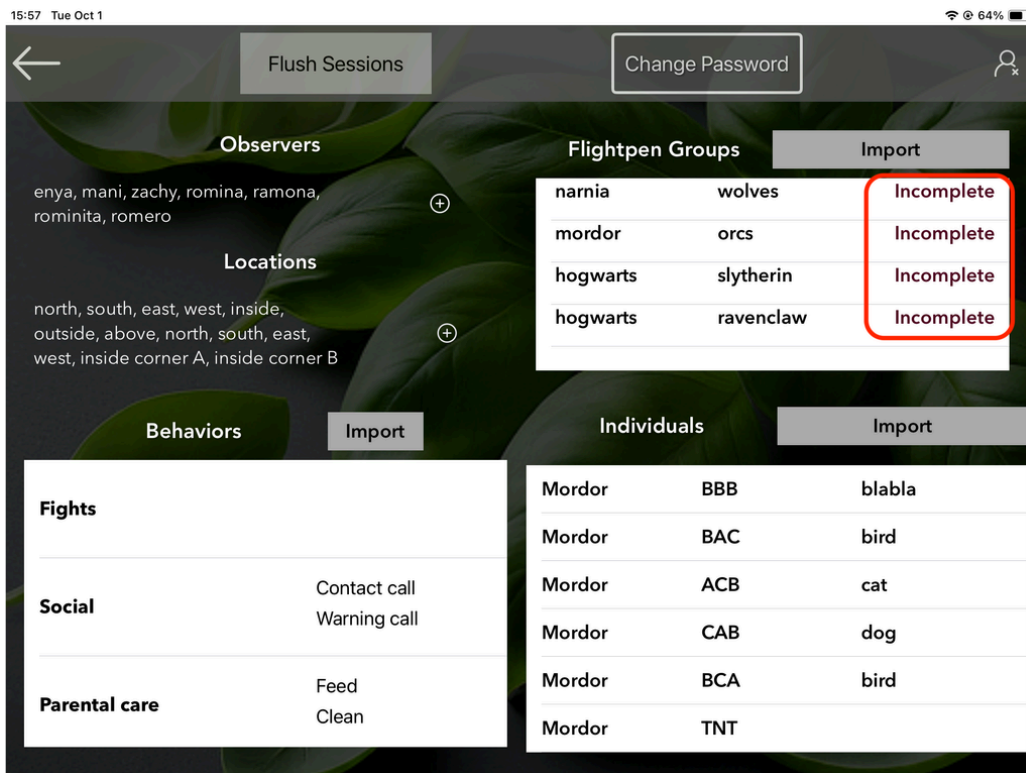
The status of each flightpen group will be indicated at the right end of each row. Each row will include the Flightpen ID, Group ID and Status (Incomplete/Ready)

← | Flush Sessions | Change Password |

Observers

enya, mani, zachy, romina, ramona, rominita, romero ⊕

Locations

north, south, east, west, inside, outside, above, north, south, east, west, inside corner A, inside corner B ⊕

Flightpen Groups | Import

wolves		Incomplete	EDIT	ENABLE
mordor	orcs	Ready		
hogwarts	slytherin	Ready		
hogwarts	ravenclaw	Ready		

Behaviors | Import

Fights	
Social	Contact call Warning call
Parental care	Feed Clean

Individuals | Import

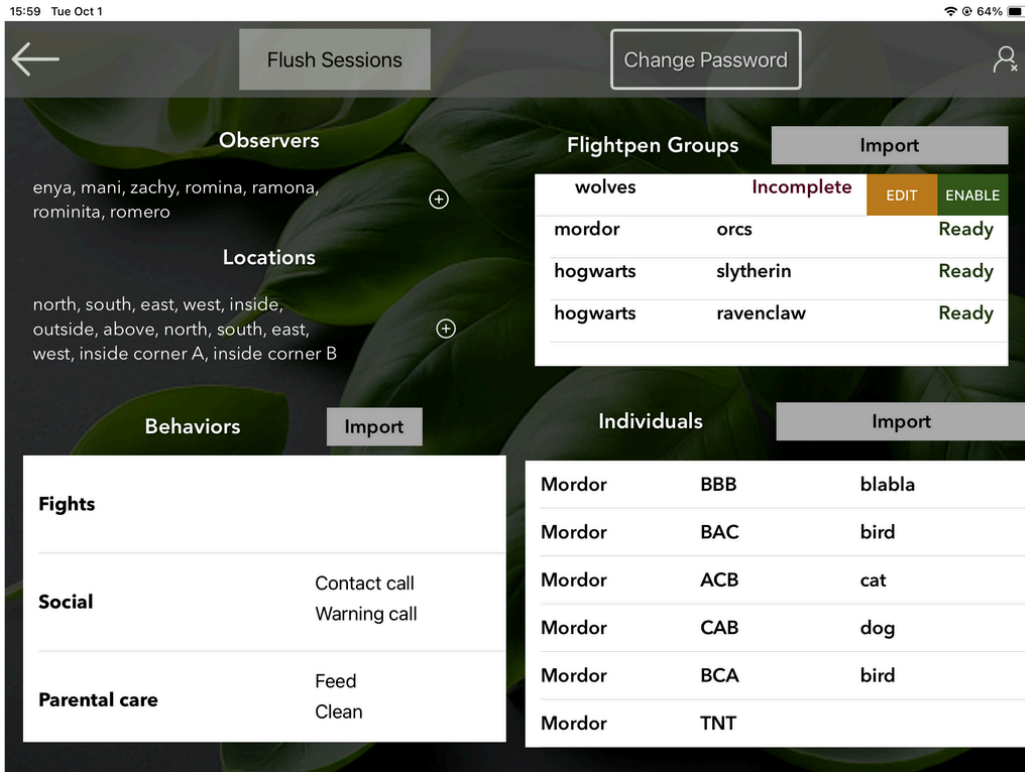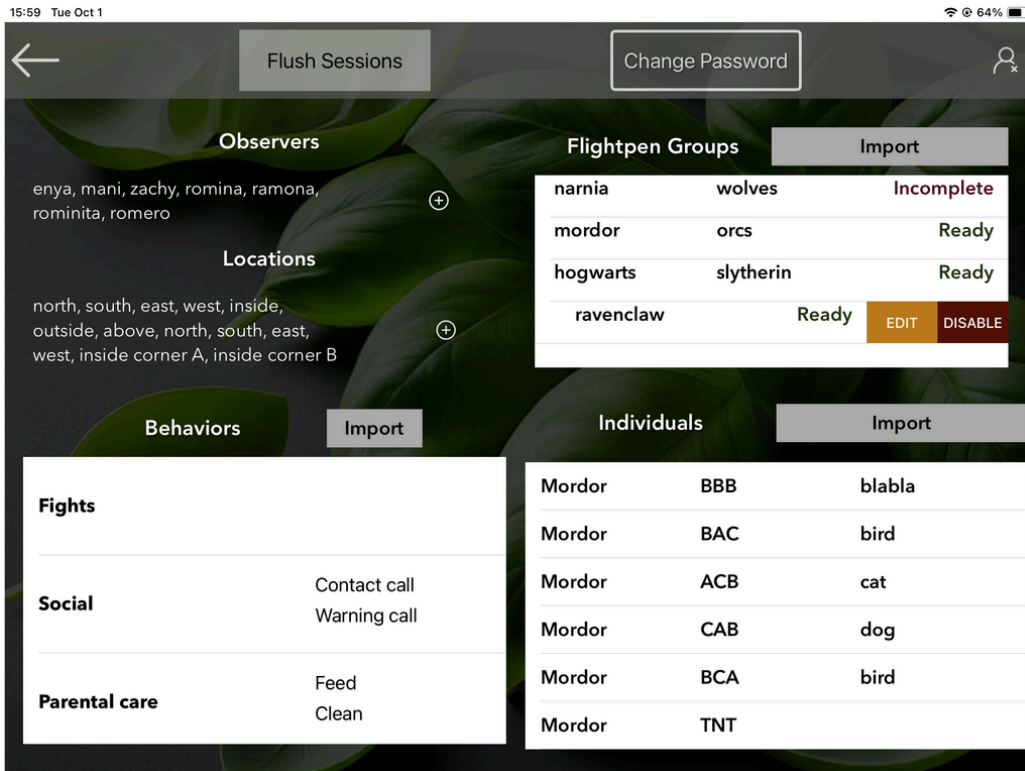| Mordor | BBB | blabla |
Mordor	BAC	bird
Mordor	ACB	cat
Mordor	CAB	dog
Mordor	BCA	bird
Mordor	TNT	

The admin user can interact with each row by swiping to the left to reveal two options: "Edit" and "Enable/Disable" depending on the current group status

← | Flush Sessions | Change Password |

Observers

enya, mani, zachy, romina, ramona, rominita, romero ⊕

Locations

north, south, east, west, inside, outside, above, north, south, east, west, inside corner A, inside corner B ⊕

Flightpen Groups | Import

narnia	wolves	Incomplete		
mordor	orcs	Ready		
hogwarts	slytherin	Ready		
	ravenclaw	Ready	EDIT	DISABLE

Behaviors | Import

Fights	
Social	Contact call Warning call
Parental care	Feed Clean

Individuals | Import

| Mordor | BBB | blabla |
Mordor	BAC	bird
Mordor	ACB	cat
Mordor	CAB	dog
Mordor	BCA	bird
Mordor	TNT	

If later on, the admin user wants to prevent the observers to use a flightpen group temporarily, it can be disabled so it won't show up as an option for the observers until it gets enable again. The option Edit will take the user to the map image edit screen
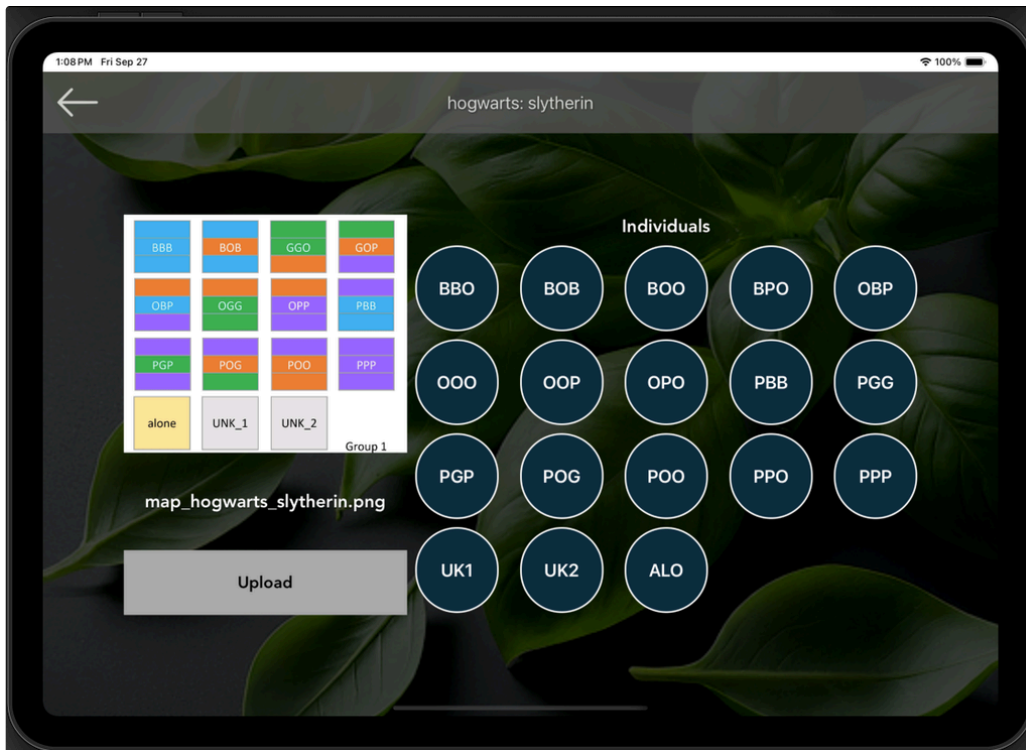
Map Images - Upload
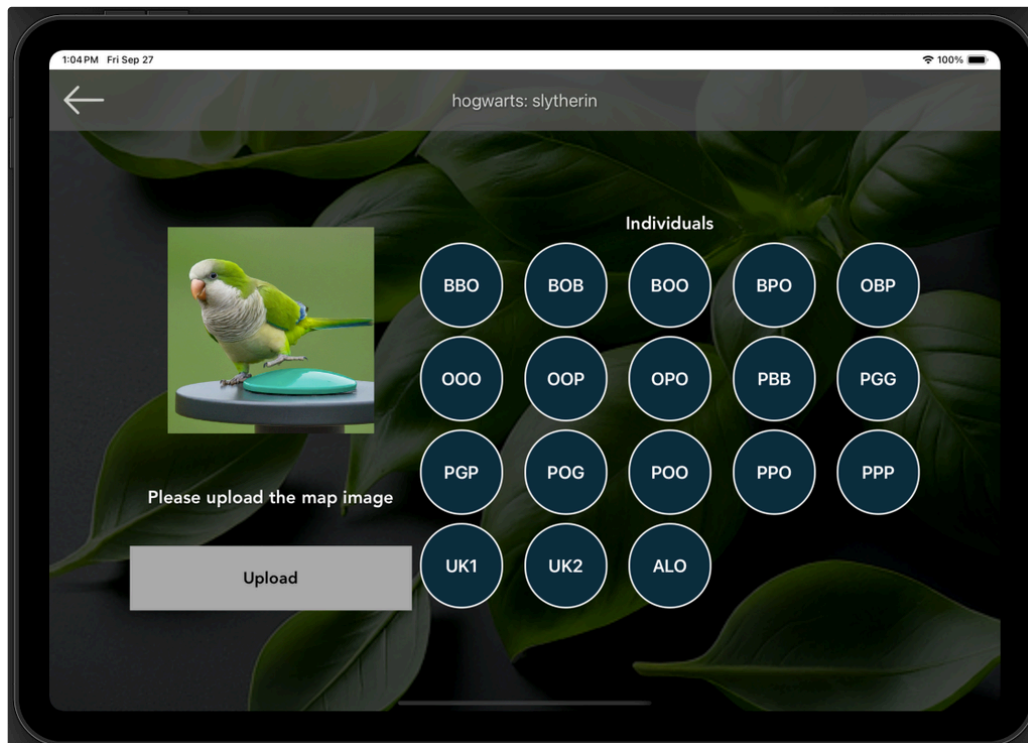
The user will be able to validate the list of individuals associated to that group and upload(select) the map image from the photo gallery
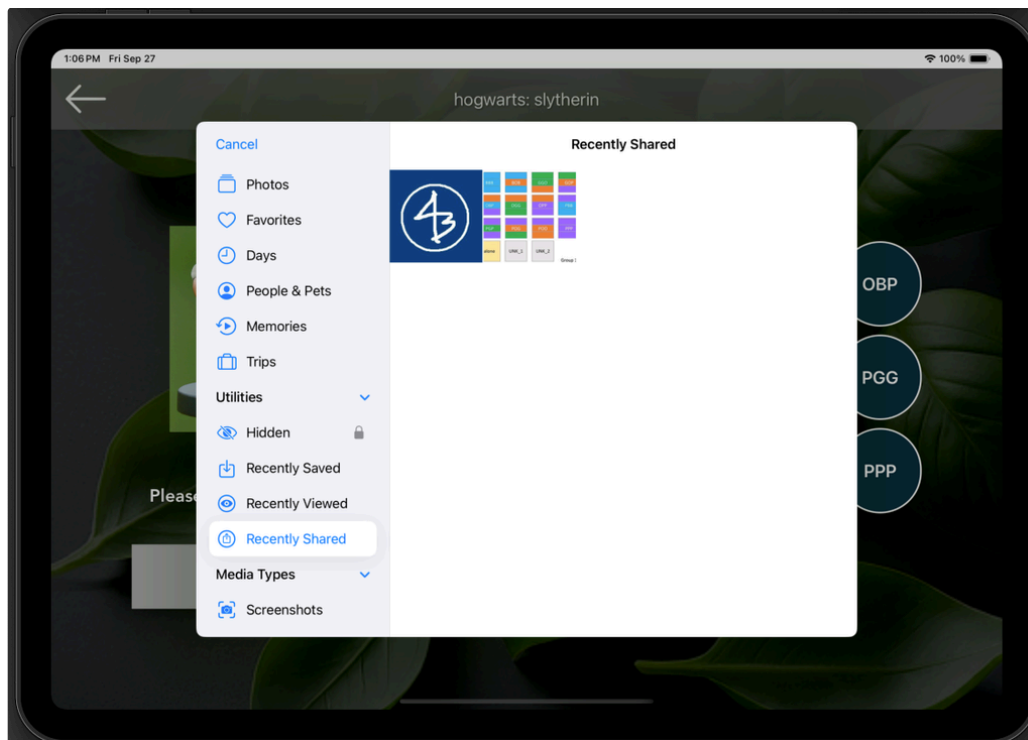

By tapping "Upload" you will be able to select the image from the iPad's photo gallery/files. The image will be renamed and added to the BASIL_MapImages folder to retrieve it later on the frontend.

By selecting the image, if there aren't more entities left to import, this action will enable the flightpen group automatically. Otherwise, you will have to enable it manually

Map Images - Import

The user can connect the iPad to a Mac and navigate to BASIL_MapImages directory under BASIL_. To add all the images at once, they should follow the naming convention: "map_{flightpenID}_{groupID}.png" (values exactly as stated in the flightpen csv import file), one image per flightpen group. Logging into the backenda after adding the images to this folder will update the flightpens automatically and enable them if no other data is missing. If the user is already logged-in and the images are copied into the folder during the admin session, logging out and back in will update the flightpen status. Failing to see this, you can enable them manually and no warnings should popup. See Transfer Data for reference
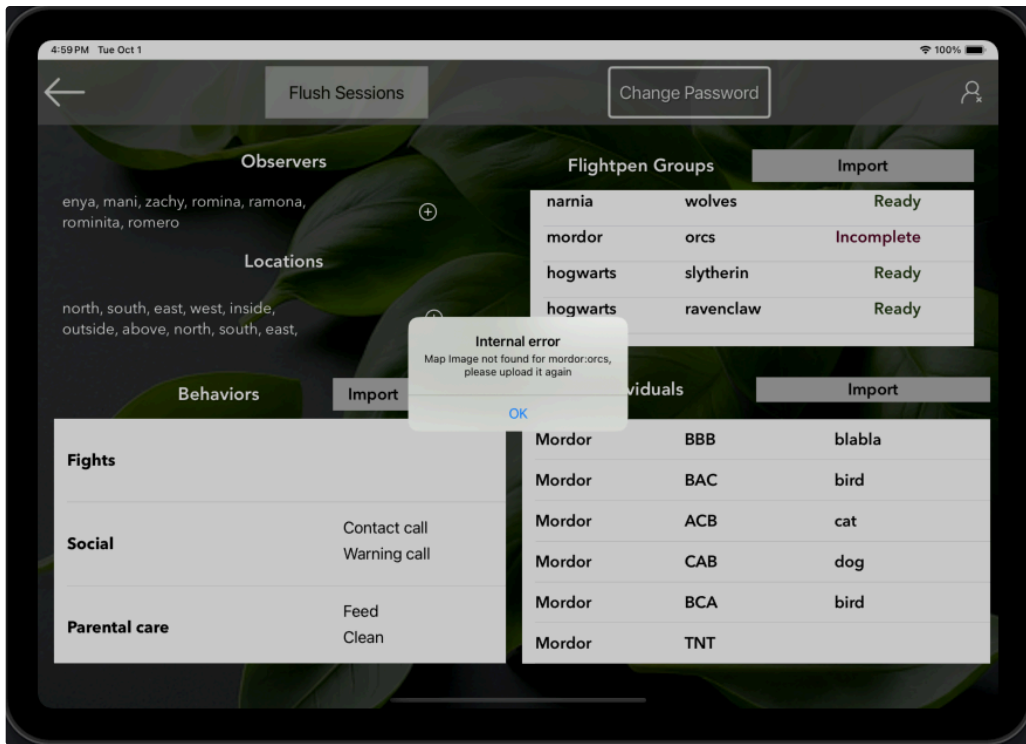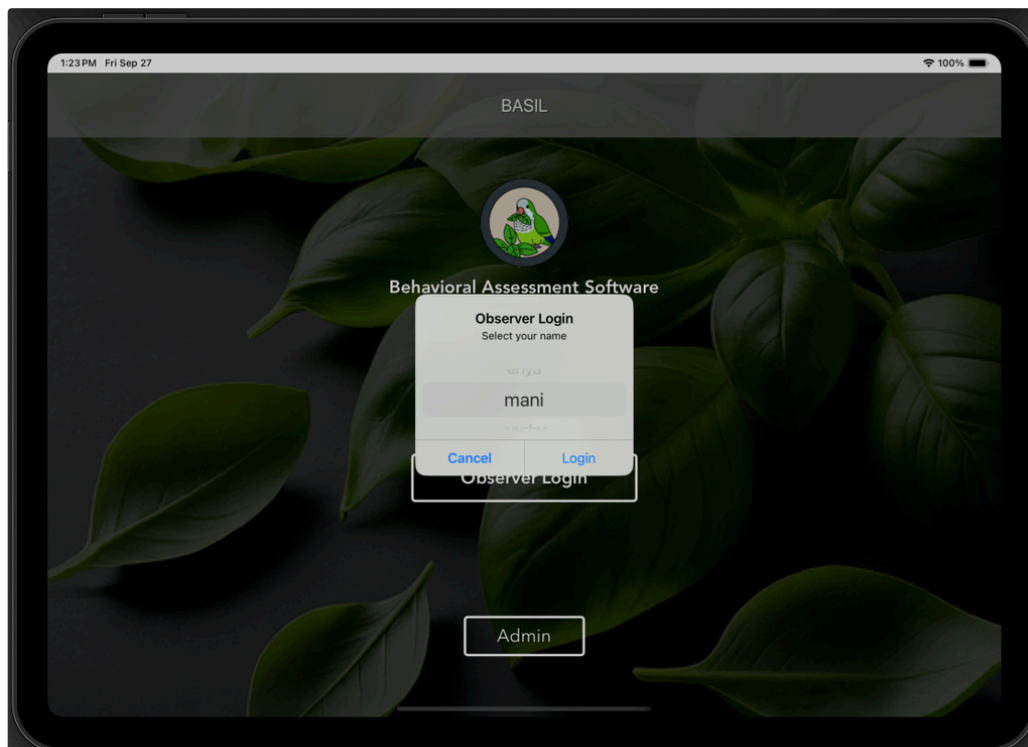
If the user removes an image from the BASIL_MapImages folder, and the fligthpen is still enabled, logging into the backend will disable it and show an error message including the flightpen and group IDs
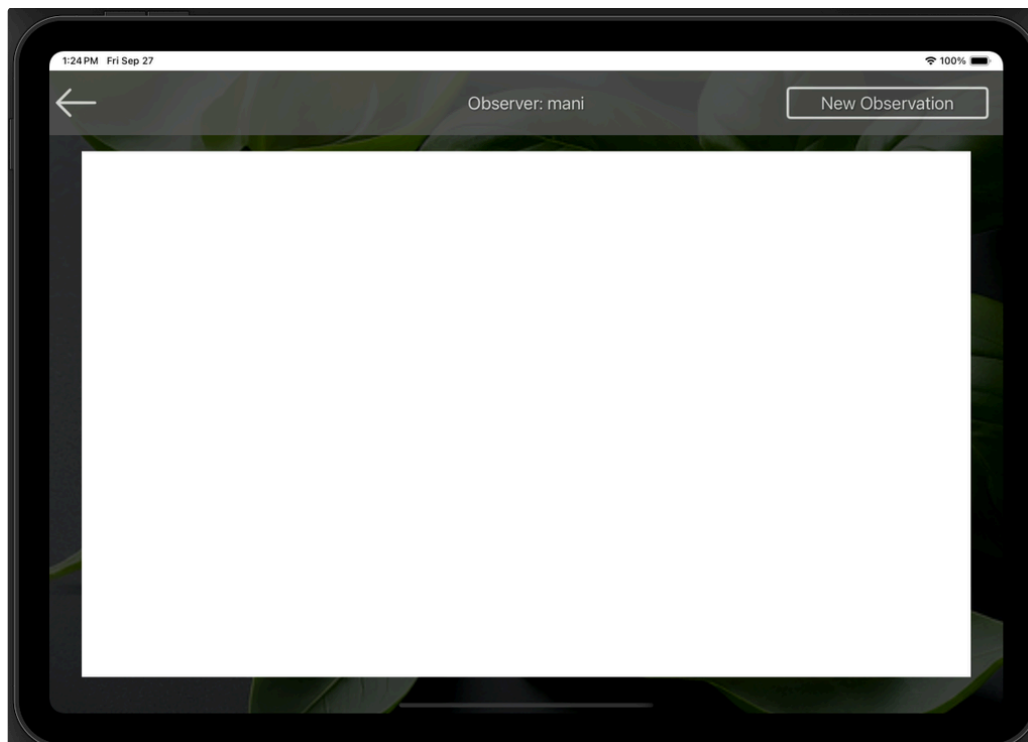
Frontend
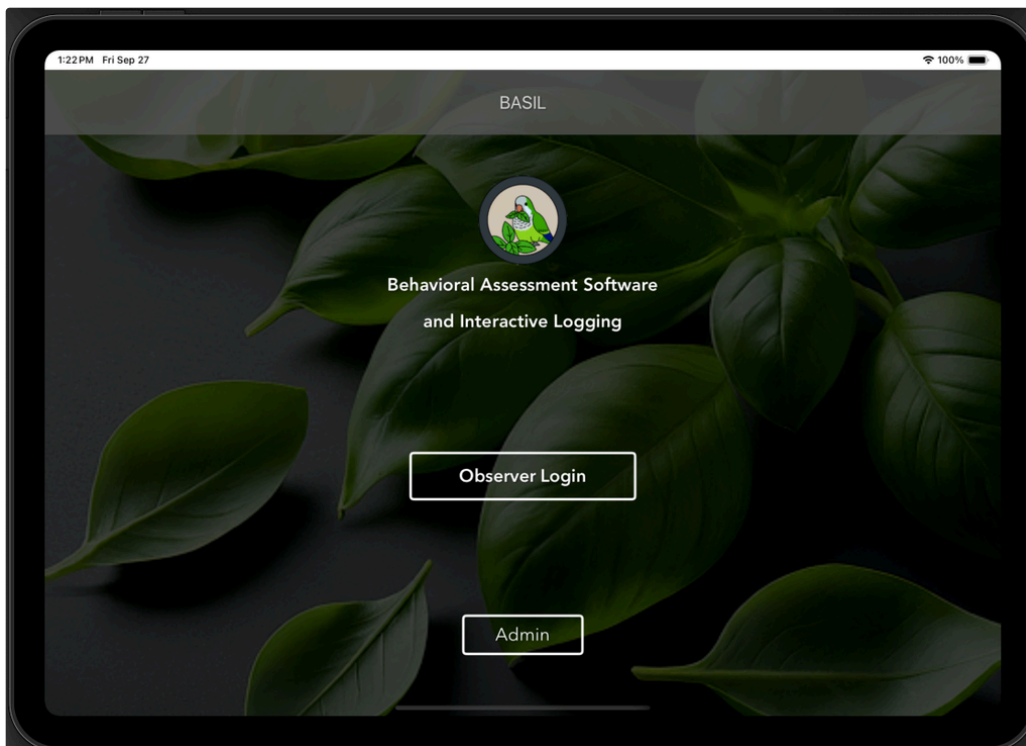
If at least one flightpen group has been configured by the admin user, the observer login button will be displayed in the home screen
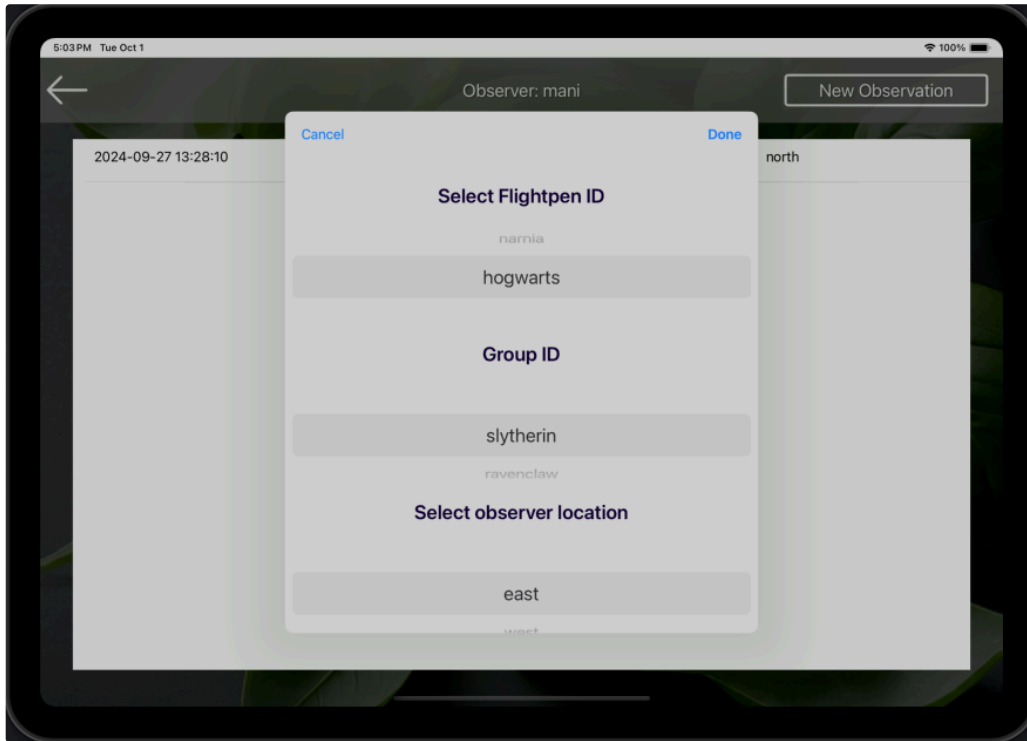
Observer Login

The observer can select their name from the observers list to login and start new observations

After the login, the observer user will be able to see a list of all the observations registered under their name (unless flushed by the admin). Their name will be displayed on the top and new sessions can begin with the "New Observation" button

Observation Session

The observer can configure the new session by selecting the Flightpen ID, Group ID and observer location. If nothing is actively selected, whatever is on the screen will be selected as default when clicking "Done". In this example we can see that "mordor(orcs)" is not an option in the flightpen ID picker because it was disabled from the admin
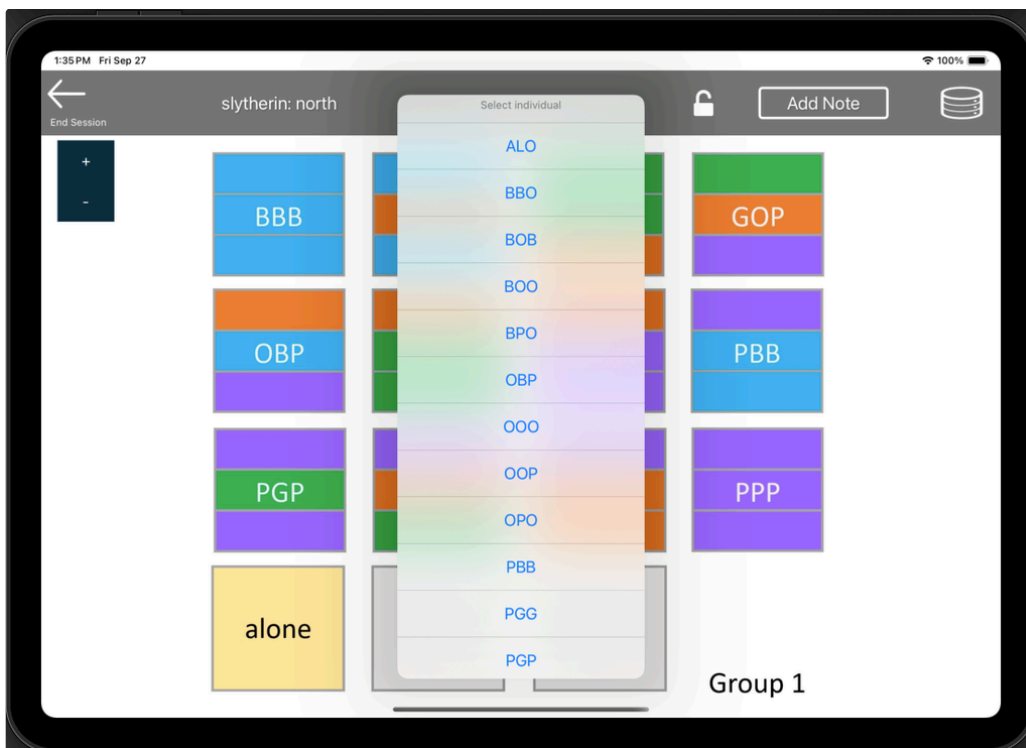
Individual Selection

The top of the screen will have useful information and control buttons. The locking functionality will lock the labels on their set position and set their size so the user can start mapping behaviors. The buttons on the top-left of the screen (+ / -) will increase/decrease the font size of the labels on the map
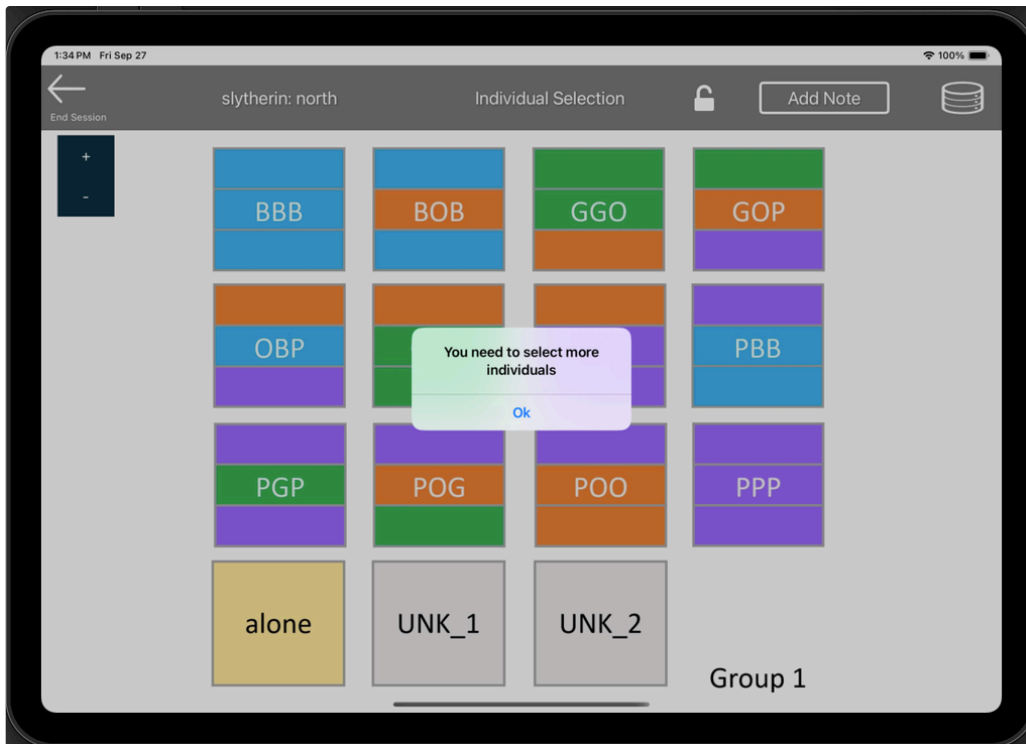
If the lock button is clicked but there aren't enough individuals added yet (>=2), a warning popup will be displayed

Tapping on any point on the map will show a menu of all the individual labels associated to that group. The observer can select a label to be added to the map, and it will be removed from the list
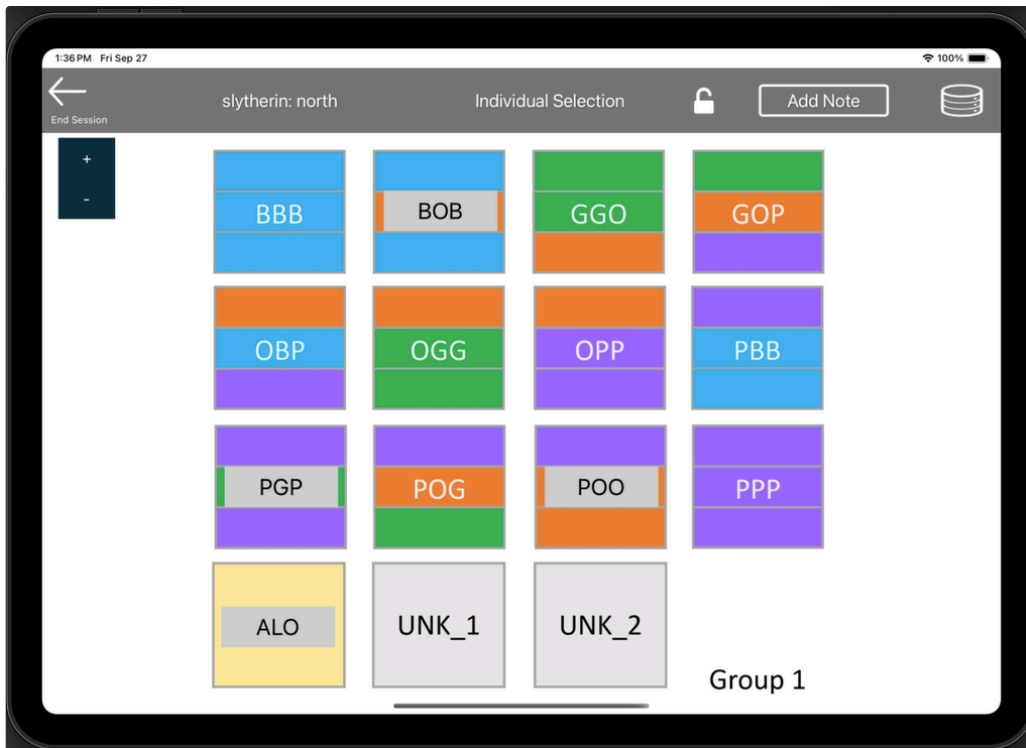
The observer user can increase/decrease the size of the font by using the blue buttons. Any new labels added after changing the size will inherit the same font size as the existing labels. The labels can be moved around to ensure their alignment in the map
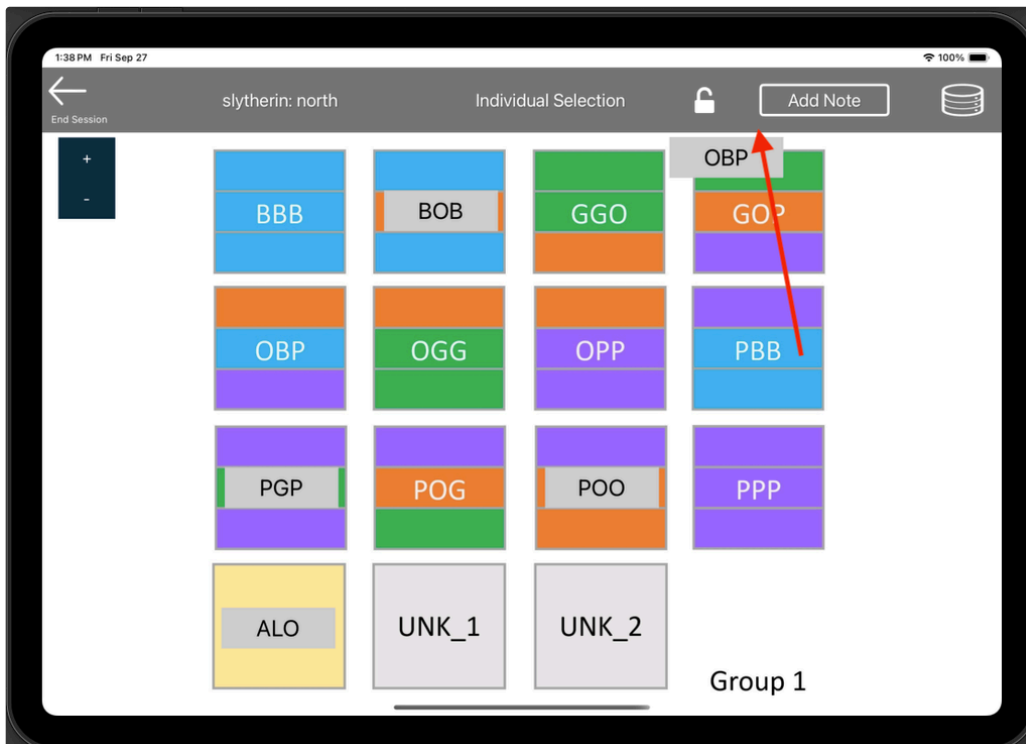
If the user added the wrong individual label, this can be dragged to the top (header). It will be removed from the map

Behavior Mapping

When the labels are positioned as expected and their sizes are correct, the user can lock them by clicking on the "lock" button. The increase/decrease font buttons will be hidden and an automatic note will be added to the CSV file indicating that the session started

To map a behavior action, the observer can select on the "actor" individual and drag the point to the "target" label

When lifting the touching point, a menu of the behavior groups will be displayed so the user can select the "action"
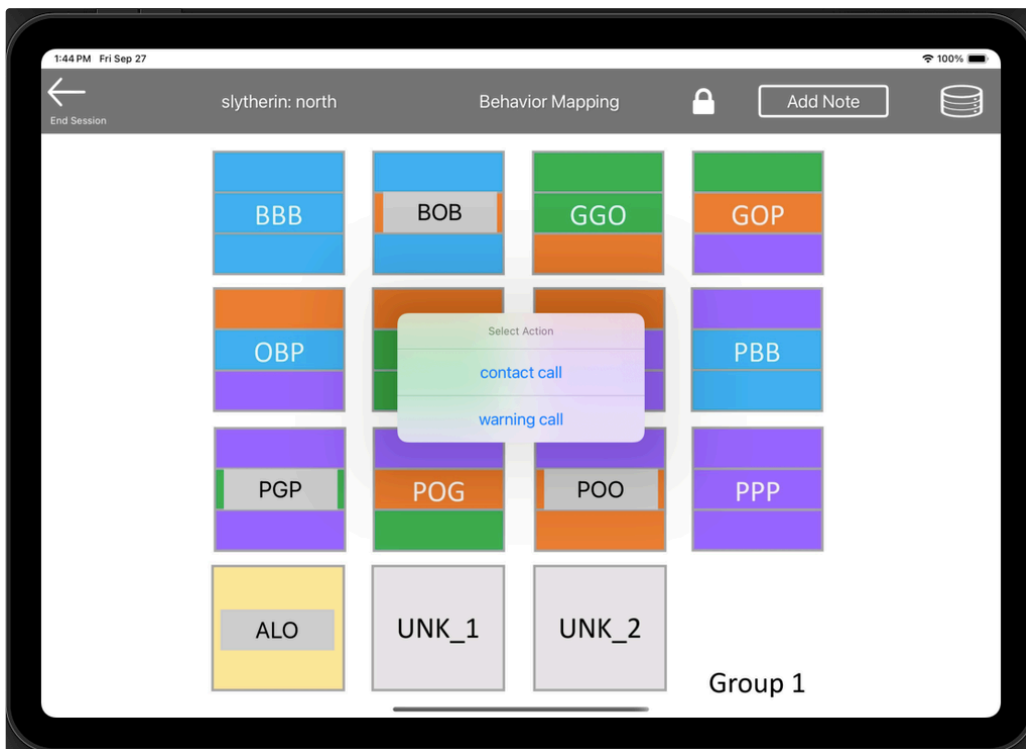

If the selected action has nested options, the menu will now show the updated options. Selecting the final action will write a new row in the CSV file with all the information (timestamp, actor, target, action, observer)

Adding notes

The observer can add notes to the CSV file by clicking "Add note", entering a short text and clicking "Add". Adding notes is available in both stages and it will be printed in the CSV file as a new row

Edit CSV Data
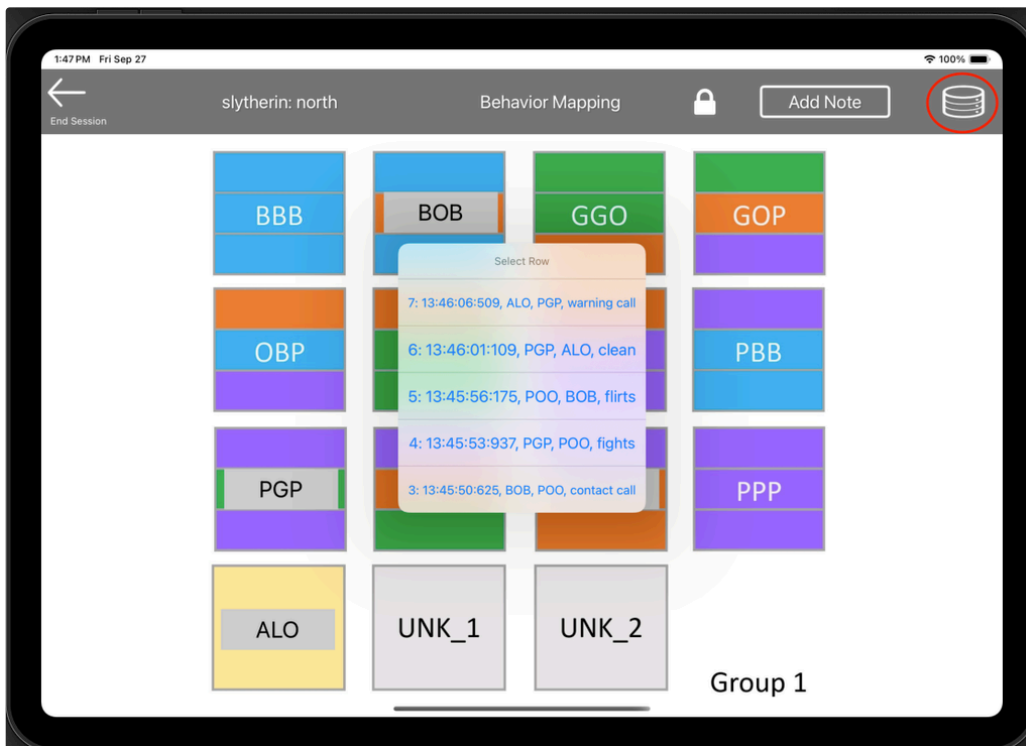
By clicking on the "data" button, the observer can see all the behavior action rows listed by row number, newest on the top of the menu. Clicking on any row will allow the user to correct the data directly on the CSV file. For this example we will select row #7

In this example, we realized we can identify the individual previously added as "ALO" and we want to correct the data by adding the new label to the actor field "PPP"
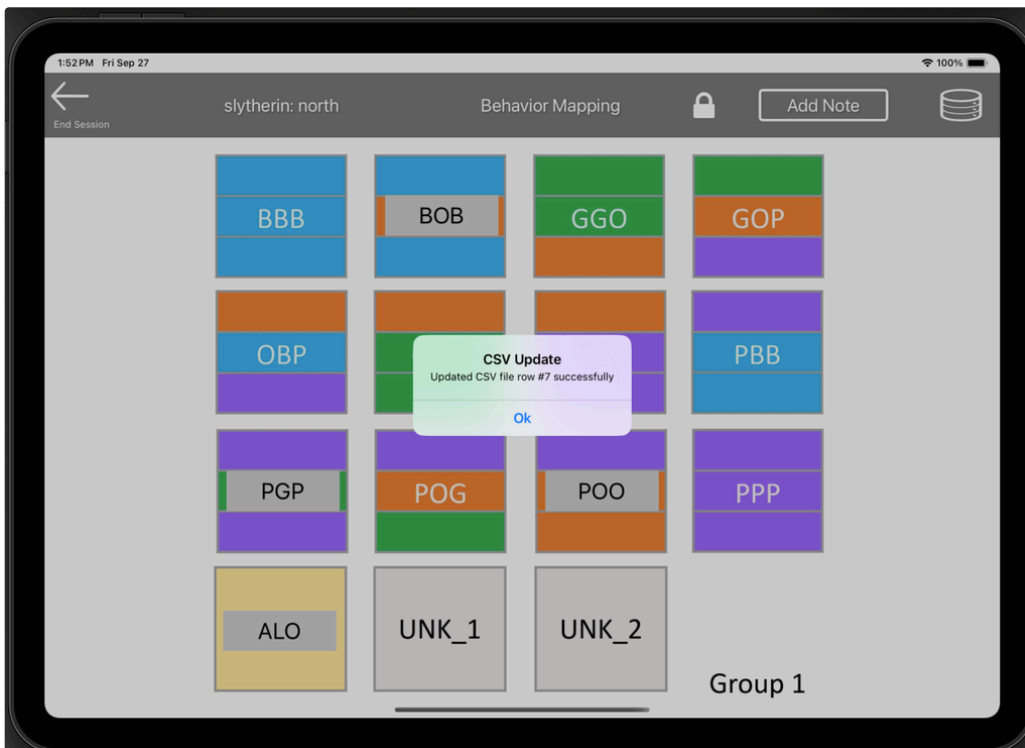
By clicking "save", the user should get a confirmation alert and a note will be added to the CSV file indicating which row was changed, which column, which value was there before and which value should be there after the change
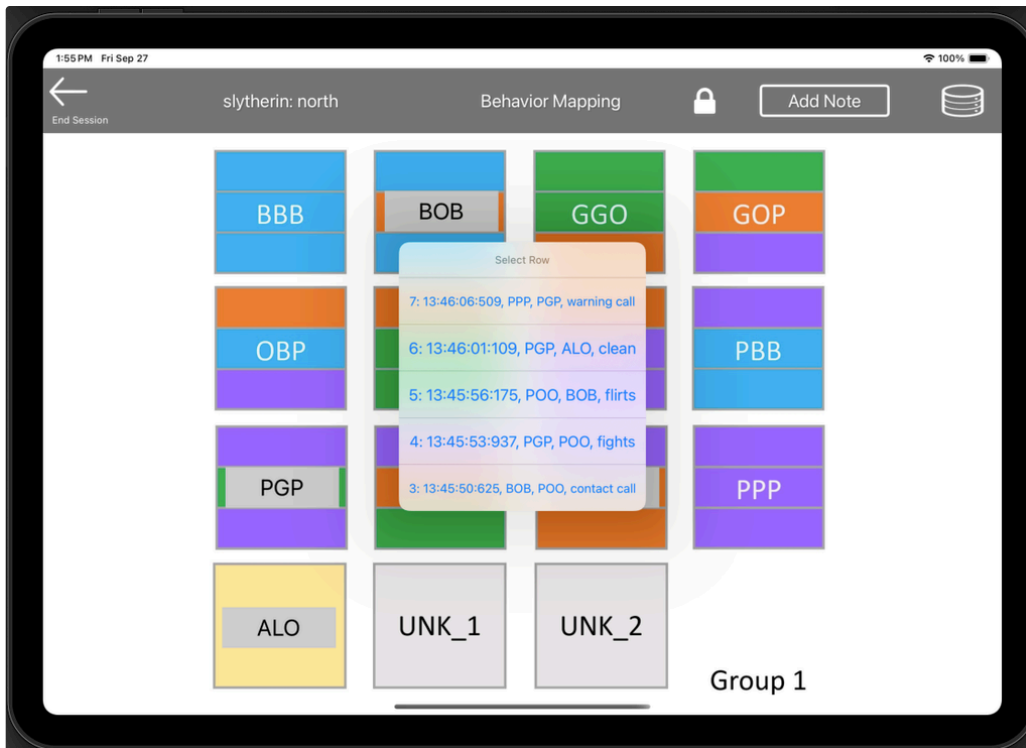
The observer can click on the "data" button again just to confirm the change was applied correctly. In this example, the row #7's 'actor' column got changed from "ALO" to "PPP" correctly. The observer can then change other rows that had "ALO" in them. Tapping on any point outside the menu should make it go away
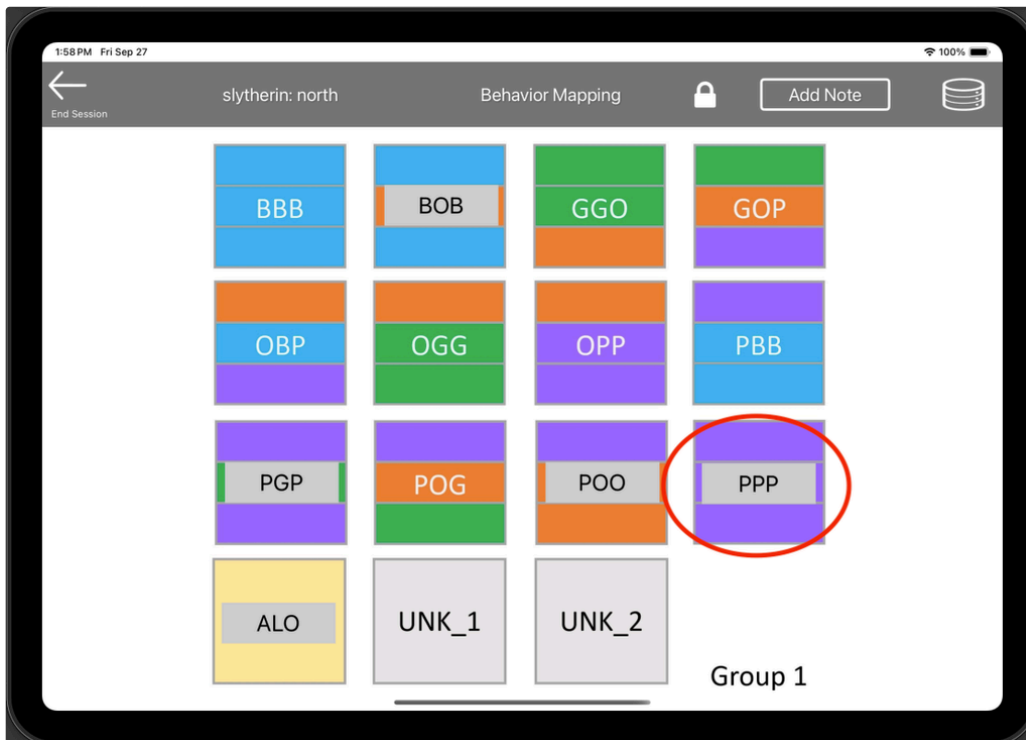
After correcting the data, the user can unlock the map, tap on the new individual found, add the label and lock the map to proceed with the session. Unlocking the map will add a note to the CSV file indicating the session was paused, then another note indicating that the session got started again after the map gets locked again

To end the session, the user can click on the left arrow button on the top left corner of the screen
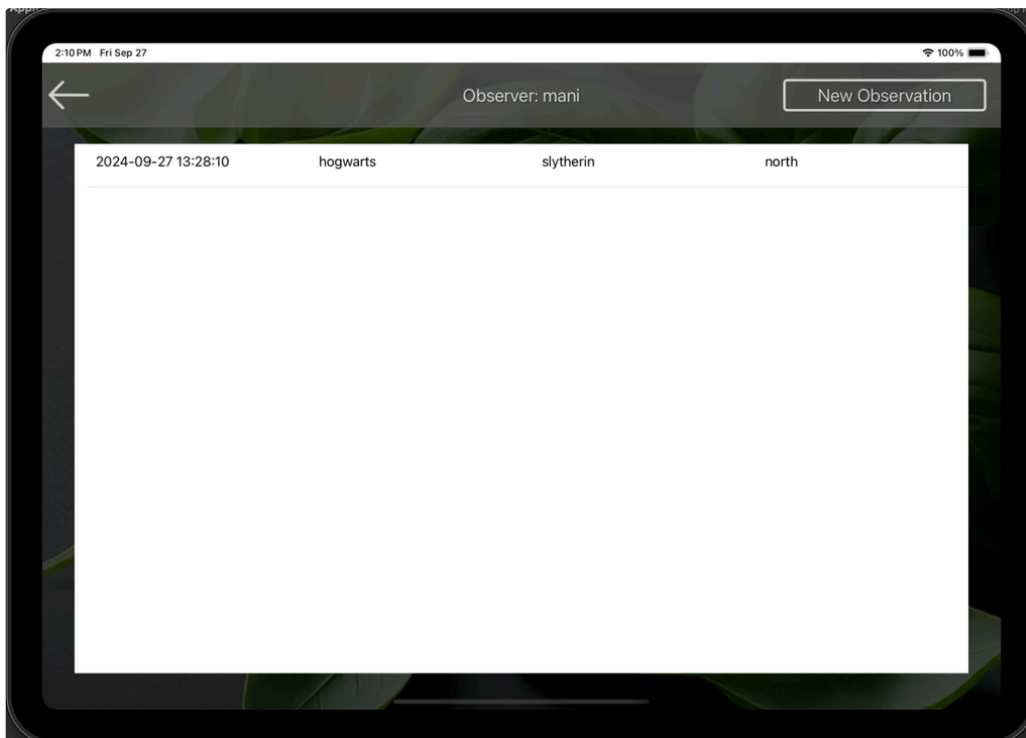

New observation will be listed on the top of the table, the oldest will be at the bottom

CSV output

BASIL_ will create a folder called "BASIL_Data" to store all the CSV files generated by each observation session

BASIL_Data

Every day, a new folder will be created inside BASIL_Data, here all the CSV files of that day will be created. To trigger this functionality, an observer user must start a new observation.
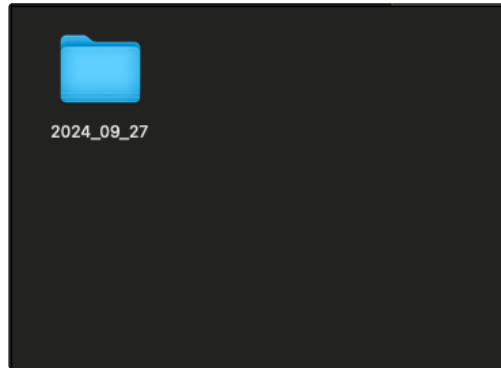
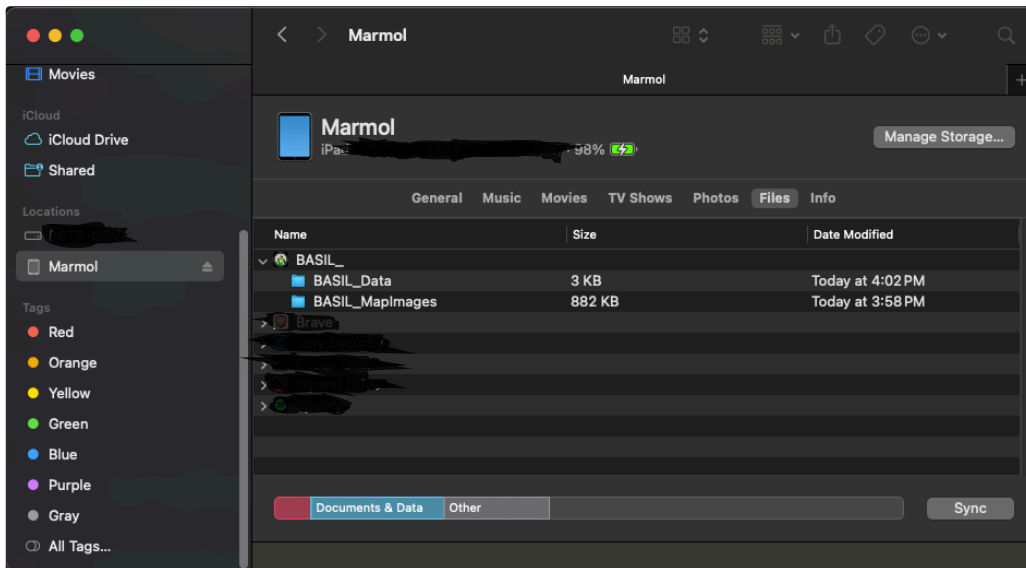The session CSV file name will include date, created_at time, flightpen ID, group ID and observer name

CSV Data

Headers: date, clock_time, decimal_time, flightpen, group, location, actor, target, action, observer, notes
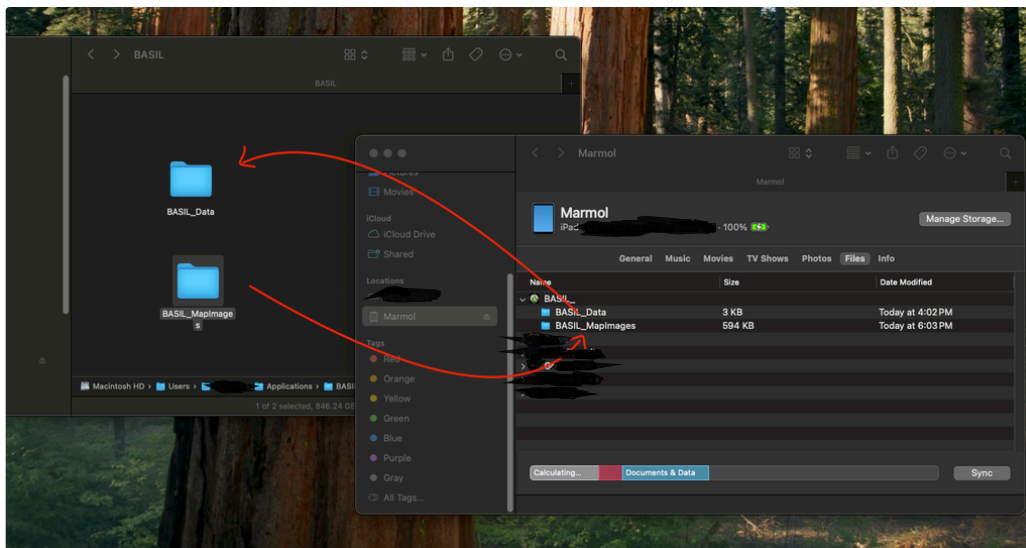

Notes will always display N/A for columns: actor, target, action

Transfer Data

Connect the iPad via USB. These folders will be under BASIL_

To transfer from the iPad to a Mac and vice versa you can drag the folders back and forth

Glossary for BASIL

- **Admin User**: The primary user responsible for managing their own credentials, settings, and configurations within the BASIL_ App.
- **Observer**: A frontend user who will be able to create and modify observation sessions.
- **Individual**: An entity representing the observation subjects: Label, Flightpen (where the individuals are contained) and Description (optional property to describe the individual). Individuals can be either actor or target.
- **Observer**: A frontend user who will be able to create and modify observation sessions.
- **Behavior**: A group of actions that the individuals can perform during an observation, it can have sub-behaviors or be the end action to be printed in the CSV output file.
- **Import file**: The CSV data responsible to create the flightpen groups configuration.
- **Flush Sessions**: Admin action that deletes all observation entries without affecting the data files stored in the `BASIL_Data` folder.
- **Map Images**: Images representing flightpen groups, which are uploaded and configured in the backend to be used for behavior mapping.

- **Behavior Mapping**: The process during an observation where an observer logs interactions between individuals, including actors, targets, and actions.
- **Observation Session**: A session where observers record individual behaviors, interactions, and notes, which are saved as CSV files in BASIL_Data