

Learner's Guide for Relationships

What is this guide?

This guide contains all exercises and detailed steps to perform them related to the review of ***Relationships*** for the Android Level 1 academy. Please perform each of the exercises when prompted to by your instructors.

Learning objectives for this session

1. Create relation types to be rendered in android
2. Create relationships between people
3. Demonstrate how to render relationships as a list or in a map

Exercise 1 - Adding and viewing relationships

Adding relationships via search

To start the relationships session, add a new person to the immunization program.

When you are enrolling the new person, make sure you select enrollment coordinates. These will be important later on when you map the relationships.

4:41 ⚡⚡⚡•

* ✨ WiFi 88% ⚡

← Enroll in Immunization

① Enrollment data

2/3



Date first seen *

18/11/2021



Enrolling OU: *

0002 CH Mittaphap

Coordinates for the Child

Latitude

Longitude

[Next](#)

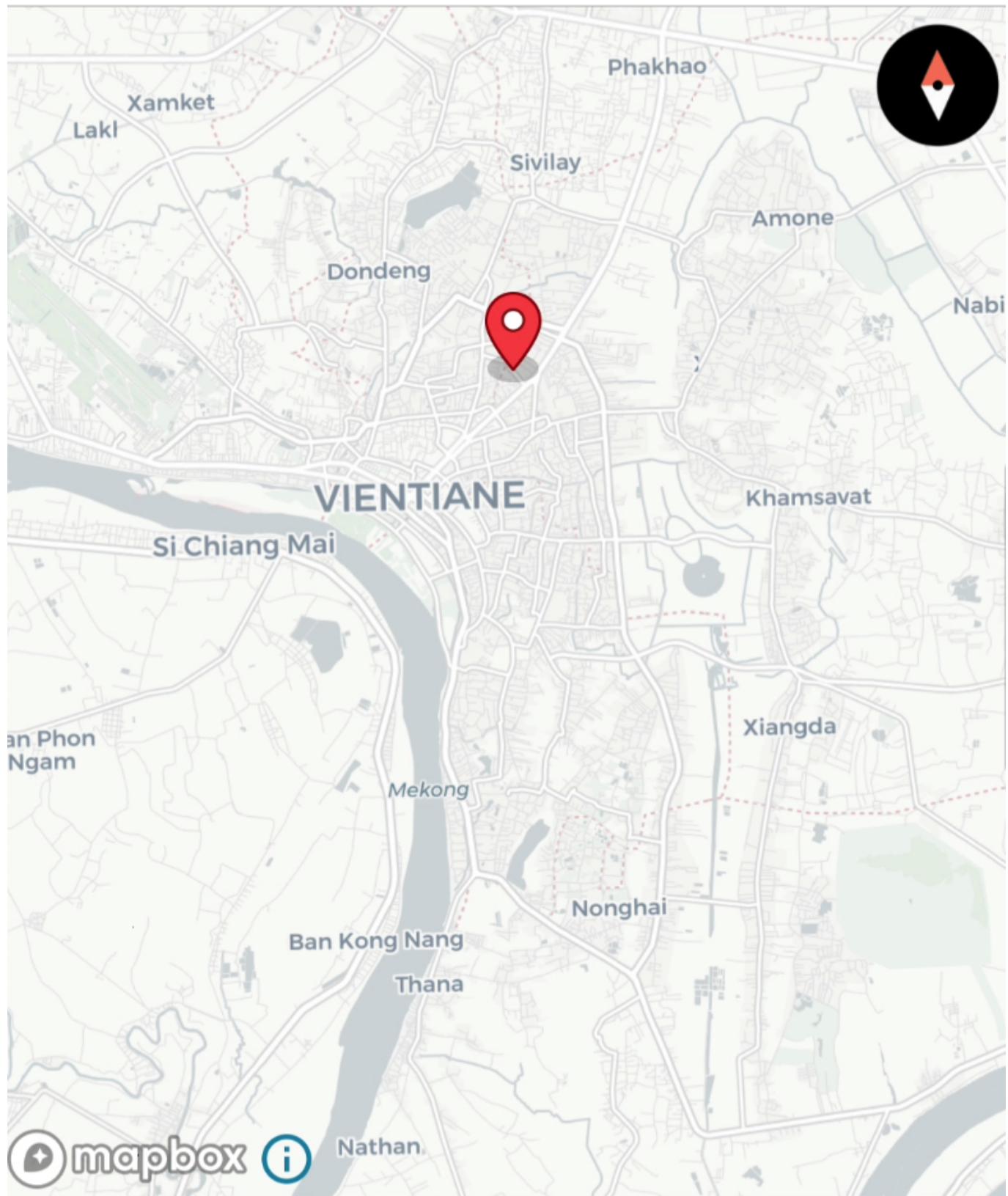
② Attributes - Child

6/15



To make things easier, select a coordinate within Lao as that's where all of the other cases are located (by default it will pinpoint your current location so you may need to zoom out of the map)

← Select location



Lat

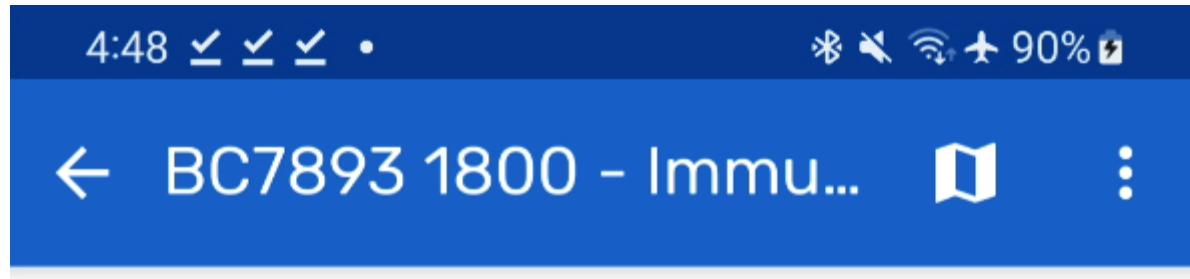
17.98204

Lng

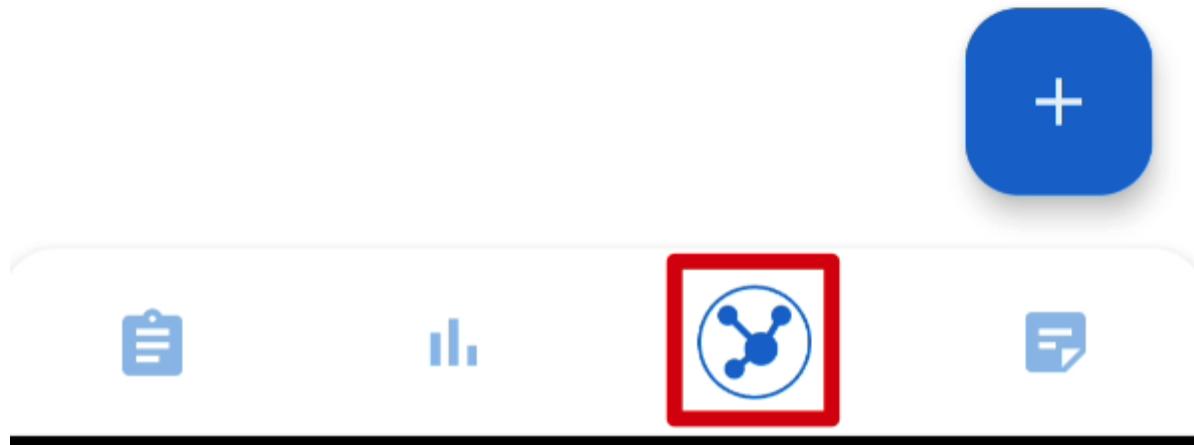
102.62795

Enter the remaining details of the child and save the child to proceed.

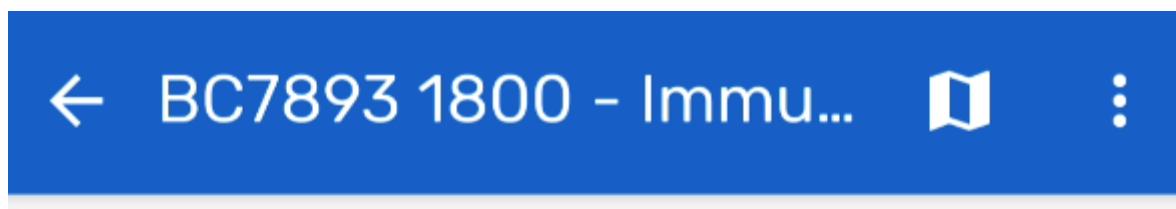
Select the relationships tab to be taken to the relationships page



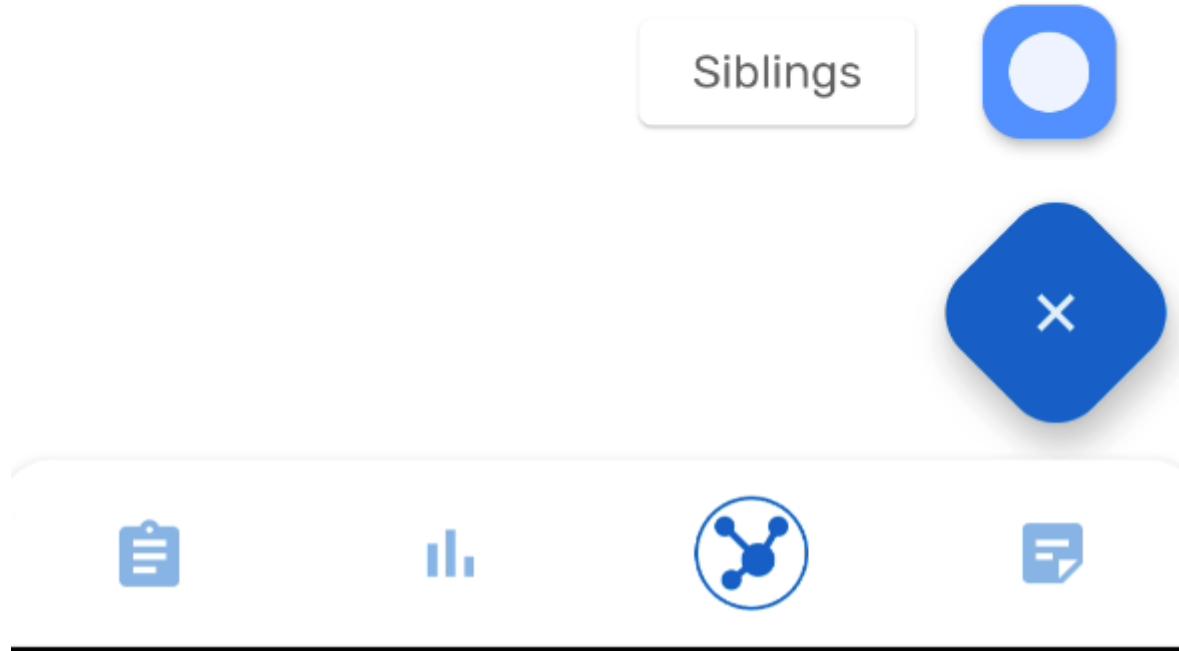
There are no relationships, click +
to add a new one.



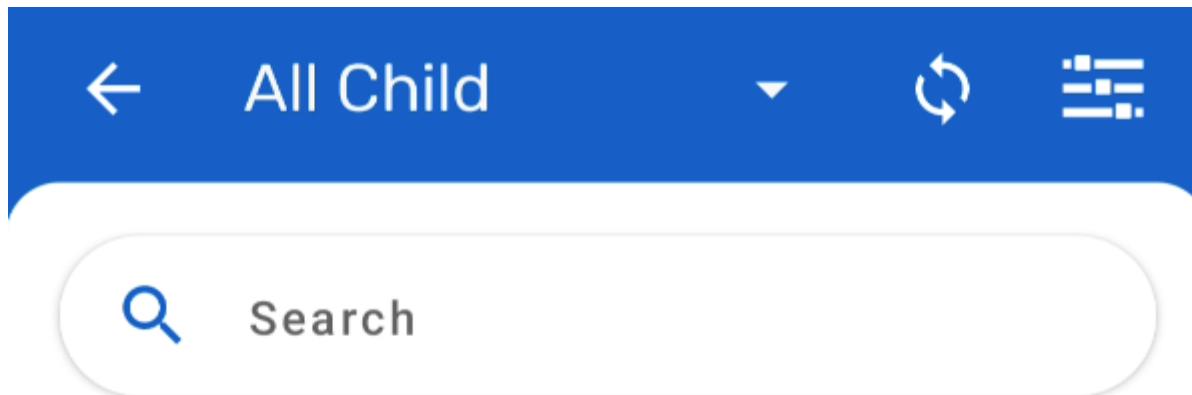
From here, select the plus button and tap on siblings to add a new relationship



There are no relationships, click +
to add a new one.



By default, it will allow you to search all TEIs that are the same TE type as you are currently using.



Start a search to find any Child

In this mode, you can use search criteria to find the child you want.



All Child



- ⓘ It is necessary to enter at least 1 attributes to search

Child Number

3717

First Name

Enter text

Last name

Enter text



Date of Birth

Choose date



Sex

Tap on the child after you have found it

The screenshot shows a mobile application interface. At the top, a blue header bar displays the text "All Child" next to a left arrow icon. To the right of the header are a refresh icon and a menu icon. Below the header is a search bar containing a magnifying glass icon and the word "Search". The main content area shows a list item for a child. On the left is a blue circular badge with the number "3". To the right of the badge, the child's information is listed: "Child Nu... 3717", "First Name Barrett", and "Enrolled in: PPM Chanthabouli". Next to the enrollment status is a blue square icon with a white syringe symbol. To the far right of the list item is a downward-pointing arrow icon. A vertical scroll bar is visible on the right side of the list.

This will take you back to the relationships list and you will see the child at the top of the list

The screenshot shows a mobile application interface. At the top, a blue header bar displays the text "BC7893 1800 - Immu..." next to a left arrow icon. To the right of the header are a navigation icon and a more options icon. The main content area shows a list item for a child. On the left is a blue circular badge with the number "3". To the right of the badge, the child's information is listed: "3717 Barrett" and "Sibling". To the right of the child's name is a red square icon with a white "X" symbol, likely a delete button. A vertical scroll bar is visible on the right side of the list.

Add relationships via list

You can also add relationships by selecting a child from within a program.

Navigate back to the relationships page and add a new Sibling relationship.

Instead of tapping on search, select the dropdown where the TE Type is listed.



All Child

Immunization

From here, you can select a program instead of using all TE of the same type as your search criteria.

After you select the program you will see the list of TEIs within that program. The search box is still available at the top, so now you have the option to either search for the TEI or select the TEI from the available list.

A screenshot of the application interface after selecting the "Immunization" program. The top navigation bar remains the same. Below it, there is a search bar with a magnifying glass icon and the word "Search". The main content area displays two entries, each with a circular profile picture and a list of details. The first entry has a blue circle with a white question mark icon and shows "Local ID - Child Numb... 3717" and "Enrolled in: PPM Chanthabouli" with a dropdown arrow. The second entry has a blue circle with a white letter "B" icon and shows "Local ID BC7893", "Child Numb... 1800", and "Enrolled in: 0002 CH Mittaphap" with a dropdown arrow. Both entries also have a timestamp "4 min. ago" to their right.



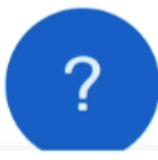
Local ID - 30 min. ago
Child Numb... 2285
Enrolled in: 0002 CH Mittaphap ▼



Local ID AX6789 30 min. ago
Child Numb... 1024
Enrolled in: 0001 CH Mahosot ▼



Local ID - 31 min. ago
Child Numb... 4531
Enrolled in: PPM Chanthabouli ▼



Local ID - 31 min. ago
Child Numb... 8212

If you select a TEI from the list you will be taken back to the relationships page and will see they have been added.

← BC7893 1800 - Immu...

3	3717 Barrett Sibling	
7	7 Dallin Sibling	

3

3717 Barrett
Sibling



7

7 Dallin
Sibling



STOP - Exercise 1

Exercise 2 - Interacting with relationships

From the relationships page, you are able to interact with these TEIs. If you select one of the TEIs

← 3717 Barrett - Overview



3717 Barrett

Hermiston



Immunization

Enrolled in:

PPM Chanthabouli

Date first seen

3/10/2021

It will show you the programs that the TEI is enrolled in.

If you select a program, it will take you to that TEIs enrollment in that program.

← 3717 Barrett - Im... ⌂ ⚏ ⋮

3717 Barrett
Hermiston

Open

Date first seen: 3/10/2021
Enrolling OU: PPM Chanthabouli

OPEN CHILD DETAILS

Birth Details +
0 events

Immunization +
6 events

Mapping relationships

Go back to the original TEIs relationship page by selecting the back button.

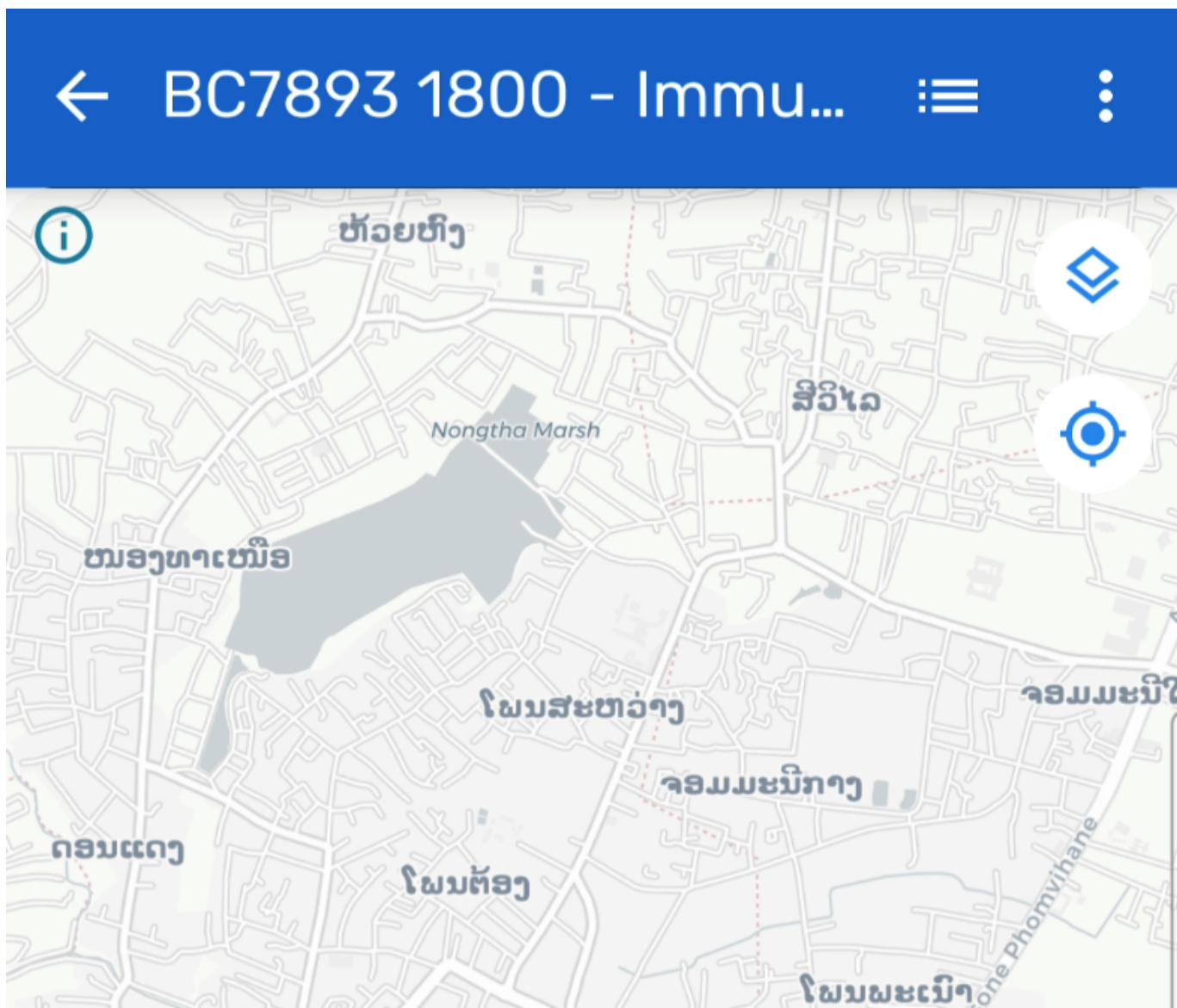
In addition to displaying these relationships as a list, we can also display them in a map view. We do this by selecting the map icon on the relationships page.

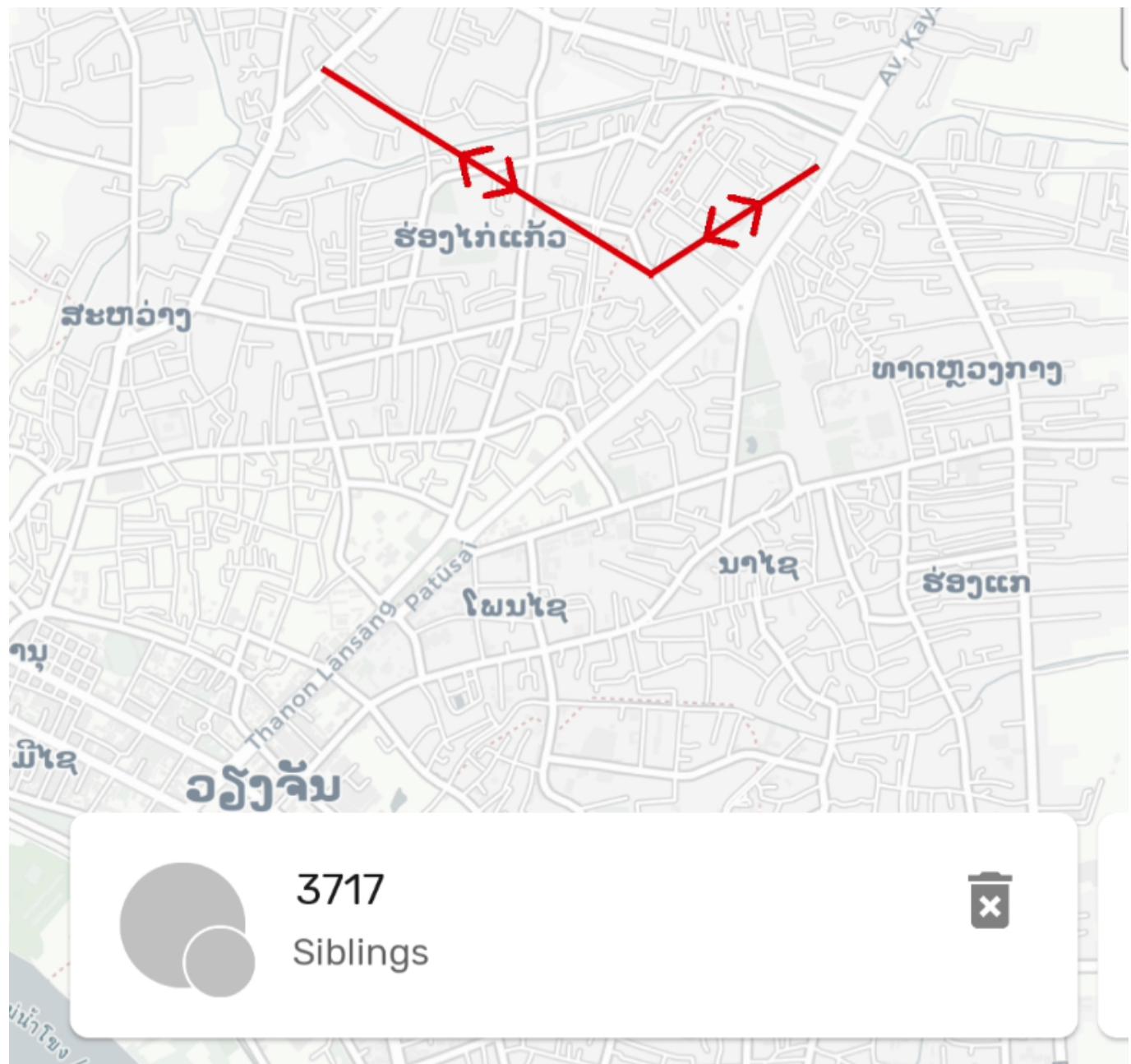
← BC7893 1800 - Immu...  ⋮

3 3717 Barrett 
Sibling

7 7 Dallin 
Sibling

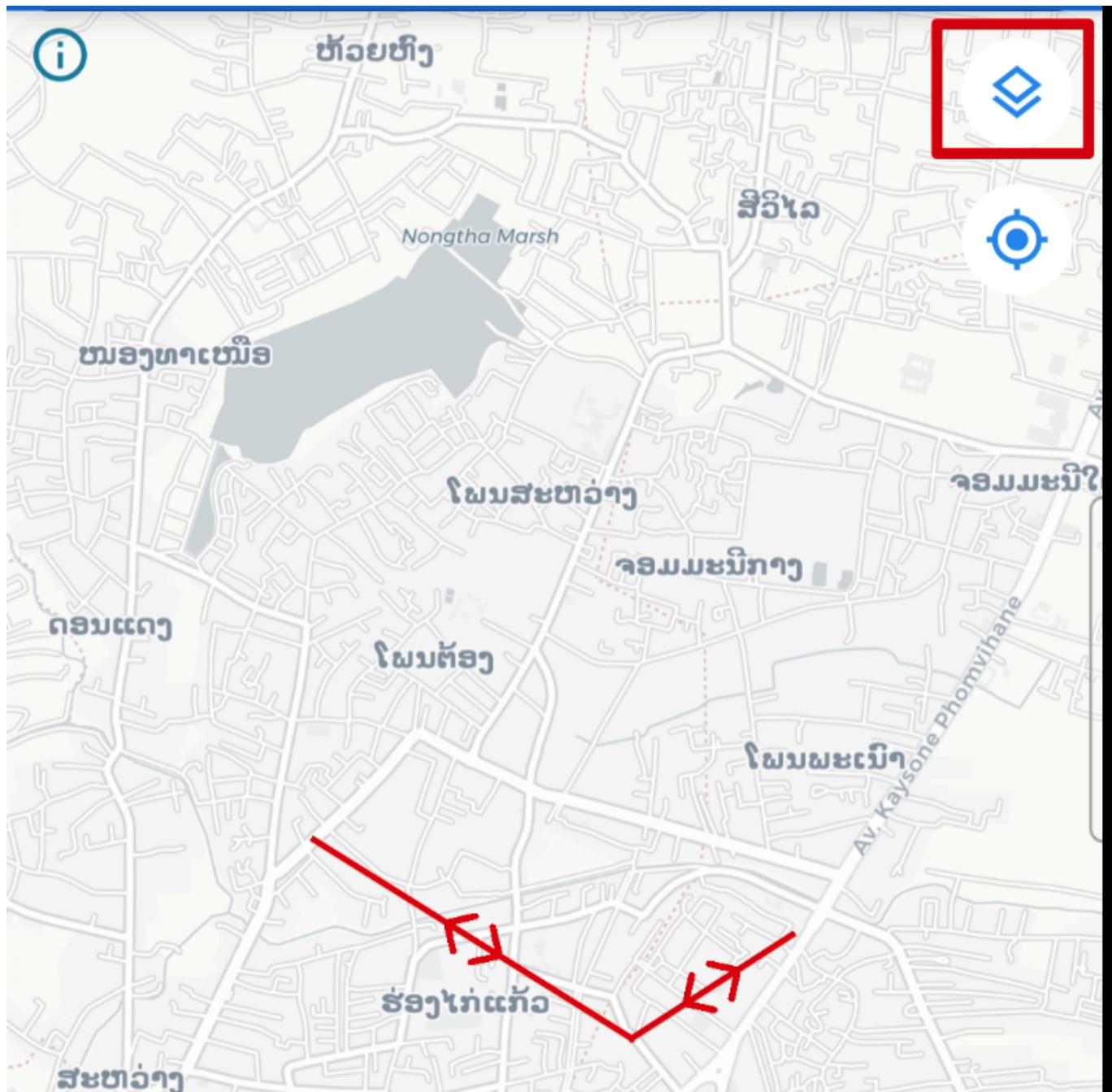
This will then display a map showing the TEI we are working with along with the locations of any other children they have a relationship with.



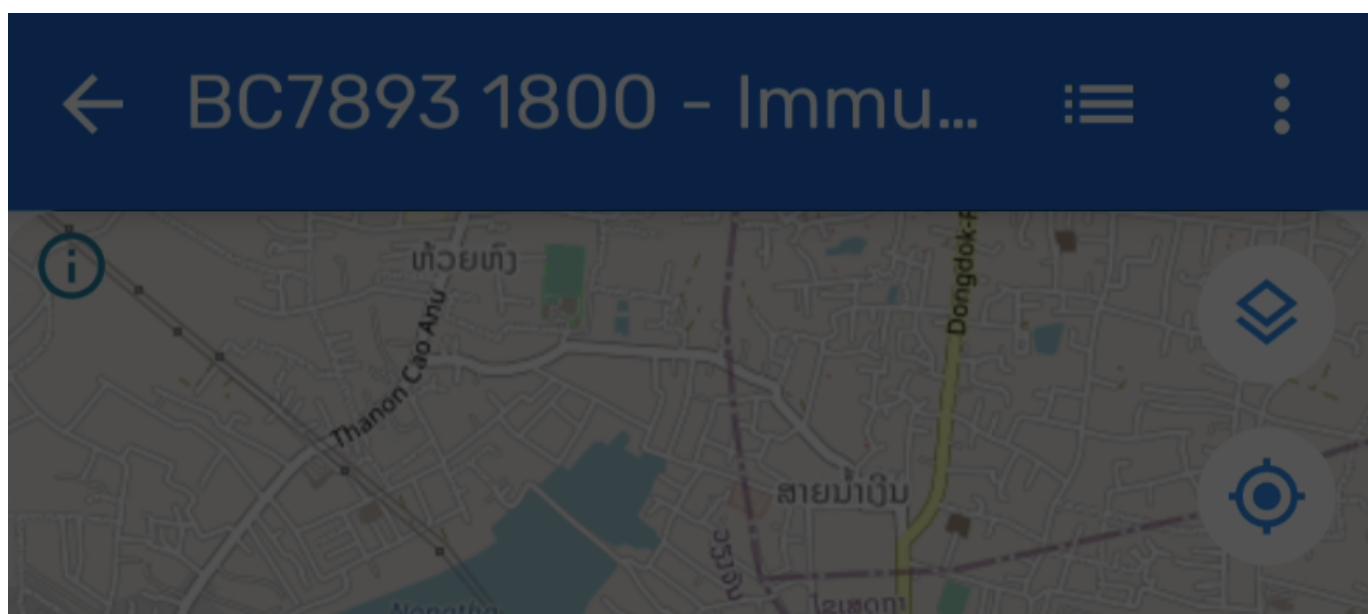


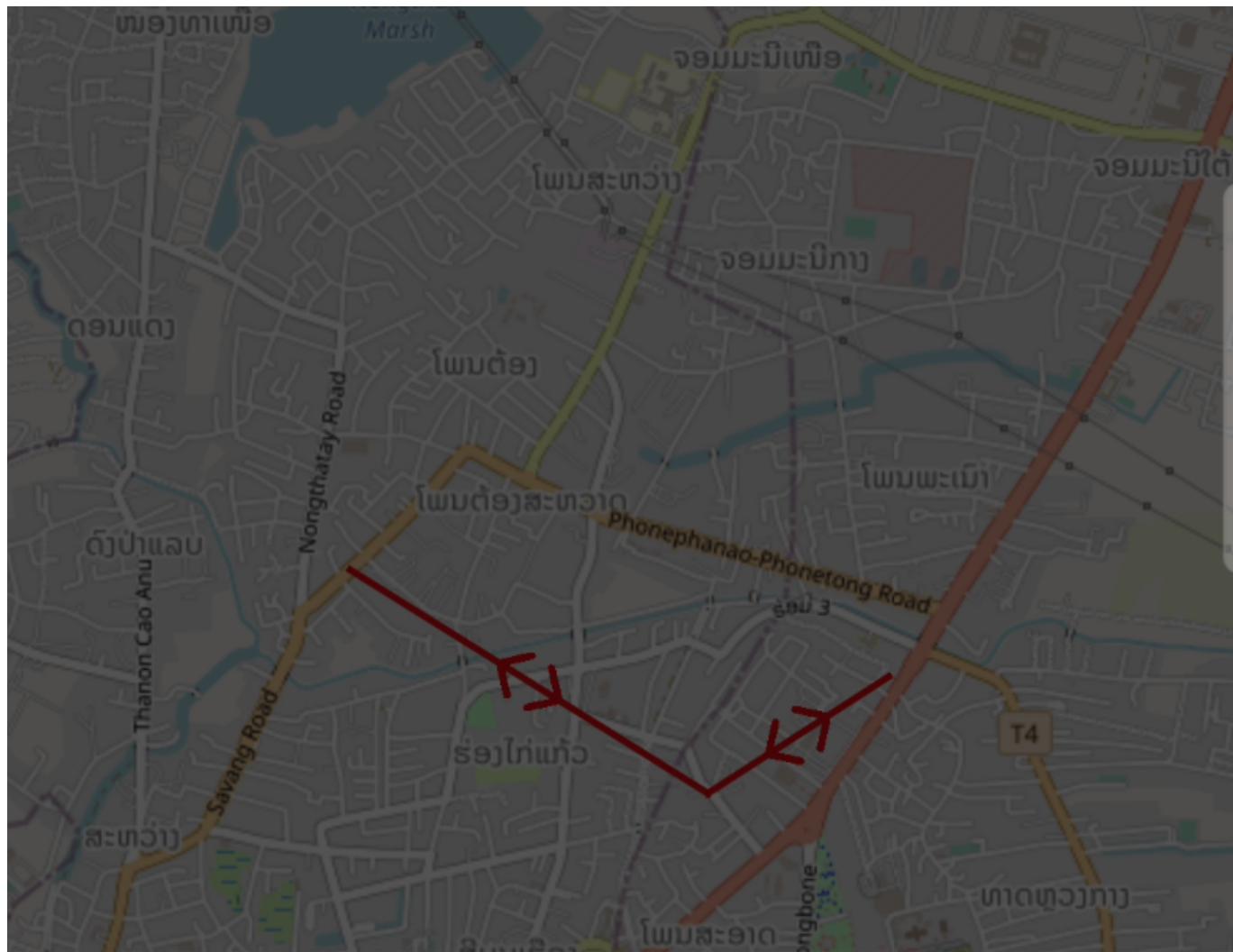
We can tap on the lines on the map or use the carousel at the bottom of the screen to select from the different TEIs available here.

On this page, we are able to change the base map if needed. We do this by selecting the map settings icon.



From here, we can select a different basemap then tap apply to apply our changes.





Map layers



OSM Light



OSM Detailed



Bing Road

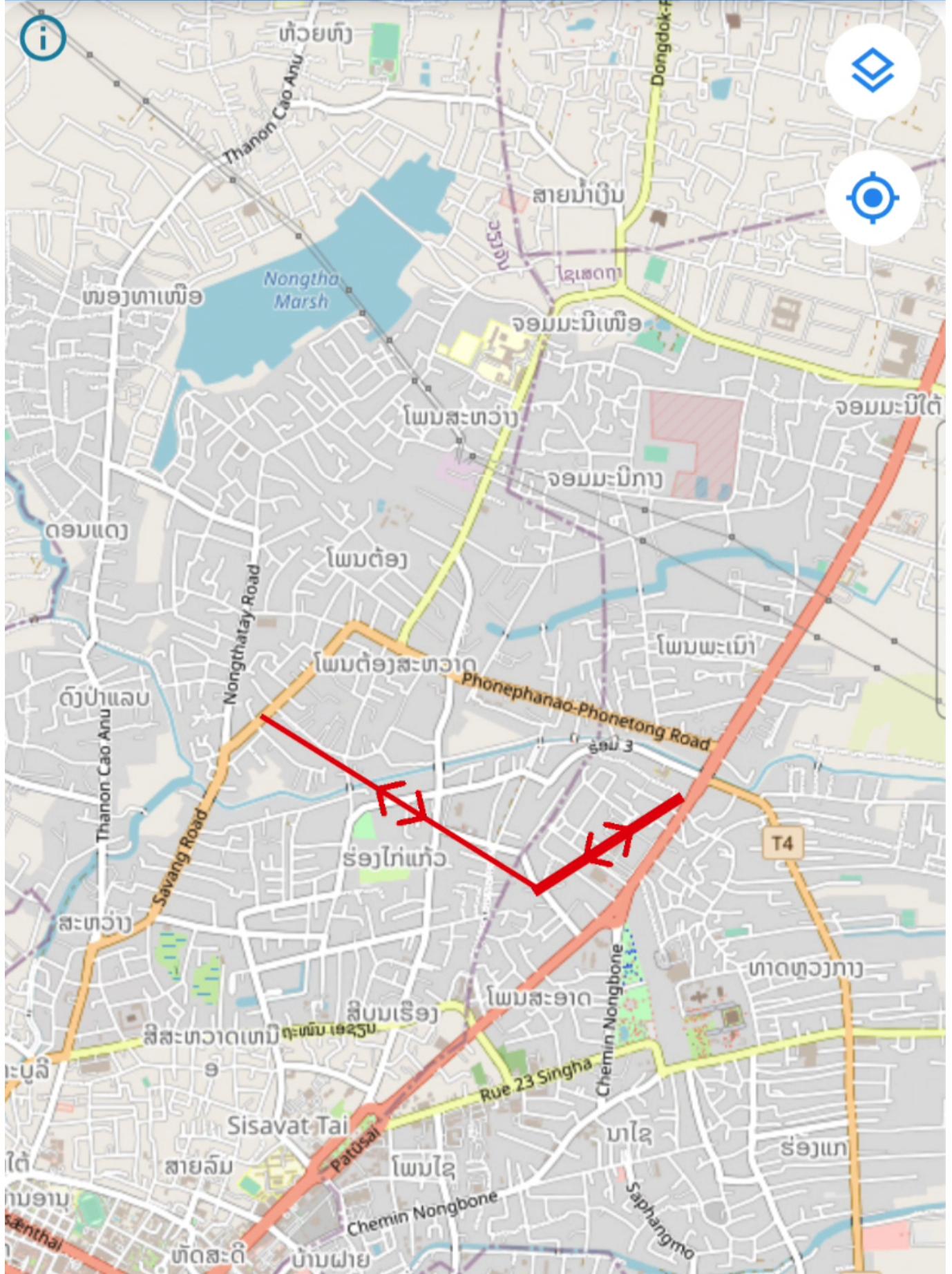


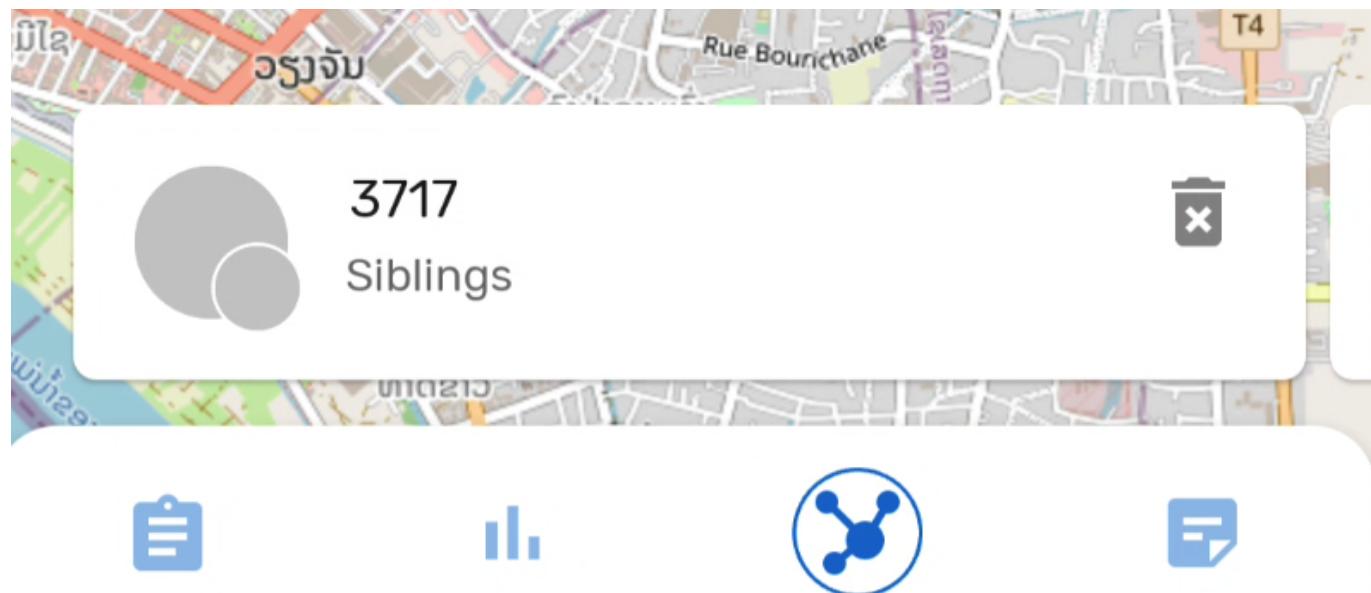
B

Siblings

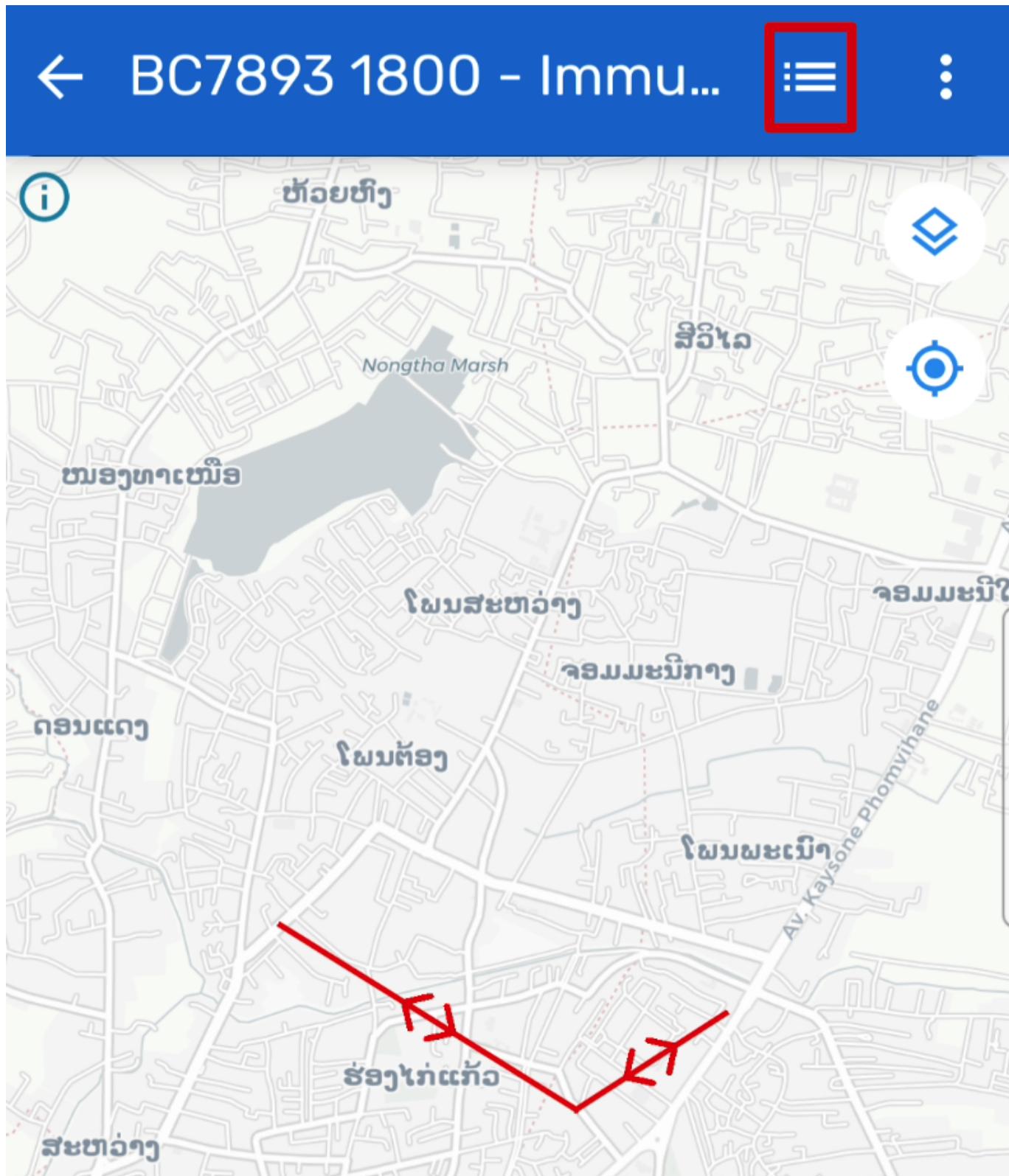
APPLY

← BC7893 1800 - Immu... ⏮ ⏺





In order to go back to list view from the map, select the list view icon from the top.



STOP - Complete Exercise 2

Exercise 3 - Configuring Relationships

Tracked Entity Type

Before we get into managing and creating a new relationship, it is useful to understand how a TE types configuration affects how relationships will function on android.

Navigate to maintenance -> program -> tracked entity type to get to the tracked entity types page and select the "Child" TE type.

There are two main items we want to discuss here

1. How collection of coordinates allows you to create a mapping of relationships
2. How selecting and managing tracked entity attributes for a TE type affects your search parameters

Coordinates

Within the child TE type, scroll down to Feature type. This is set to point in our example.

Name (*)

Child

Color

SELECT COLOR

Icon

ADD ICON

Description



Enable tracked entity instance audit log

Minimum number of attributes required to search

1

Maximum number of tracked entity instances to return in search

0

Feature type

Point

Notice some other parameters that we didn't use but could be useful in the future: color and icon.

From the sessions on visual configuration and visual data entry we have some understanding of how this might affect the android app, as we can assign a specific color and icon for these TE types and it will alter the visual appearance accordingly.

TE Attributes

Next scroll down to the tracked entity attributes section. Here, we are assigning tracked entity attributes to the TE type, not a specific program. This means any program using TEs of this type will have at least these TE attributes.

Tracked entity type attributes

Search available/selected tracked entity type attributes

GEN - Date of birth is estimated
GEN - Family name
GEN - First Name
GEN - Patient type
GEN - Sex
Local ID
Mother's email
Mother/Caregiver's contact number
Mother/Caregiver's first name
Mother/Caregiver's last name
NUTR - Affiliation type
NUTR - CVA beneficiary

Child Number
First Name
Last name
Date of Birth
Sex

ASSIGN ALL 37 → ← REMOVE ALL 5

Scroll down a bit more where you will see the attributes along with a matrix of checkboxes.

Here, you decide which attributes appear in various lists as well as which ones are searchable. Recall that when we were adding a relationship using the CHILD TE type, we were able to enter some search criteria. That is defined within this page. Those attributes in which "Searchable" is selected can be used to search for any Child, in both the web and android app.

Relationships

We define relationships via the "Relationship type" section in maintenance. It is no different than any other tracker program, whether using web or android.

To see them, they need to be properly shared. On android, when we add a relationship, we have to select the relationship type. These are all defined here.

You can set up constraints to control the program in which relationships can be made, or leave it open so the TEI can make relationships with any other TEI. For practice, you can create a new relationship type if you need to.

1. Navigate to Maintenance
2. Select Program
3. Select Relationship type
4. Click on the blue plus sign to add a new relationship type
 1. Give the relationship type a name
 2. Decide whether or not the relationship is bidirectional (does the relationship work in both directions or not)
 3. Decide what will be seen when the relationship is being created in the user interface
 4. Add to and from constraints if needed

5. Save the relationship

As long as the relationship is shared correctly, it should be available from within the android app. You will need to sync your metadata after creating the relationship type in order to see it on the device.

STOP - Complete Exercise 3