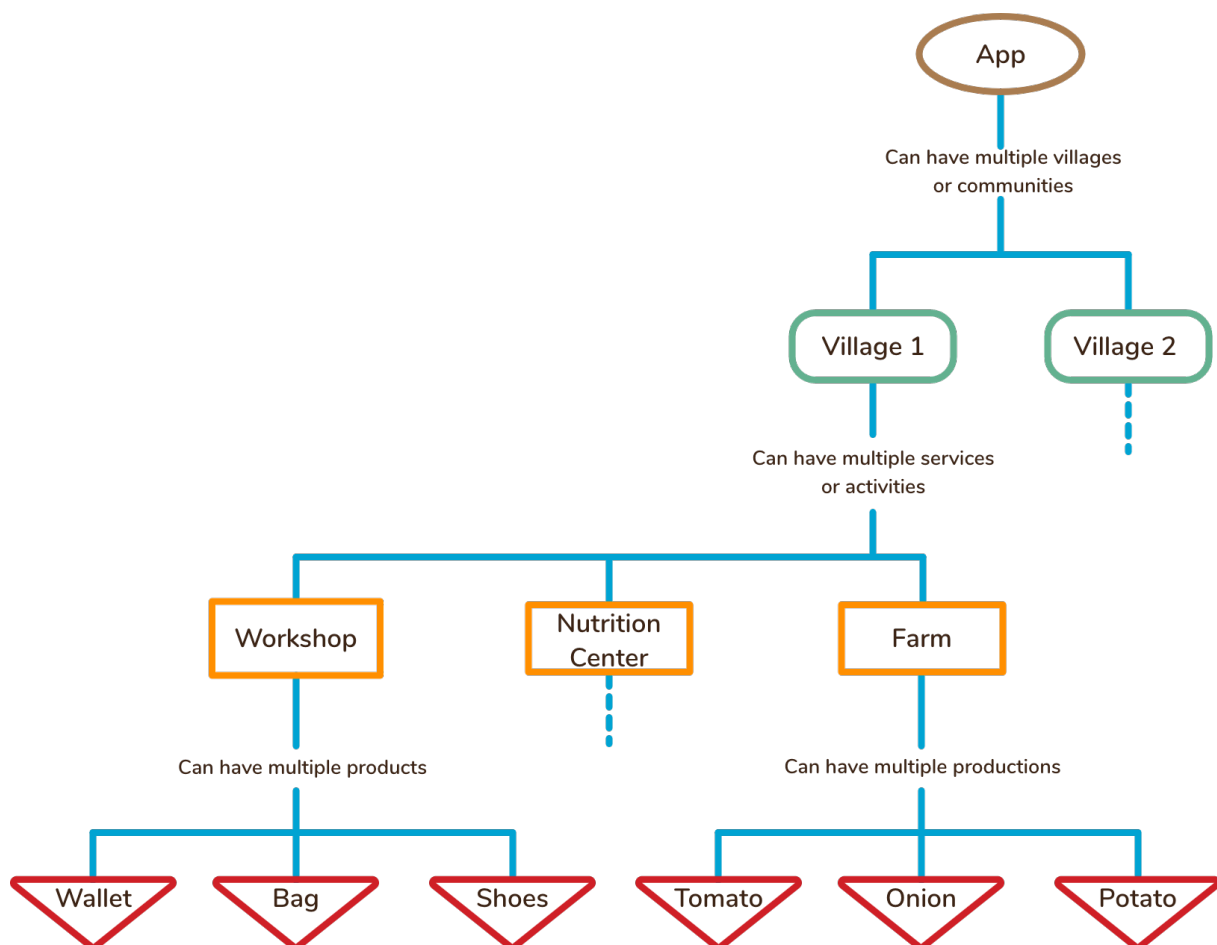Data flow and restrictions

INDEX

Villages

This app allows NGO's which have on the ground projects to have a vocational training bases in guided video tutorials.

The app allows you to have different services (you customize it. For example: barbershop, workshop, farm...).
Note that you can have more than one service of the same kind (more than 1 barbershop, in the same or in different villages).
By default, the app creates the Warehouse service.

You can have from one single service in one single village, to different services in different villages. So the app can easily adapt to your current and future situation.

```
                                        ┌─────────┐
                                        │   App   │
                                        └────┬────┘
                              Can have multiple villages
                                    or communities
                        ┌─────────────────────┴──────────────┐
                   ┌─────────┐                          ┌─────────┐
                   │Village 1│                          │Village 2│
                   └────┬────┘                          └─────────┘
                  Can have multiple services
                        or activities
          ┌──────────────┬─────────────┬──────────────┐
    ┌──────────┐   ┌───────────┐              ┌────────┐
    │ Workshop │   │ Nutrition │              │  Farm  │
    └────┬─────┘   │  Center   │              └───┬────┘
         │         └───────────┘                  │
  Can have multiple products          Can have multiple productions
   ┌─────┬──────┬──────┐              ┌──────┬──────┬──────┐
 Wallet  Bag   Shoes              Tomato  Onion  Potato
```

Each of these product can be tracked by a QR code, sent to another service from any village, use as row material for another more complicated product, or send it to the distributors to sell them to the final customers.

Each of these productions can be sent to another service from any village, use as row material for another more complicated product (for an ingredient for a food in the nutrition centre from the same village), or send it

Data initialization

The system is designed to be a different databases distributed and synchronized with one main central online.
If you are going to operate in an online environment constantly, it would be a good idea to keep it simple and have and use only one app in the cloud.

If you will work with some places with no internet connection, make the server with a raspberryPI and the USB manual synchronization whenever there is no connection, and the online version of the app whenever there is connection.

When you start the main central system, preferably on the cloud, you initialize with the village name "Central", and from that main central database, you must export to the village the database (after including all the video-tutorials). Once you export the database, it will download a .ZIP file that you can import to the new Village´s Database.

Every time you want to sync the offline database with the online database, you must export manual in .ZIP files (the app will make all for you in the Settings section).

If you user the central in loropio, are the transactions made in Loropio services in loropio??

Data flow restrictions

In order for you to register new items in the app, there are some logical restrictions in the order you have to do it.
Here you have a complete list of all the restrictions:

Related to Users

-A User needs a Village in the form, so you first will need to create the Village where the User will work and then the User.
-Admin and Managers have no Village
-Only admin can create another admin

Main differences between the roles

Admin: create new content in the database, like new Video-Courses, Items o Categories.
Manager: one per village to organize the workers and supervise the work. Can make payments, sells, or buy products from the worker.
Worker: can only watch, he can not make any change in the database. Altho they can create conversations or reports.

Related to Services

-If you for example want to create a "Barbershop", you need first to create the kind of Service "Barbershop" and then create the instance of the service in the desired Village.
-Following the previous example, to create the instance of the Service in the desired Village, you first need to create the Village.
-For a User to appear in the service, you need to give Access to the User for the Service. Note that the User's Village and the Service's instance Village must be the same, since a worker can not work in a service of another village.
-If you change a Worker from Village, it will cancel all the Accesses that previously has.

Categories

For abstract organization, Items must be into Categories, and a Category has a custom Type.

The Category also has a Type of Article, in which the selection could be any of these 3:

-**Service Product**: this is the final product of the Service (Like a wallet, shoe, necklace...).

-**Primary material**: this will be the row material needed to create the product: wood, screws, paint...

-**Tool**: this will be the tools used by the workers. You have the possibility to have a registry to rent the tools to the workers to know who has which tool in real time.

Items

You can measure the Items by Unit, Meters, Liters or Kilograms.

Items can be also tracked with a QR code, as long as in the Category that the Item belong it is activated the tracking. Here there is a restriction, as you can not track items that can be divided, you will be only able to create items measured in units in the Categories that QR code tracking is activated.

Error: create item by meter or liter and then change the category in edit.

Stock

You will be able to start having materials and tools in the different services after inserting the Items and theirs correspondents Categories and Categories types.

Once you create the Items in the database, you need to make a delivery from the Central Village to the service desired.

Once you accept the delivery in the Service desired, you will have in stock the Items in the delivery. You can then sell or rent them to the workers in order to produce a Service Product.

Deliveries

It is not enough with make the delivery of an Item, you need also to received them in the Service is receiving the delivery.