

Citizens' interactions

1 Introduction

Purpose:

The citizens' interactions module aims to provide a wide range of interactions in order to provide visualisation, gather feedback and book rooms.

Description:

This module allows citizens to interact with the data provided and exposed by the cities.

Through this module, they can do the following:

- Visualise communication from the cities, including hotspots and KPIs
- Visualise alternative of planned interventions in the cities, including hotspots, KPIs with highlighting per alternative, alternative with explanation and a call to action to vote for one alternative
- Feedback gathering on both communication and alternatives
- Room booking on specific hotspots

2 Where this component fits in the ReGreenation architecture

This component lies in the end-user layer, making it directly accessible to citizens.

It communicates with a cloud service, which is exposing the data stored.

This component also relies on middleware such as Image 360, Map Integration, OGS Integration and Map Based visualisation.

3 Module description

The module is mainly a frontend application, written in Angular (?).

It is composed of multiple Angular components interacting with each other.

Each component should be as reusable as possible, allowing easy integration at different location and preventing rewriting of existing elements.

3.1 Mockups of a potential UI

3.1.1 Communication Map

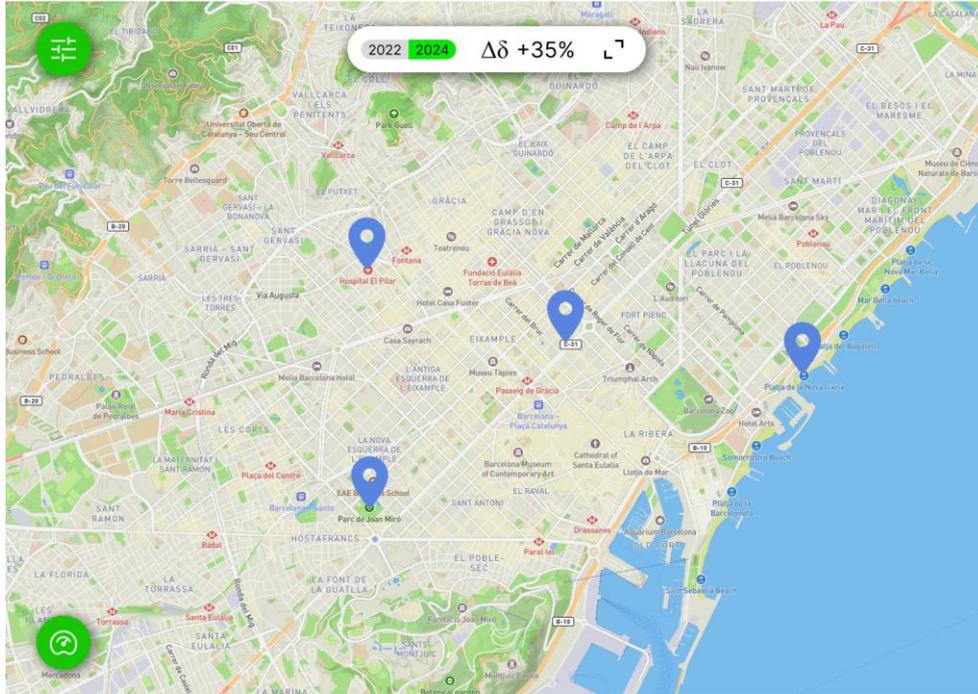
3.1.1.1 General view

The communication map displays multiple information.

First, hotspots are shown on the map, here as the blue icons.

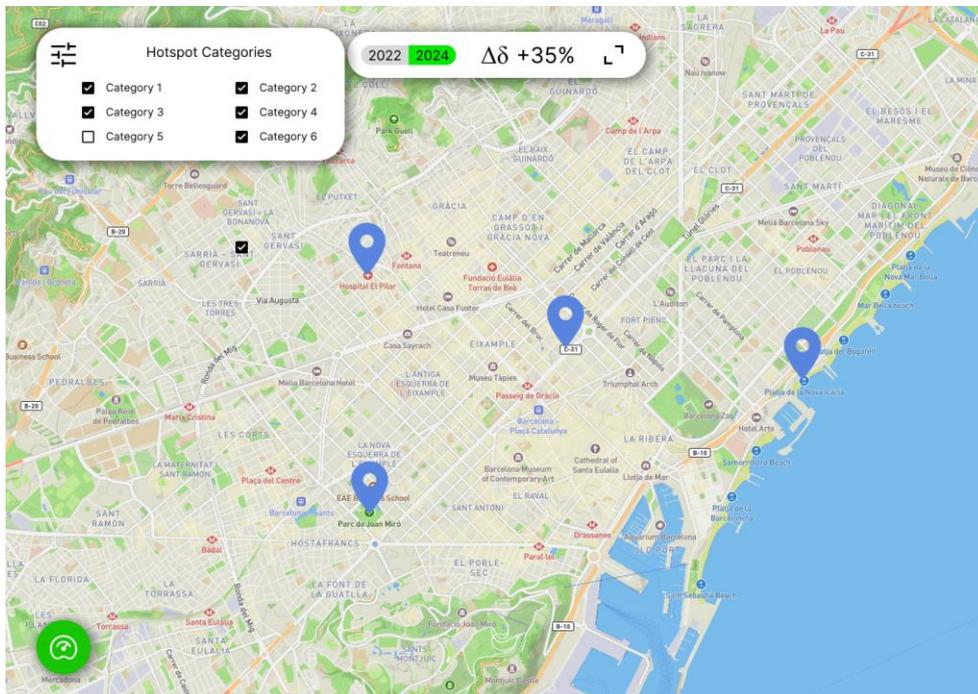
Then, the selected map KPI delta on the top, along with a button to switch between actual value/baseline value and a button to expand the KPIs to see all the information.

Finally, the select map KPI directly renders information on the map (not visible here).



3.1.1.2 Categories filters

On the top left, a button allows to filter categories of the hotspots shown on the map.



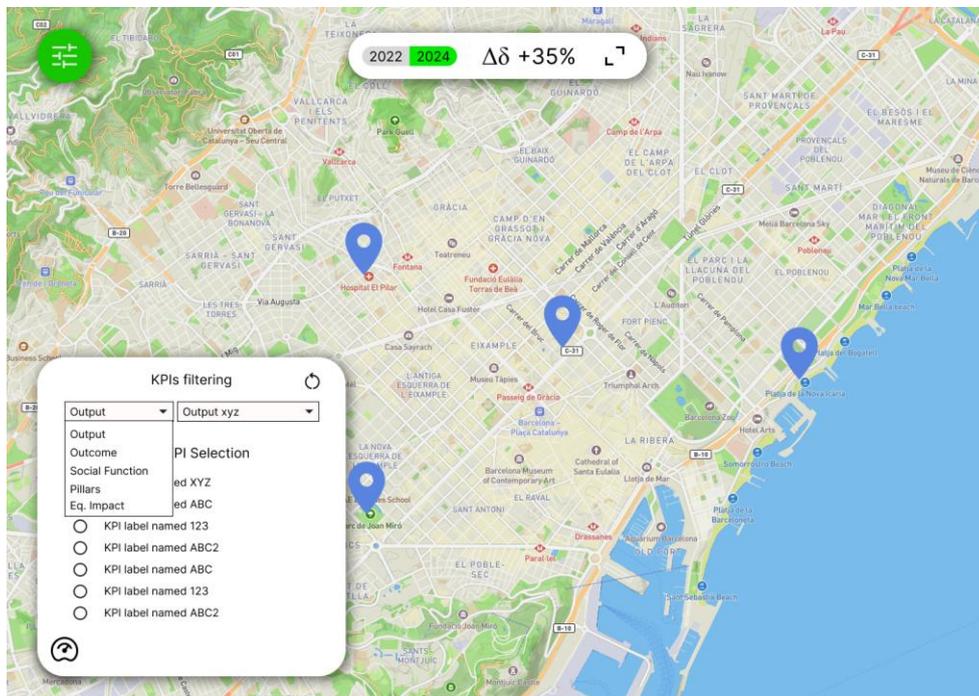
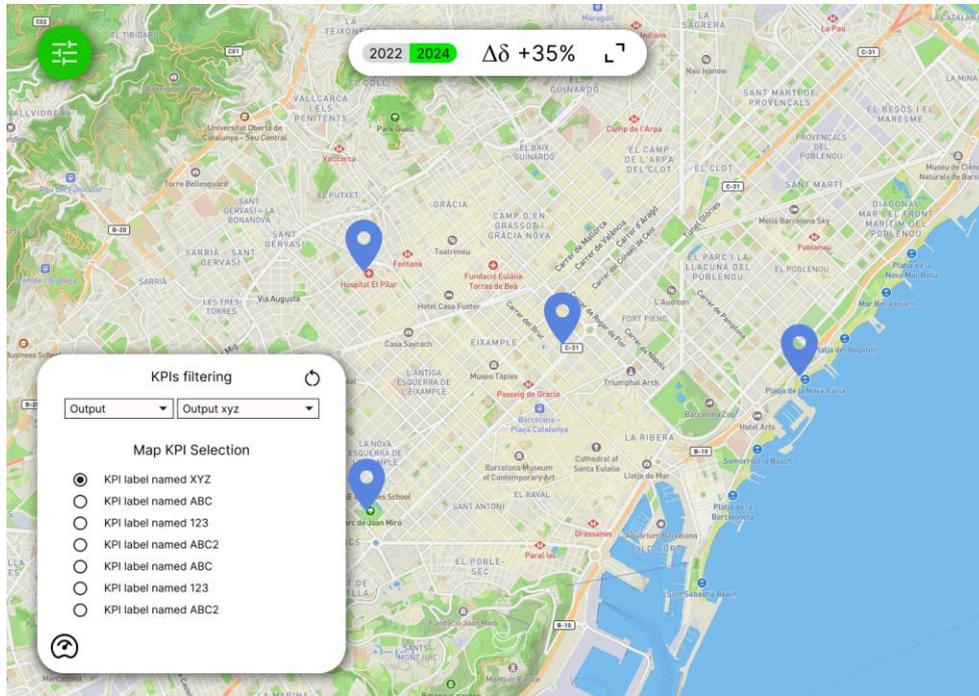
3.1.1.3 KPIs filters

On the bottom left, a button allows to filter the KPIs and select the current KPI displayed on the map.

Filtering can be done on the following elements, one at a time:

- Output

- Outcome
- Social Function
- Pillars
- Eq. Impact

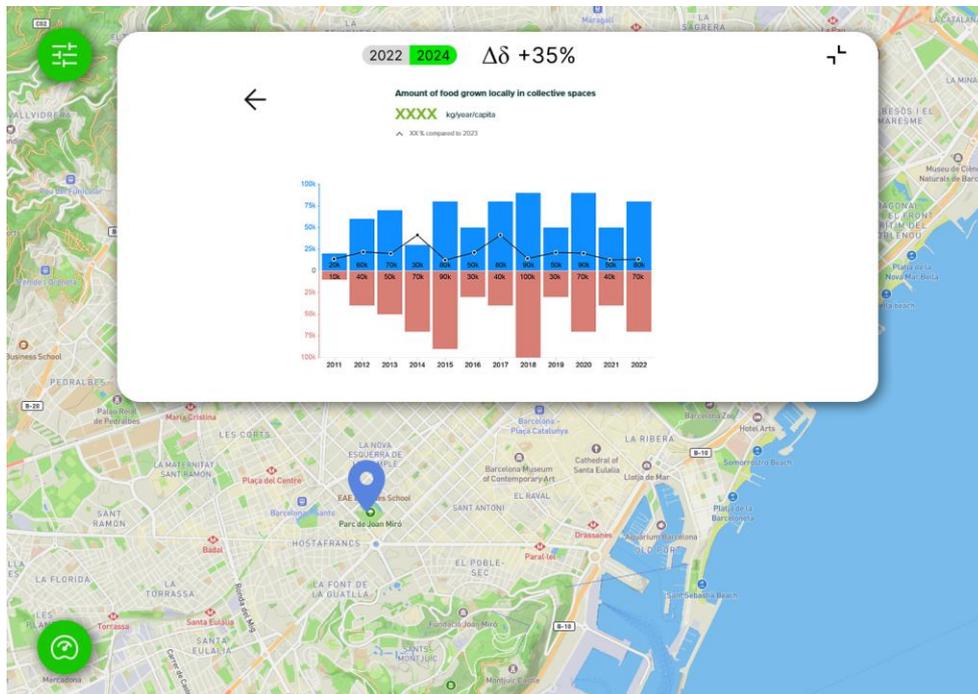
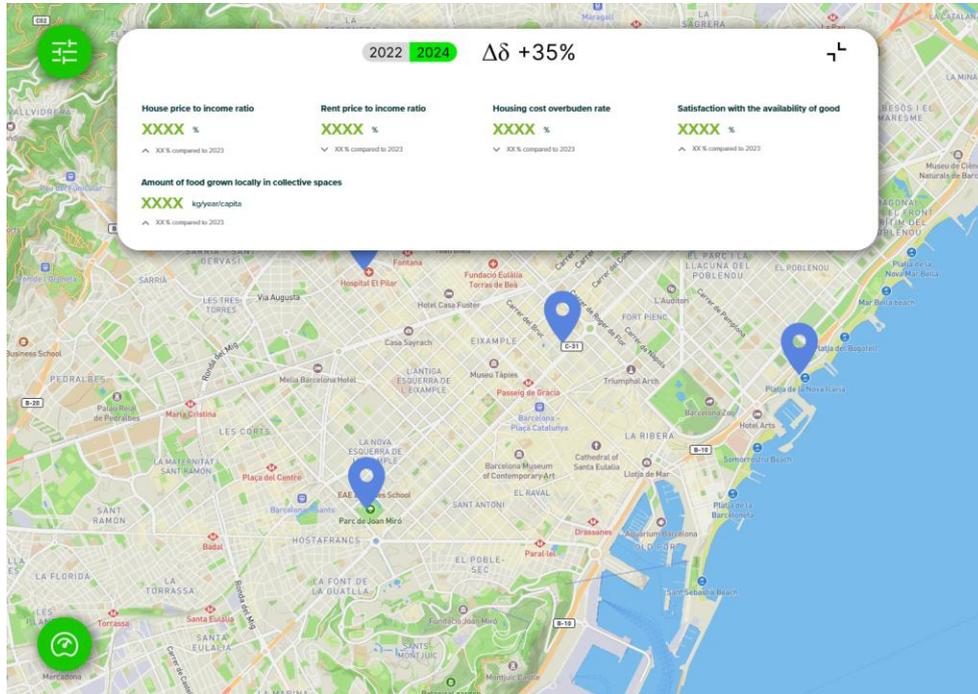


Sensitivity: Company

3.1.1.4 KPIs list and history

Expanding the top element with the delta reveals all the available KPIs (depending on the filter and what is exposed by the city).

A click on one of the KPI shows its historical values (if available).

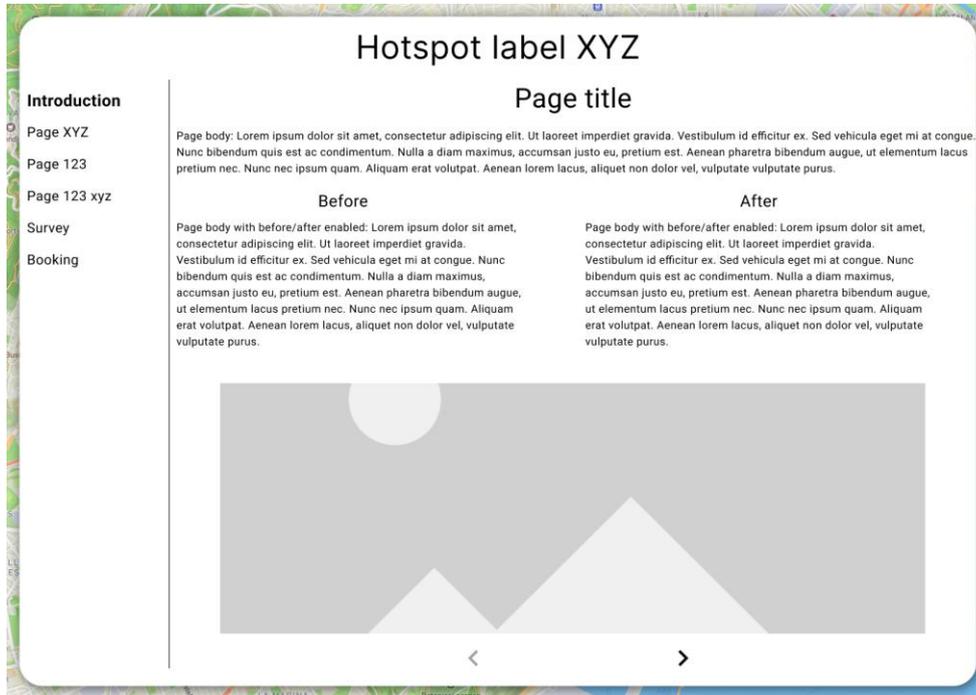


3.1.1.5 Hotspot details

Clicking a hotspot on the map show an almost full screen popup with its description. This description is made of multiple pages, made themselves of multiple blocks.

This block can include:

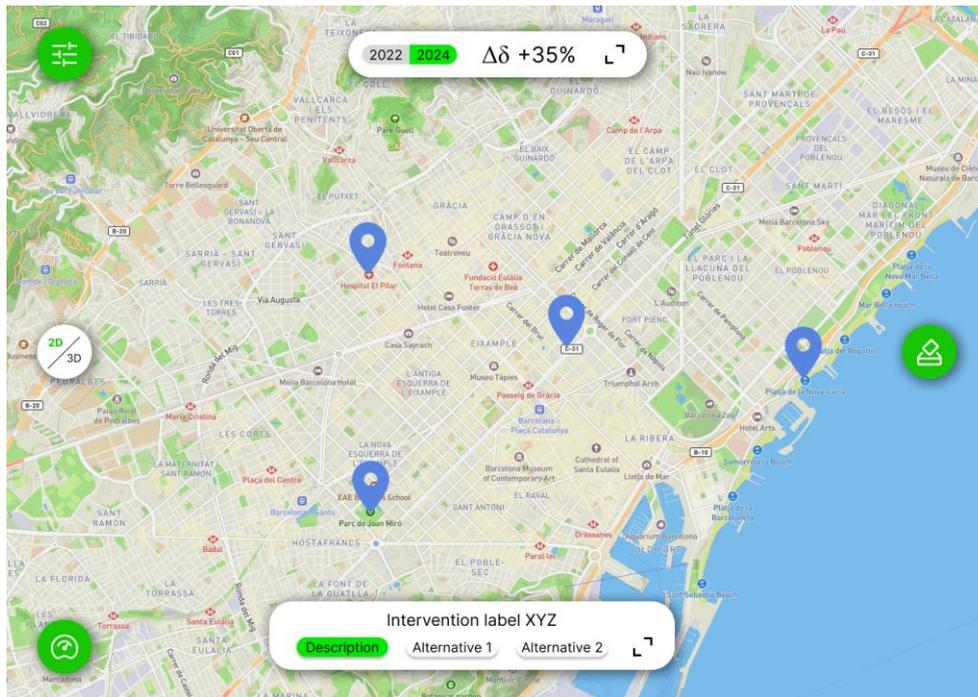
- Title
- Text
- Video
- Image
- 360 Image
- Booking
- Survey



3.1.2 Alternative map

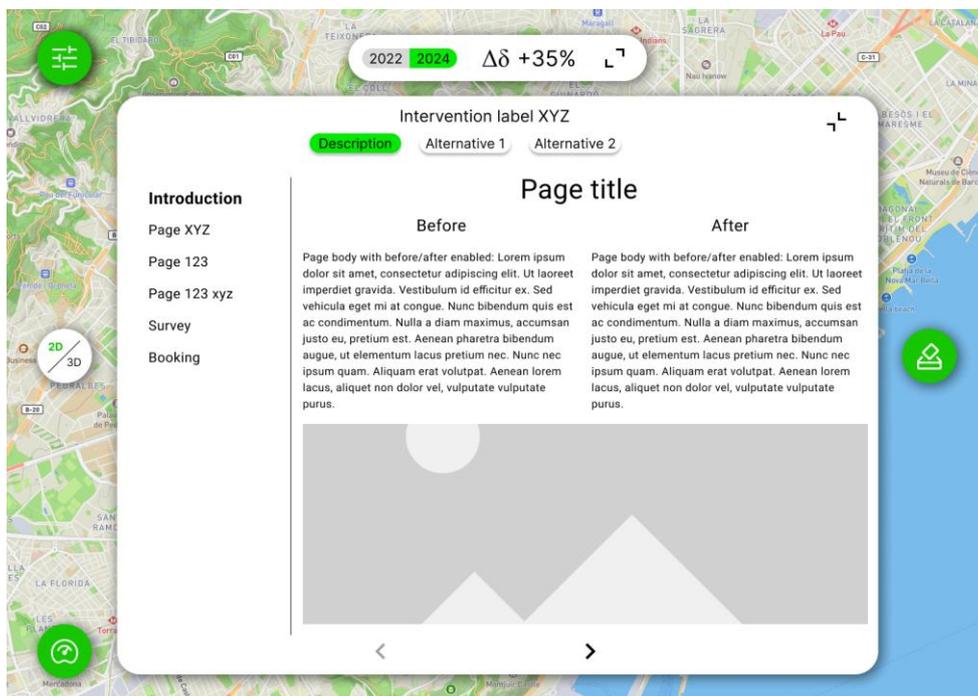
3.1.2.1 General overview

On the alternative map, there are two more elements. First, the call to action button on the right. This button is directly linked to a survey that shows up to citizens once they click on it. Second, the UI element at the bottom containing information about the intervention and alternatives.



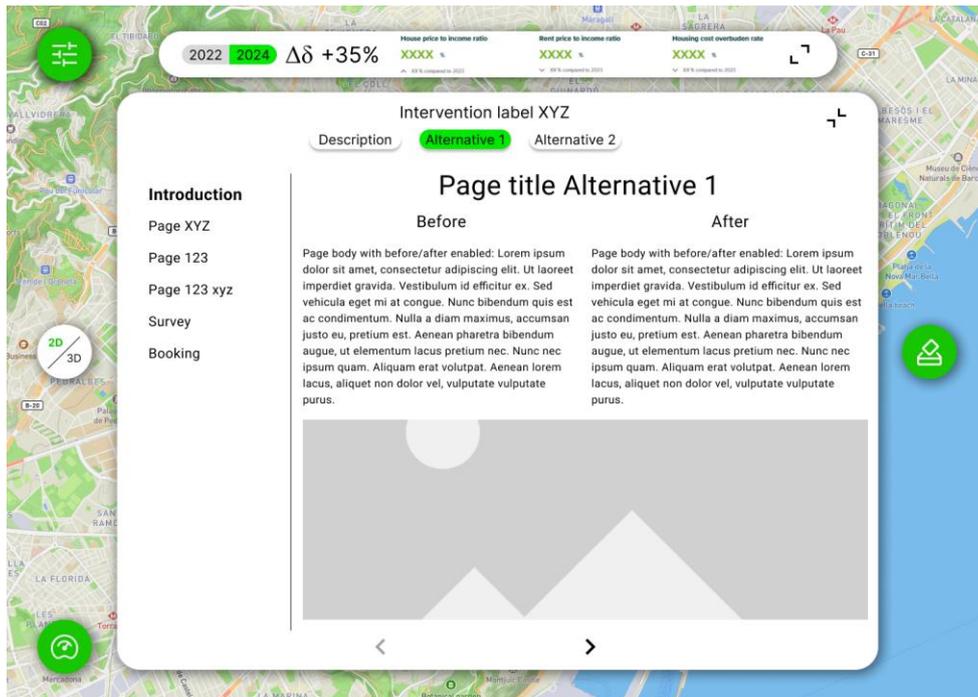
3.1.2.2 Intervention Description

When expanding the intervention element, a complete description of the intervention is shown to the user.



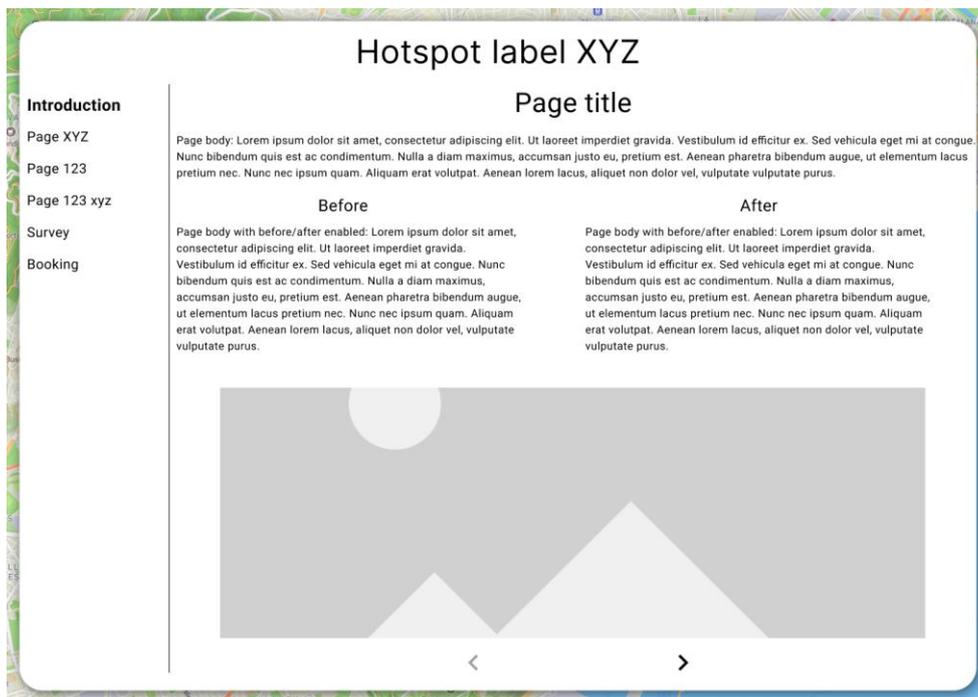
3.1.2.3 Alternative Description

Citizens can navigate through the intervention and alternatives using the associated button. When selecting an alternative, citizen can see its description and also up to 3 highlighted KPIs on the top element.

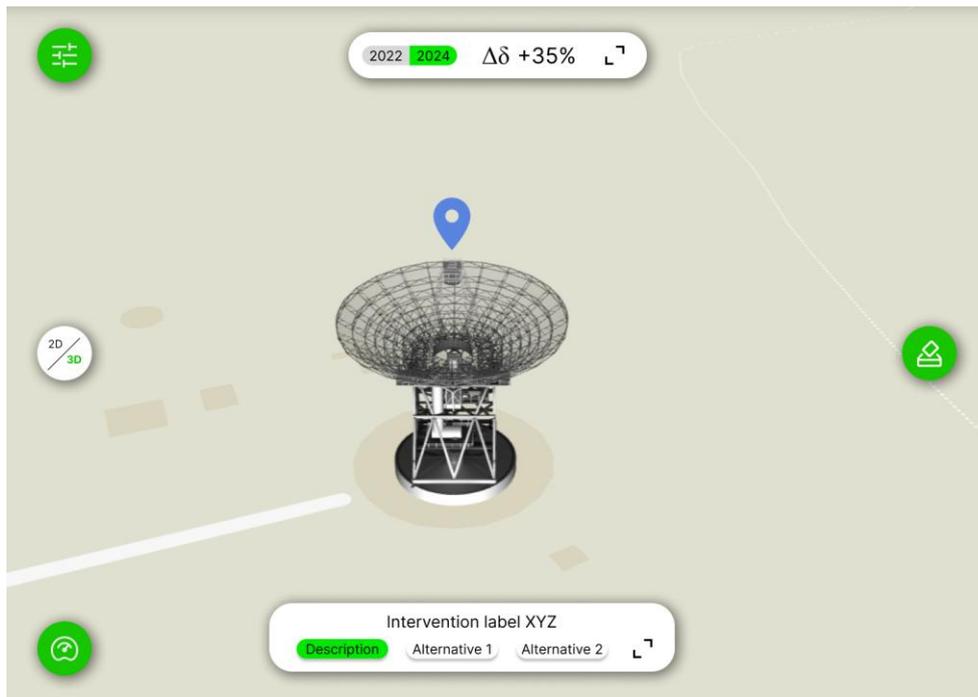


3.1.2.4 Hotspot Description

Similar to the communication map, hotspot description is available upon a click.



3.1.2.5 3D Asset



4 Technical Foundations and Background

Subcomponent/Component	Owner	License

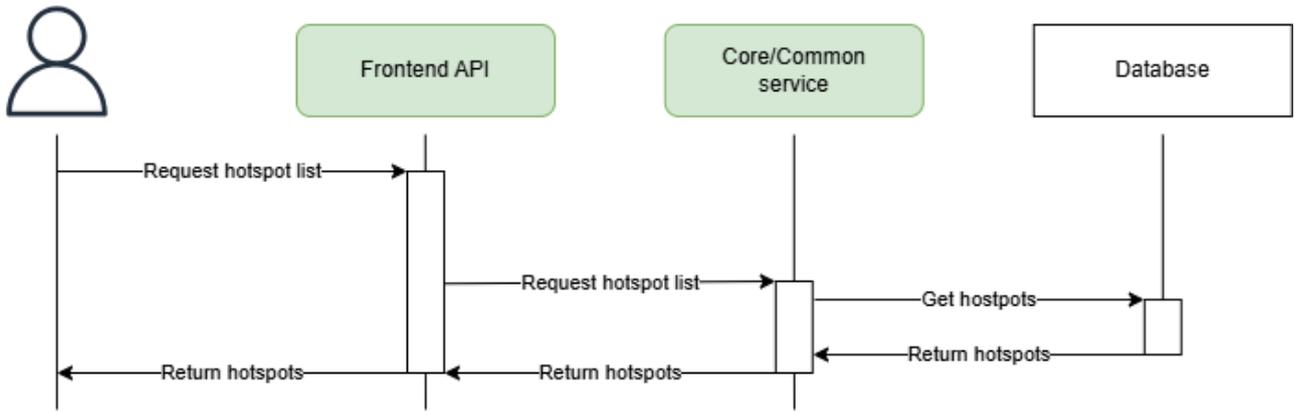
5 Sequence diagram of module components

The following sub-sections describe the sequence diagrams of the module.

5.1 Hotspots

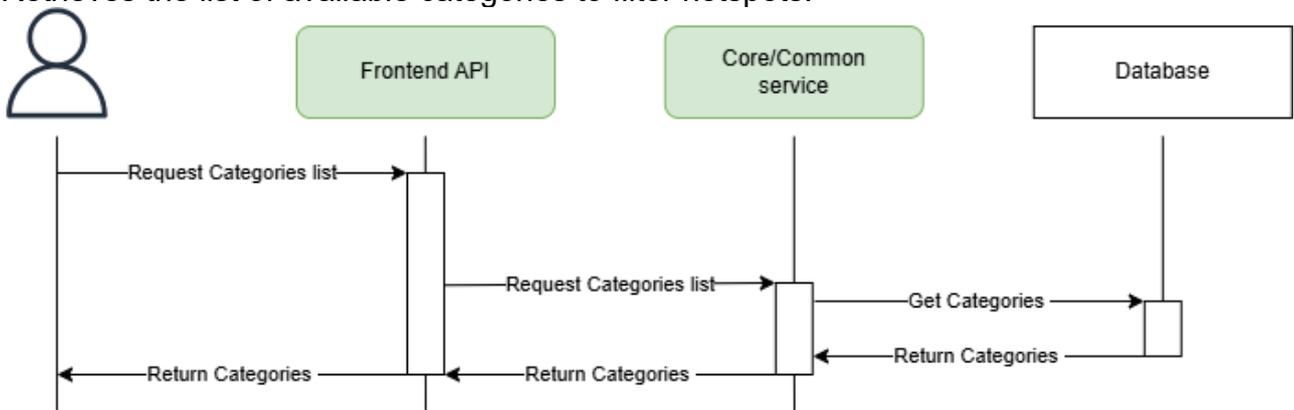
5.1.1 Fetch hotspots list (optional filter)

Retrieves the list of hotspots exposed to the citizens, based on selected filters if applicable.



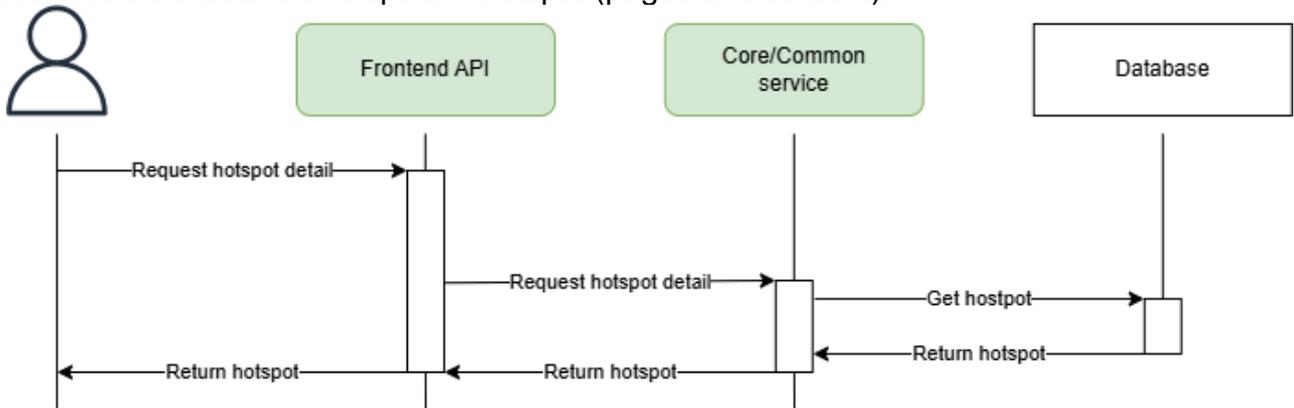
5.1.2 Fetch categories list

Retrieves the list of available categories to filter hotspots.



5.1.3 Fetch hotspot detail

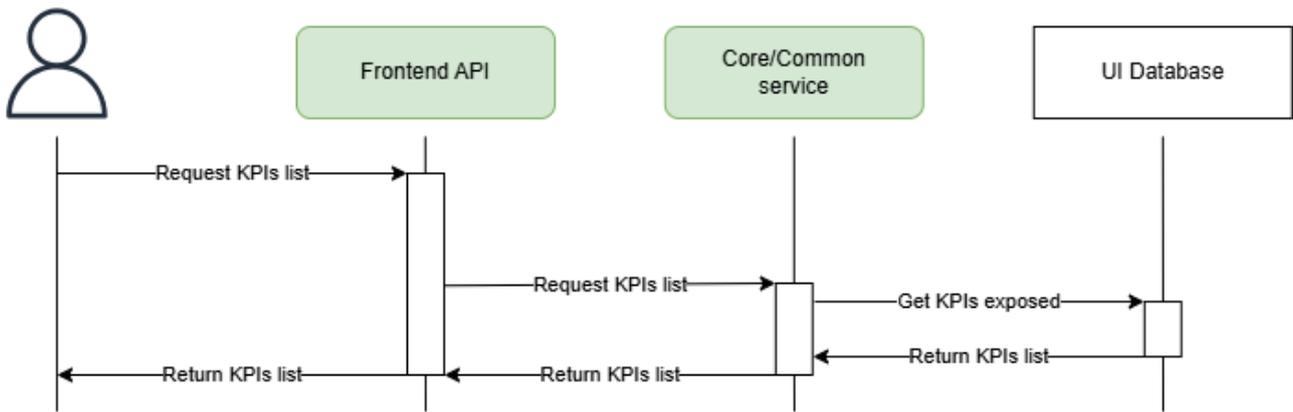
Retrieves the details of a specific hotspot (pages and content).



5.2 KPIs

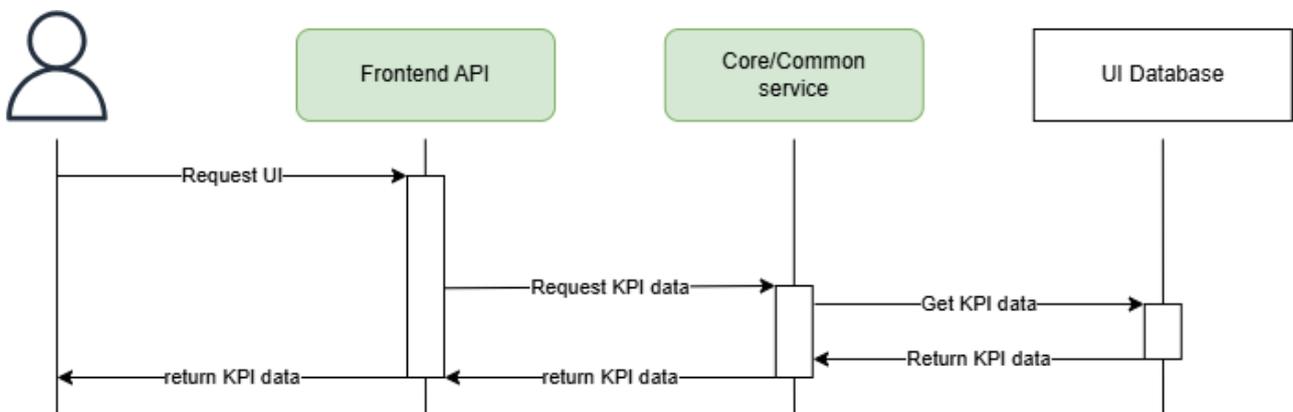
5.2.1 Get list of KPIs (optional filters)

Retrieves the list of KPIs exposed to the citizen, based on currently active filters if applicable.



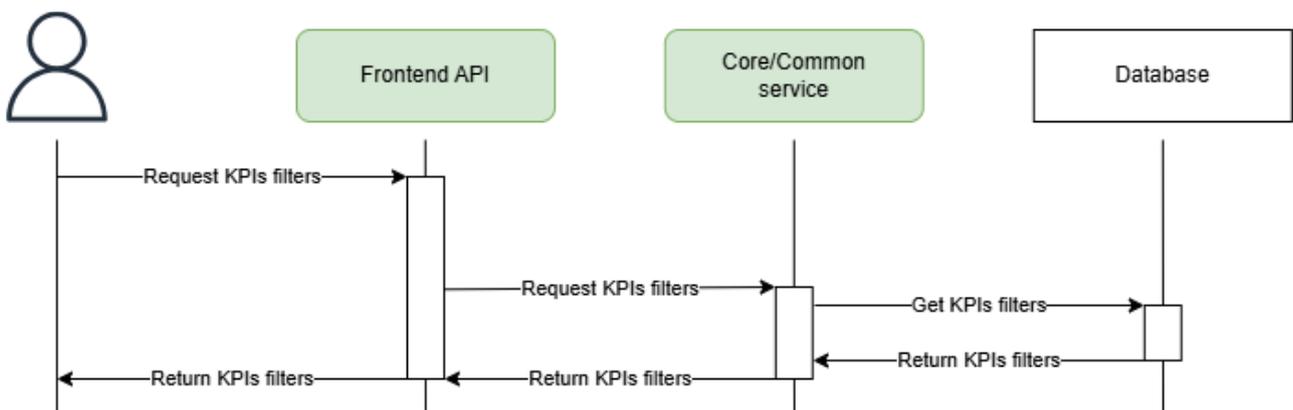
5.2.2 Get map data of a KPI

Retrieves the map data for the currently selected KPI on the map



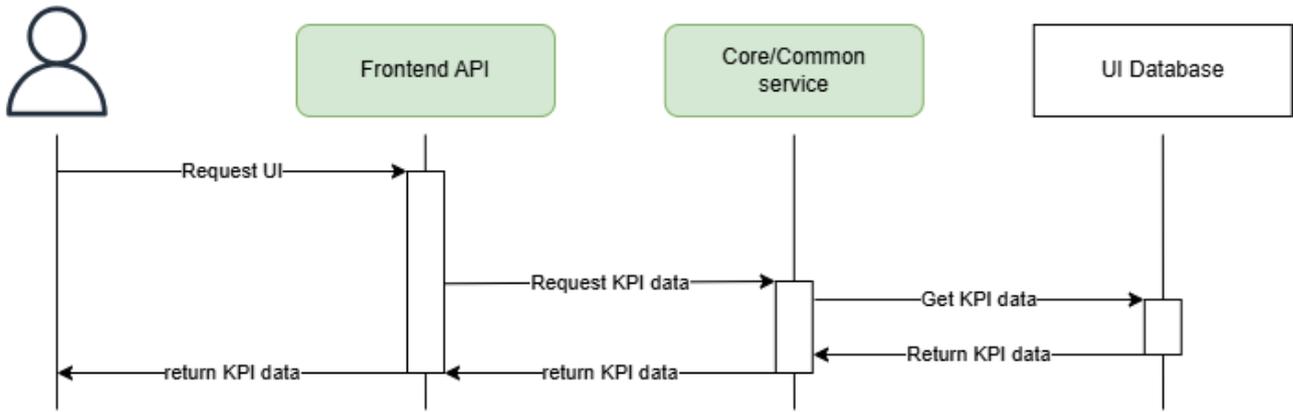
5.2.3 Get KPIs filters

Retrieves the list of filters available for the KPIs



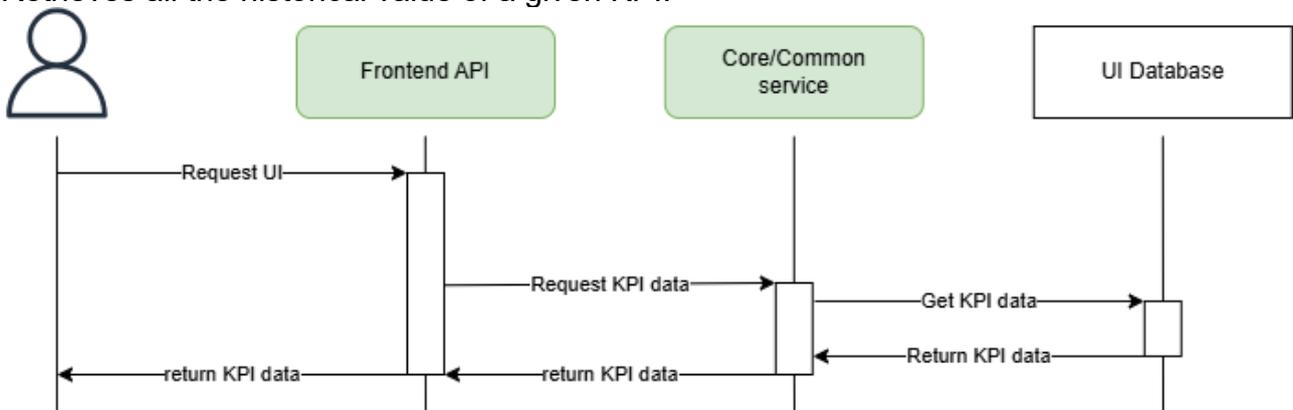
5.2.4 Get all KPIs data (optional filters)

Retrieves the list of all current/baseline KPI data based on the currently active filters if applicable.



5.2.5 Get historical data of a KPI

Retrieves all the historical value of a given KPI.

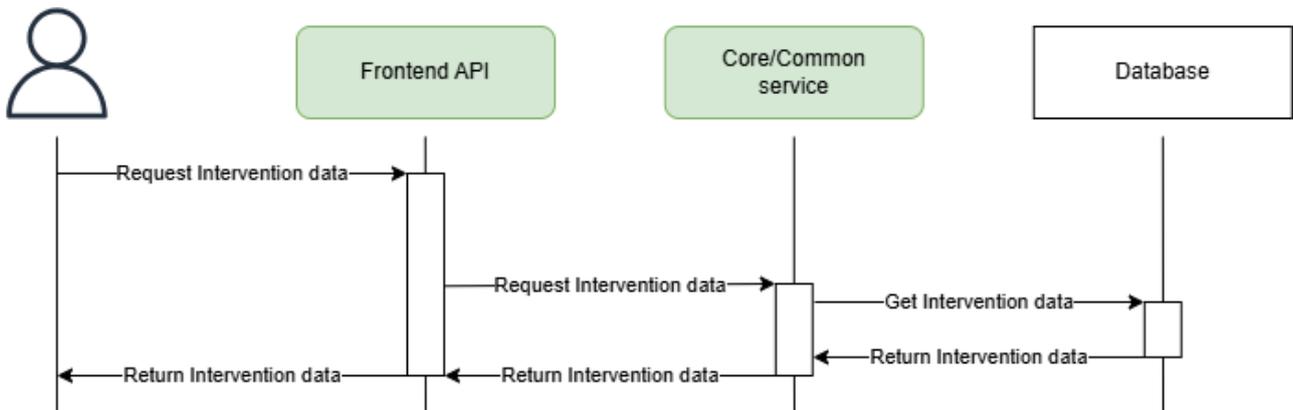


5.3 Intervention

5.3.1 Get intervention details

Retrieves all the details related to the intervention.

This includes its description, alternatives (with descriptions and highlights) and call to action.



5.4 Booking

5.4.1 Get free timeslots for a room

5.4.2 Reserve a room

5.5 Survey

See OGS block description