

Smart City App – Required Features

This document should present all features which were discussed as part of the solution. The document enumerates all required pages and processes giving an overview of what is part of the scope of this project, as long as all preferred, desired and future implementations this project would suffer.

1. Map View

- **Scope:** This view must show a map centred on the region of the user location. Pins indicating service requests from the 311 Public Service should be dropped on the map in a radius of 2 kilometres from the user's location. Different colours and/or icons must be applied on the pins regarding each category the 311 Public Service offers, giving the user a better understanding of all the services being performed in their area. Each marker, when tapped, should show the basic information of the specific service request. When tapped the short description on the marker, the view must change to the Request Detail View. The short description on the Marker should contain a "Plus 1" button, giving the user an option to engage in an existent request as a "follower".
- **Out of Scope:** Future implementations should add more layers and functionalities to the map, enhancing the user experience. When having a large number of pins in a certain area, the pins must be grouped in cluster, informing the number of services grouped in each cluster. This way the view would be clearer and easier to understand. A second step then, should implement a Heat Map, according to topics given by MGIS as relevant to the target users. The heat map should be an overlay on the map view, highlighting specific areas attended by the 311 Public Service. As future implementation, the "Plus 1" button should add a new request using the existent request info and the current user's info as data.

2. Public Request List View

- **Scope:** This view is toggled from the Map View and must contain the same service requests from the map, but in a List Format. It should show the same basic info showed when tapping the markers on the map. When tapped, it must change to the Request Detail View. The short description on the Marker should contain a "Plus 1" button, giving the user an option to engage in an existent request as a "follower".
- **Out of Scope:** As future implementation, the "Plus 1" button should add a

Smart City App – Required Features

new request using the existent request info and the current user's info as data. Another feature to be implemented is the ability to filter and search the list of requests in several ways. This is a feature that must be implemented on the company's side, as long as, currently, the 311 Public Service API does not provide an efficient way to query requests.

3. Personal Request List View

- This view is similar to the Public Request List View. The only difference here is the information presented, which should be just the requests opened by the user, serving as a “my requests” features. All the Scope and Out of Scope features in this view follow the Public Request List View ones.

4. Request Detail View

- Scope: This view should be accessed from either when the short description on the map marker is tapped, or when one of the requests is tapped from the public request list view. This is also the end point when one of the requests on the personal request list view (“my requests”) is tapped. This would show the basic information of the request, as like, title, description, category, date, status, comments, and date of accomplishment when the request is closed. This view must not show personal information from the public list of requests. It should contain a “Plus 1” button, giving the user an option to engage in an existent request as a “follower”.
- Out of Scope: As future implementation, the “Plus 1” button should add a new request using the existent request info and the current user's info as data.

5. Make a request View

- Scope: Triggered from any of the views in the application, this view should open the camera and allow the user to take a picture of the issue being reported. The process continues filling out a description field and choosing the category of the problem. When sent, the request will be opened with the 311 Public Service and linked with the user's profile on MGIS side.
- Out of scope: Future implementation should allow the user to record a video and post it alongside to the request. An option to share the request on Facebook is also an option for further developments.

6. Registration View

Smart City App – Required Features

- **Scope:** To register with the application the user will have two options. First, they can proceed with Facebook Authentication. Choosing this option, the Facebook login will pop up and if the user provides the correct username and password, they will be redirected to the Create Profile View, to fill out their personal information. The second option is to authenticate by phone number. The user will be prompted with a pop up informing their phone number. Then, an SMS message will be sent to the informed number with a 6-digit code to be input in the following view. If the information matches, the user will be redirected to the Create Profile view.
- **Out of Scope:** By now this application will use just Facebook as option for login with social media. However, in the near future any other social media would be implemented as log in option.

7. Create Profile View

- **Scope:** this view will show the fields to be filled with the user's personal information. First name, last name, e-mail and phone number will be asked as basic profile info. A button to confirm and save and another one to cancel will also be part of the view. Once the process is completed, the information is stored in the MGIS database and linked to further requests made to 311 Public Services.
- **Out of Scope:** Further implementation will allow the user to take or select a picture, upload this picture and add it to their profiles.

8. Log in View

- **Scope:** Pre-registered users will be able to log in to the app providing their phone or email, and their password. The option to log in with Facebook will be also available in this view. In case of the user forgets the password, a "remember my password" service will be provided in this page, sending by SMS or email (whichever will be available from MGIS API service) a new password to the user.

9. Profile View

- **Scope:** Profile view will contain all the information described above on the Create Profile View.
- **Out of Scope:** Further implementation will provide an option to change the application language in this view.

Smart City App – Required Features

10. About Page

- Scope: this page will contain the information from MGIS Inc. and Missing Pixel team regarding this project. The name of the team members will be part of this page alongside with the roles each member held in the project.