

An illustration of two stylized human figures. The figure on the left is wearing a blue cap and a grey long-sleeved shirt. The figure on the right is wearing a grey long-sleeved shirt and light blue pants. Both are holding blue rectangular objects, likely representing mobile devices or tablets. The background consists of light blue and white abstract shapes.

# Smart Heritage Preservation Through Open Data, Crowdsourcing, and Contextual Light Apps

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# Heritage as root of **social** and **economic** development

- **Heritage** is a **shared resource** that both reflects and influences the essence of the communities' identity.
- **Heritage** as one of the roots of **social (and economic) development** that should be recognized and affirmed for the benefit of present and future generations.

## Communities and groups are proud of their heritage

**Every town/region** has dozens of items in the streets (artworks or not) representing its history

- > Statues, old buildings, bridges... but also
- > castles, vineyards, gardens...

Artworks may be nice, but the underlying origin and history are usually more relevant... **unknown to most of visitors, even inhabitants.**



'De Koeieschieter' ('Cow Shooter')

A story from 1691 that explains why Leuven's people were nicknamed koeschieters or cow-shooters.

# ICT as an ally to **preserve** & **understand** the heritage

Easy to collect **contextual** information

- Geolocation
- Environment
- Type of user (visitor, expert, citizen...)

Easy to visualize data:

- Images and descriptions, XR...

*The Unfinished Church*



[https://nl.wikipedia.org/wiki/Sint-Pieterskerk\\_\(Leuven\)](https://nl.wikipedia.org/wiki/Sint-Pieterskerk_(Leuven))

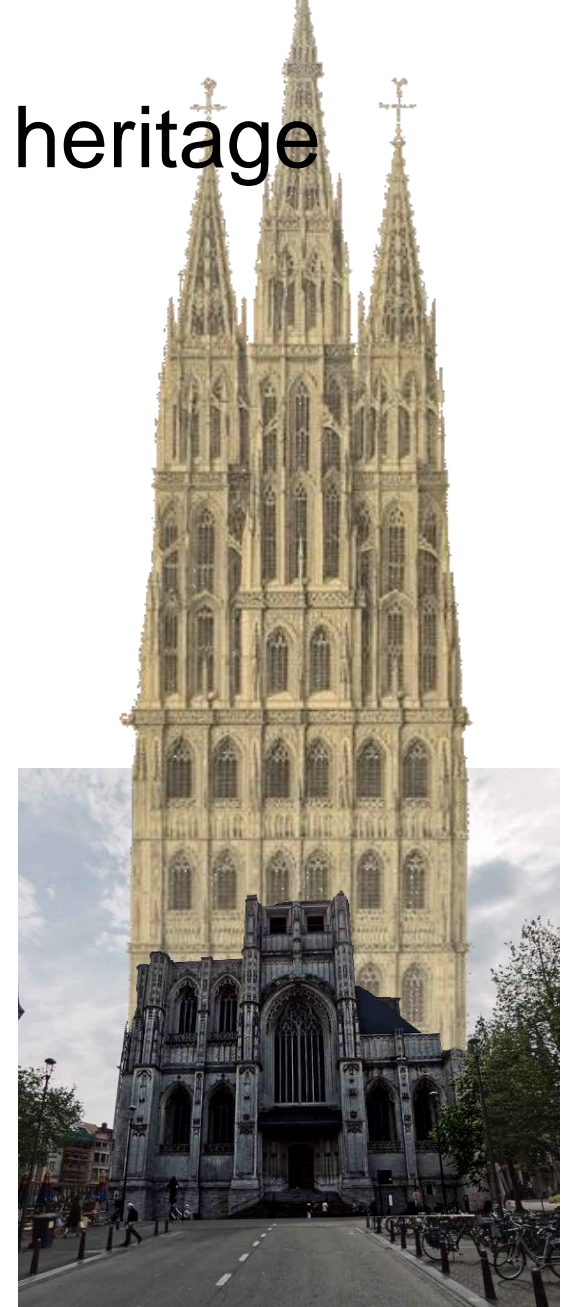
# ICT as an ally to **preserve** & **understand** the heritage

Easy to collect **contextual** information

- Geolocation
- Environment
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Easy to **visualize** data:

- Images and descriptions, XR...



# ICT as an ally to **preserve** & **understand** the heritage

Easy to collect **contextual** information

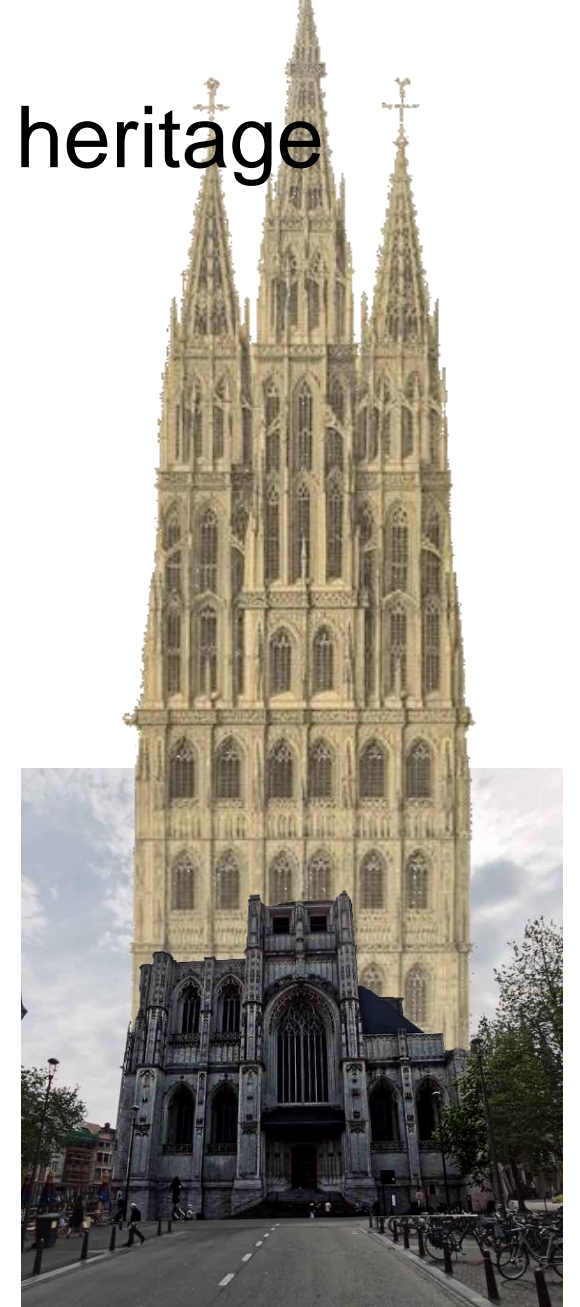
- Geolocation
- Environment
- Type of user (visitor, expert, citizen...)

Easy to **visualize** data:

- Images and descriptions, XR...

Large cities already have tourism apps and tools.

**Most of small/medium cities usually do not have enough IT resources...** but they always have **experts and enthusiasts**.





# Heritage in... A collaborative methodology & toolset to support local heritage preservation worldwide

Maximizing the efficiency and effectiveness of the institutions and individual actions with **minimum costs**.

- **Open (Linked) Data** (*official archives as the basis*)
- **Community-driven** (*open to popular anecdotes, stories...*)
- **Open Source** (*based on templates, code in Github*)
- **Sustainable** (*low-code approach*)
- **Accessible** (*ICT supporting impairments & diverse needs*)
- **Extensible** (*adaptable to any scenario*)



# Heritage in... **The Methodology**

1. Clone & configure the project (git repository)
2. The database (from spreadsheets to linked data in one file)
3. Customize the app (i.e., colors, logos, attributions,... even new sections)
4. Upload and publish content (ready to use Github actions)
5. Run the app (test, publish, open it)

<https://ow2-quick-app-initiative.github.io/poi-quick-app/>

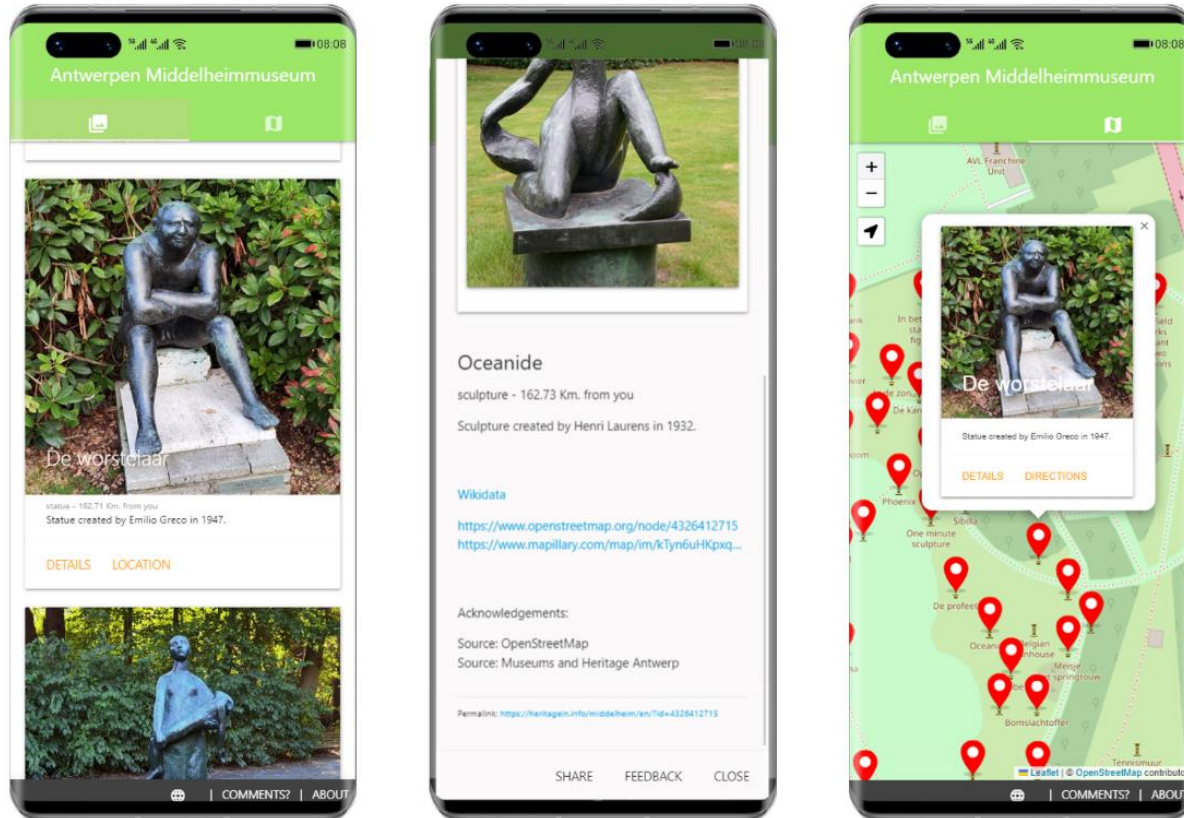
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<https://ow2-quick-app-initiative.github.io/poi-quick-app/>



# Configuration file & database



```
1  {
2      "app": {
3          "theme": {
4              "brand": "#9ce668",
5              "complementary": "#00ccf6"
6          },
7          "repository_url": "https://github.",
8          "text_info": "This app was created",
9          "text_acknowledge": "Thanks to Ope",
10         "text_feedback": "Please let us kn",
11     },
12     "pois": [
13         {
14             "id" : "2376124830",
15             "type" : "statue",
16             "lon" : "4.4041079",
17             "lat" : "51.1796373",
18             "name" : "Oceanide",
19             "description" : "Sculpture created",
20             "images" : ["https://example.org/i",
21             "attributions": ["Source: Museums",
22             "wikidata": "id00293",
23             "urls": ["https://www.openstreetma",
24         }
25     ]
26 }
27 }
```

# Change colors, icons, texts... in different languages

```
"content": {
  "en": {
    "app": {
      "theme": {
        "brand": "#071F32",
        "complementary": "#FAFAFA"
      },
      "repository_url": "https://github.com/ow2-quick-app-initiative/poi-quick...",
      "text_info": "This app is created by local experts, so it ...",
      "text_acknowledge": "This is open-source and enriched by the community...",
      "text_feedback": "Please let us know if you want to contribute ....",
      "feedback_url": "https://ow2-quick-app-initiative.github.io/.../#get-involved",
      "issue_url": "https://github.com/ow2-quick-app-initiative/issues/new?labels=fr/paris"
    },
    "pois":
    [

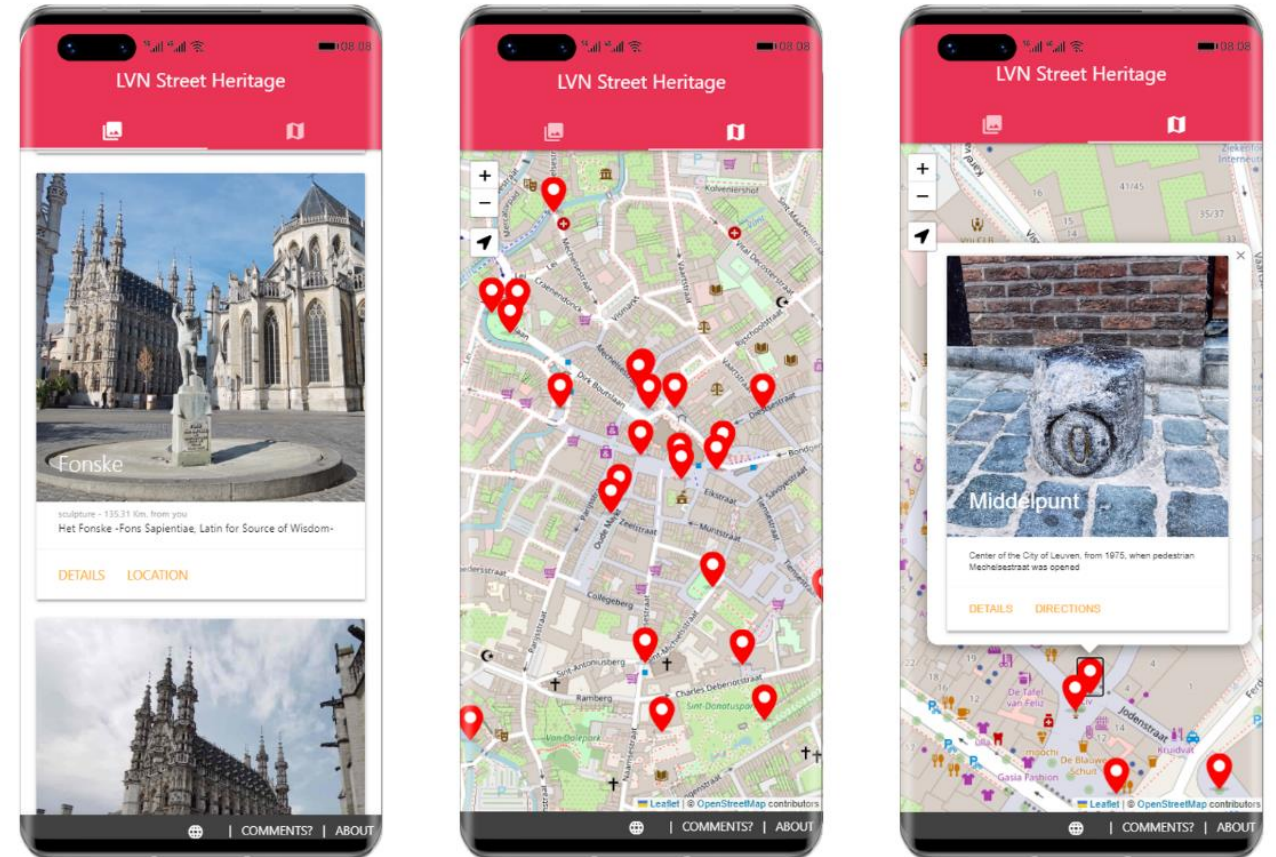
    ]
  }
}
```

# x2 Ready-to-use Light Apps

Based on W3C Standards

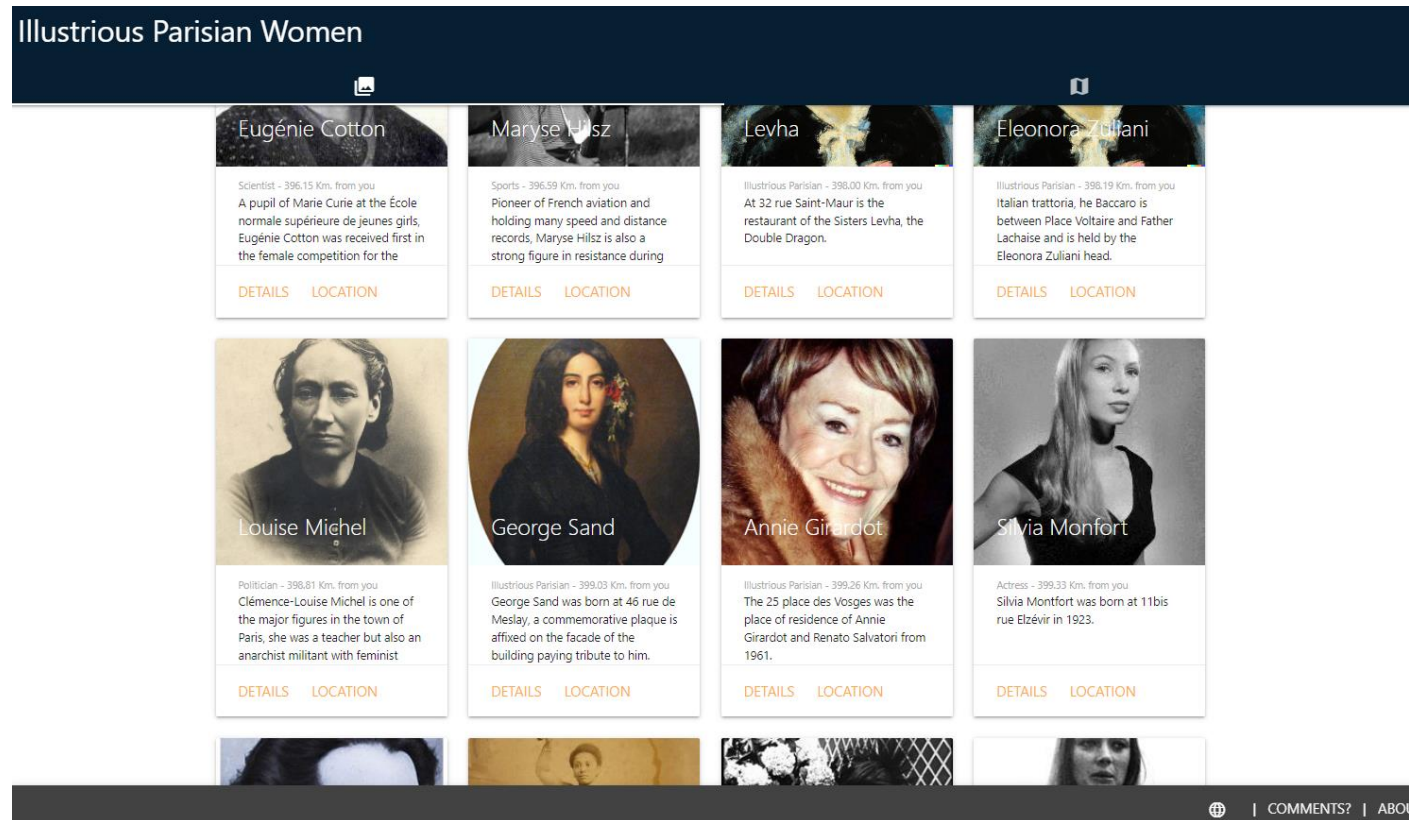
- **Progressive Web Application** (PWA)
- MiniApp, based on **Quick App** technology

Delivering content based on context (POIs around)



# Test, and deploy it **in seconds**

<https://heritagein.info/?url=https://ow2-quick-app-initiative.github.io/poi-quick-app-implementations/fr/paris/women/data.json>





# This example was made in one hour



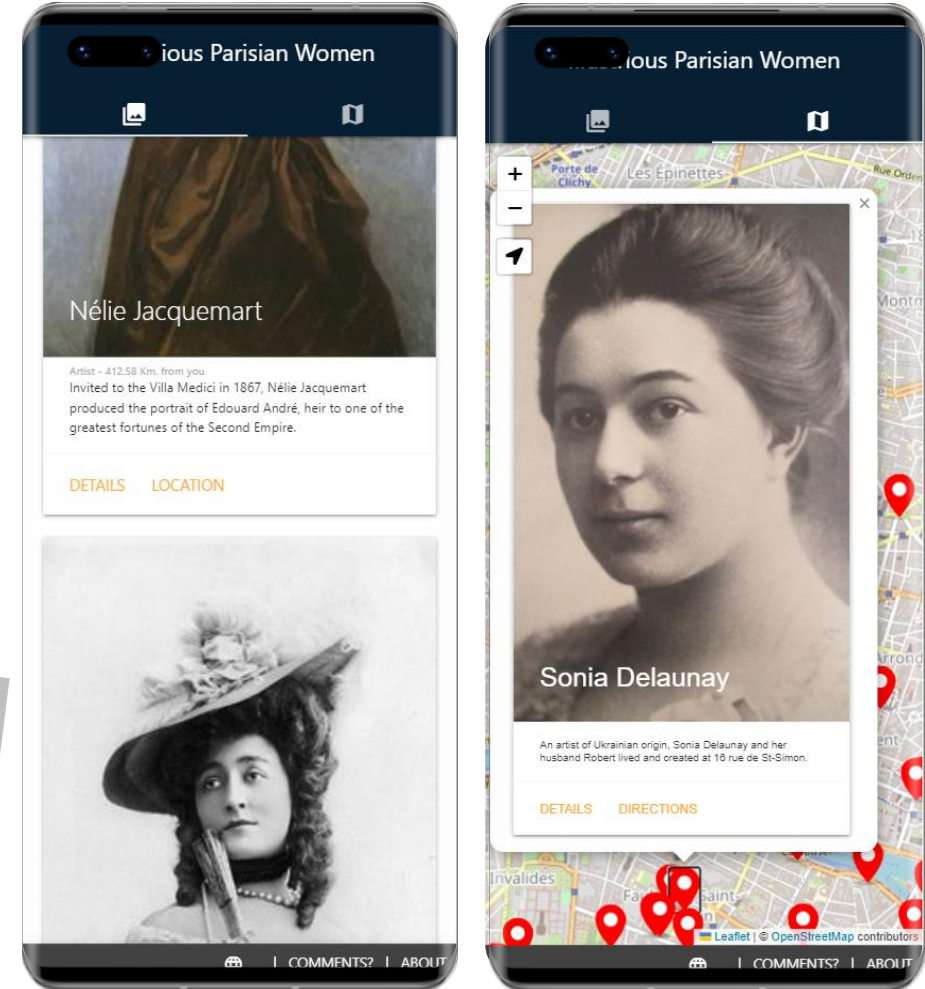
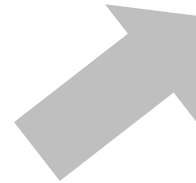
	OBJECTID	SHAPE_LEN	geo_shape	geo_point_2d
1	2	0	["coordinates": [2.34124699972043, 48.85084582, 2.33682699229]	
2	3	0	["coordinates": [2.3326470054875, 48.8563175534, 2.32795633864]	
3	4	0	["coordinates": [2.3235330009051, 48.8568567743, 2.32304202021]	
4	5	0	["coordinates": [2.32245800069078, 48.8564550363, 2.31877963131]	
5	7	0	["coordinates": [2.3107210733824, 48.8530841848, 2.30965075019]	
6	6	0	["coordinates": [2.3179680025464, 48.8521315536, 2.3138430961]	
7	8	0	["coordinates": [2.30910693709877, 48.848930007, 2.30329450565]	
8	9	0	["coordinates": [2.29851799967159, 48.8488000414, 2.29535944429]	
9	1	0	["coordinates": [2.34191000033436, 48.8616727103, 2.34148746967]	
10	10	0	["coordinates": [2.27321799998111, 48.8516465022, 2.2730553178]	

<https://opendata.paris.fr/explore/dataset/femmes-illustres-a-paris-parcours/table/>



<https://openrefine.org>

```
{
  "id" : "8",
  "type" : "Artist",
  "lon" : "2.341775",
  "lat" : "48.85432",
  "name" : "Dora Maar",
  "description" : "Painter and sometimes a set photographer,
  "more" : "She produced the first photo report on the work of
  "images" : ["https://capgeo.sig.paris.fr/PdfEtImages/ParisC
  "attributions": ["Paris Data", "Direction de l'Attractivité
  "wikidata" : "Q236161",
  "urls": []
},
```

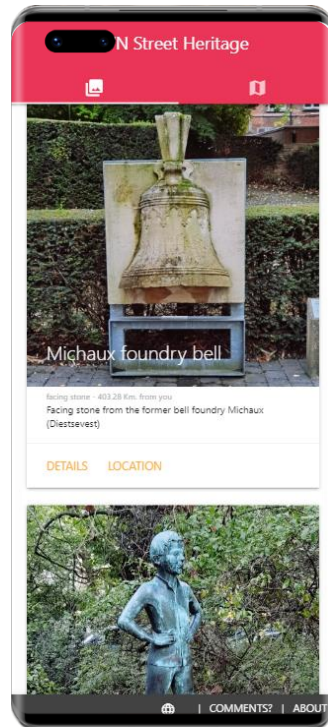


[Illustrious Parisian Women](#)

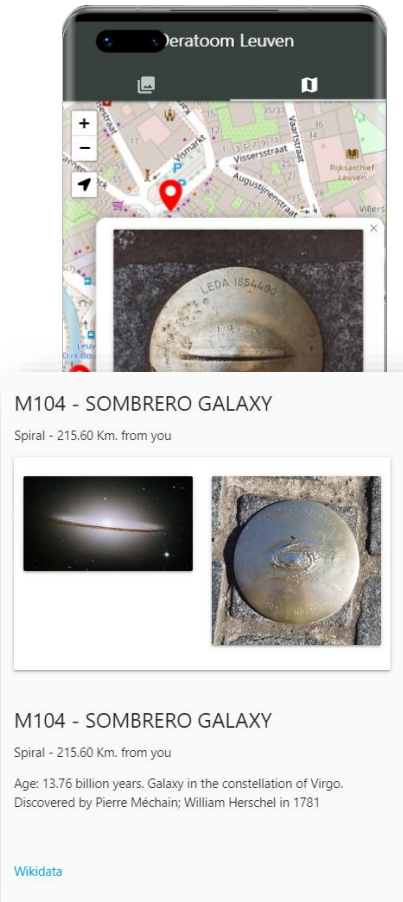
[In GitHub](#)

# Applicable to any *type of heritage* and *community*

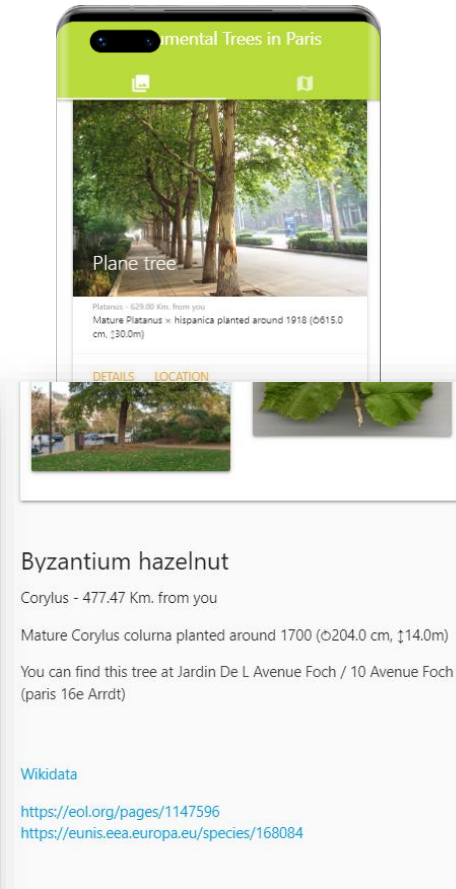
## Cultural Heritage (art, local culture)



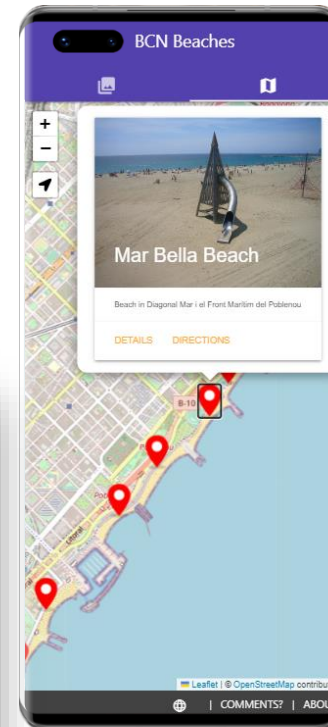
## Big Bang Theory (astronomy)



## Monumental Trees (botany)



## Beaches (tourism)



## Illustrious Women (humans)



<https://heritagein.info>





# Thank you!

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