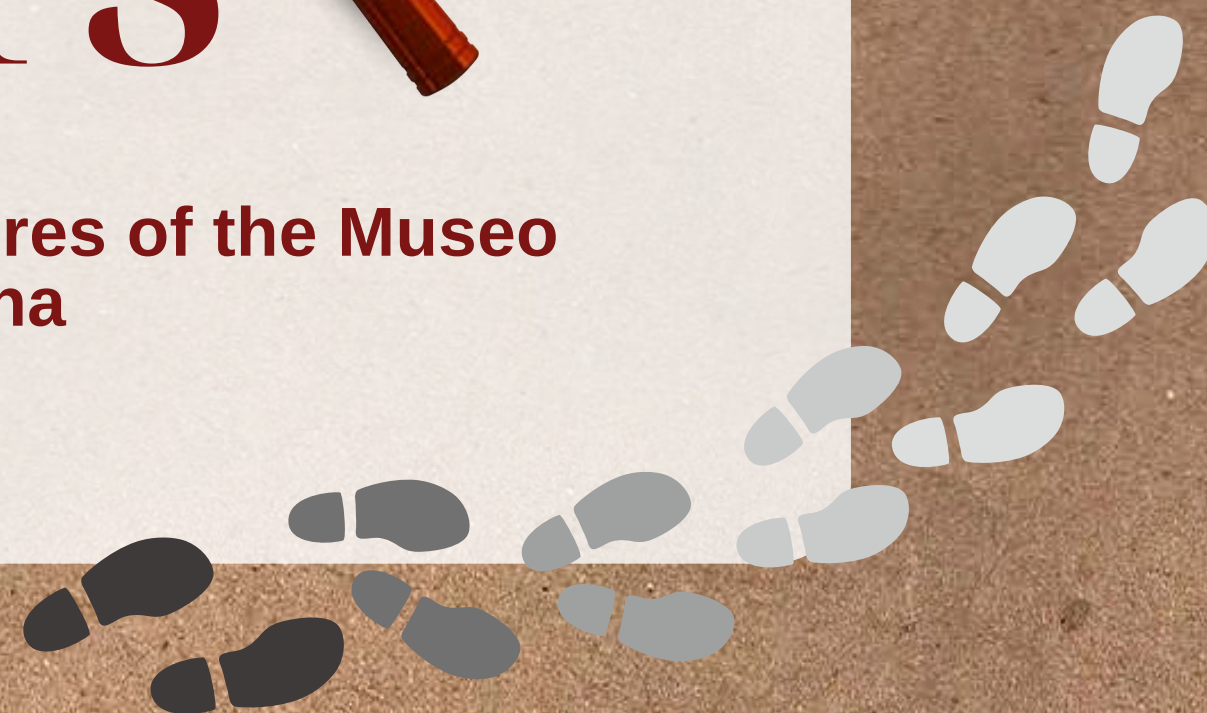# Museum Explorers

A gamified experience throughout the treasures of the Museo Civico Archeologico of Bologna

Context

Why Bologna?

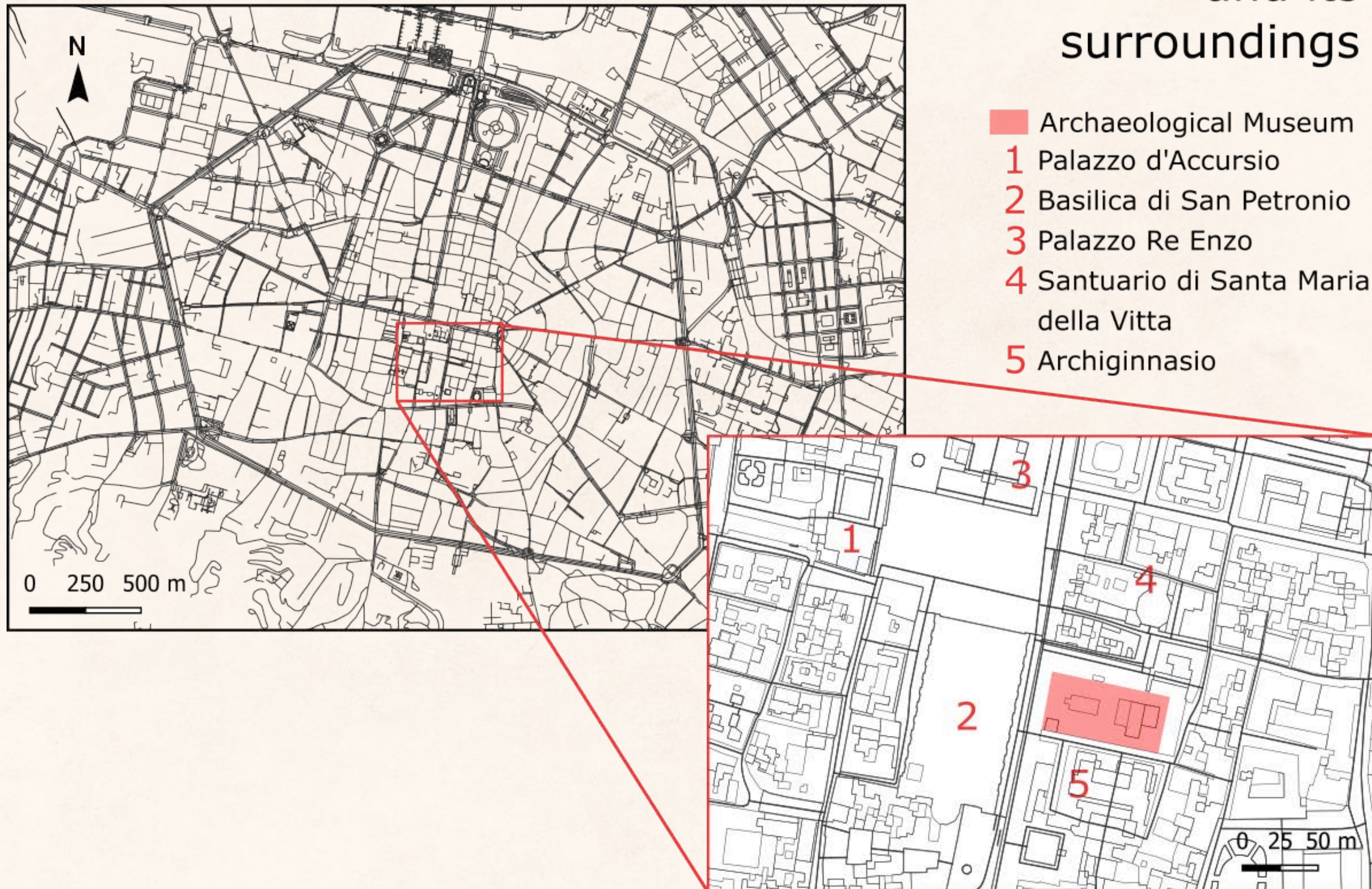A city with layers of history

Context

Why the Archeological Museum?

The Archeological Museum as one of the most representative museums of this kind, with rich collections reflecting the city's ancient history comprehensively.
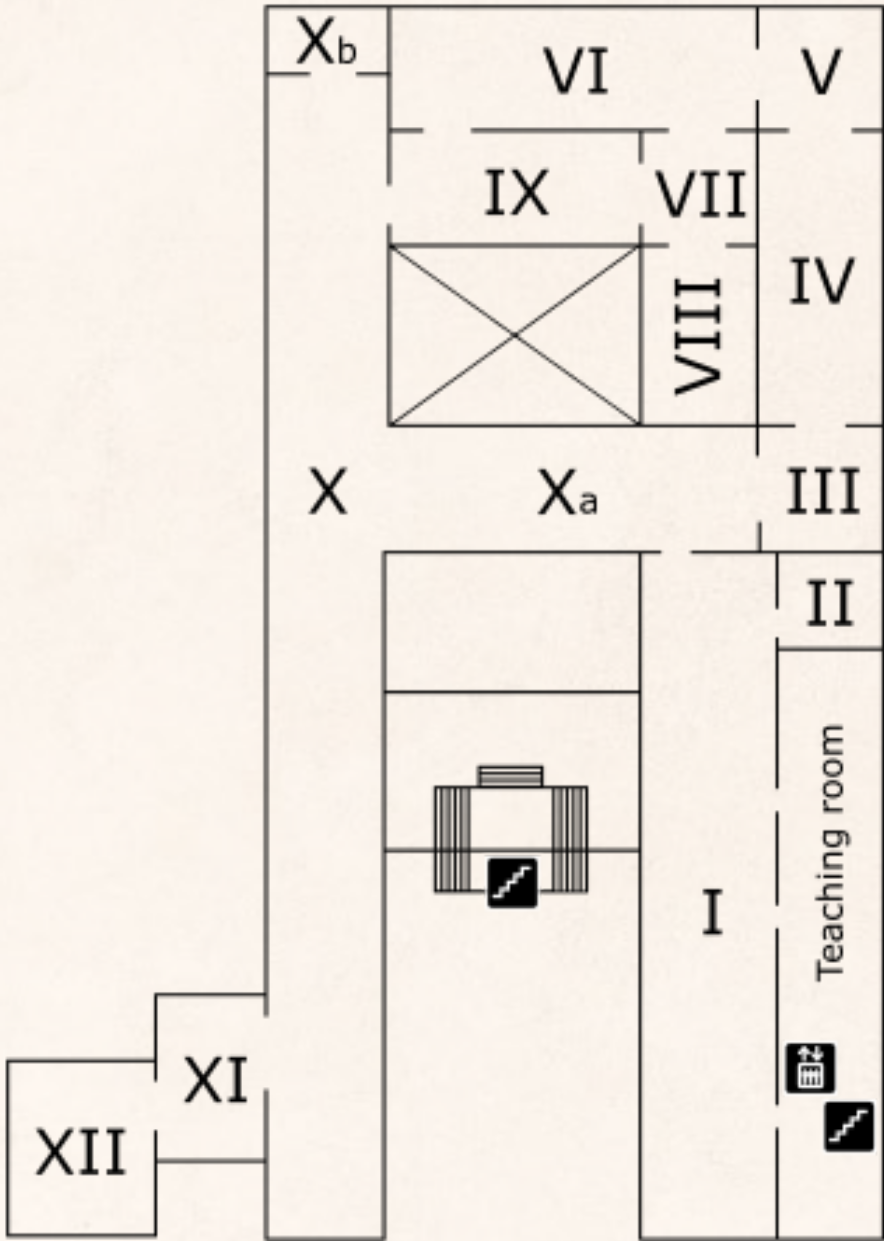
The museum and its surroundings

Archaeological Museum
1 Palazzo d'Accursio
2 Basilica di San Petronio
3 Palazzo Re Enzo
4 Santuario di Santa Maria della Vitta
5 Archiginnasio

0 250 500 m

0 25 50 m

N

The Museum's Plan

First floor

Xb · VI · V

IX · VII

VIII · IV

X · Xa · III

II

Teaching room

I

XI

XII

Ground floor

Temporary exhibitions

Temporary exhibitions

Conference room

Storage

Shop

Underground

Egyptian collection

Museum Collections

Must see

Celtic
collection

Prehistoric
collection

Roman
collection

Etruscan
collection

Egyptian
collection

Numismatic
collection

Greek
collection

Gipsoteca

Lapidarium
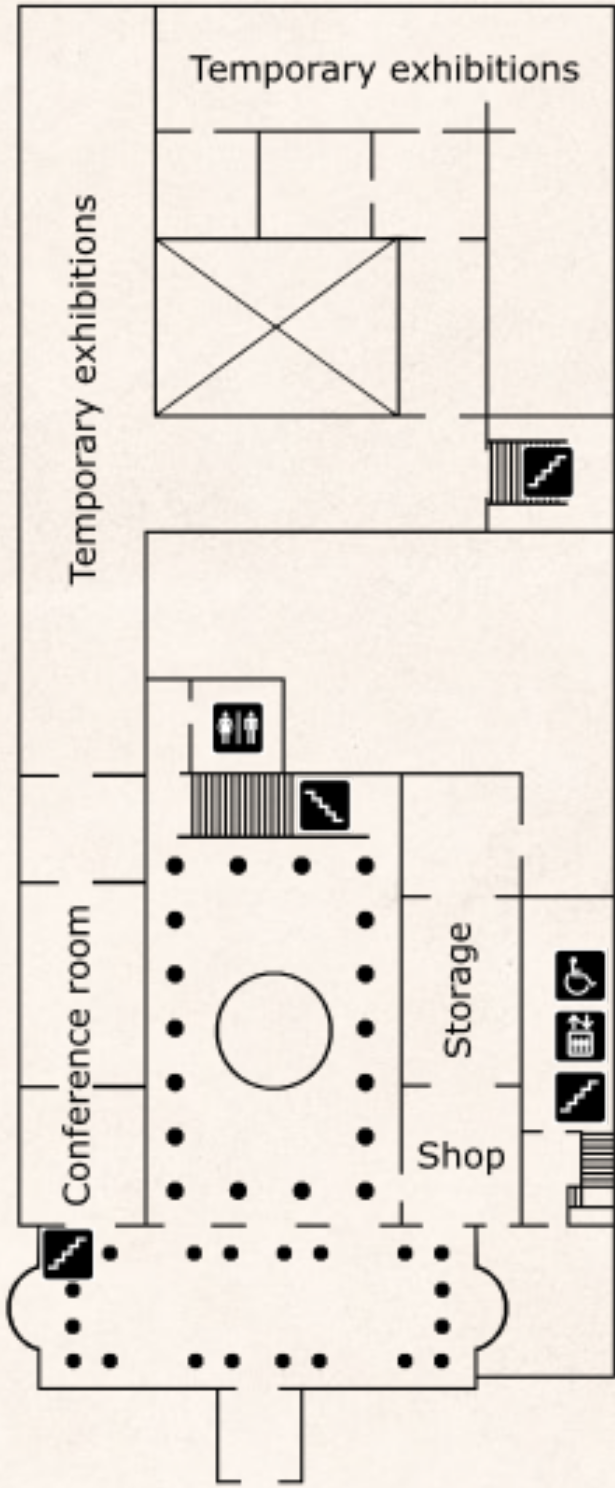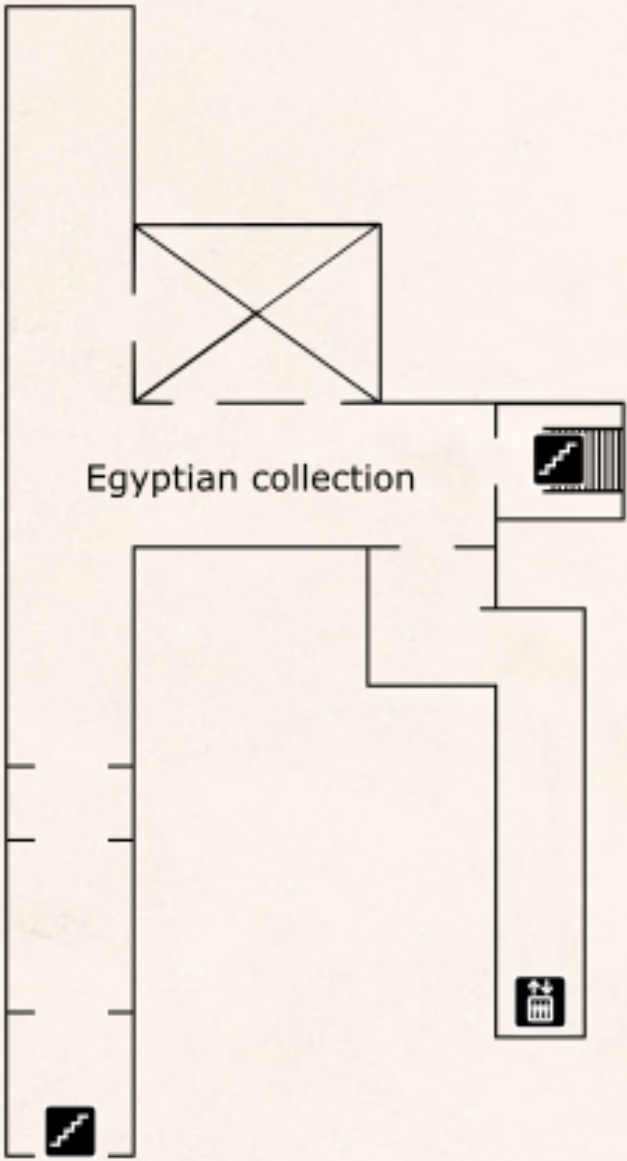
Institutional Goal:

As described in the mission of the museum, the institution **aims to represent the history of the city since its origins in Roman times** and testifies to ancient civilizations through objects that make up the Egyptian, Etruscan-Italic, Greek, Roman, and numismatic collections, collections that are also witnesses of the **history of collecting from the sixteenth century to today**. Also, the Institution researches material and immaterial testimonies of man and his environment, acquires them, and preserves, **communicates**, enhances, and displays them for **study, education, and pleasure.**
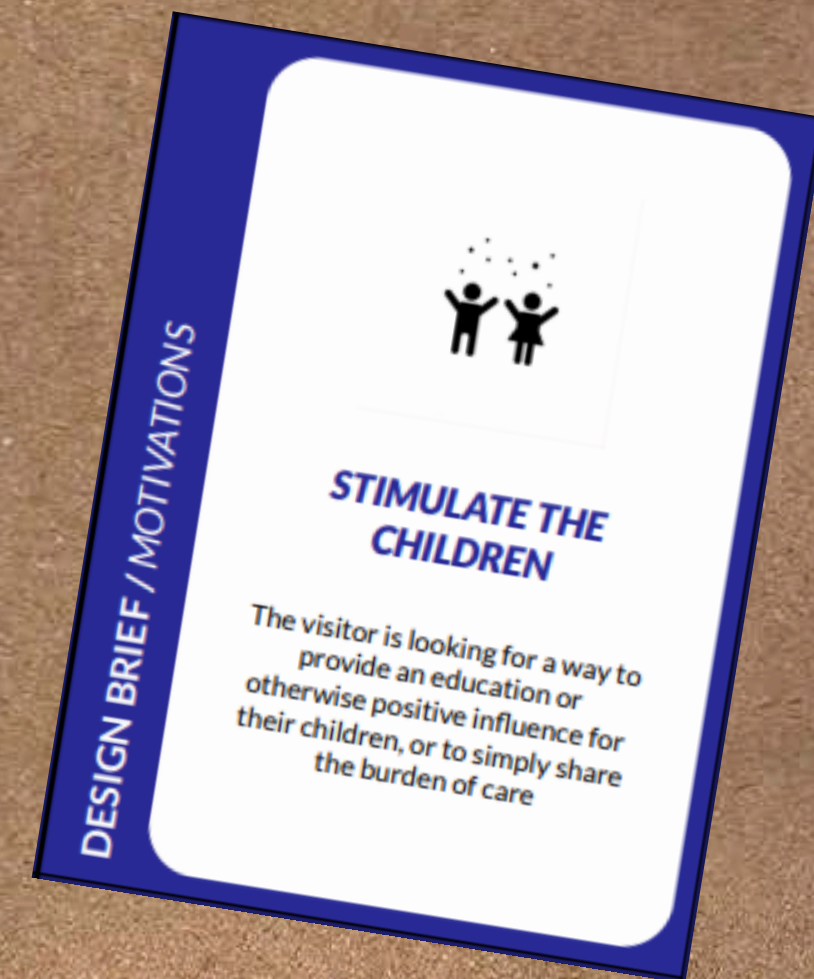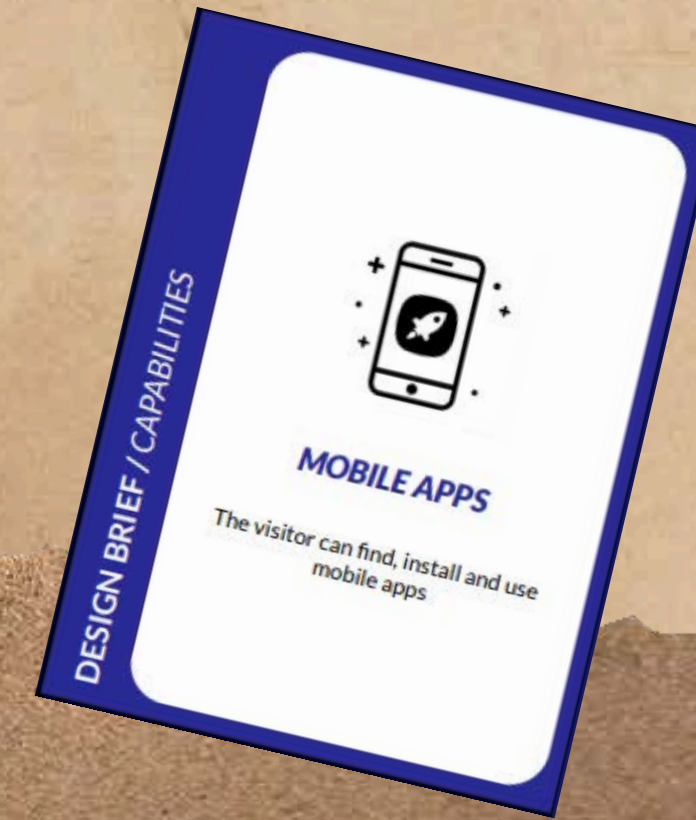
Audience

The audience of our project is students from the middle and high schools, with an average age between 10 and 16 years old.

We had chosen this audience because they are the next generation of Bologna's citizens.

DESIGN BRIEF / MOTIVATIONS

STIMULATE THE CHILDREN

The visitor is looking for a way to provide an education or otherwise positive influence for their children, or to simply share the burden of care

SMART PHONE

A telephone that is connected to the Internet and GPS, and supports a range of apps that vastly extend its functionality. Importantly, it allows the users to create and share digital content

TABLET

A portable computer with a touchscreen. More cumbersome than a smartphone, but offering a larger display that can possibly be shared by multiple users

DESIGN BRIEF / DEVICES

MOBILE APPS

The visitor can find, install and use mobile apps

DESIGN BRIEF / CAPABILITIES

ACCESSIBILITY

I have needs that many museums don't cater for. Are there resources to help me plan a visit? If I visit, can I experience all the assets that other visitors can

LACK OF ACCESS TO TECHNOLOGY

I don't have access to technologies like smartphones, computers or the Internet, so I get a second-rate experience

DESIGN BRIEF / BARRIERS

As barriers, we identified some logistical problems, such as the possible high flow of students in the event and accessibility aspects regarding the installations. Another barrier identified was the lack of access to technologies.

It requires the **capabilities** of using the devices as well as basic orientation and text interpretation.
It requires **devices** including smartphones or electronic tablets.

How to achieve that?

Gamified experience:

positive intermittent reinforcement

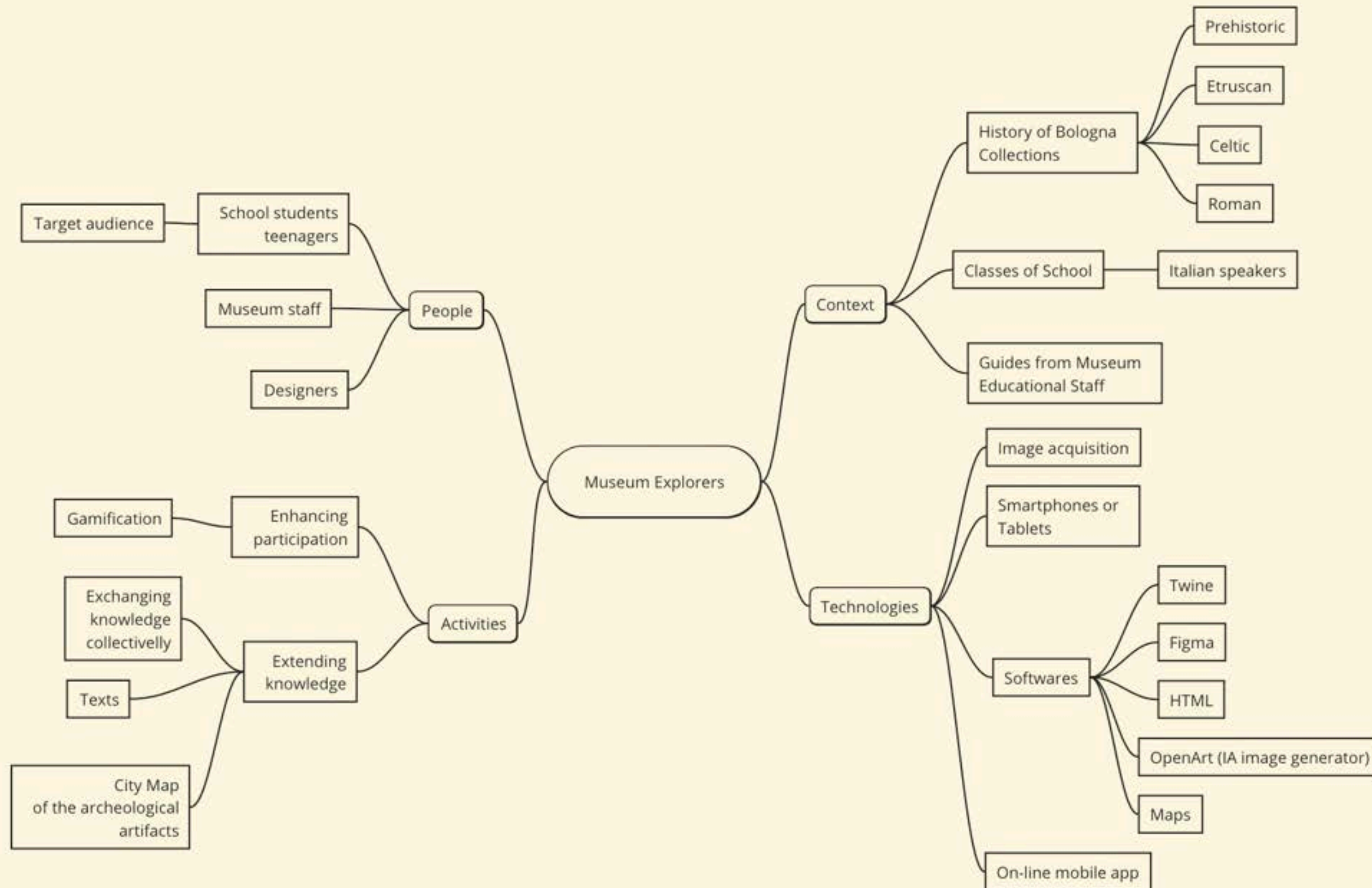**retrieving spatial information**

acquiring casual knowledge

AUDIENCE GOALS / SENSE OF CARE

EXTEND KNOWLEDGE

AUDIENCE GOALS / SENSE OF CARE

MAKE CITIZENS LEARN ABOUT HERITAGE PROTECTION

AUDIENCE GOALS / SENSE OF CARE

BOOST ENCHANTMENT

Museum Collections

Must see

Prehistoric collection

Celtic collection

Roman collection

Etruscan collection

Egyptian collection

Numismatic collection

Gipsoteca

Greek collection

Lapidarium

The Project in PACT Framework

The Concept

TREASURE HUNT GAME

- Museum Explorers is a gamification project which uses archeological treasures

- It is based on some of the collections: Prehistoric, Etruscan, Celtic, and Roman collections

- Development of narrations through storyelling & digital means

Study Case

The user finds some of the most interesting objects to understand the material culture that survived until today.

funeral practices

housing

workspaces

nature and domestic animals

Requirements

Must
- Rules
- Defined date
- Devices
- Internet

Should
- Contact with the schools
- Accessibility options

Could
- Previous school recommendations
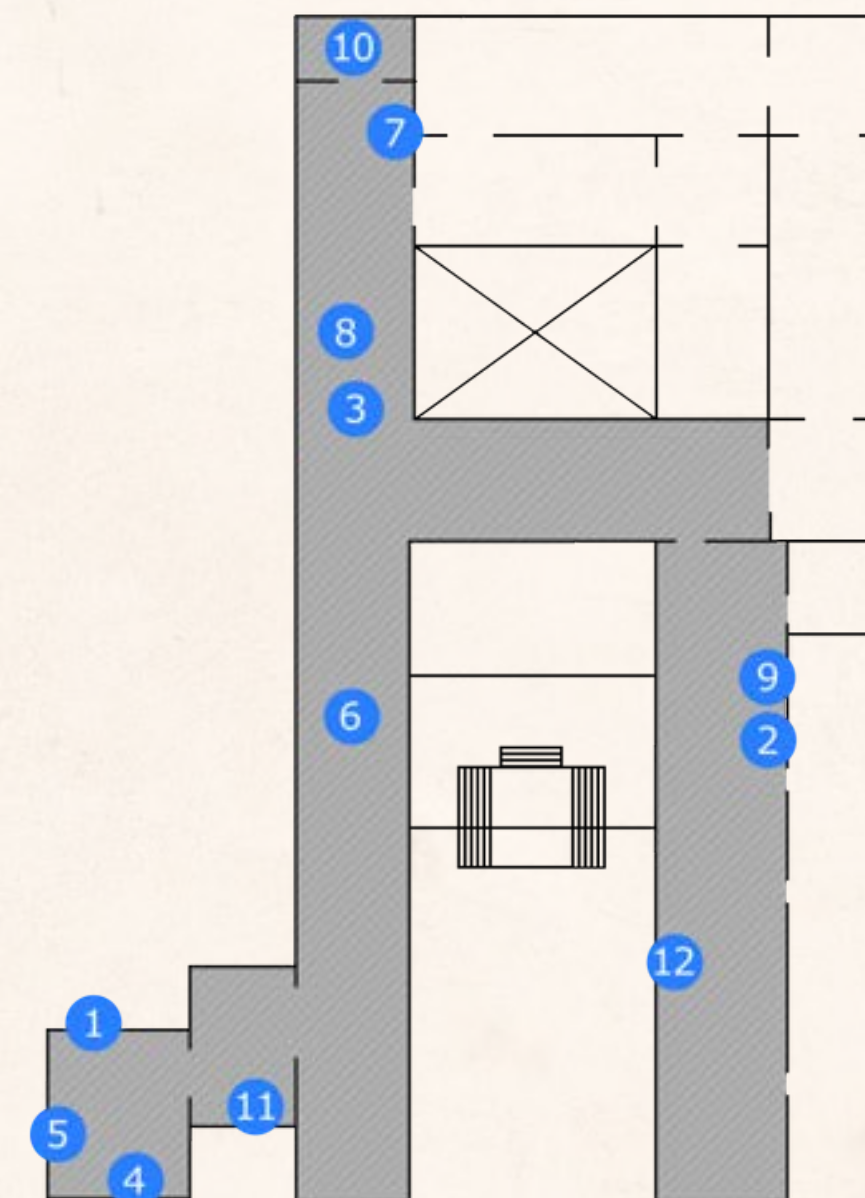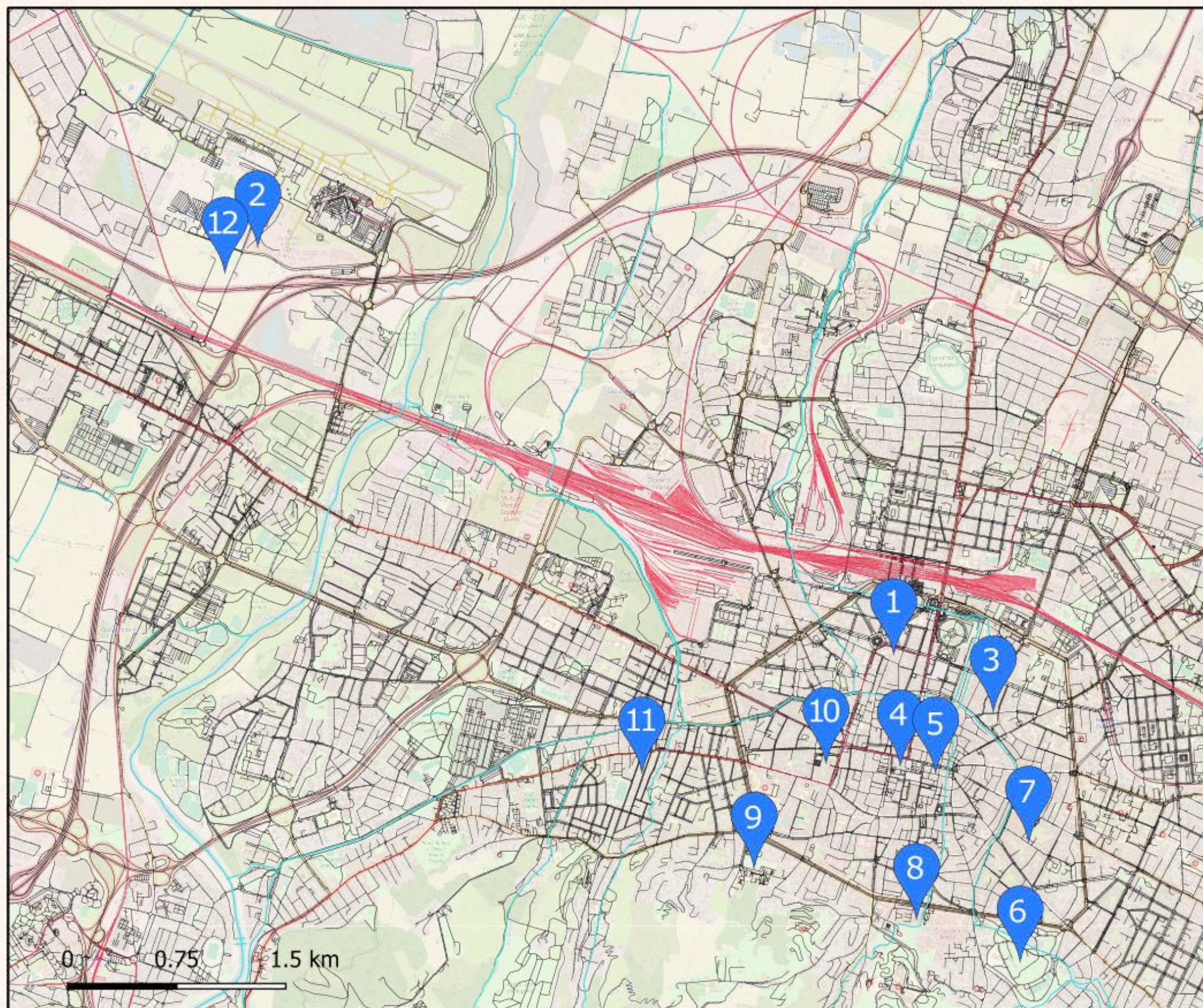- Staff support
- Survey

Won't
- Change physical structure of the museum
- Costs
- Profit

Characters and Items

Items Location

1. Roman Mosaic   **2.** Cup with bird's head handle
3. Tomb of the two horses **4.** Gorgon head antefix
5. Statue of nymph   **6.** Sandstone sculpture of a lion
7. Etruscan limestone sculpture **8.** Tintinnabulum
9. Anthropomorphic figure **10.** Large earthenware pot
11. Bronze helmet   **12.** Burial kit

Twine

Acess GitHub repositories

MUSEUM EXPLORERS

Personas

A school student and a history teacher

Marco Santini

"The school could have video games".

Marco is more interested in video games and technology than in his schoolwork. He often spends his free time playing strategy and building games like Minecraft and Fortnite or tinkering with gadgets. While not very engaged in his academic subjects, he has a passion for science and technology, dreaming of becoming a game developer or tech engineer one day. Despite his academic challenges, Marco is optimistic and resourceful, seeking ways to turn his interests into a future career.

He has a close-knit group of friends who share his interests in video games and soccer. They often hang out after school, playing games online, or meeting at the local park for a match. He is active on social media, connects with friends, and follows tech and gaming influencers.

Age: 14

Student of 9 grade in Scuola Media Statale Enrico Fermi

Family
His mother is a supermarket cashier; His father works in an auto repair shop;He also has a 10-year-old sister.

He lives in **Bologna**.

Digital native.

Interests: Video Games and soccer.

Most frequently technologies used:

Social Media

Goals
Marco dreams of becoming a game developer or a tech engineer, inspired by his love for video games and gadgets. Although he knows he needs to improve his school performance to achieve these goals, he struggles with staying motivated in his current academic environment. He hopes to find a way to channel his interests into a future career.

Frustrations
Matteo faces the challenge of staying motivated in school. His lack of interest in traditional academic subjects often leads to mediocre grades, which could hinder his future opportunities. Additionally, balancing his gaming time with other responsibilities is an ongoing struggle. Despite these challenges, Matteo remains optimistic, relying on his resourcefulness and passion for technology to guide him forward.

Maria Rossi

"Bringing the past to life with passion and purpose."

Born and raised in Bologna, Maria developed a love for history early on, inspired by the city's rich cultural heritage. She pursued her education at the University of Bologna, earning both her Bachelor's and Master's degrees in History.

She believes history is about memorizing dates and events and understanding the narratives connecting us all. She employs various teaching methods to engage her students, including storytelling, interactive projects, and field trips to historical sites around Bologna. Her goal is to make history relatable and exciting, encouraging her students to think critically about the past and its impact on today's world.

Maria fosters an inclusive and dynamic learning environment in her classroom. She uses technology thoughtfully, incorporating multimedia presentations and online resources to enhance traditional teaching methods.

Age: 32

History teacher in Scuola Media Statale Enrico Fermi
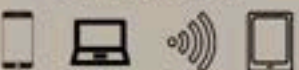
Family:
Her parents are both retired school teachers; she has a brother who is married and has two kids.

She lives in **Bologna** with her cat "Leonardo," named after Da Vinci.

Digital Proficient.

Interests: Literature and cooking, besides history.

Most frequently technologies used:

Social Media

Goals
Maria aims to continue growing as an educator and hopes to eventually write a book on Bologna's history for young readers, reflecting her involvement with the community. She dreams of developing a comprehensive history curriculum that can be used in schools across Italy, inspiring future generations to appreciate and learn from the past.

Frustrations
Maria Rossi aims to navigate her professional and personal life adeptly, striving to avoid overreliance on technology in her teaching while keeping students engaged and avoiding administrative burdens and burnout. Personally, she seeks to balance independence with social connections, manage her time effectively, maintain a healthy relationship with technology, keep up with its rapid changes, and prioritize her health and well-being.

The Interaction Between the Appilication and the User

see on Miro
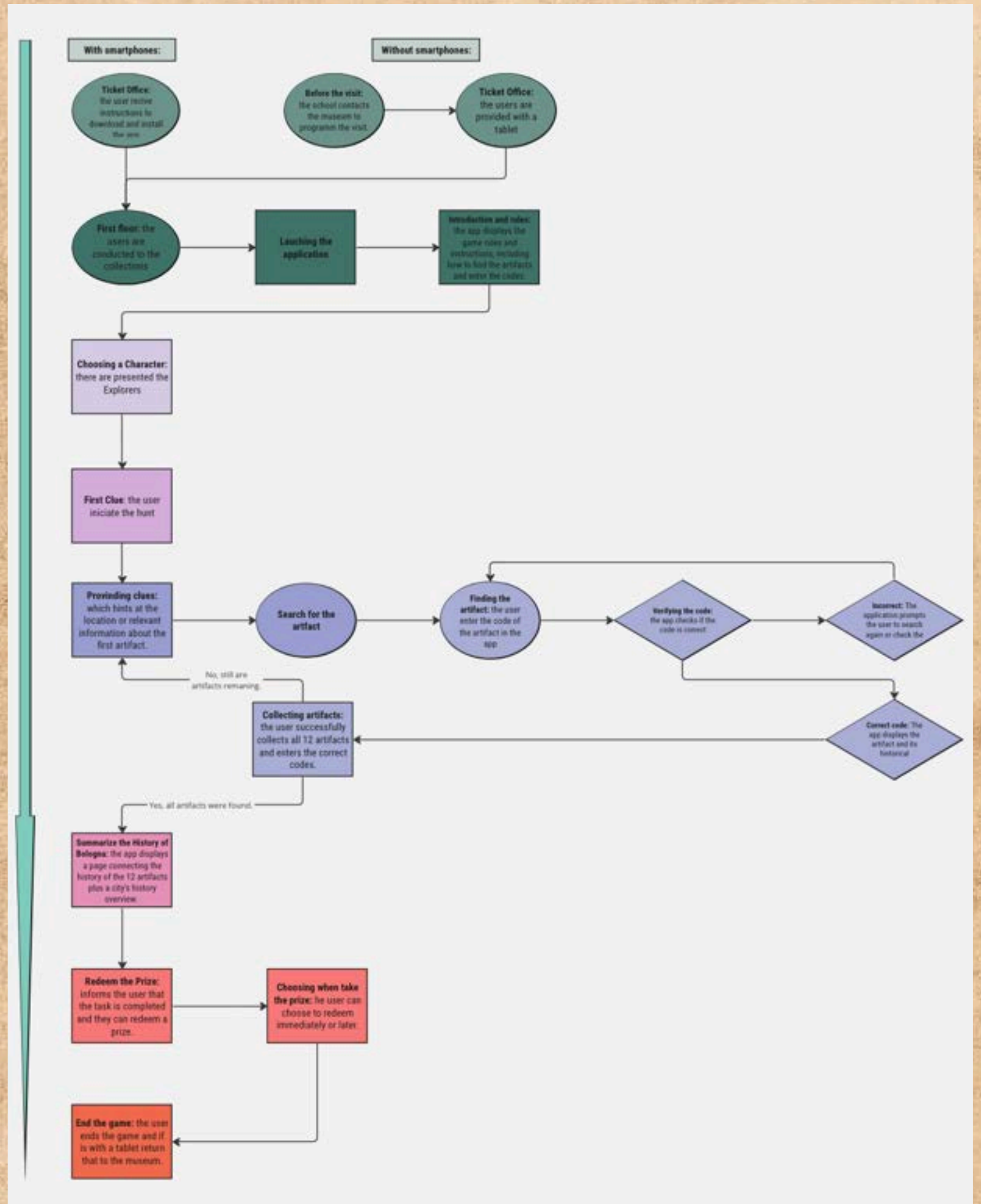
Figma

Acess **Figma** repositories

Wecome to
Museo Civico
Archeologico
of Bologna

Disruption

Schools are not informed about procedures

Accessibility adaptations

Loss of interest

Noise and other interferences

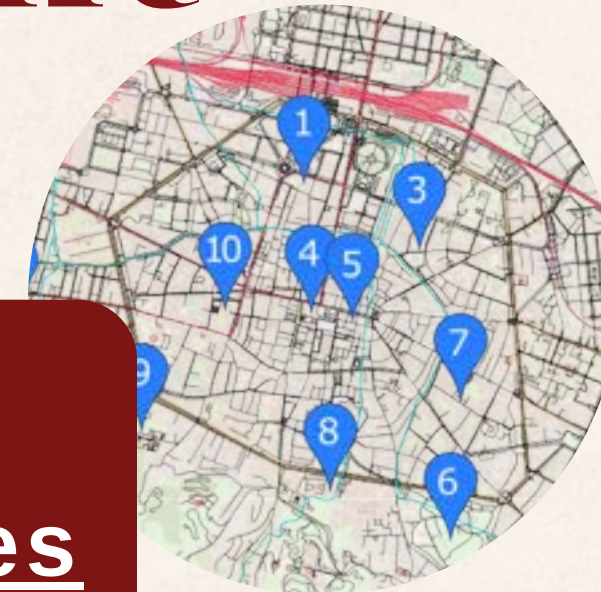Bugs, crashes, or compatibility issues

Insufficient devices

Wi-Fi issues

Further Development

Post visit

Treasure hunt inside Bologna though QRcodes

Sustainability

easy re-use - in different contexts

Connections

interconnection with other museums

Team Roles

Carla Menegat	Bibliographical research Image acquisition Workflow design Development of personas Development of characters
Rubens Fernandes Jr	Image acquisition Workflow design Twine development Maps design
Virginia D'Antonio	Bibliographical research Image acquisition Workflow design Development of characters
Zizhe Lin	Workflow design Figma application designs

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Thank you for listening!

We are open for questions.