

Museum App

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Overview

1 Intro

The Pinacoteca of Brera project focuses on giving a mix of a functional app and a game experience in which the Player is incentivized to explore both a virtual and the real Pinacoteca to collect and learn about the Paintings.

1.1 Objective

The Objective is to create an immersive virtual tour of the Pinacoteca in which the Player can interact with some of the Paintings from the real One and can read the story behind the Painting, the Painter or other curiosity about it, then the Player is incentivise to explore the real one for more information.

1.2 Gamification

The main elements of the Gamification are the Virtual Tour, the Augmented Tour at the Pinacoteca di Brera and rewards in different forms, this helps keep the Player engaged in both Tour.

1.2.1 Virtual Tour

The Player is able to explore a virtual recreation of the Pinacoteca (for now only the initial rooms), in which some of the paintings are on the walls and can be interacted with to see the details and play a game in which the Player is tasked to search and take from others paintings some items that they must position in the right spot in the correct painting.

This will unlock the painting in the Gallery, in which the Player is able to read and learn about it, this also gives a reward to personalize their account.

1.2.2 Augmented Tour

When going to the real Pinacoteca the Player can use this game to also interact with the real painting. If they have already unlocked it during the Virtual Tour they can scan the real one and learn even more information and an extra reward for their account.

1.2.3 Reward

As mentioned above the the Player is rewarded twice:

- Complete the minigame in the Virtual Tour.

- Scan the real painting in the Gallery.

The first one will grant an accessory to decorate the account icon, the second will grant a background banner for the account.

2 Research

At the start of the project the team is divided into different groups, each one is tasked with a different subject to research:

- Target Audience.
- Competitor & Inspiration.
- Paintings & History Art.

2.1 Target Audience

Research about which group of young people goes to the Pinacoteca in their free time and in which archetype they fall into, this will show us what the habit and what kind of experience both of the game and the app can help the Player understand and have a positive experience using the app.

2.2 Competitor & Inspiration

Research about similar museum apps with Gallery, Painting, Map and Home page for UI study, some references on structure, functionality and aesthetics.

Research about a similar Virtual experience with an explorable museum and interactable Paintings and augmented experiences.

2.3 Painting & History Art

Research about some of the paintings in the Pinacoteca and the history behind it, with a focus on why they are significant in the History Art.

3 Main Feature

There are 3 main feature:

- **Virtual tour & minigame:** the Player is able to explore and interact with the Paintings and is tasked with fixing the missing details by searching and picking them up in other Paintings.
- **Augmented tour:** the Player is also able to augment the visit of the Art Gallery during their visit on site.
- **Extensive description:** every Painting is accompanied by a page with info about its story, painter and importance in history.

4 Mood & Feel

The Player should relax and explore the museum calmly, trying to learn as much as they can while searching for each missing object and should be engaged by an easy to understand and execute puzzle, giving more chance to enjoy the actual Paintings.

4.1 User Interface

4.2 Virtual Exploration

5 Art

5.1 UI

5.2 Painting

5.3 Environment

Art

UI (Flowchart)

1 General info

1.1 Objective

1.2 Limitation

1.3 Accessibility

1.4 Inspiration

1.5 Style

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2 Framework

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2.3.6 Map Screen

2.3.7 Account Screen

2.3.8 Customization

3 HUD

3.1 Character

3.2 TextBox

3.3 Interaction

Mechanics ([Keyword](#))

1 Game Progression

1.1 Game Loop

1.2 Win Condition

1.3 Rewards

2 Movement ([Ref](#))

The *Player* is confined to move only from a *Checkpoint* to another.

2.1 Checkpoint

Every *Checkpoint* can be reached from any other *Checkpoint* that is *In Sight* with a quick *Press & Lift* on the corresponding **+Icon**.

2.2 Camera

The Player can move around the Camera along 2 axis, as the drawing below:

The Player can Press to initialize the Camera Rotation state.

2.2.1 Camera Rotation State

Horizontal Swipe of the Finger results in rotation around the Y Axis, following the inverse direction of the Swipe:

Left Swipe = Rotate to the Right (Clockwise).

Right Swipe = Rotate to the Left (Anti-Clockwise).

Vertical Swipe of the Finger results in rotation around the X Axis, following the same direction of the Swipe:

Swipe Up = Rotate to the Top (Clockwise).

Swipe Down = Rotate to the Bottom (Anti-Clockwise).

The Player can Press with another Finger to initialize the Camera Zoom state.

If Finger is Lifted return to Neutral state.

2.2.2 Camera Zoom State

3 Interactables

3.1 Checkpoint

3.2 Painting

3.3 Missing Object

4 Inventory

4.1 Gallery

4.1.1 Locked

4.1.2 Unlocked

4.1.3 Scanned

4.2 Account

4.2.1 Avatar

4.2.2 User's Data

Level

Sound