WANDERLOST

A PROJECT FOR THE
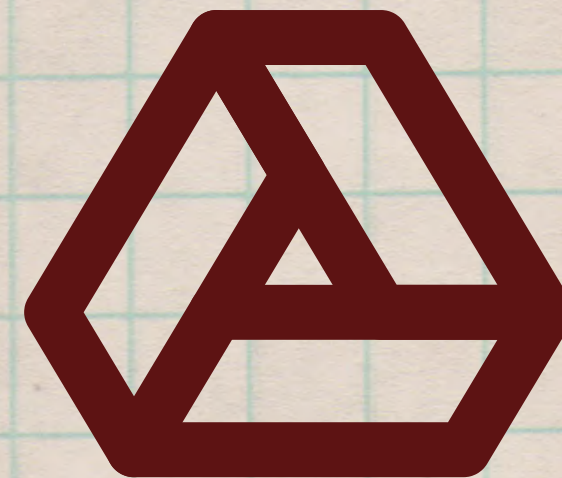DIGITAL HERITAGE AND MULTIMEDIA COURSE
(2021/2022)

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PREMISE

All the material developed for this project has been uploaded either on a **Github Repository** or on a dedicated **Google Drive** folder.

Both can be accessed through the links:

PROJECT OVERVIEW

Our project regards the implementation of a **single-user Virtual Reality on-site application** about **climate change** within **Palazzo Poggi** Museum (the "Chamber of Geography and Nautics")

THE IDEA

A selection of places to visit

Possibility to see changes both from above (satellite pictures) and from a point of view

TRAVEL THROUGH TIME AND SPACE

CLIMATE CHANGE AWARENESS

From globe to map in 2 emispheres to single continent

Nasa: Images of Change

Travelling on the "Chamber of Geography and Nautics"'s **ancient maps** and **witnessing** first-hand the **modifications** of the environment due to **climate change**

Virtual reality technology to enhance the immersivity and authenticity of the experience

The colour of the map could change with regards to the passing of time (from maps to modern globes)

Possibility to choose a favourite ship from the ones displayed and travel with a 3d reconstruction of it on the map

Digital Heritage and Multimedia (DHDK Master Degree at UniBo) - Ginevra Botto, Orsola Maria Borrini

THE MOODBOARD PREPARED AT THE BEGINNING OF THE DEVELOPMENT OF THE PROJECT

CONTEXT AND SCOPE

- Palazzo Poggi's **"Magna Charta Universitatum"** Room *(idea of crossing countries' borders!)*
- **"Chamber of Geography and Nautics"** Collection

- **Enhance** the "Chamber of Geography and Nautics" Collection
- Improve the **learning** experience
- Trigger a **behavioural change**

HOW?

Immersive, **authentic** and **engaging** experience, stimulating various **emotions** in the visitor (affection, excitement, worry and a sense of initiative) and set in an appropriate location for the **direct contact** with the assets

TARGET AUDIENCE AND CONCEPT

Tourists (both Italian and foreign), representing "the common people"

Raising awareness among common people is fundamental to address the issue of climate change

Having the right mindset (change empathy)

Knowing what to do (final brochure)

A VR experience **enhancing education** with **little interaction** (guided by an accompanying **voice**) and based on a **selection of objects** from the "Chamber of Geography and Nautics"

HQ Photographs   **3D reproductions**
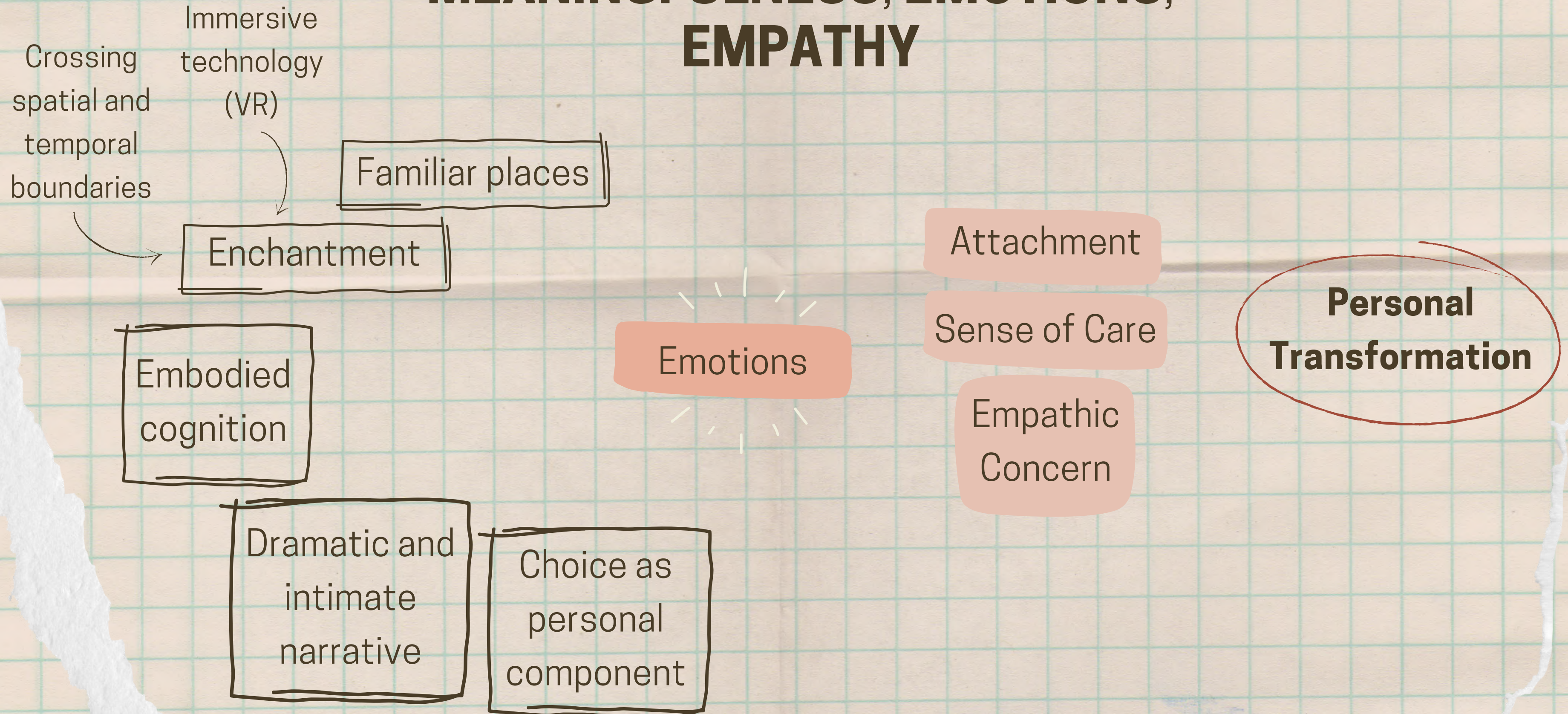
Interactive digital environment

These technologies allow for a different connection with the Cultural Heritage objects

THE CONCEPT

NEED	EDUCATION
EXAMPLE	Guided browsing within a potential learning environment
TECHNOLOGY	Virtual Reality experience based on HQ images, 360 interactive panoramas and 3D reproductions
CONTENT	Digital images, texts, audio (soundtrack and guiding artificial voice), 3D models. The digital objects are reproductions of the maps, the naval models and the globe displayed in the physical exhibition
VIRTUAL/REAL	Virtual on real
VISITORS EXPERIENCE	Surprising and provocative for both the casual and the greedy visitor

WanderLOST described through Caraceni's taxonomy (2014).

THE COGNITIVE FOCUS:
MEANINGFULNESS, EMOTIONS, EMPATHY

Crossing spatial and temporal boundaries

Immersive technology (VR)

Familiar places

Enchantment

Embodied cognition

Dramatic and intimate narrative

Choice as personal component

Emotions

Attachment

Sense of Care

Empathic Concern

Personal Transformation

PACT FRAMEWORK

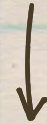**P**EOPLE

ACTIVITIES

CONTEXT

TECHNOLOGIES

Tourists
(representing
"common people")

Development of
two **personas**

Experience
**inoperable by
people** with **visual
empairment**

Single-user
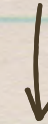
**Simple
interactions**

Known and
**peaceful
environment**

**Occasional
activity** (max. 3
reps)

Brochure as **follow-up**

Spatious and
quiet museum's
room

Accessible

Presence of
assistance

**Restrictive
opening
hours**

VR technologies

Prototype: 360
panoramas

Immersive **virtual
reproductions** of
existing places

3D reproductions
of the **museum's
objects**

*Research
will be
needed!*

THE EXPERIENCE

Virtual reconstruction of "Chamber of Geography and Nautics" Presence of a **guiding voice**

Choosing the vessel

Moving towards Coronelli's globe Instructions from the voice "Throwing" the ship on it
Choose the type of adventure

Virtual **reconstruction** of the selected **location in the past** Intervention of the **voice**

Continent map unscrolls (placeholders pinned on it)
Choose the location

Two-emipsheres map unscrolls
Choose the continent

Globe starts spinning and **randomly** selects a continent and a location

Virtual **reconstruction** of the selected **location in the present** Intervention of the **voice**

Virtual **reconstruction** of the selected **location in the future** Intervention of the **voice**: **provocative questions**
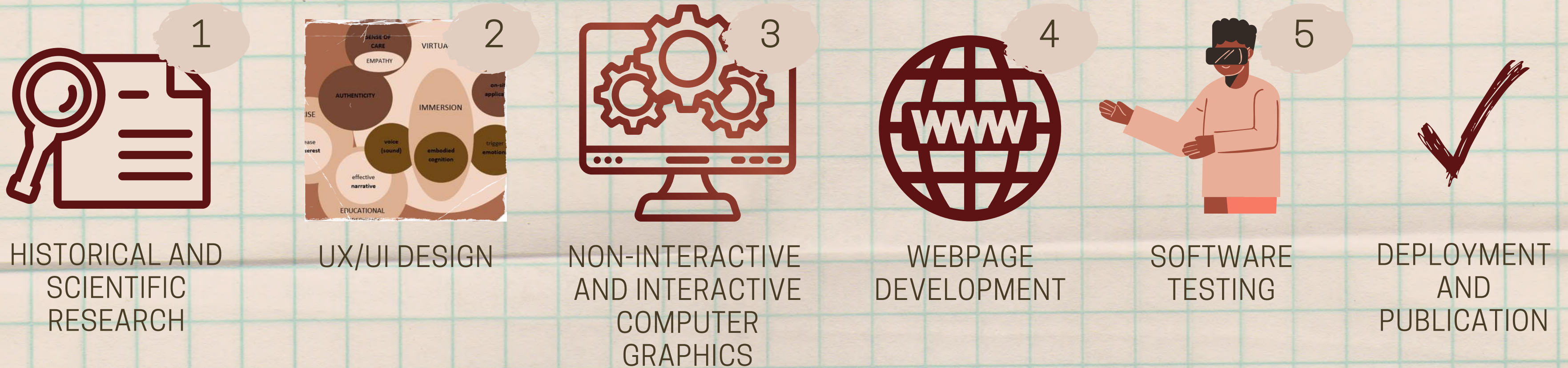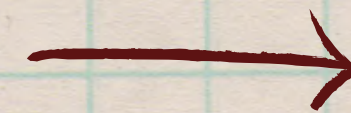
Repeat the experience? [Y/N]

TWINE

Brochure on the experience with follow-up actions to implement in day to day life

FORESEEN WORKFLOW

1 HISTORICAL AND SCIENTIFIC RESEARCH

2 UX/UI DESIGN

3 NON-INTERACTIVE AND INTERACTIVE COMPUTER GRAPHICS

4 WEBPAGE DEVELOPMENT

5 SOFTWARE TESTING

DEPLOYMENT AND PUBLICATION

Periodical maintenance following the progressive development of Climate Change ⟶ EVERY **5 YEARS** OR SO!

SUPPORTING MATERIALS
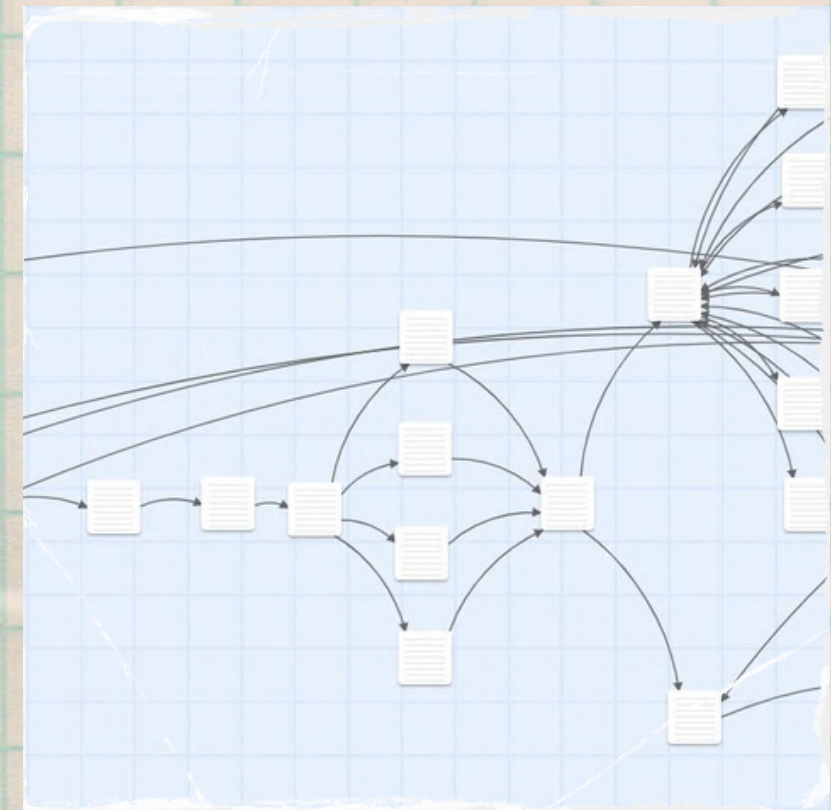

360 PANORAMAS

PTGui

CLICK HERE

Choose to travel to Europe
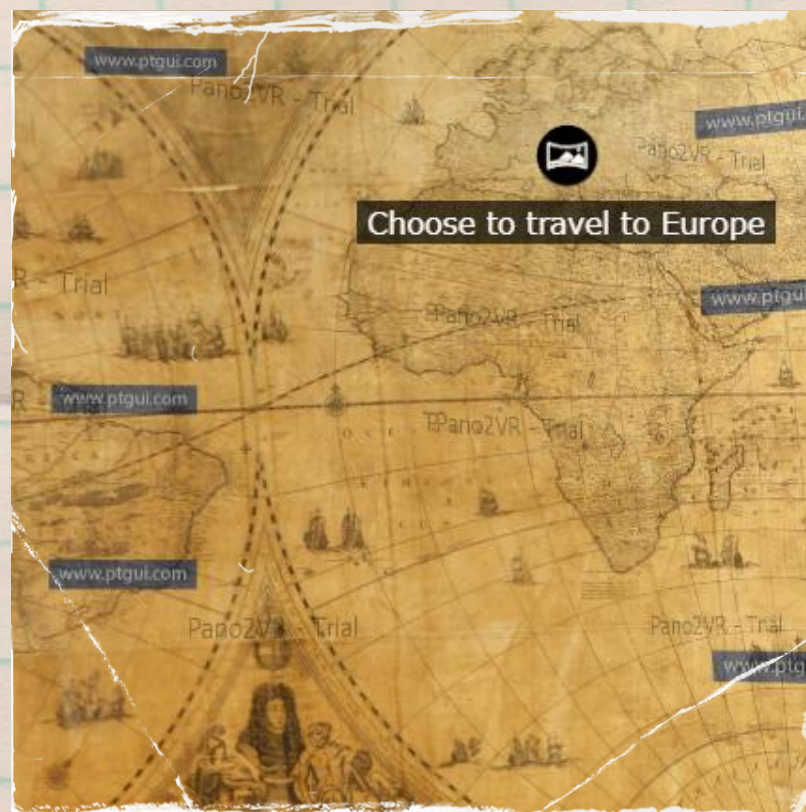
360 INTERACTIVE PANORAMA

PANO2VR

INTERACTIVE STORY

Twine

CLICK HERE

THE SUPPORTING MATERIAL CAN BE FOUND EITHER IN THE GITHUB REPOSITORY OR IN THE DEDICATED GOOGLE DRIVE FOLDER

Thank You