



# Automated Artwork **Metadata Generation** using Multimodal LLM

Andò S. - Baldi F. - Cozzone R.

# PROJECT GOALS



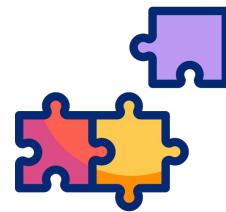
-  Developing an AI-driven tool that automatically generates metadata for new paintings
-  Supports accurate documentation
-  Enables broader access to artistic content creating value through automation and creativity



# VALUE PROPOSITION



Improve efficiency in  
art management



Enable Structured  
Art Data



Preserve Cultural  
Heritage

# SDG 2030



**4** QUALITY  
EDUCATION



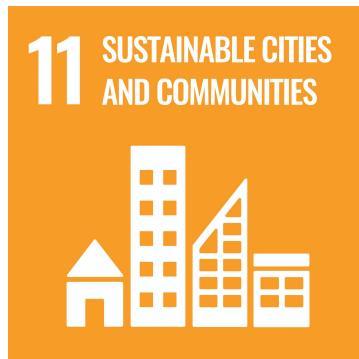
ENHANCES  
CULTURAL  
KNOWLEDGE



**9** INDUSTRY, INNOVATION  
AND INFRASTRUCTURE



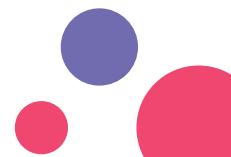
INCREASE  
ACCESS TO  
INFORMATION



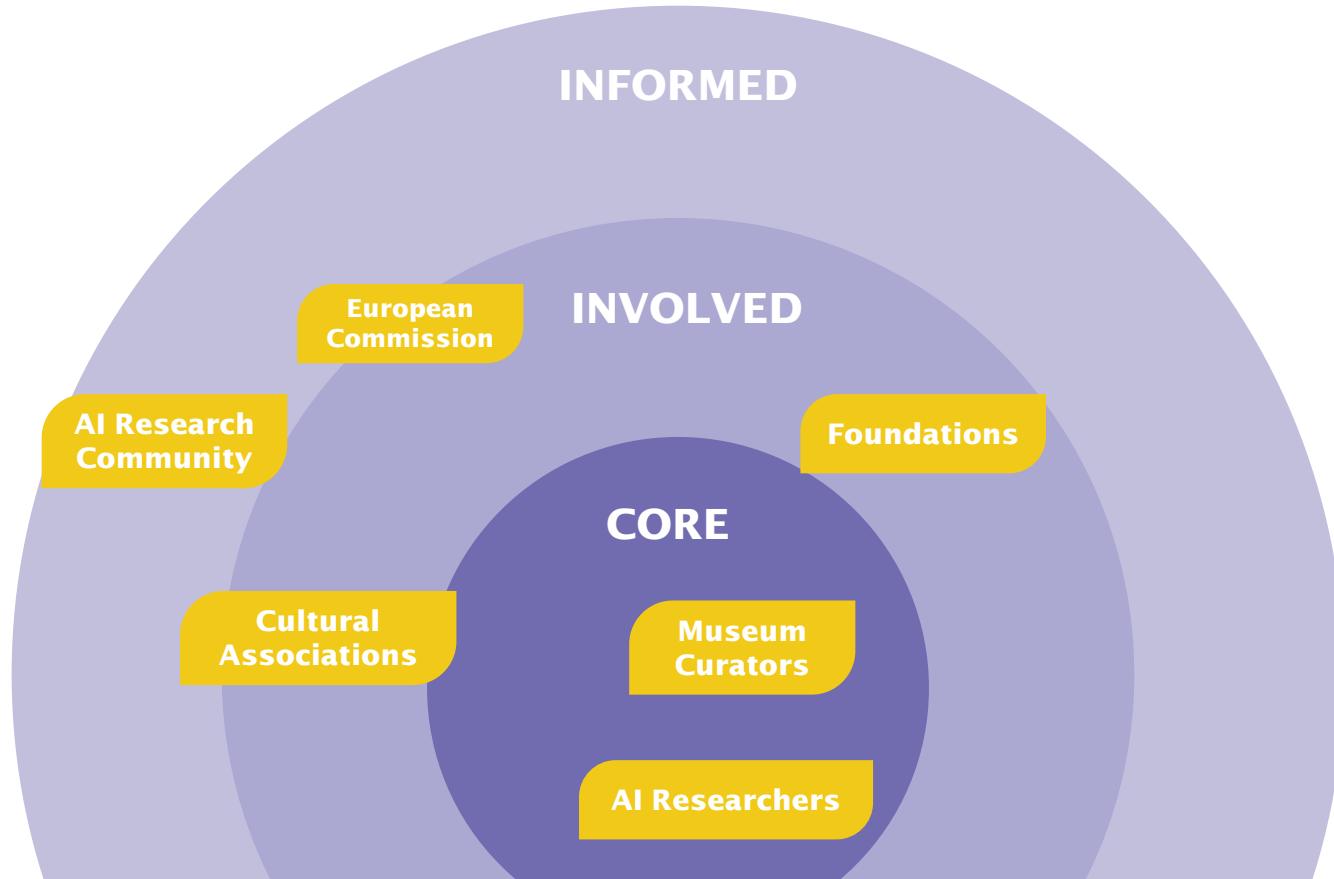
**11** SUSTAINABLE CITIES  
AND COMMUNITIES



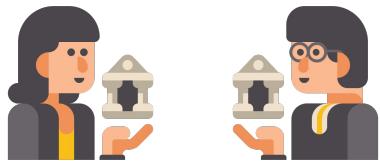
PROTECT THE  
WORLD'S  
CULTURAL  
HERITAGE



# STAKEHOLDERS MAP



# PERSONAS



## Curators

Use the AI model to document new artworks and complete missing metadata, simplifying cataloguing and improving data accuracy.



## AI Researchers

Refine and evaluate the AI model, enhancing its understanding of visual and textual art information.

# FUNCTIONAL REQUIREMENTS



Generation of metadata-based answers from an image



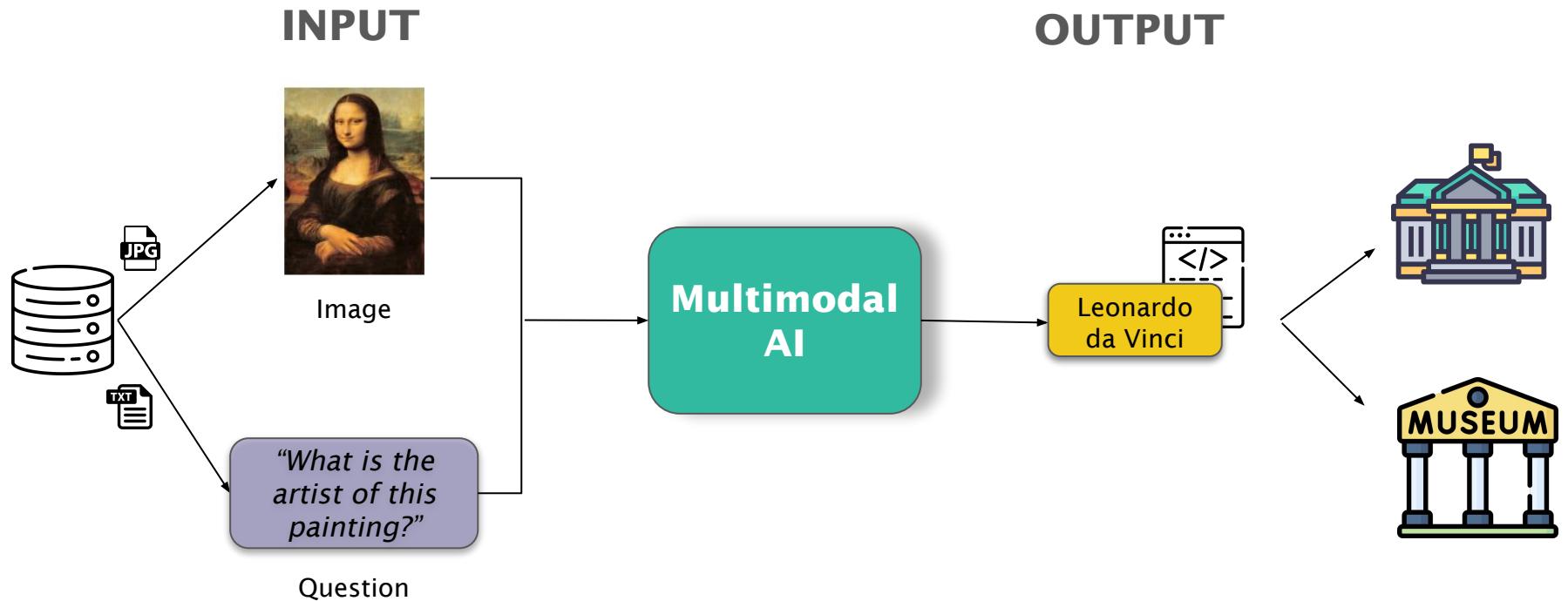
Efficient adaptation techniques for adapting the multimodal model and evaluating its ability to generalize to new or unseen data



Allow expert to provide feedback on generated metadata

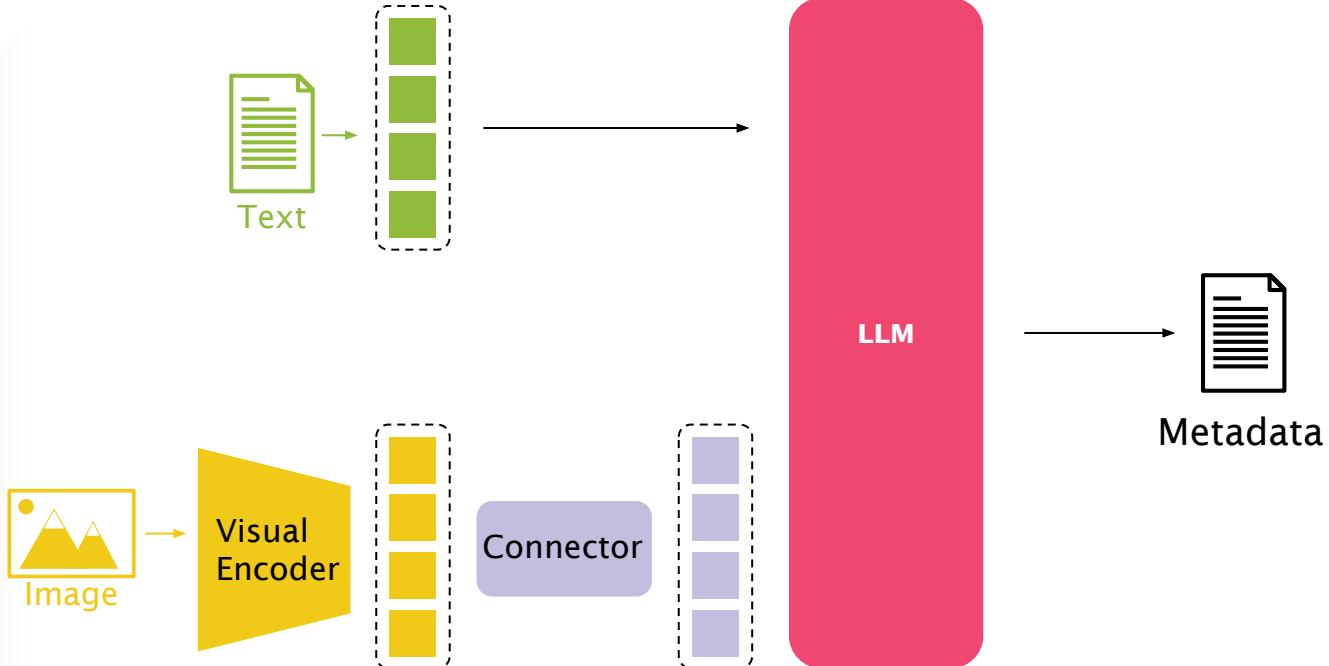


# FUNCTIONAL DIAGRAM



# FUNCTIONAL DIAGRAM

Multi  
modal  
AI



# MANAGEMENT

## DESIGN

---

1. Define project objectives
2. Identify Stakeholders and Personas
3. Functional requirements
4. Functional Diagram

## MANAGEMENT

---

1. Define work packages
2. Create project timeline
3. Assign task duration

## DEVELOPMENT

---

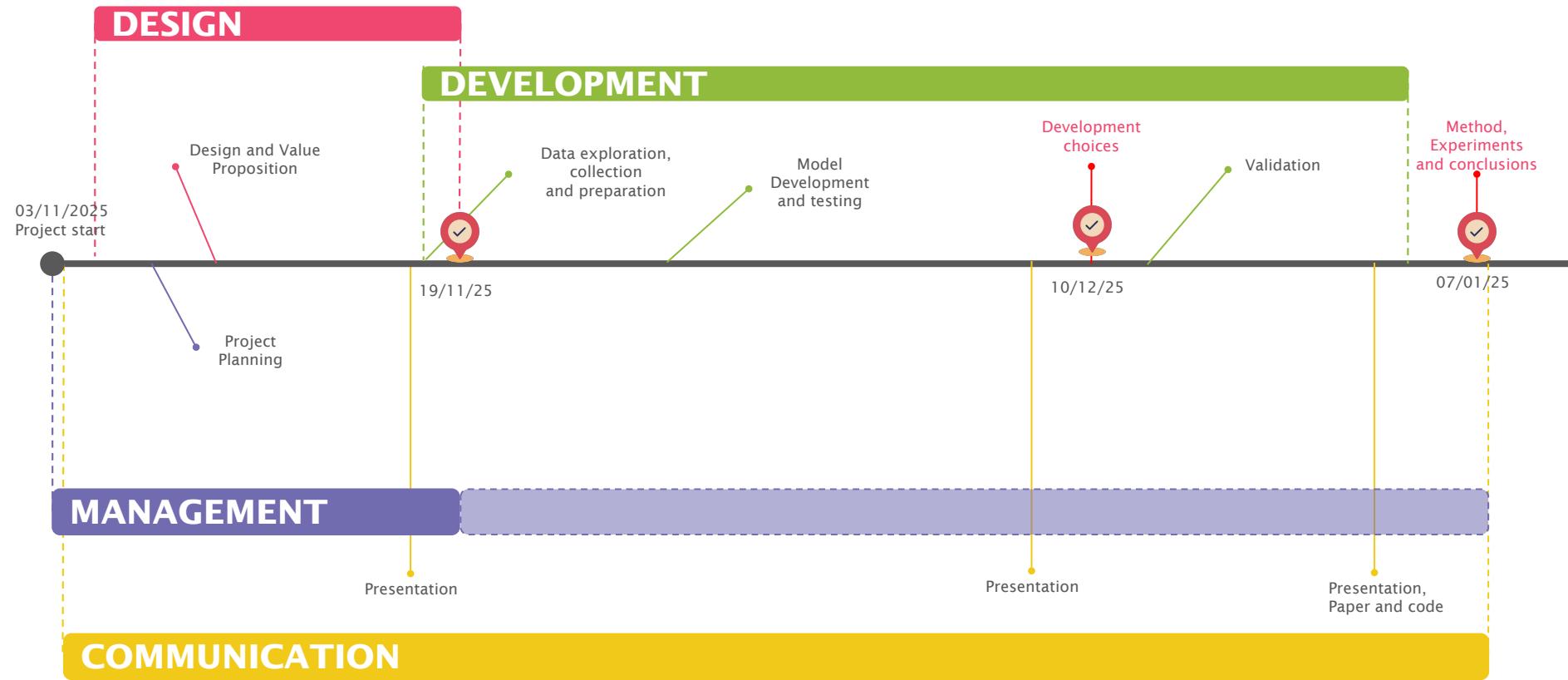
1. Data exploration
2. Data collection and Preparation
3. Model Development
4. Testing & Validation

## COMMUNICATION

---

1. Technical documentation
2. Presentation and Paper
3. Project outputs

# TIMELINE





# THANK YOU

# APPENDIX

# GANTT