



Automated Artwork **Metadata Generation** using Multimodal LLM

Andò S. - Baldi F. - Cozzone R.

PROJECT GOALS



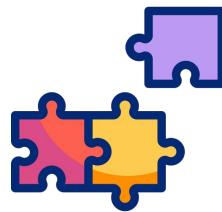
-  Developing an AI-driven tool that automatically generates metadata for new paintings
-  Supports accurate documentation
-  Enables broader access to artistic content creating value through automation and creativity



VALUE PROPOSITION



Improve efficiency in
art management



Enable Structured
Art Data



Preserve Cultural
Heritage

SDG 2030



4 QUALITY
EDUCATION



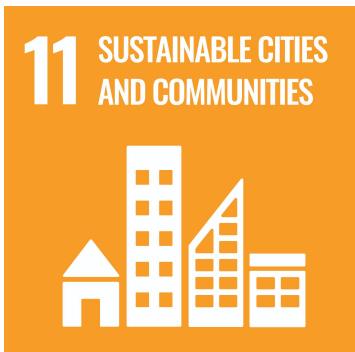
ENHANCES
CULTURAL
KNOWLEDGE



9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE



INCREASE
ACCESS TO
INFORMATION



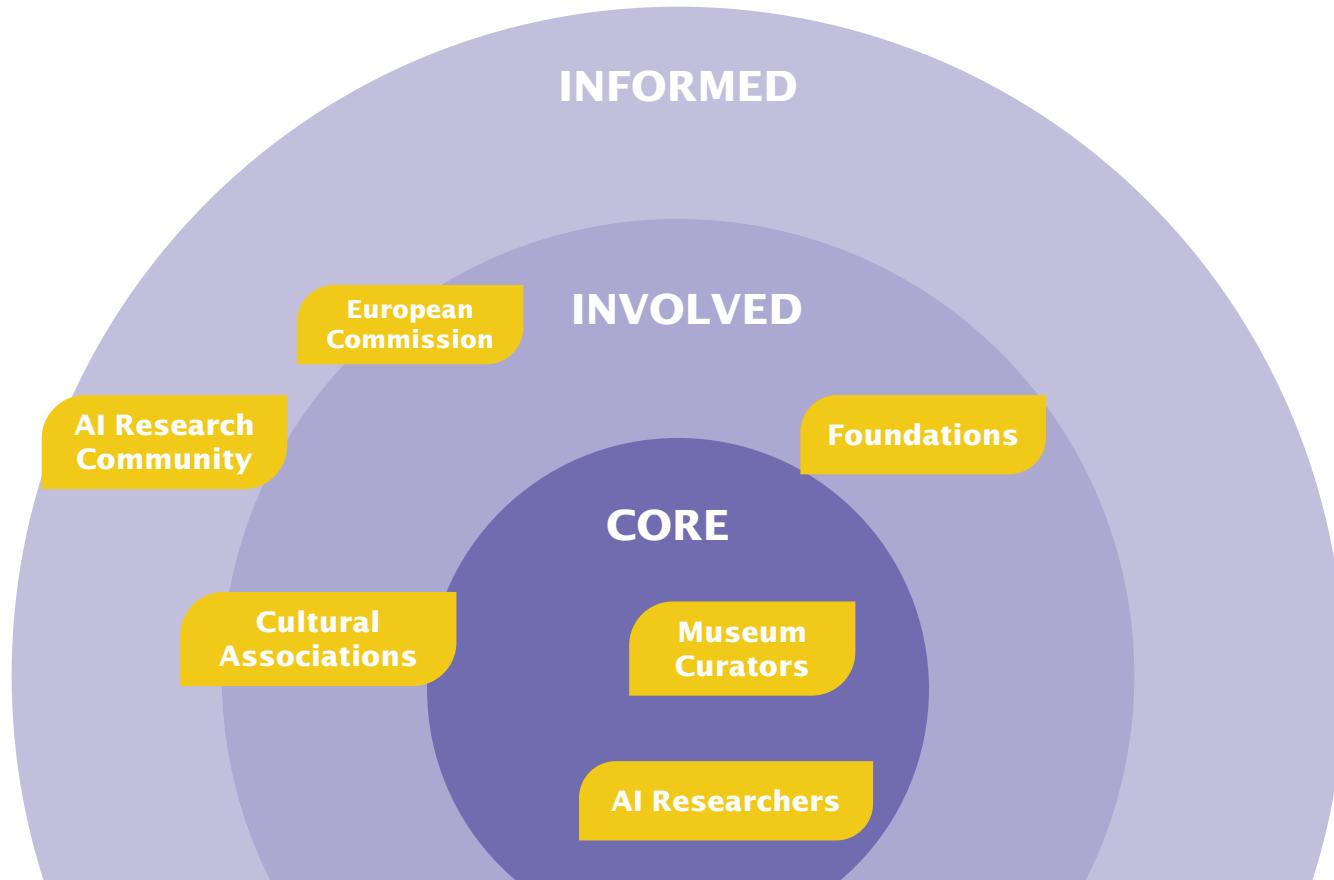
11 SUSTAINABLE CITIES
AND COMMUNITIES



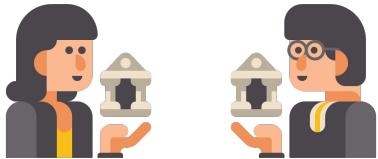
PROTECT THE
WORLD'S
CULTURAL
HERITAGE



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.

USER REQUIREMENTS



Generation of metadata-based answers from an image



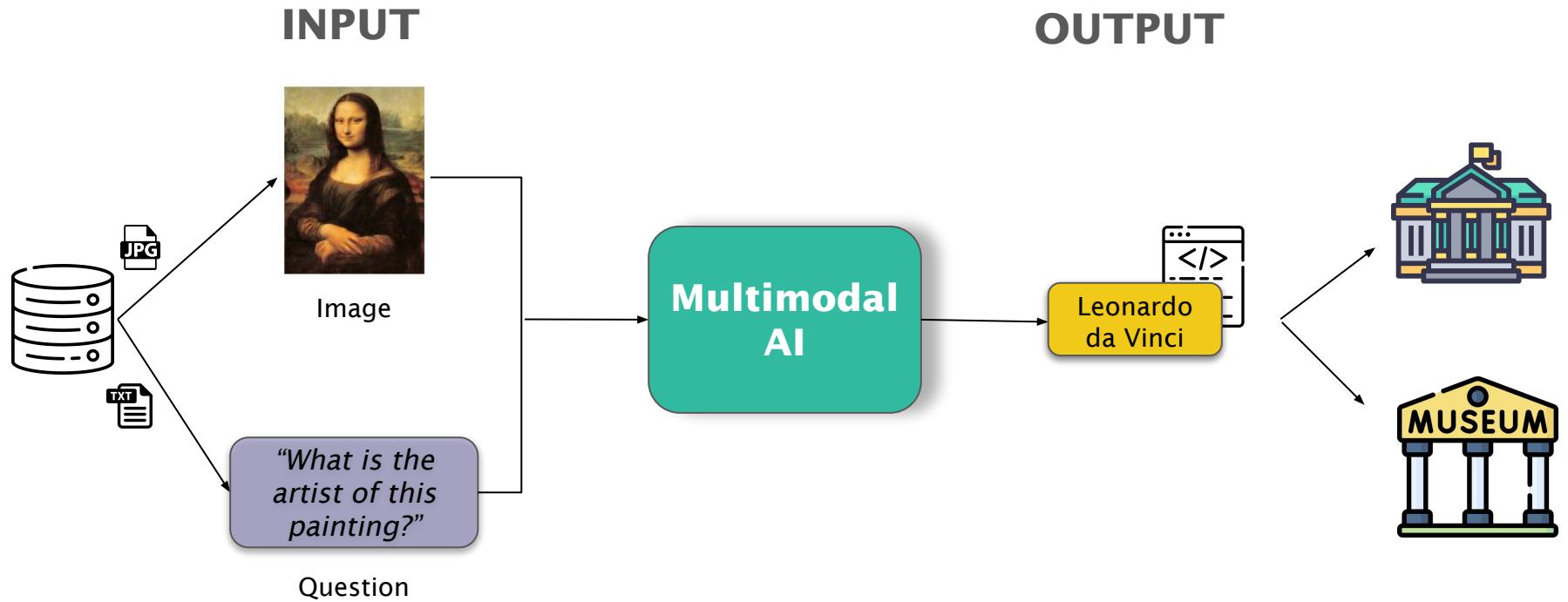
Efficient adaptation techniques for adapting the multimodal model and evaluating its ability to generalize to new or unseen data



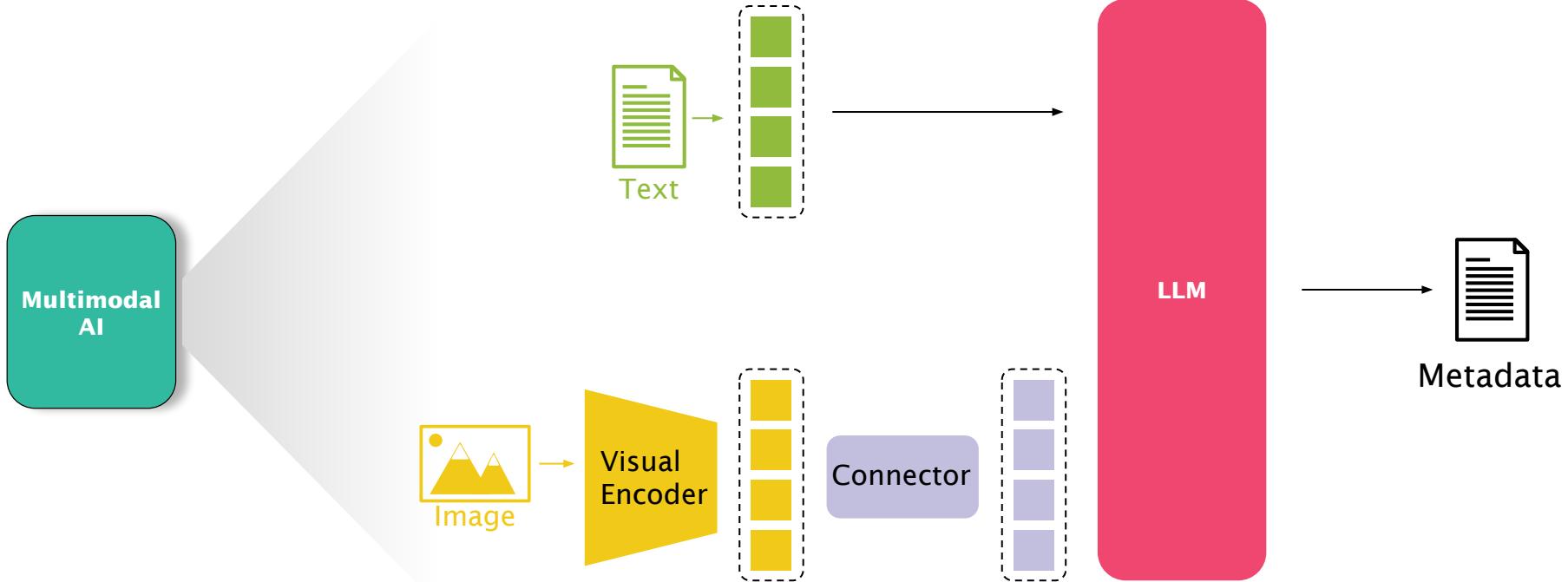
Allow expert to provide feedback on generated metadata



FUNCTIONAL DIAGRAM



FUNCTIONAL DIAGRAM



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

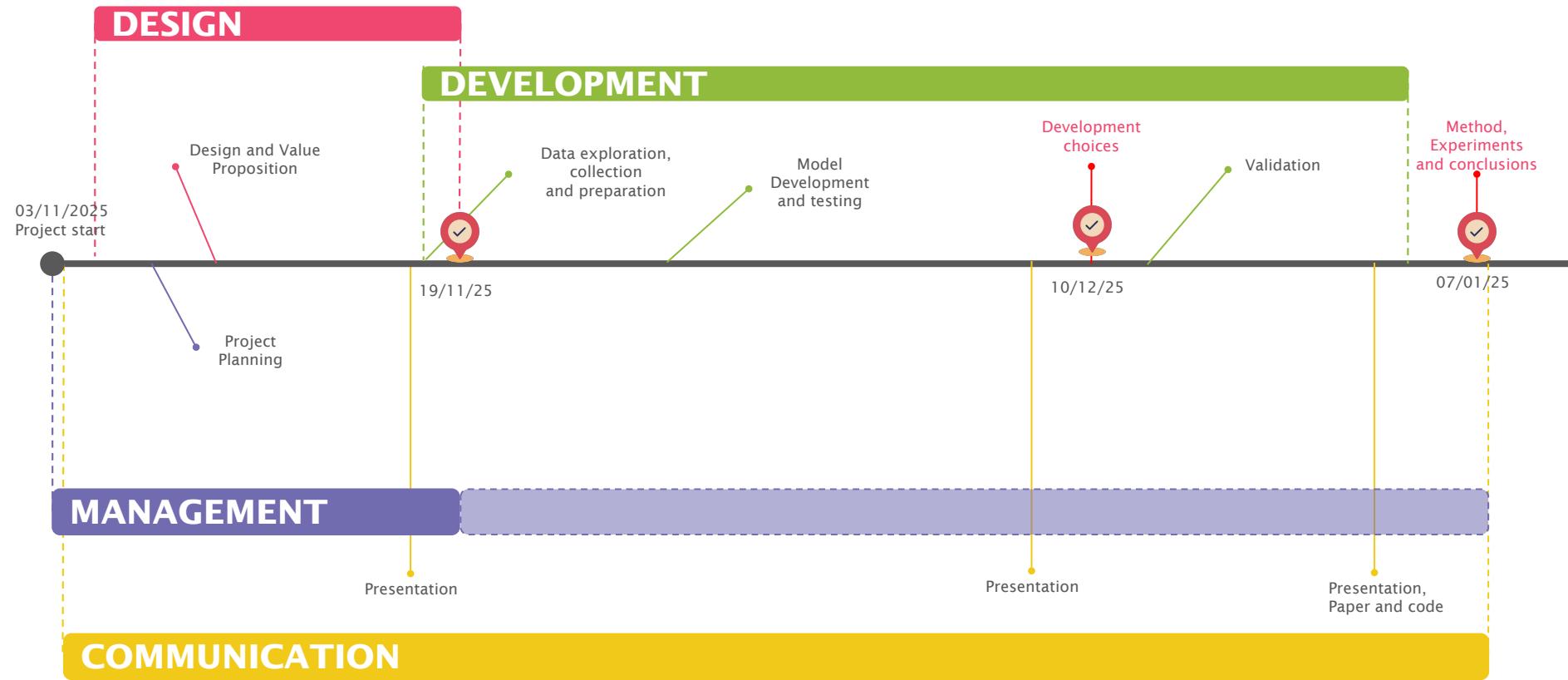
DEVELOPMENT

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

WORK PACKAGES

WP No.	WP Title	Lead Name	Person Month (PM)	Start Month	End Month
1	Project Planning	R. Cozzone	1.4	11	1
2	Design and Value Proposition	F. Baldi	0.7	11	11
3	Communication	R. Cozzone	1.4	11	1
4	Data exploration, collection and preparation	F. Baldi	0.7	11	11
5	Model development and testing	S. Andò	0.7	11	12
6	Validation	S. Andò	0.7	12	1
Total			5.6		