



Zorya

M1: Lifecycle objectives and calendar for the project

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OUR TEAM



João Varela
Architect / DevOps
Developer



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DevOps Master
Developer



Henrique Oliveira
Product Owner
Developer



Raquel Vinagre
UI Designer
Developer



Carolina Prata
Team Manager
Developer



OUR TEAM



Luís Bastião
Supervisor



Carlos Costa
Co-Supervisor



CONTEXT



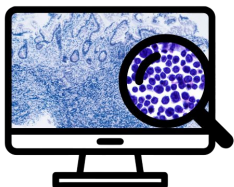
Digital Pathology field is rapidly evolving,
requiring efficient solutions

Incorporation of existing AI models

Stakeholders: Doctors, medical institutions,
researchers

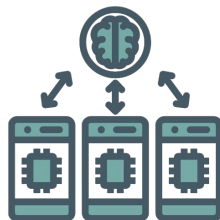


PROBLEM



Digital pathology faces challenges in data management

The increasing volume of high-resolution medical images requires efficient storage, retrieval, and analysis solutions



Lack of datasets in the field of digital pathology

Researchers aim to create new algorithms and continuously improve their workflow quality but the lack of datasets makes it difficult to train these algorithms



Lack of user-friendly interfaces

An easy-to-use system designed to store, process, and share pathology images, supporting AI-driven diagnostics and federated learning methodology

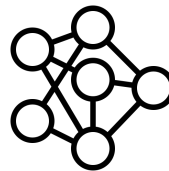


GOALS



Manage Digital Pathology Images

Cell types, organs, tissue type, stainings...



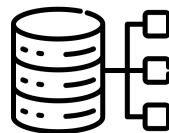
Catalog of Algorithms

Organs, tissue type, staining



Matchmaking algorithms

For specific Digital Pathology images



Organize Digital Pathology Datasets

By institutions and researches

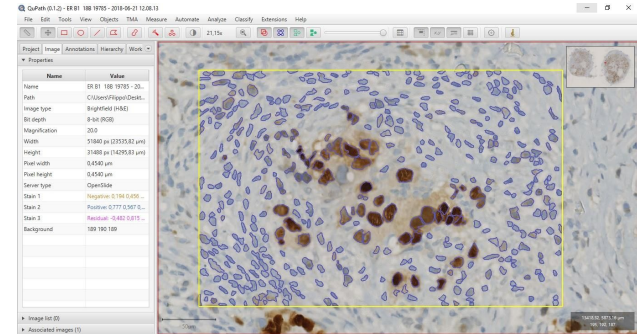
RELATED WORK



QUPATH

<https://gupath.github.io/>

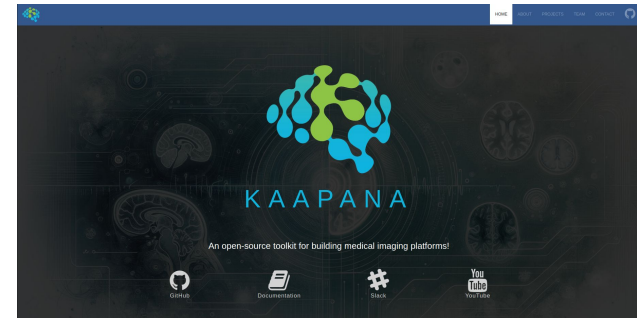
Open-source software for digital pathology image analysis



KAAPANA

<https://www.kaapana.ai/>

Open-source toolkit for building medical imaging platforms





EXPECTED WORK



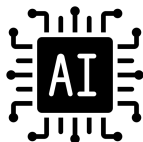
User
Interface



Zonal Image
Grouping



Dicom Image
Processing



AI models
Integration



Centralized
Database

PROJECT CALENDAR



17 PI Calendar

Calendar view +

Phase	Focus	Description	Tasks	Modules	Start Date	Due Date	Assignee	State	
Inception	Project initiation (define the concept, goals, requirements, expected functionality)		<ul style="list-style-type: none"> - Project presentation - Project calendar - Communication plan 	Frontend Architecture Backend	18/02/2025	25/02/2025	Everyone	In progress	
Inception	Documentation website Development	The website will serve as a communication platform, providing up-to-date project information, key elements, and continuously updated documentation.	<ul style="list-style-type: none"> - Main information about the project - Reports - Minutes - About us - Deployed 	Frontend Deployment	12/02/2025	25/02/2025	Raquel Carolina Diogo João	In progress	
Inception	Presentation Planning			Presentation	17/02/2025	24/02/2025	Henrique Carolina	In progress	
Inception	Milestone 1	Presentation of the lifecycle objectives and calendar for the project		Presentation	18/02/2025	25/02/2025	Everyone	In progress	
Elaboration	Existing Technologies Research				25/02/2025	04/03/2025	Everyone	Not started	
Elaboration	Relationships between Entities			Database Product Specification	25/02/2025	27/02/2025	Henrique	Not started	
Elaboration	DER and ER Design			Database	27/02/2025	02/03/2025	Henrique Diogo	Not started	
Elaboration	Functional and non-functional requirements			Product Specification	27/02/2025	04/03/2025	Raquel João	Not started	
Elaboration	Use Cases			Product Specification	01/03/2025	05/03/2025	Carolina	Not started	
Elaboration	Mock-Ups Design			Prototype	02/03/2025	09/03/2025	Raquel Carolina	Not started	
Elaboration	Architecture Definition			Architecture	02/03/2025	09/03/2025	João Diogo Henrique	Not started	
Elaboration	Presentation Planning				01/03/2025	10/03/2025	Everyone	Not started	
Elaboration	Milestone 2	Presentation of the lifecycle architecture	<ul style="list-style-type: none"> - Detailed State-of-Art - Functional and non-functional requirements 	Presentation	25/02/2025	11/03/2025	Everyone	Not started	

PROJECT CALENDAR



Construction	Database Construction				11/03/2025	19/03/2025	Henrique	● Not started
Construction	Website Skeleton Development			Frontend	11/03/2025	15/03/2025	Diogo	● Not started
Construction	API Development			Backend Frontend Testing	14/03/2025	21/03/2025	Everyone	● Not started
Construction	✓ CheckPoint				25/03/2025	25/03/2025	Everyone	● Not started
Construction	🕒 Milestone 3	Presentation of initial operational capability		Presentation	08/04/2025	08/04/2025	Everyone	● Not started
Construction	Consuming API			Frontend Backend	08/04/2025	22/04/2025	Carolina Raquel	● Not started
Construction	Tools Integration			Backend Frontend Database	15/04/2025	30/04/2025	João Diogo	● Not started
Construction	Technical Report			Product Specification	08/04/2025	29/04/2025	Everyone	● Not started
Construction	✓ CheckPoint				06/05/2025	06/05/2025	Everyone	● Not started
Construction	Usability Testing			Testing	06/05/2025	13/05/2025	Henrique Raquel	● Not started
								● Not started
Construction	Testing and Quality Assurance			Testing	06/05/2025	26/05/2025	Henrique João	● Not started
Construction	✓ CheckPoint				20/05/2025	20/05/2025	Everyone	● Not started
Transition	Students@deti	Presentation to DETI	- Poster - Promotional Video - Demo		27/05/2025	27/05/2025	Everyone	● Not started
Transition	🕒 Milestone 4	Final Presentation		Presentation	03/06/2025	03/06/2025	Everyone	● Not started



Documentation Website



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[GitHub](#)

ILLUMINATING THE FUTURE OF PATHOLOGY

Bringing light to every cell

Zorya is a Web Platform for data lakes and exploration of artificial intelligence for Digital Pathology.

[Get Started](#)

[Learn more](#)

<https://zorya-docs.github.io/>