

the new UC Digitalis ecosystem



UNIVERSIDADE DE
COIMBRA

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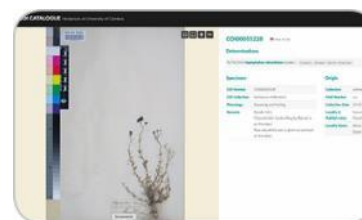
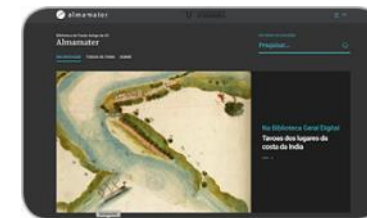
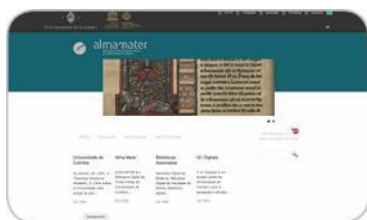
Strategic Planning

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Strategic Planning

Existence of resources that do not communicate with each other and do not allow an aggregate search.

Resources dispersed across multiple systems.



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Context

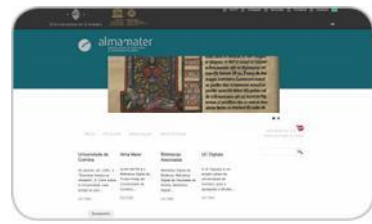
UC Digitalis > today connected publications

OJS
Editorial / production process

●

●

lack automatic
migration process



AM
ALMA MATER
Old Document
Repository



PB
POMBALINA
Book
Repository



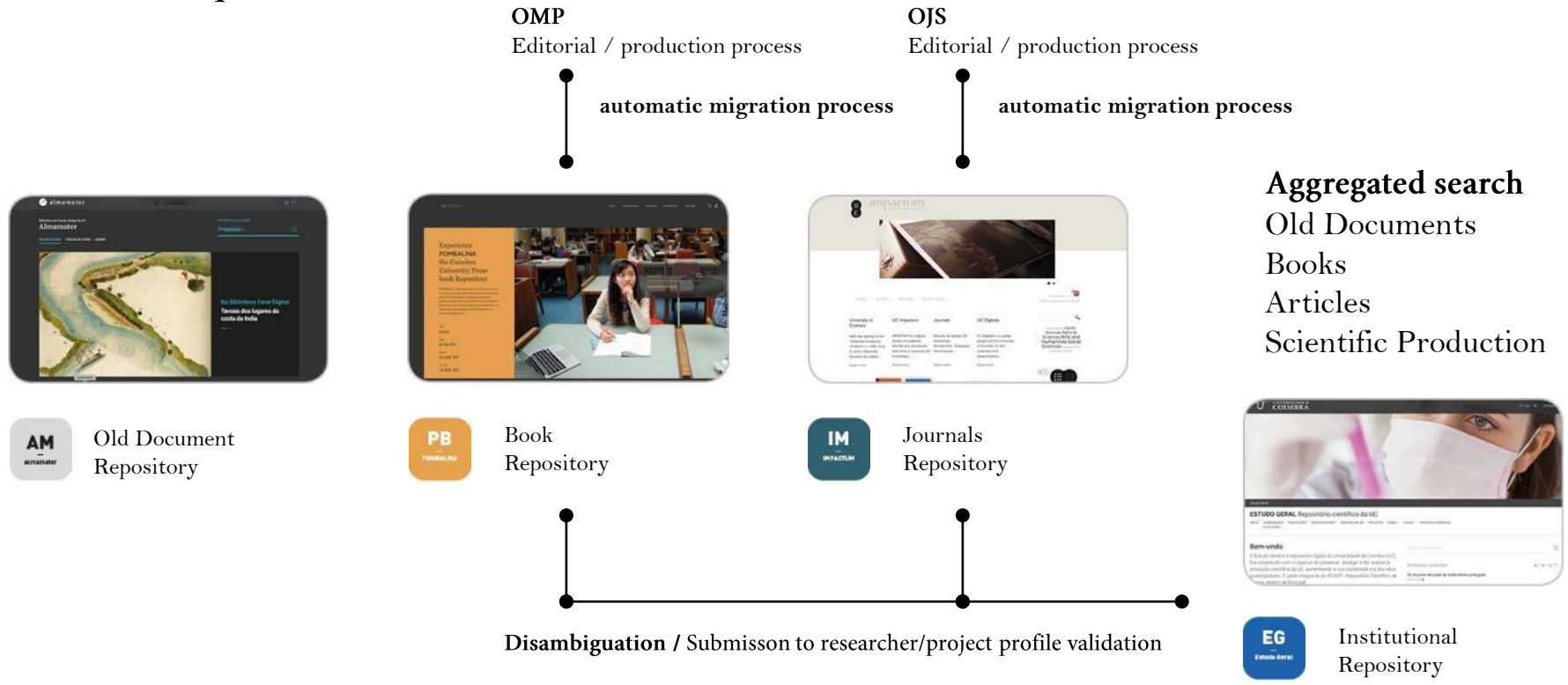
IM
IMPACTUM
Journals
Repository

Aggregated search
Old Documents
Books
and articles

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Context

UC Digitalis > tomorrow connected publications



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Context

Aggregate all resources, and make them globally searchable in one point.

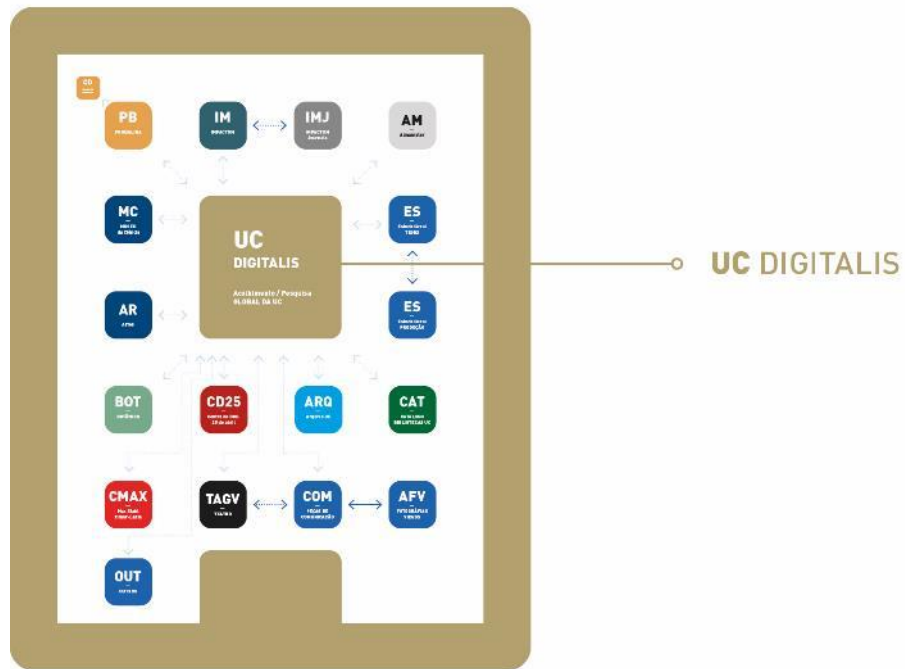
Return resources to the University Infrastructure, promoting the use of Open Source Software.

Make all resources FAIR.

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Motivation



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Motivation



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connect publications
with other types
of **research outputs**

Journals

Editorial / production process

managed by OJS

integrated in UC Digitalis [Dspace]

Archive / Search / Disambiguation

In Global Institutional Repository via Impactum

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UC Digitalis ecosystem

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connect publications with other types of research outputs > **Journals**

Books

Editorial / production process

managed by OMP (under test)

integrated in UC Digitalis [Dspace]

Archive / Search / Disambiguation

In Global Institutional Repository via Pombalina

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connect publications with other types of research outputs > **Books**

Journals / Books

Editorial / production process

both **Disambiguate** > **ORCID / DOI**

Submit Publications to researcher/project profile validation
in Digital Repository for the Scientific Production

Best management of editorial process

Controlled process of production

Record of originals to further publishing

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connect publications with other types of research outputs > **Journals / Books**

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the **new AlmaMater**
digital library

Weaknesses & Threats

Different type of software

Maintenance of current systems

The **quality** and the **amount** of data

Technical **complexity** of the new systems solution

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The new AlmaMater digital library > **Weaknesses & Threats**

Opportunities & strengths

UC Heritage visibility/findability
Reusing data and metadata contents
New applications support
Data provider
Solution for **multiple type of contents**

Single infrastructure for digital contents
Local maintenance
Use of **open standards**
Open source components
Interoperability

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The new AlmaMater digital library > **Opportunities & strengths**

Requirements

Modular architecture for sharing different components

Management and display for **multiple type of contents**

Scability for large amount of data

Open source software

Alignment with **European guidelines for Open Science**

Compliance with **FAIR** principles

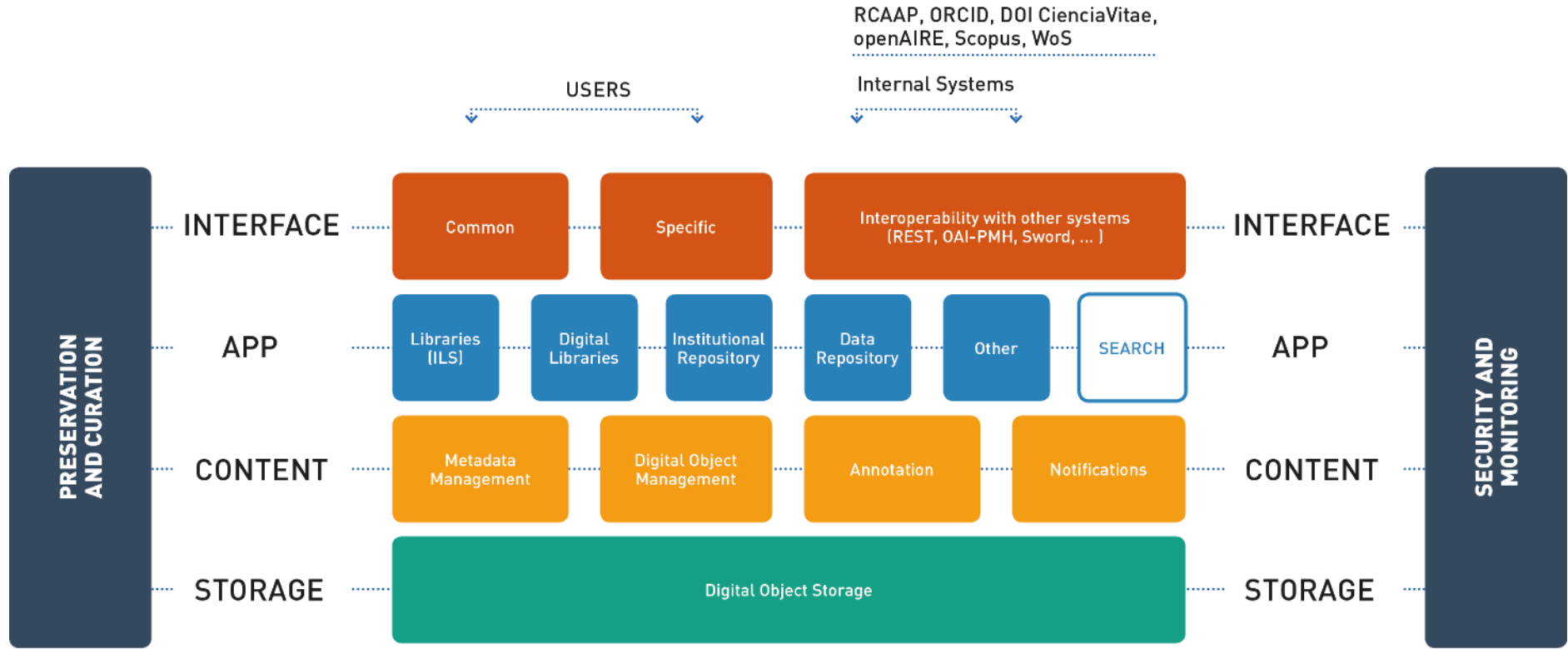
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The new AlmaMater digital library > **Requirements**

Architecture



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The new AlmaMater digital library > **Architecture**

AlmaMater > Backend

Edit Item

PLEASE NOTE: These changes are not validated in any way. You are responsible for entering the data in the correct format. If you are not sure what the format is, please do NOT make changes.

Item Data	
Item internal ID	43634
Handle	123146/0010112
Last modified	23 Aug 2015 15:47:14
In Collections	Ciò che non si trova
Item page	http://hdl.handle.net/10320/0010112

Scheme	Element	Qualifier	Value	Language
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dc	date	xxxxxx:ondf	2013-04-22T14:01:10Z	
dc	date	xxxxxx:ondf	2015-01-12T12:46:54Z	
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dc	identifier	uri	http://hdl.handle.net/10320/0010112	
dc	identifier	uri	http://hdl.handle.net/10320/0010112	
dc	identifier	uri	http://digital.library.ucp.pt/bitstream/10320/0010112/1/0010112.tif	pt
dc	description	xxxxxx:ondf	Made available in DSpace on 2013-04-22T14:01:10Z. No. of bitstreams: 1 0010112.tif: application/tif	en
dc	description	xxxxxx:ondf	Made available in DSpace on 2015-01-12T12:46:54Z. No. of bitstreams: 1	en

Admin Tools

- Edit (Submission mode)
- Edit (Admin mode)
- Export Item
- Export (Migrate) Item
- Export metadata

Duplicate 1

Google Scholar Check

User Tools

- Claim Publication

File Item

Description	Size	Format
L28_001_caba_03f	688K	\$1.45 MB TIFF

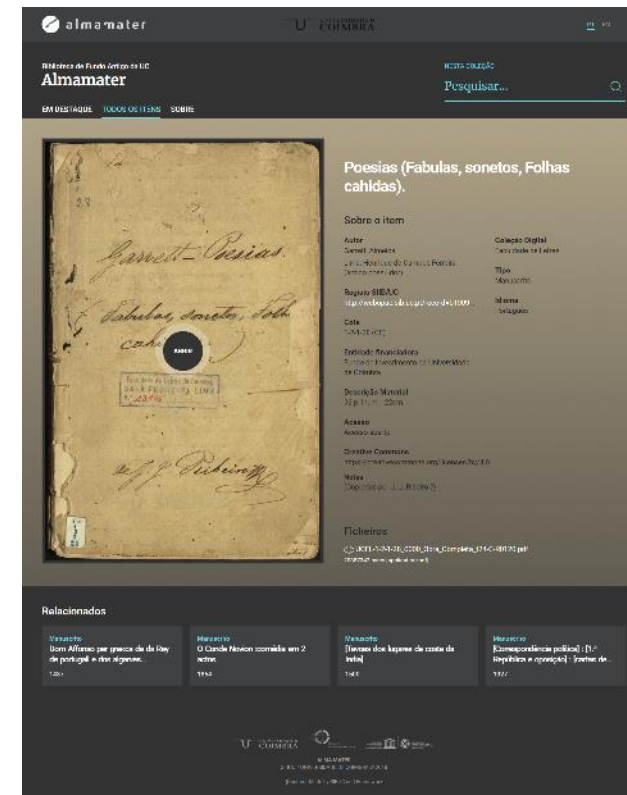
See online

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The new AlmaMater digital library > **AlmaMater**

AlmaMater > Frontend



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The new AlmaMater digital library > AlmaMater

Results

Simple and user-**friendly access**

Browsing within each document

(IIIF - International Image Interoperability Framework)

Responsive interface

Easy way of building new digital libraries/collections

Smooth data migration

Interoperability

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The new AlmaMater digital library > **Results**

Enriched metadata

Metadata fields for item agregation in the Frontend

eg. uc.publication.digCollection (BG or NC or RD)

Metadata fields for image presentation in the frontend

eg. uc.publication.manifest uc.publication.thumbnail

Bitstream metadata for IIIF

eg. bitstream.iiif.imageid bitstream.iiif.canvasindex bitstream.toc

Metadata fields to implement relations between items

eg. uc.publication.journalTitle uc.publication.bookTitle

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The new AlmaMater digital library > **Enriched metadata**

FAIR

PRINCIPLES FOR SCIENTIFIC DATA MANAGEMENT AND STEWARDSHIP



FINDABLE

Metadata and data should be easy to find for both humans and computers.

- F1.** (Meta)data are assigned a globally unique and persistent identifier
- F2.** Data are described with rich metadata (defined by R1 below)
- F3.** Metadata clearly and explicitly include the identifier of the data they describe
- F4.** (Meta)data are registered or indexed in a searchable resource



ACCESSIBLE

The exact conditions under which the data is accessible should be provided in such a way that humans and machines can understand them.

- A1.** (Meta)data are retrievable by their identifier using a standardised communications protocol
 - A1.1** The protocol is open, free, and universally implementable
 - A1.2** The protocol allows for an authentication and authorisation procedure, where necessary
- A2.** Metadata are accessible, even when the data are no longer available



INTEROPERABLE

The (meta)data should be based on standardized vocabularies, ontologies, thesauri etc. so that it integrates with existing applications or workflows.

- I1.** (Meta)data use a formal, accessible, shared, and broadly applicable language for knowledge representation.
- I2.** (Meta)data use vocabularies that follow FAIR principles
- I3.** (Meta)data include qualified references to other (meta)data



REUSABLE

Metadata and data should be well-described so that they can be replicated and/or combined in different research settings

- R1.** Meta(data) are richly described with a plurality of accurate and relevant attributes
 - R1.1.** (Meta)data are released with a clear and accessible data usage license
 - R1.2.** (Meta)data are associated with detailed provenance
 - R1.3.** (Meta)data meet domain-relevant community standards

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The new AlmaMater digital library > FAIR



In Digital General Library
**Tavoas dos lugares da
costa da India**

ABRIR →

Collections

9 Coleções 878 Items 17813 Visualizações



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The new AlmaMater digital library > **AlmaMater Video**

Future work

To **develop** the main interface for global search

To (re)**create** new **repositories** (e.g. Impactum and Pombalina)

To **curate** metadata

To **develop** an articles & essays section

To **develop** annotation functionality

To **support** audio and video streaming

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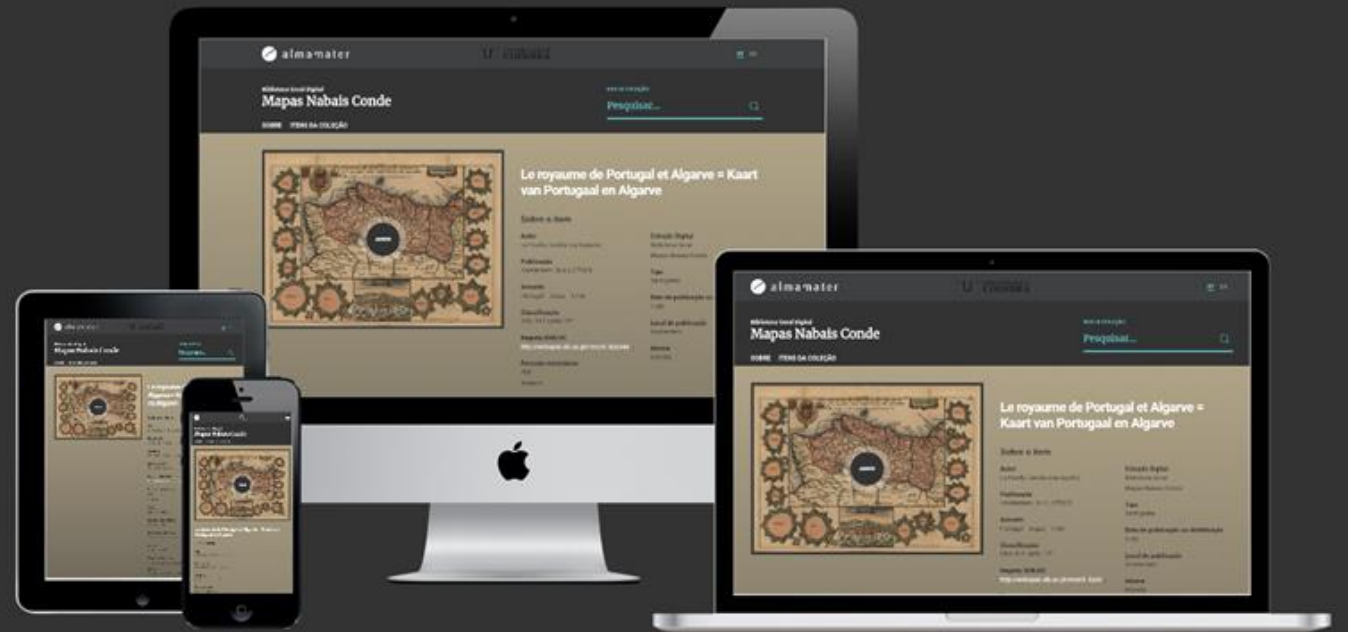
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am.uc.pt

Visit AlmaMater



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