

A photograph of two young girls sitting on a bed, looking intently at an open book they are holding together. The girl on the left has long blonde hair and is wearing a white polka-dot pajama top. The girl on the right has dark hair tied back and is wearing a yellow and blue patterned pajama top. They are both looking down at the book. The background shows a floral patterned wall.

# 1001 storia



**POLITECNICO**  
MILANO 1863

Multidisciplinary project  
2021 / 2022

**Paolo Cremonesi**  
Federico Schieppatti

Pietro Valente  
Guido Bordonaro  
Elisa Manzoni

# Quick requirements recap



## The last mile

### Improve The Project

#### Main features:

- Bug fixes
- Improve UX and UI

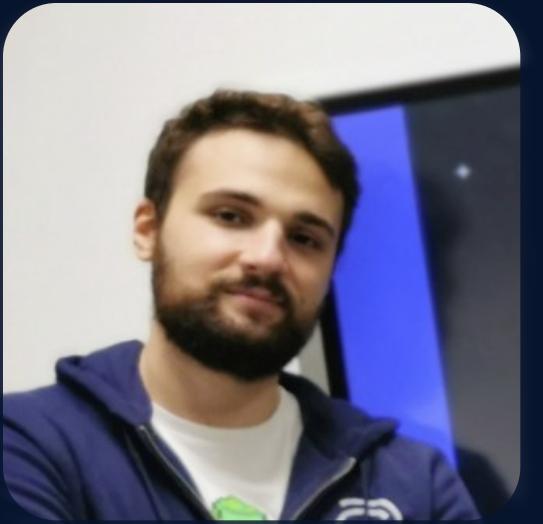
#### Smaller details:

- Implement / modify the required functionalities
- Identify possible improvements

# Our team



**Pietro Valente**  
The Technician



**Guido Bordonaro**  
The Manager



**Elisa Manzoni**  
The Creative

# Our tasks

**Computer Science  
& Engineering**

Task: back-end

**Computer Science  
& Engineering**

Task: connect front-end  
with back-end

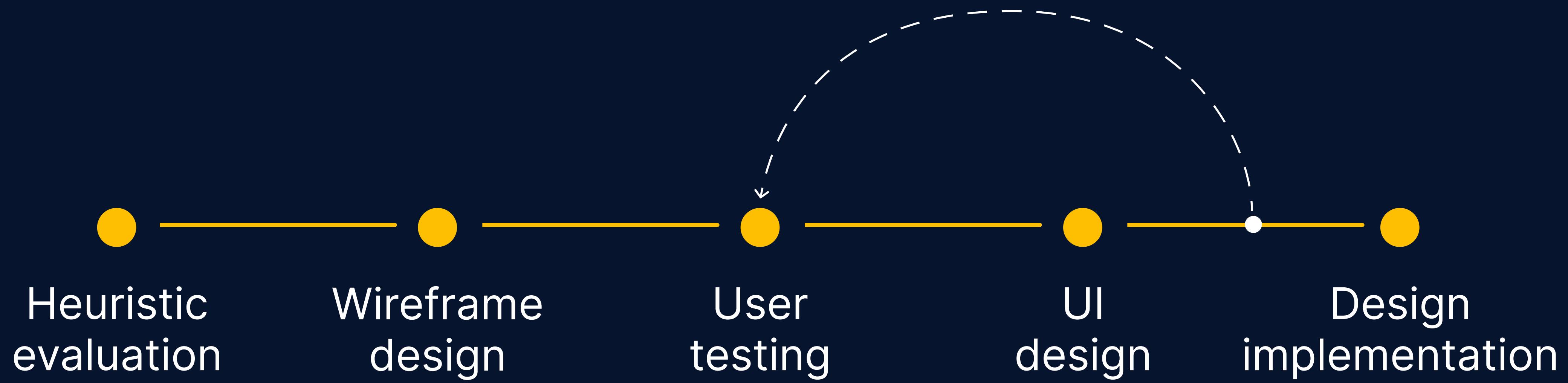
**Digital & Interaction  
Design**

Task: front-end



**Design and code  
reading**

# Roadmap



Theodelinda: first Queen of Italy ↗

The Lombards

Why Theodelinda  
History  
**The Lombards**  
Italy at the time of the conq...  
Biography  
The relevance  
Add element

Written sources about Lombards are scarce

Written They for "Histori... The 2 Duration: 0:40

10 s 10 s 10 s 10 s

Written sources about Lombards are scarce: the best one, the "Historia Langobardorum" by Paul the Deacon, was written much later, on the 8th century, based on disputable oral traditions. According to legends, partly confirmed by archeological findings, they probably moved from Scandinavia to Northern Germany around the 1st century B.C. They were constantly on the move and would not remain in the same region for more than 40-50 years. Between the 1st and the 4th century, making a number of stops, they reached Pannonia (modern Hungary) where they founded a strong and well organized kingdom. During the war between the Byzantines and the Ostrogoths some Lombard troops descended to Italy, serving as auxiliaries in the Eastern Roman Empire army. Their tales of a rich and weak (from a political and military point of view) country are likely to have stimulated their king Alboin to invade Italy down to the Po valley.

EXTRA PAGES

The series The International Inner Wheel of Monza Credits +

Normal B I U S , E E A A

The International Inner Wheel Club of Monza (Italy) PHF has conceived, supported and promoted the realization of the cultural project "Queens of Italy". The goal of this initiative is to create a series of multimedia "narratives" presenting four medieval Italian politically relevant women: Theodelinda, Constance of Hauteville, Eleanor of Arborea, Matilda of Canossa. The narratives will sketch the personalities of these queens, highlighting their political influence and their capacity of dealing as peers with all the most prominent political powers of their time: kings, emperors, princes and popes, with the restless and ever-changing Middle Ages in the background, identifying and studying in depth those themes which, throughout history, contributed to evolve, both in the short and in the long term.

The historical setting encompasses a national and at the same time international landscape. Indeed, these queens are the protagonists of events rooted in their local contexts, and yet strictly connected to the history of Italy and Europe.

But they were not the only ones: therefore this project aims at inspiring other similar initiatives, to tell the stories of women who made a difference at their time.

Narrated in a vivid and engaging style, and relying on the authoritativeness and passion of the scholars involved in the historical reconstruction of the events, the multimedia narratives produced by HOC-LAB of Politecnico di Milano effectively respond to the need of valorizing, communicating, and promoting this cultural initiative.

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Facebook Twitter LinkedIn YouTube

## Heuristic evaluation

Study the current interface and independently analyse existing user experience problems.

Such as:

- 1 Absence of helping tools to guide the user
- 2 Non-compliance with certain standards (ambiguous interactions)
- 3 No system status visibility

# Helping tools to guide the user

The screenshot illustrates a digital platform for managing historical content, specifically focusing on the creation of a video page for "Theodolinda".

**Header:** The top navigation bar includes the logo "1001 storia", the user profile "Theodolinda > Storia", and buttons for "Anteprima" (Preview), "Esporta" (Export), and a user icon.

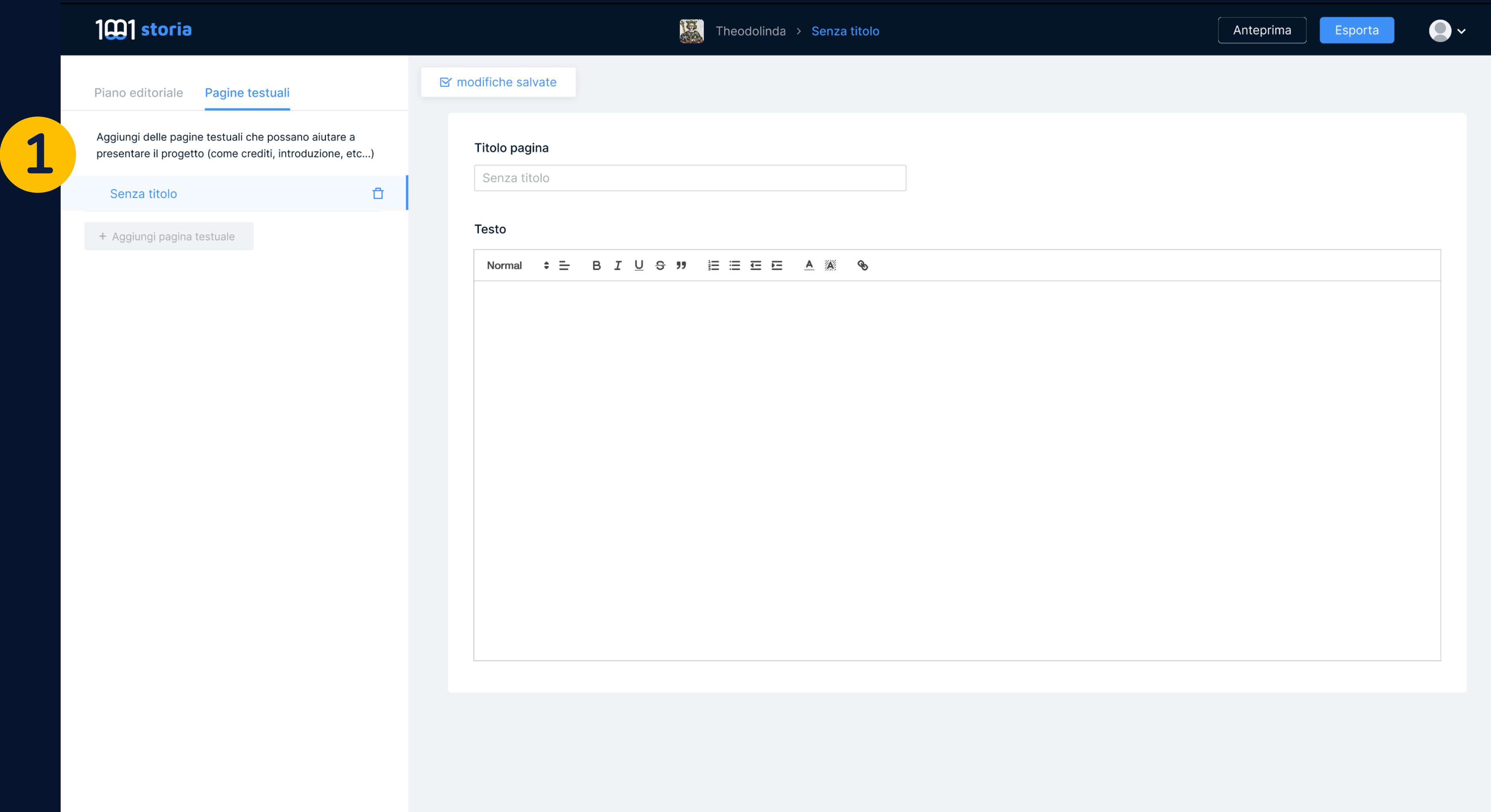
**Sidebar:** The left sidebar, titled "Piano editoriale", lists categories: "Storia" (selected), "Biografia", and "L'importanza". A button "+ Aggiungi capitolo" is also present.

**Main Content Area:** The main area displays a medieval painting of a scene with figures on horseback and on foot. Below the image is a video player interface showing a play button, volume icon, and a progress bar at 0:00 / 0:10. The video player has tabs "EDITOR VIDEO" and "TESTO".

**Text Editor:** The "TESTO" tab is active, showing a title field containing "Storia" and a rich text editor toolbar with buttons for "Normal", "B", "I", "U", "S", "“”, “”, “”, “”, “A”, and “”.

**Numbered Callout:** A large yellow circle with the number "1" is positioned on the left side of the sidebar, likely indicating the first step in a process.

# Helping tools to guide the user



The screenshot shows a digital editor interface for creating a page titled "Senza titolo". The interface includes a sidebar on the left labeled "Pagine testuali" (Text pages) which contains a single item named "Senza titolo". A yellow circle with the number "1" is overlaid on the sidebar area. The main workspace shows a title input field ("Titolo pagina") containing "Senza titolo" and a rich-text editor ("Testo") with a toolbar at the top.

1

Piano editoriale Pagine testuali

Aggiungi delle pagine testuali che possono aiutare a presentare il progetto (come crediti, introduzione, etc...)

Senza titolo

+ Aggiungi pagina testuale

modifiche salvate

Theodolinda > Senza titolo

Titolo pagina

Senza titolo

Testo

Normal B I U S " E E E A A

# Eliminate ambiguous interactions

The screenshot shows a digital editor interface for a historical entry titled "Theodolinda". The top navigation bar includes the logo "1001 storia", user profile, and buttons for "Anteprima" (Preview), "Esporta" (Export), and a user icon.

The left sidebar, labeled "Piano editoriale", contains sections: "Storia" (selected), "Biografia", and "L'importanza", with a button "+ Aggiungi capitolo". A "modifiche salvate" (saved changes) indicator is present.

The main content area displays a medieval painting of a scene with figures on horseback and on foot. Below the image is a video player with controls: play/pause, volume, and a progress bar showing 0:00 / 0:10.

The bottom section, labeled "EDITOR VIDEO", contains tabs for "EDITOR VIDEO" (selected) and "TESTO". It features a "Immagini/video" (Images/video) section with a thumbnail of the painting, a duration of "10s", and options "Modifica" (Edit) and "Elimina" (Delete). A large yellow circle with the number "2" is overlaid on this section. An "Aggiungi elemento" (Add element) button is also present. The "Audio" section lists "narrazione-longobardi.mp3" with a three-dot menu icon.

# System status visibility

1001 storia

Theodolinda > Storia

Anteprima Esporta

Piano editoriale Pagine testuali

modifiche salvate

Storia Biografia L'importanza

+ Aggiungi capitolo

3

EDITOR VIDEO TESTO

Immagini/video

Modifica Elimina 10s

+

Aggiungi elemento

Audio

narrazione-longobardi.mp3

## User testing

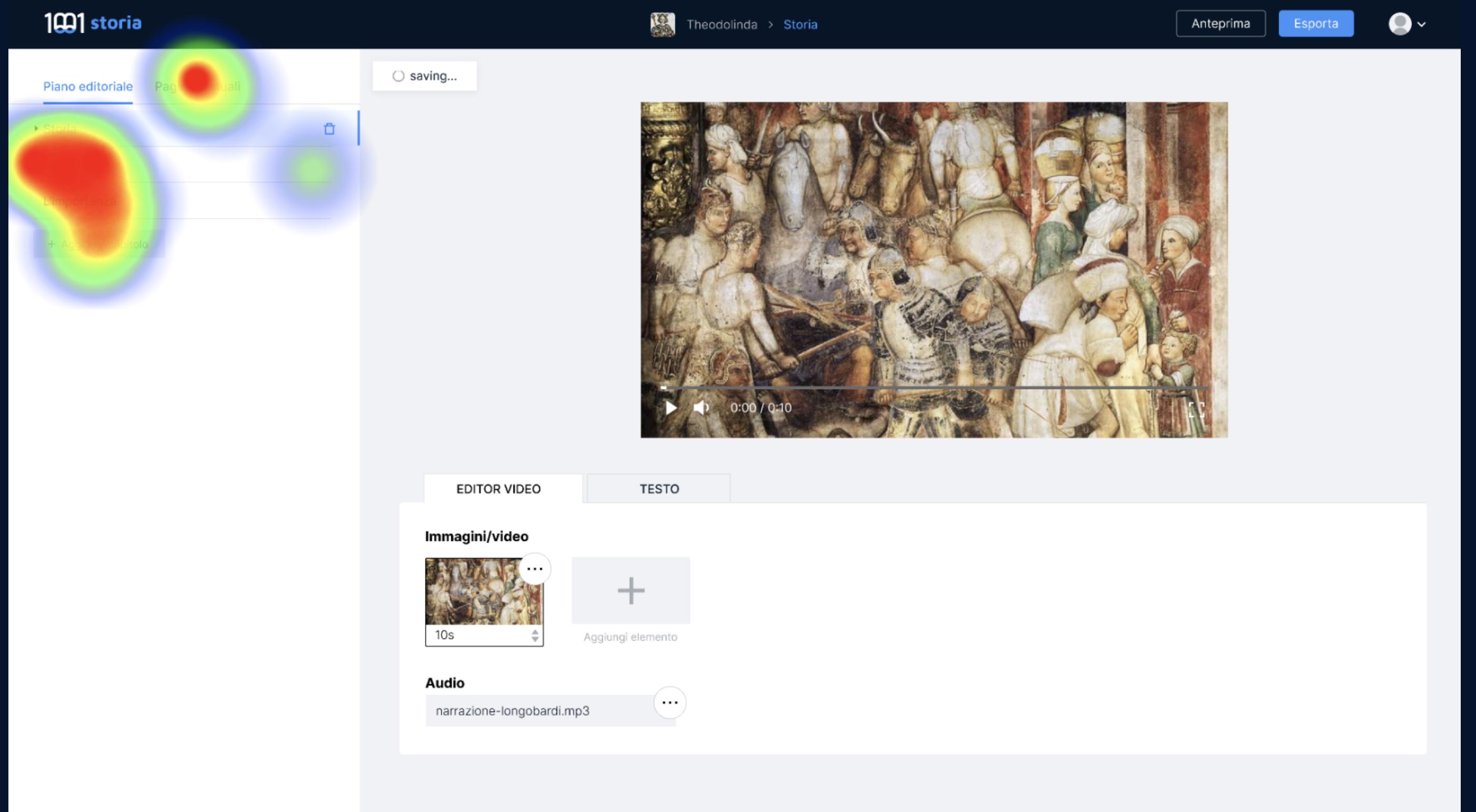
6 tester

5.7 / 7  
usability evaluation

Some comments:

**“Trovo la piattaforma utile e divertente”**

**“Mi sembra facile da usare e abbastanza intuitiva”**

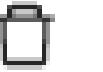




# UI design

## Your Stories

 Title[Create a new story](#)

Title	Cluster	Locked	Action
La vita a Milano Romana alla fine del IV sec. d.C.		No	<a href="#"> Edit</a> <a href="#"> Delete</a>
Theodelinda: first Queen of Italy		No	<a href="#"> Edit</a> <a href="#"> Delete</a>
Amin		No	<a href="#"> Edit</a> <a href="#"> Delete</a>

# 1001 storia

## Le tue storie

Crea o modifica una storia e crea qualcosa di unico!



Crea nuova storia



Theodelinda

1001 storia x poli.cultura

## Le tue storie

Crea o modifica una storia e crea qualcosa di unico!



Crea nuova storia



Theodelinda



# Theodelinda: first Queen of Italy



+ Why Theodelinda 

- + History 

The Lombards 

Italy at the time of the conqu... 

> + Biography 

+ The relevance 

+ Add element 

## The Lombards



Written



10 s

They for



10 s

"Historic



10 s

They we



10 s

(+) Duration: 0:40

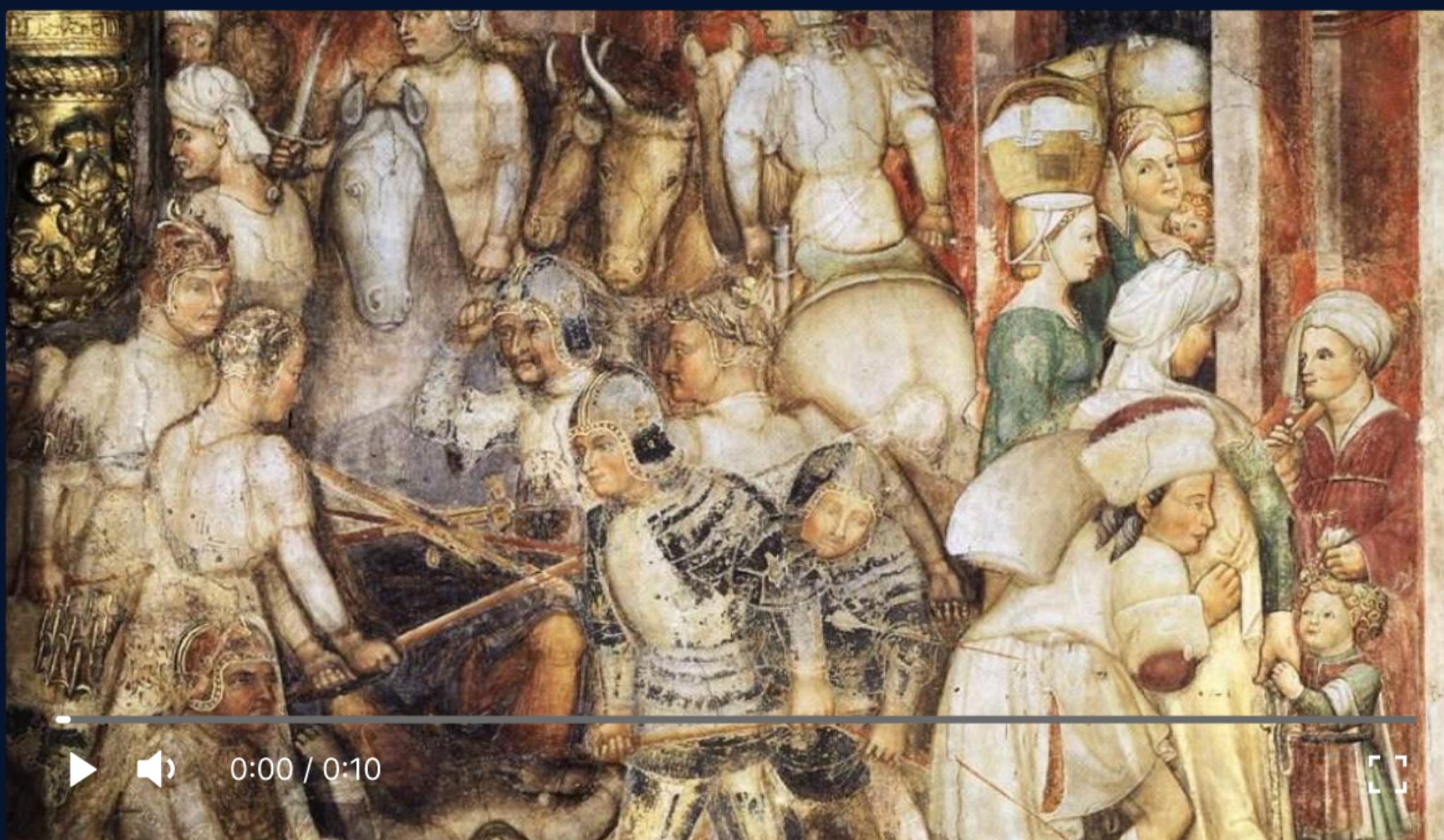
Audio:  2.3.mp3 

▶ 0:00 / 0:39 

⋮

Normal 

Written sources about Lombards are scarce: the best one, the "Historia Langobardorum" by Paul the Deacon, was written much later, on the 8<sup>th</sup> century, based on disputable oral traditions. According to legends, partly confirmed by archeological findings, they probably moved from Scandinavia to Northern Germany around the 1<sup>st</sup> century B.C. They were constantly on the move and would not remain in the same region for more than 40-50 years. Between the 1<sup>st</sup> and the 4<sup>th</sup> century, making a number of stops, they reached Pannonia (modern Hungary) where they founded a strong and well organized kingdom. During the war between the Byzantines and the Ostrogoths some Lombard troops descended to Italy, serving as auxiliaries in the Eastern Roman Empire army. Their tales of a rich and weak (from a political and military point of view) country are likely to have stimulated their king Alboin to invade Italy down to the Po valley.

[Piano editoriale](#) [Pagine testuali](#)[Storia](#)[Biografia](#)[L'importanza](#)[+ Aggiungi capitolo](#) modifica salvate[EDITOR VIDEO](#)[TESTO](#)**Immagini/video**

10s



Aggiungi elemento

**Audio**

narrazione-longobardi.mp3





Piano editoriale Pagine testuali

▶ Storia

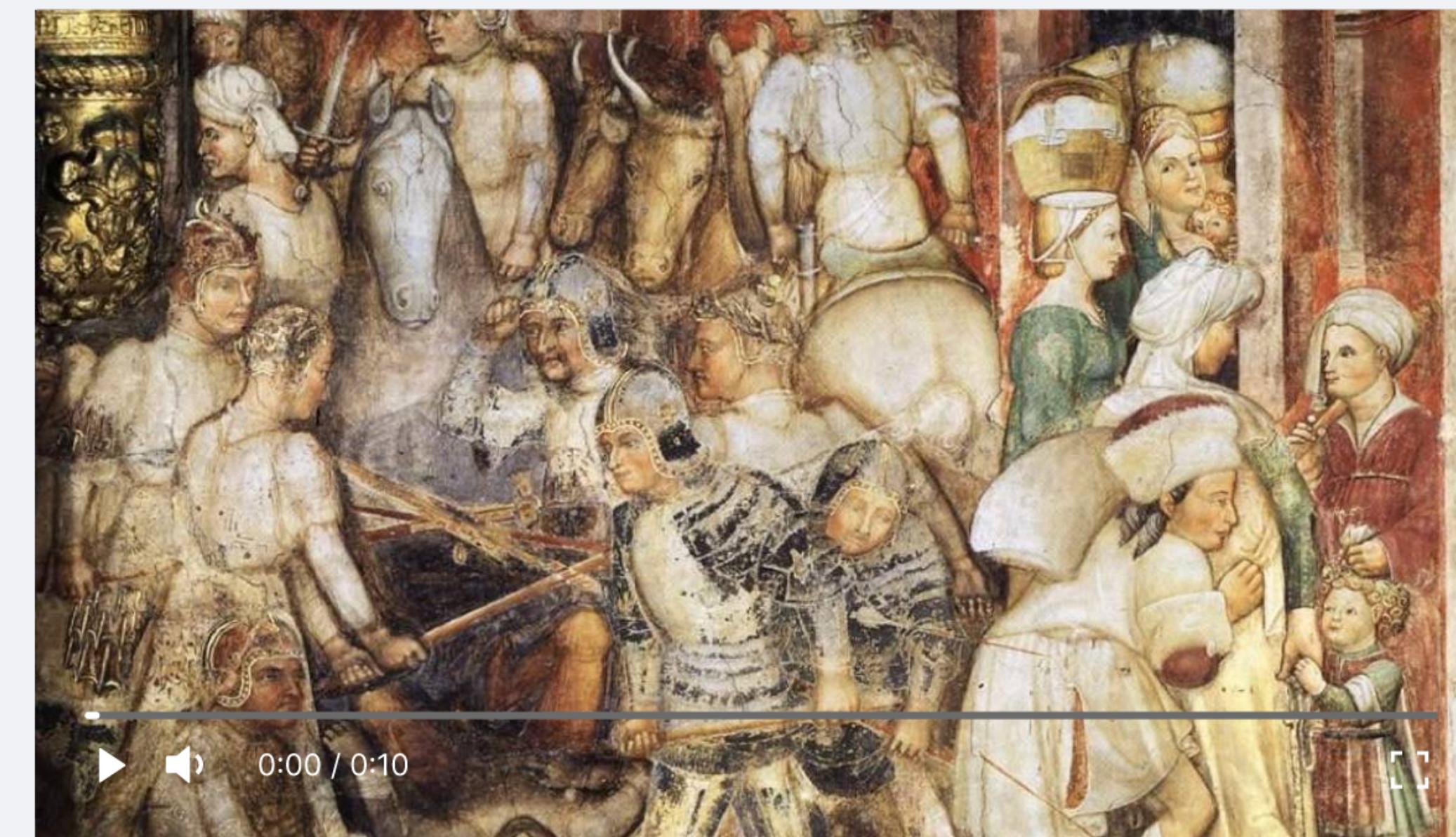


▶ Biografia

L'importanza

+ Aggiungi capitolo

modifiche salvate



0:00 / 0:10

EDITOR VIDEO

TESTO

**Immagini/video**

10s



Aggiungi elemento

**Audio**

narrazione-longobardi.mp3

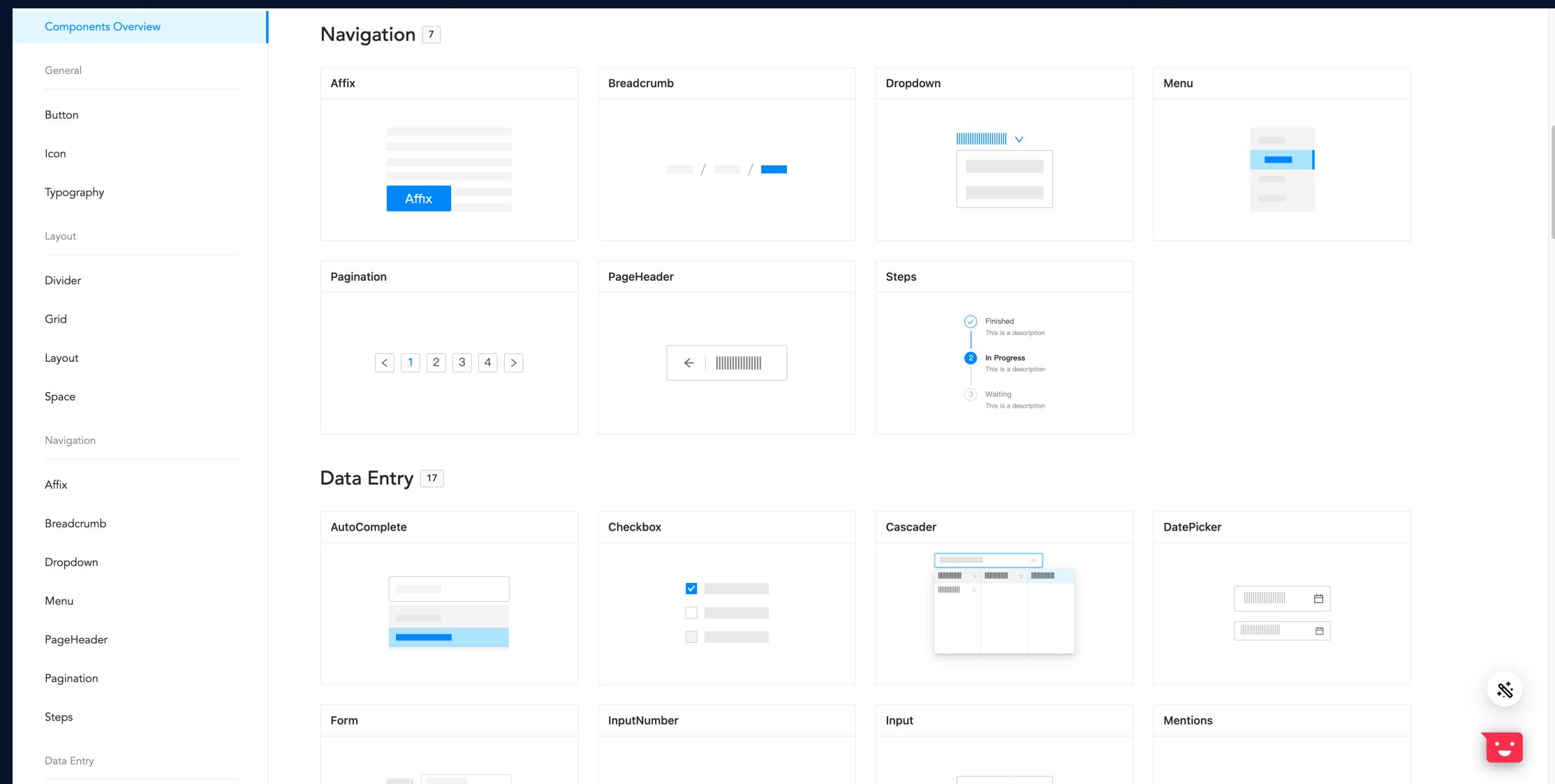
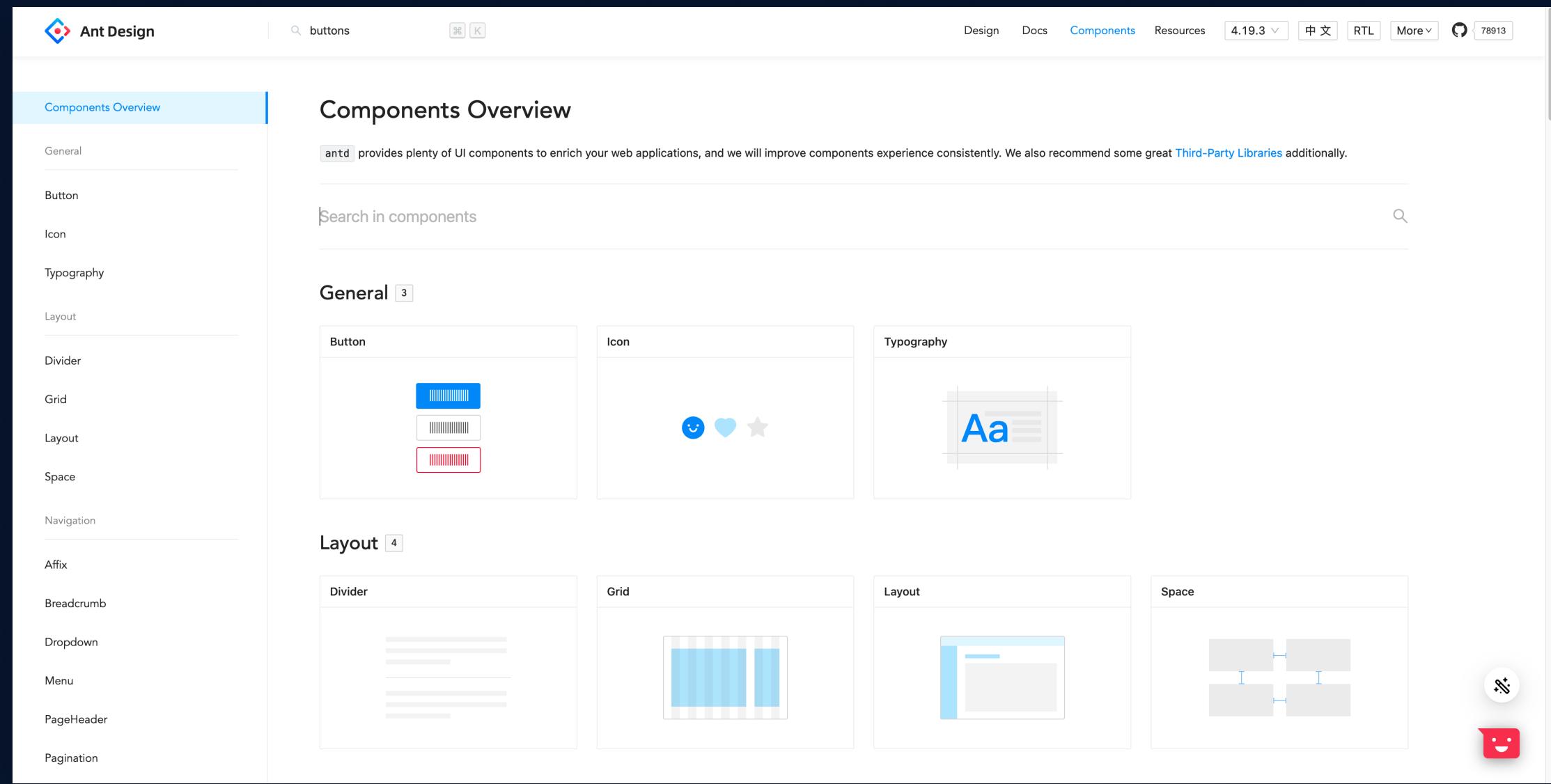


# Implementation

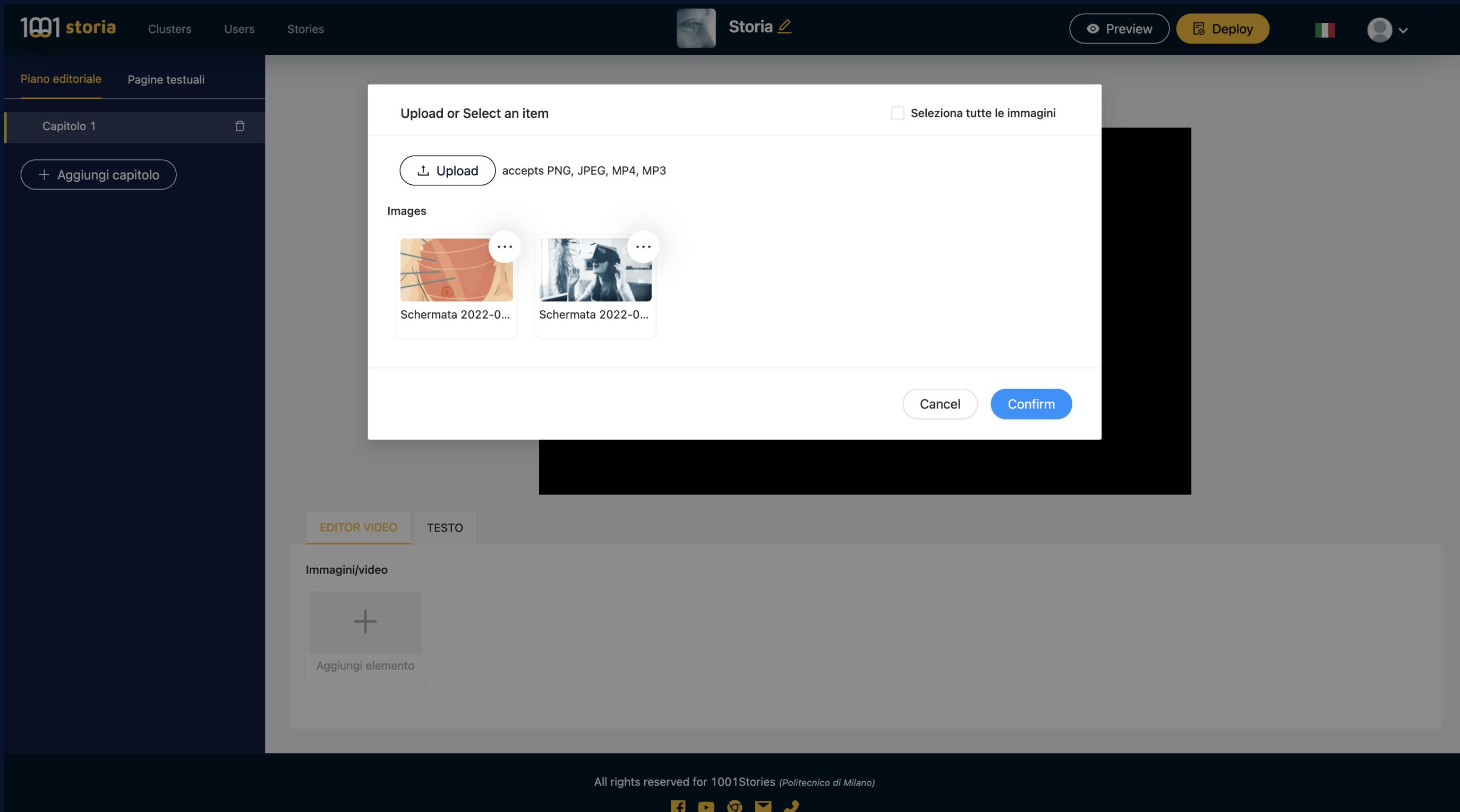
# From Design to Javascript

## Aesthetical Implementation

- Proceeded smoothly, thanks to the use of the same core libraries
- We were able to mirror our visual design goals fastly



# From Design to Javascript



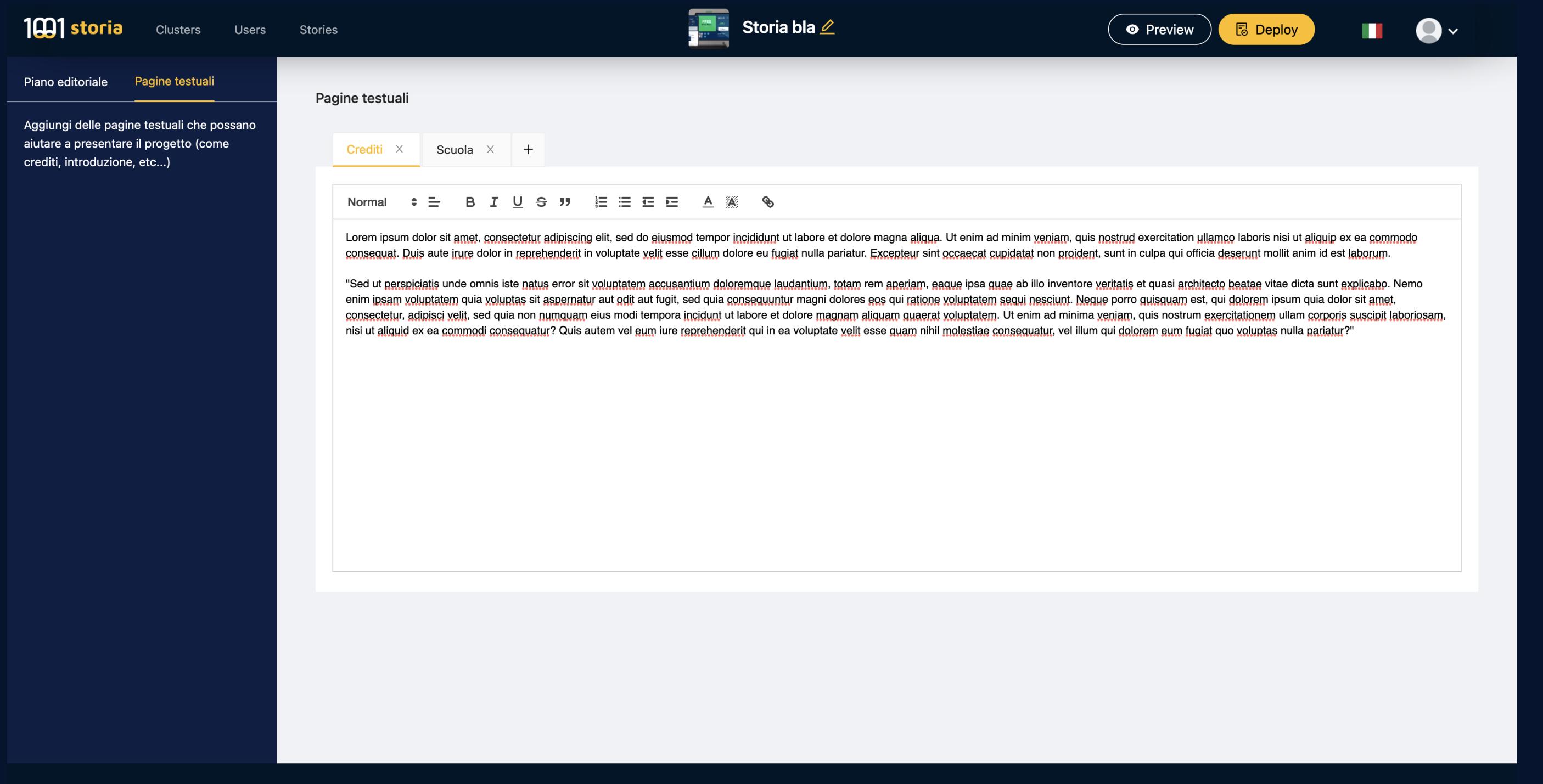
## Functional Implementation

- The application is highly optimized for the older requirements
- Luckily, adding new functionalities can be done with relative ease...
- But, we mostly needed to modify existing ones.
- Every change could break something else, so actions must be taken with care and respect of the original codebase

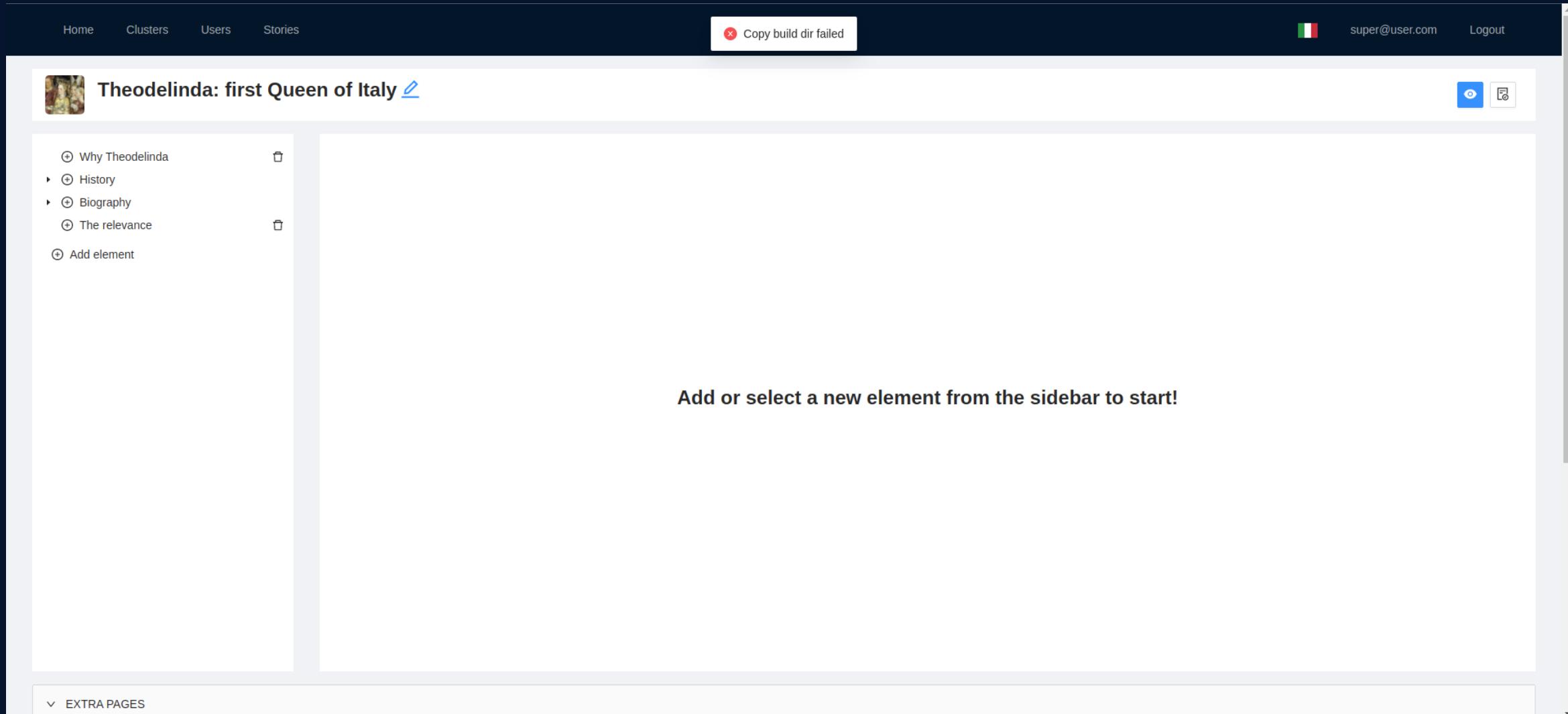
# From Design to Javascript

## What We Changed

- Added cover field to the story list API
- Rewritten display part of upload modal
- New logic for creating story chapters and extra pages
- Adding an autoupdated field, to know the last save in a story



# Bug resolution



# Deploy Bug

## Problem

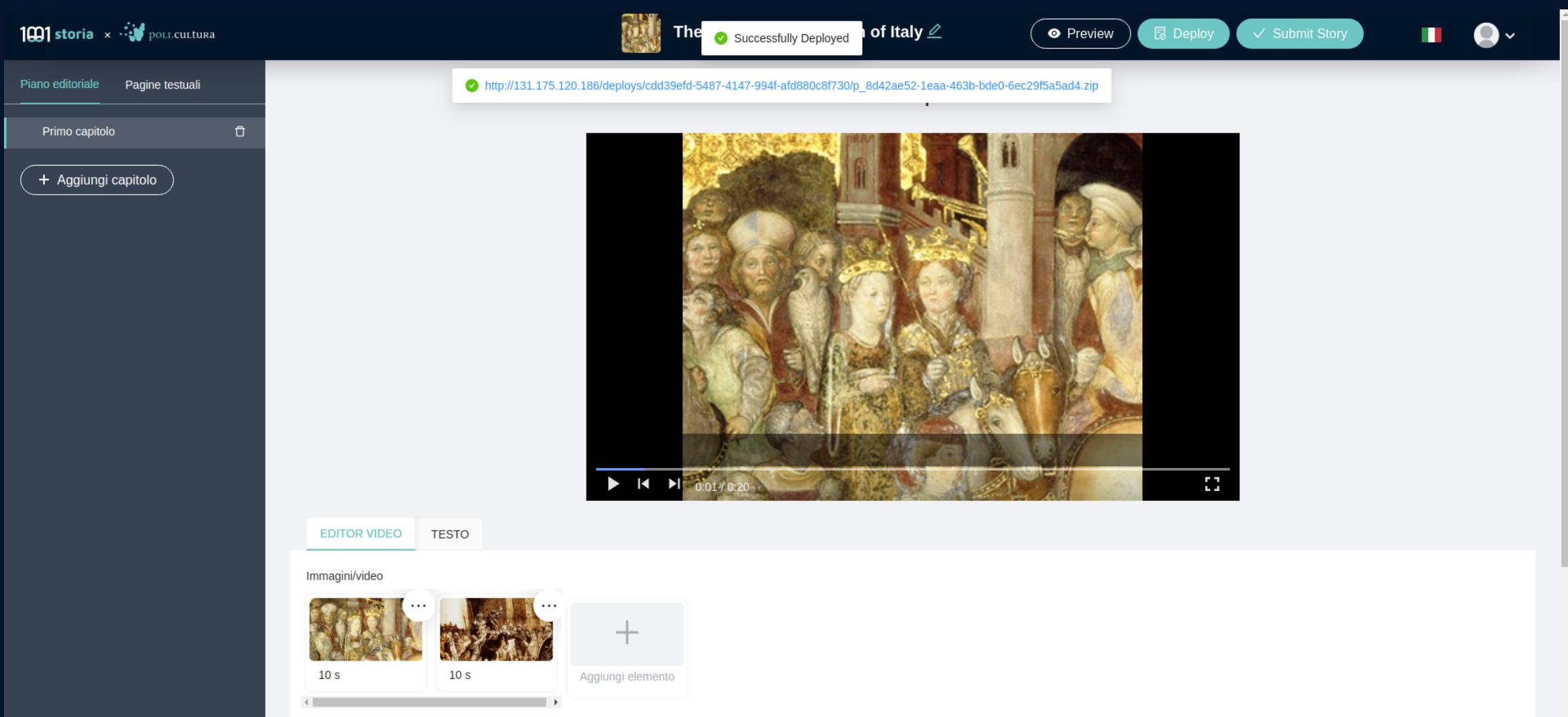
- Deploy function not working

## Cause

- Permissions not set correctly

## Solution

- Fixed command to start docker



# Video Bug

## Problem

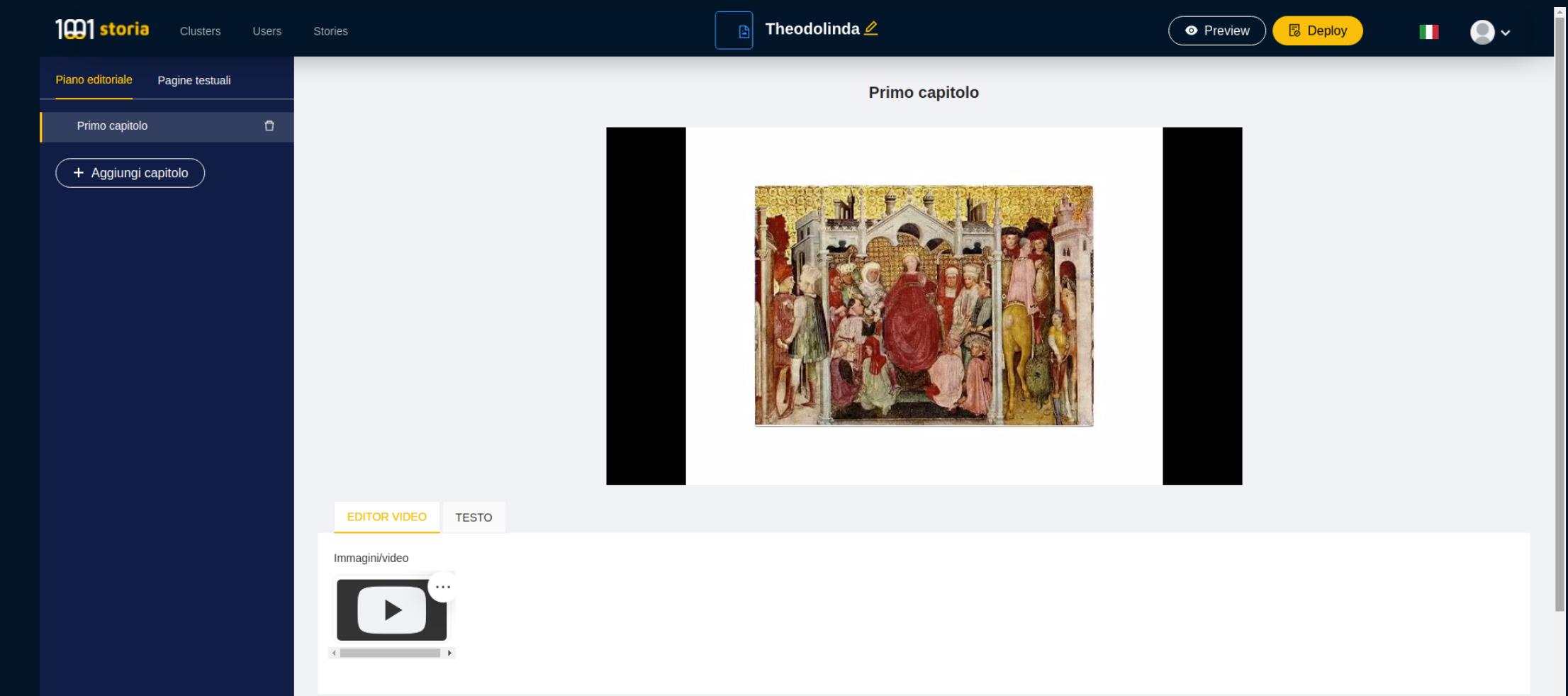
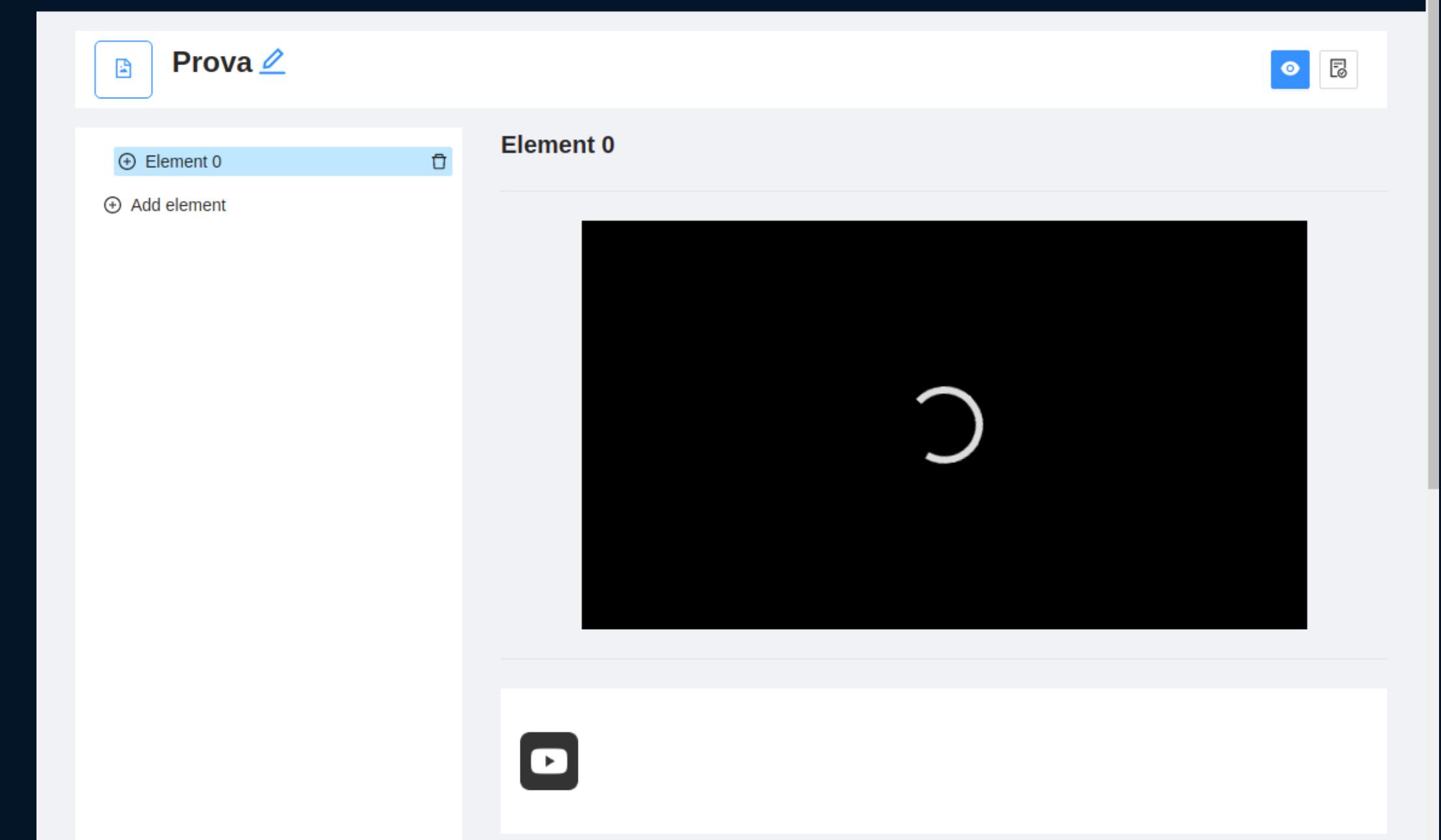
- Upload video not working

## Cause

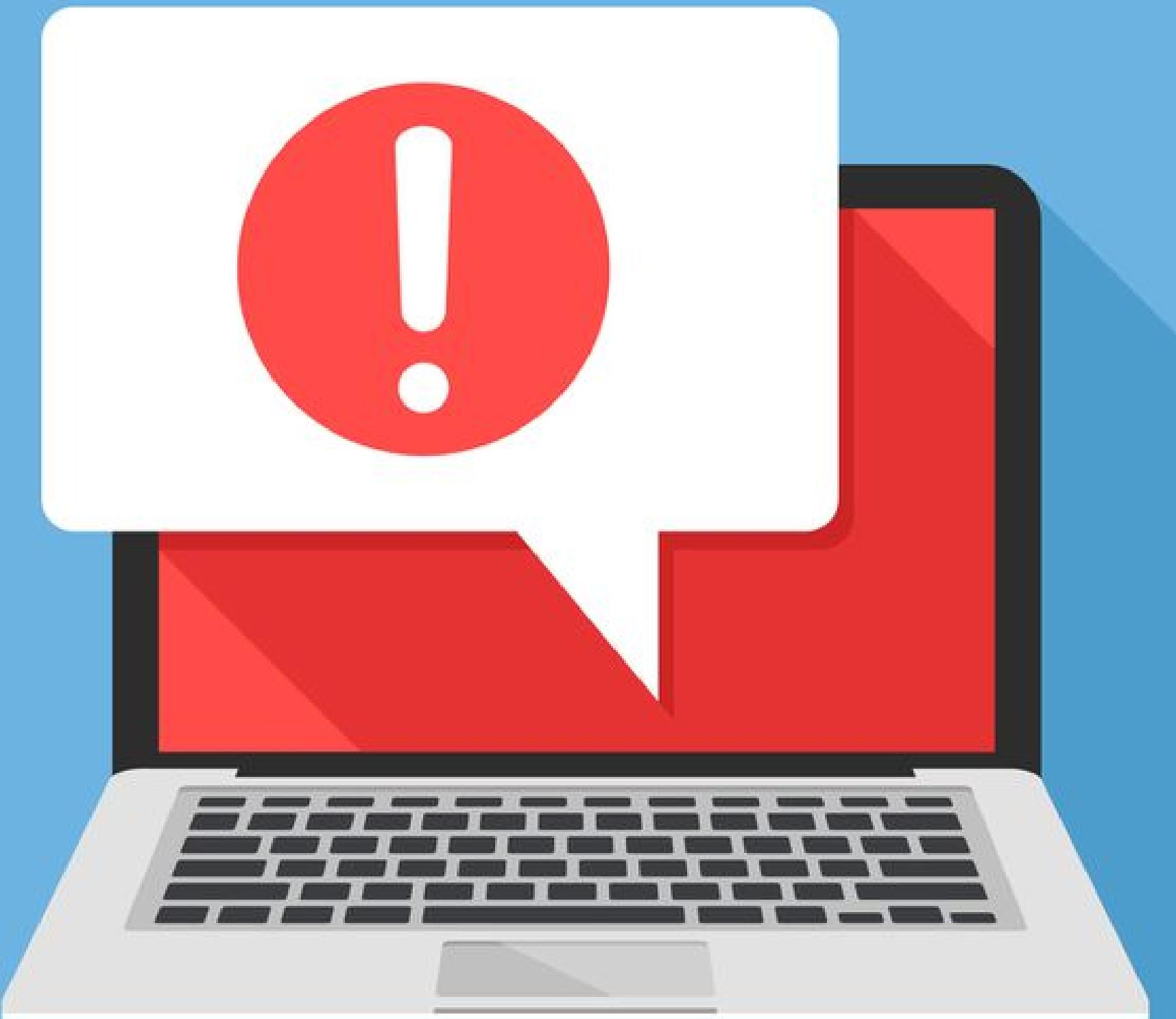
- Loading bar in the front end did not reflect the actual loading in the backend
- If the user selected the item before actually uploading it to the backend it didn't work

## Solution

- In the new frontend the loading bar mirrors the loading



# Server Problem



## Problem

- There are 2 configurations for the site: local and remote. Having tested the changes on the local one, once the files were uploaded to the remote server, the changes were not showing.

## Cause

- In the remote version, the files were compiled initially and only the built versions were used later on
- No documentation about this server side behavior

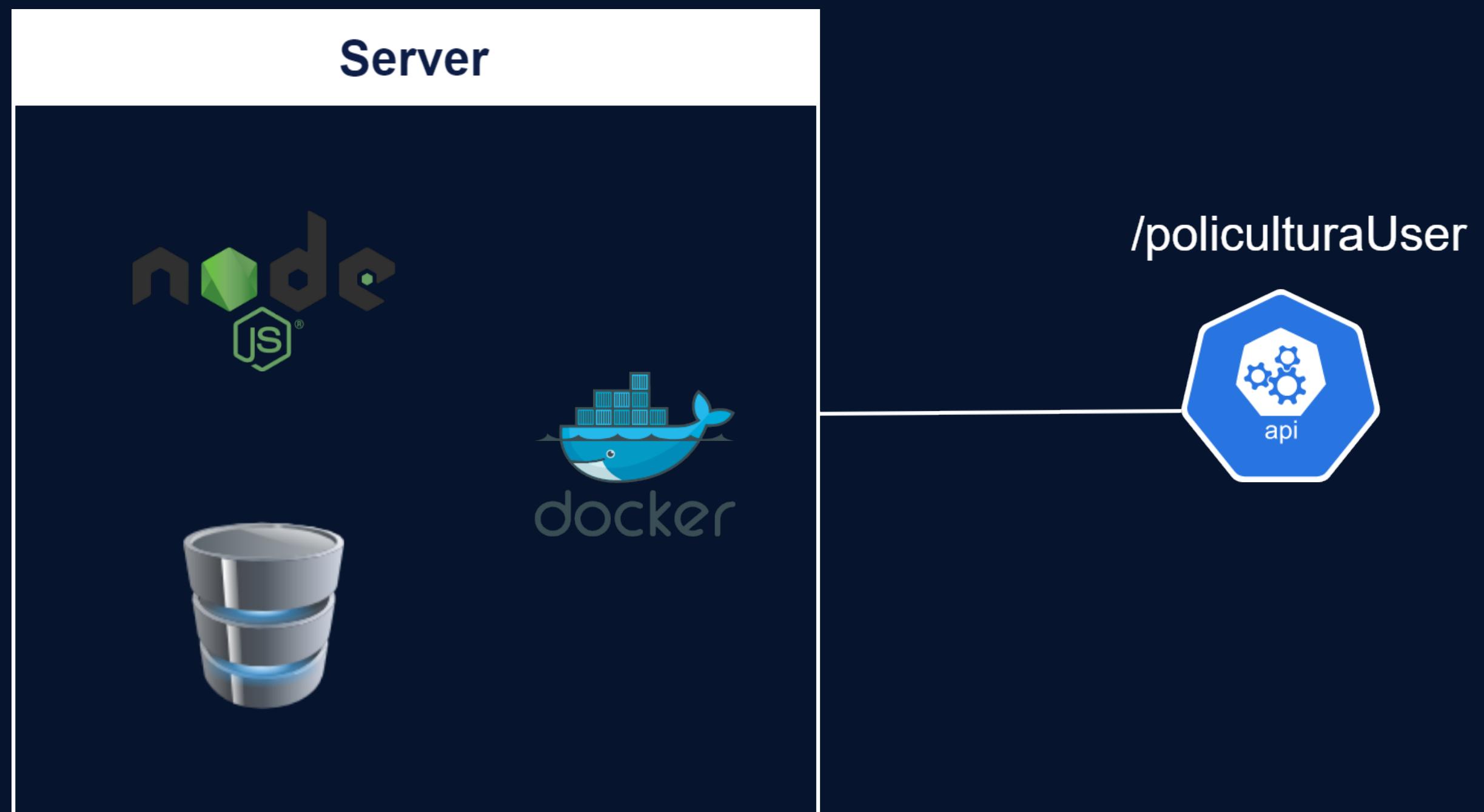
## Solution

- Added a file (build.sh) that allows the recompilation of all files on the server



# **API and Policultura form**

# API for Policultura user subscription



## Aim

- Allows automatic creation of a polyculture user and his story (in the current year contest cluster) in 1001 storia database

## Use

- When a Polyculture user is created (which happens in a separate database from 1001 storia)

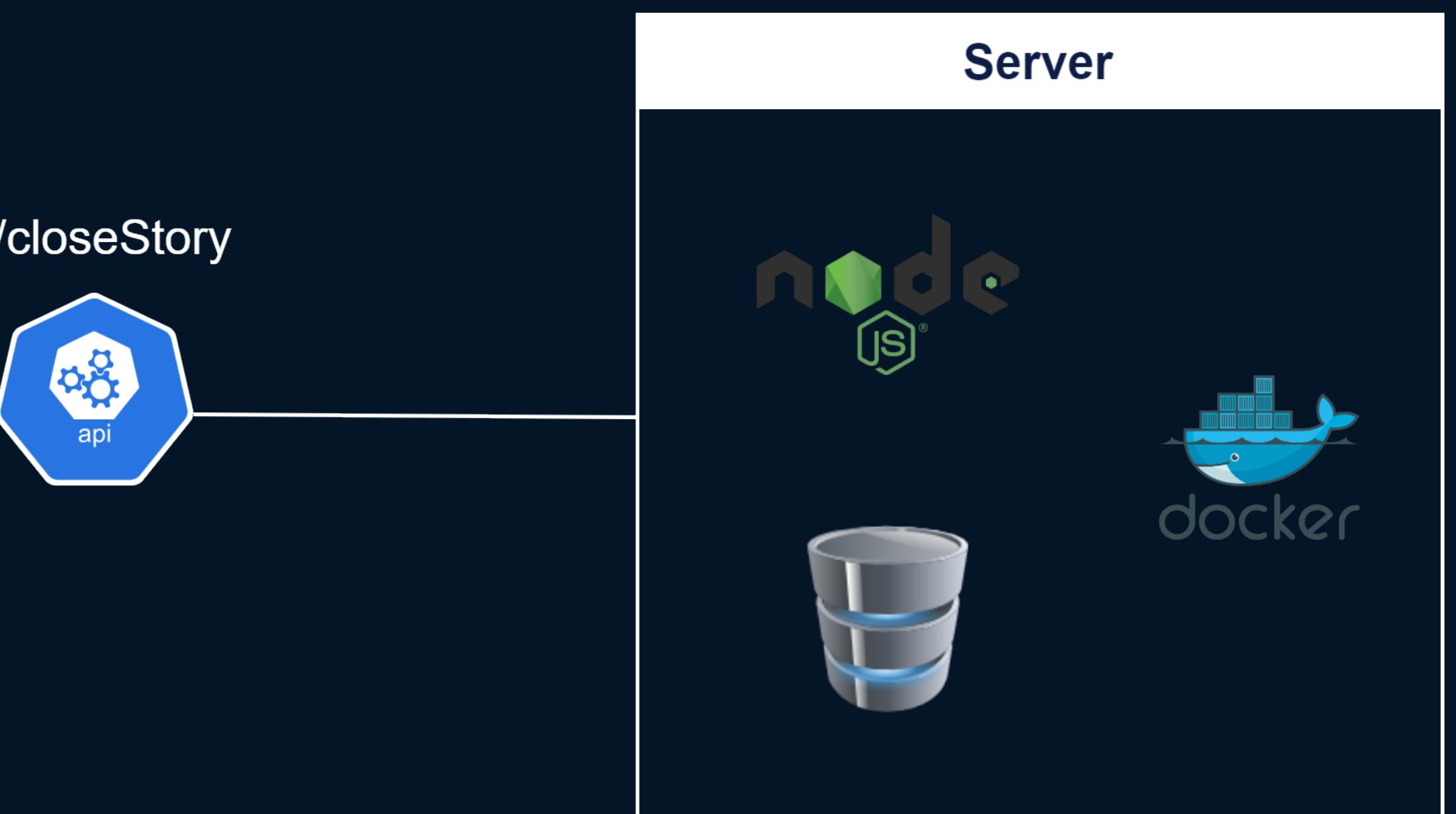
# API for closing Policultura story

## Aim

- Allows to close a story, this means that it can no longer be modified but only viewed or downloaded

## Use

- When a story is ready to enter the contest (only for polyculture users)



POLICULTURA 2022®

## REGISTRATION

poli.cultura

1. SCHOOL/TEACHERS    2. CLASS    3. END

SCHOOL NAME <input type="text" value="NAME"/> Insert complete school name	FIRST TEACHER - CONTACT  FIRST NAME <input type="text" value="FIRST NAME"/> LAST NAME <input type="text" value="LAST NAME"/> EMAIL <input type="text" value="email@email.it"/> MOBILE PHONE <input type="text" value="MOBILE PHONE"/> SUBJECT <input type="text" value="HUMANITIES"/>	SECOND TEACHER - OPTIONAL  FIRST NAME <input type="text" value="FIRST NAME"/> LAST NAME <input type="text" value="LAST NAME"/> EMAIL <input type="text" value="email@email.it"/> SUBJECT <input type="text" value="HUMANITIES"/>
SCHOOL EMAIL <input type="text" value="email@email.it"/> no PEC	THIRD TEACHER - OPTIONAL  FIRST NAME <input type="text" value="FIRST NAME"/> LAST NAME <input type="text" value="LAST NAME"/> EMAIL <input type="text" value="email@email.it"/> SUBJECT <input type="text" value="HUMANITIES"/>	FOURTH TEACHER - OPTIONAL  FIRST NAME <input type="text" value="FIRST NAME"/> LAST NAME <input type="text" value="LAST NAME"/> EMAIL <input type="text" value="email@email.it"/> SUBJECT <input type="text" value="HUMANITIES"/>
SCHOOL ADDRESS  <input type="text" value="ADDRESS"/> es. Via Camillo Golgi 39/G		
CAP <input type="text" value="CAP"/> es. 20133		
CITY <input type="text" value="CITY"/> es. Milano		
PROVINCE <input type="text" value="PROVINCE"/> es. MILANO		
REGION <input type="text" value="REGION"/> es. Lombardia		
STATE <input type="text" value="STATE"/> es. Italia		

 **hoc-lab**  
hypermedia open center

# The Registration Form

## Before:

- Static website in HTML, CSS, JavaScript
- Unclear UX
- Poor UI

# The Registration Form

The screenshot shows the original registration form interface. At the top left is the POLI.cultura logo. On the left side, there's a sidebar with a title "Form di registrazione" and a navigation menu:

- Informazioni scuola (selected, indicated by a teal dot)
- Contatti insegnanti
- Informazioni classe
- Privacy Policy

The main content area is titled "Informazioni scuola" with the subtitle "Inserisci le informazioni della tua scuola". It features several input fields:

- Nome scuola**: A field with a placeholder "Nome" and a note "Inserire nome esteso dell'istituto".
- Indirizzo**: A field with a placeholder "email@email.com" and a note "Inserire nome esteso dell'istituto".
- Email scuola**: A field with a placeholder "Indirizzo" and a note "Inserire nome esteso dell'istituto".
- CAP**: A field with a placeholder "CAP" and a note "Inserire nome esteso dell'istituto".
- Città**: A field with a placeholder "Regione" and a note "Inserire nome esteso dell'istituto".
- Provincia**: A field with a placeholder "Città" and a note "Inserire nome esteso dell'istituto".
- Regione**: A field with a placeholder "Stato" and a note "Inserire nome esteso dell'istituto".
- Stato**: A field with a placeholder "Stato" and a note "Inserire nome esteso dell'istituto".

A green "Conferma" button is located at the bottom right of the form area.

## After:

- Dynamic web app in React.js (using Ant design components)
- Intuitive UX
- Coherent UI



# Thank You!



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