UA Smart Signage



Milestone 3 Prototype Phase

Licenciatura em Engenharia Informática Projeto em Informática 2023-2024 Diogo Silva Miguel Cruzeiro Tomás Victal 107647 107660 109018 João Andrade Pedro Pinho Rafael Vilaça 107969 109986 107476 Context and State of The Art



- Dynamic information.
- Improves information accessibility.
- Easy management and maintenance.



Context and State of The Art





- Videos iterated statically
- Limited capability
- Client's request: Overhaul entire system.

Context and State of The Art



Our Goal:

- Content Management System
- Content Creator Tool (CCT)

Context and State of The Art 04

Personas





Director of DETI Name: Nuno Age: 37 Occupation: Technician

Nuno aims to **effortlessly share news** and other resources on screens he can add.



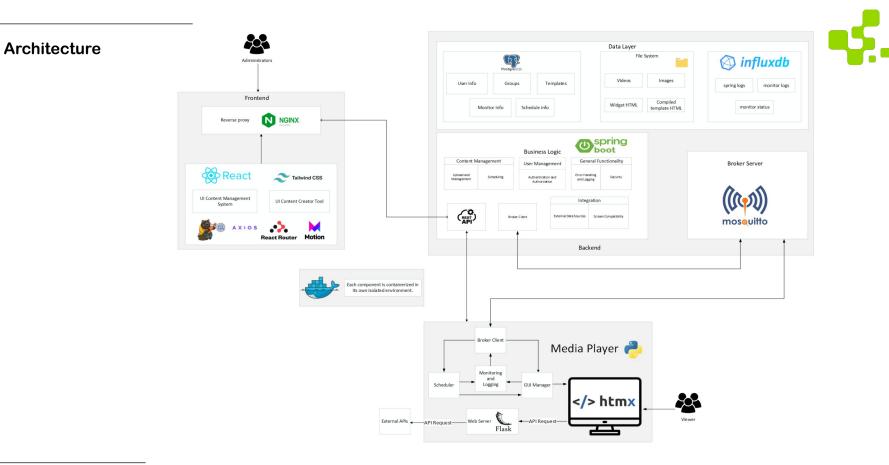
Employee Name: Sara Age: 30 Occupation: Designer

Sara seeks customizable software that allows her to unleash her creativity and **design her own templates**.



Student at DETI Name: Rodrigo Age: 19 Occupation: Student

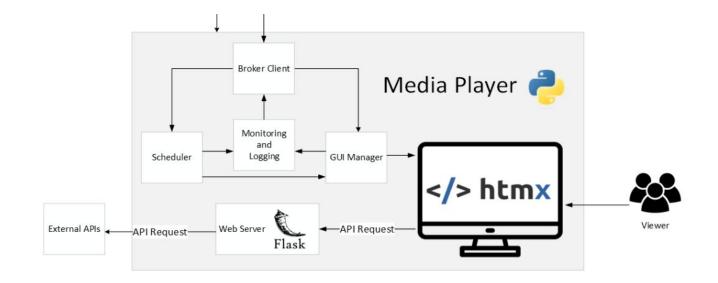
Rodrigo anticipates clear and accessible information to remain updated while navigating the campus.



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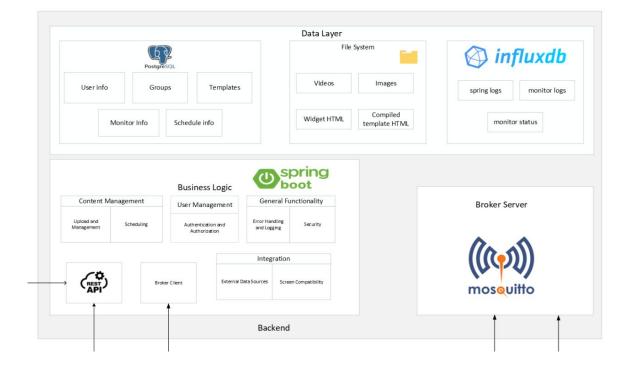
Administrators.
Frontend
Reverse proxy NGINX.
React ~ Tailwind CSS
UI Content Management System UI Content Creator Tool
AX105 React Router Motion



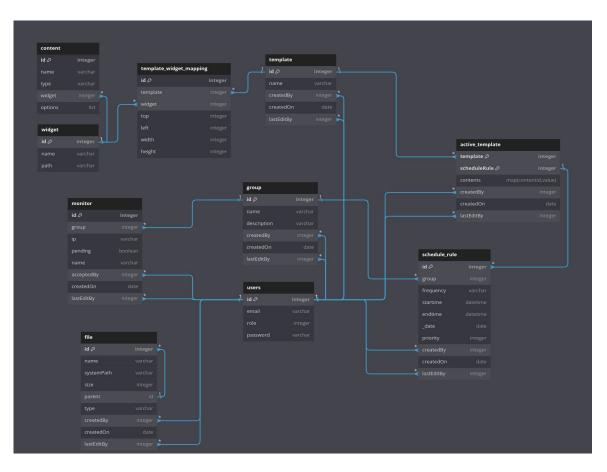




Architecture



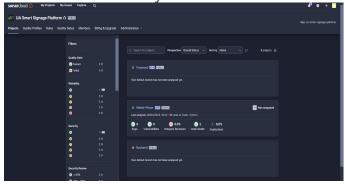
Database Model



Management



SonarCloud Quality Gate



Guidelines

📫 UA Smart Signage I	Platform Docs	🔅 Q Search		
Guidelines	Contributing to UA Smart Signage			
Reporting Bugs Server Repository	5 5 5			
Media Player Repository	Welcome to UA Smart Signage! We appreciate your interest in contributi	ing. Before you get started, please take a moment to review		
Proposing New Features	the following guidelines.			
Server Repository				
Media Player Repository Running Tests and Setting Up	Reporting Bugs			
Your Environment				
Code Style and Conventions	Server Repository			
Definition of Done (DOD) Get in Touch	1. Ensure the bug has not already been reported by checking the Issue	es section.		
Get in rolich	If the bug has not been reported, open a new issue. Please use the information is included.	provided pull request template to ensure all necessary		
	3. Provide a clear and detailed description of the bug, including steps t	o reproduce it.		
	4. Include any relevant screenshots or error messages.			

Templates for different issue types

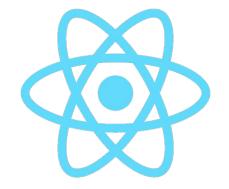
Code ○ bases 10 In Put requests ② □ Docusions ○ Actions			
۹	Ne Bug Report Report a bog	Get started	
	Fecture Request Support an ideas for this project	Get started	
	Don't see your issue here? <u>Open a Idan't issue</u>	Edit templates	

Pull Request Template

Add a title	Baviewen	
71 add a pull request template		
Add a description		
Issue		
Reason for this change		
- Description of changes		
Description of how you validated changes	Milestone No milestone	
Checklist	Development Use Closing keywords in the descripti	on to
I have updated the documentation to reflect my changes.	automatically close issues	
I have added/updated unit tests (if applicable).	Helpful resources	
	GitHub Community Suidelines	
Aditional Information		

Frontend Development





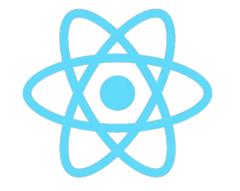
Static pages: - Dashboard

Frontend Development 12



Frontend Development





Dynamic pages:

- Media
- Monitors
- Monitor Details
- Scheduler

Media

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+ ADD home

🗅 Name	Size	Date
🗅 Logos	0 Bytes	
50 Years Celebration	0 Bytes	
Events.png	68 KB	
DETI.mp4	4 MB	

Rows per page: 10 ▼ 1-4 of 4 |< < > >|

Select a file to preview it here

				+ Pending Monitors
Name	Group	Warnings	Status	
hall	DETI		\frown	
flow	DETI			
door	DMAT			
pipa	DMAT			
train	DBIO			
	hall flow door pipa	hall DETI flow DETI door DMAT pipa DMAT	hall DETI flow DETI door DMAT pipa DMAT	hall DETI flow DETI door DMAT pipa DMAT

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Ş.	Monitor			
	← Go Back			Preview
먊	test		1	
		Template		
		DUMMY VALUE		
Ū	Memory	IP	Group	
	120/undefinedGB		▶ test	Contraction of the second s
	Updated	Errors	Last Update	
	DUMMY VALUE	DUMMY VALUE	DUMMY VALUE	

Schedule 🛈

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Select a template: template1 ~

Submit

Backend Development





Endpoints



Documentation



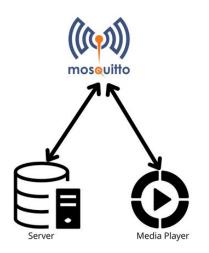
Tests



HTML template converter

Backend and Media Player Integration







Protocol Definition and Implementation

Communication between System Components

Media Player Development 21

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Media Player Development



External APIs





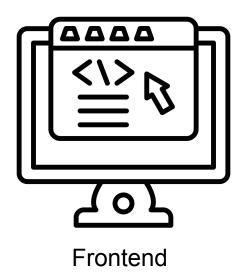
Change Template

VIDEO

Next Steps



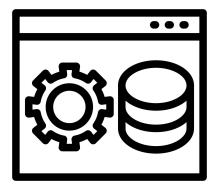
- → UI enhancements
- → Schedule feature
- → Content Creator Tool
- → Dashboard



Next Steps



- → Remaining Tests
- → Remaining User Stories
- → UA IDP Integration
- → Log storage using InfluxDB



Backend



- → Scheduler implementation
- → Create interface for initial configuration
- → Receiving video/image files
- → Setting up linux image



Media Player

ua-smart-signage-platform.github.io/Documentation-Website/

