



deti departamento de electrónica,  
telecomunicações e informática

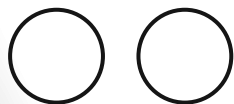


# VARLAB +

RVA 2024/2025 - Midterm Presentation

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◦ 108840



2024



# INTRODUCTION



**IEETA**

## **Project Context**

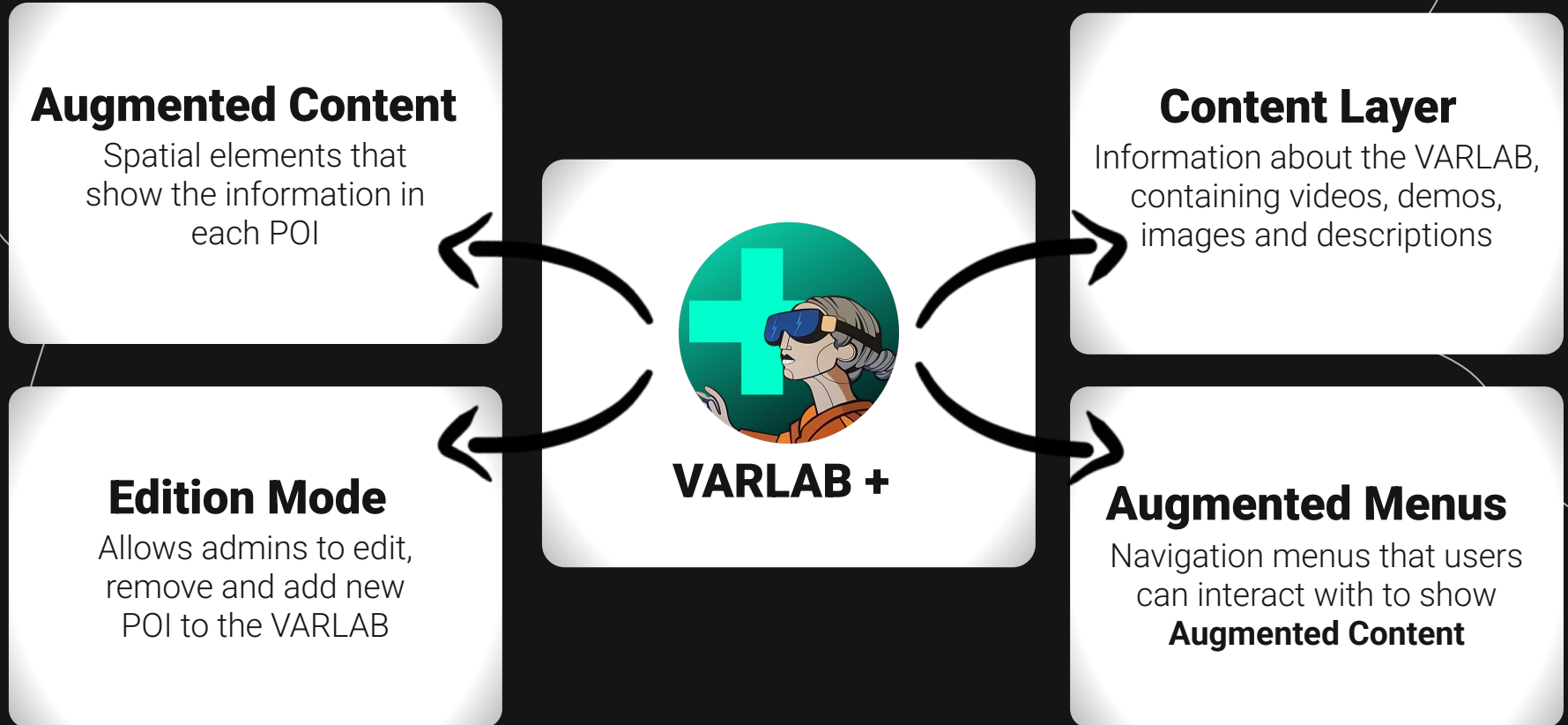
Use the VAR Lab logo as a visiting guide in IEETA (VR or AR --- combine with 3D reconstructions of the environment)



## **Motivation**

Give users more information about the VARLAB, by providing a solution for them to interact with

# PROJECT MAIN MODULES



# PROJECT OVERALL VISION

- Create a VR experience for VARLAB's visitors
- Provide users an interactive way of learning more about VARLAB and its history
- Allow VARLAB owners to edit /add /remove each POI



# OBJECTIVES



## **INFORMATION**

Show information on relevant POI



## **SHOWCASE**

Showcase project's media in a VR environment



## **RECOGNITION**

Object recognition instead of location pin to identify equipment



## **LOCATION PIN**

Create spacial pin where each data should be displayed



## **3D SCREENS**

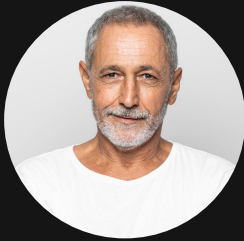
Display information within 3D windows



## **EDITION**

Allow admins to customize how each bit of space is used

# PERSONAS



**João Mirandela**

59 years

Lagos, Algarve

Potential client that  
wants to collaborate  
with VARLAB

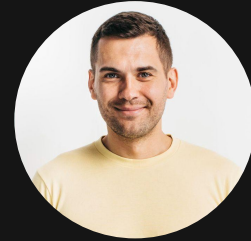


**Carlota Batalha**

48 years

Pombal, Leiria

Investigator that  
wants to work with  
VARLAB team



**Josefino Calças**

26 years

Cernache, Coimbra

New student at the  
University of Aveiro that  
wants to learn more  
about VARLAB

# USER STORIES

As a **Client** I want to **know more about VARLAB's projects** so that **I can decide if I should collaborate with them.**

As an **Investigator** I want to **learn more about VARLAB's team** so that **I can get to know each team member better.**

As a **Student** I want to **learn about the equipments used at VARLAB** so that **I can try a piece of equipment that I've always wanted to use.**







# FUNCTIONAL REQUIREMENTS

## User Interaction



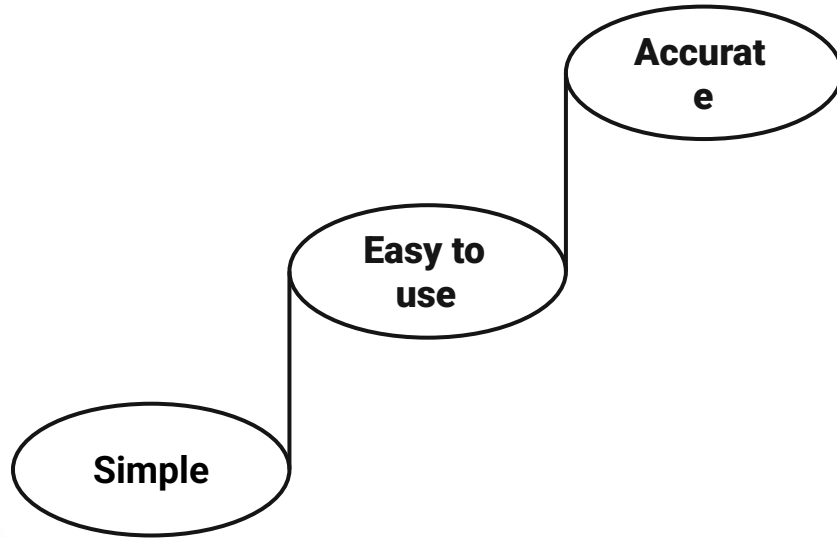
## Display Images and videos



## Present a Timeline



# QUALITY REQUIREMENTS



# PROJECT CONSTRAINTS

- Evolution of the VARLAB (3D Reconstruction)
- Administrator role (can define the position of elements)
- Object recognition functionality



# NEXT STEPS

- Retrieve VARLAB information
- Analyze data for type creation
- Learn how to use and work with the Unity Mixed Reality Kit



# THANKS

# !

**DO YOU HAVE ANY QUESTIONS?**

2024

