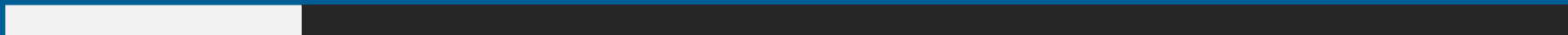


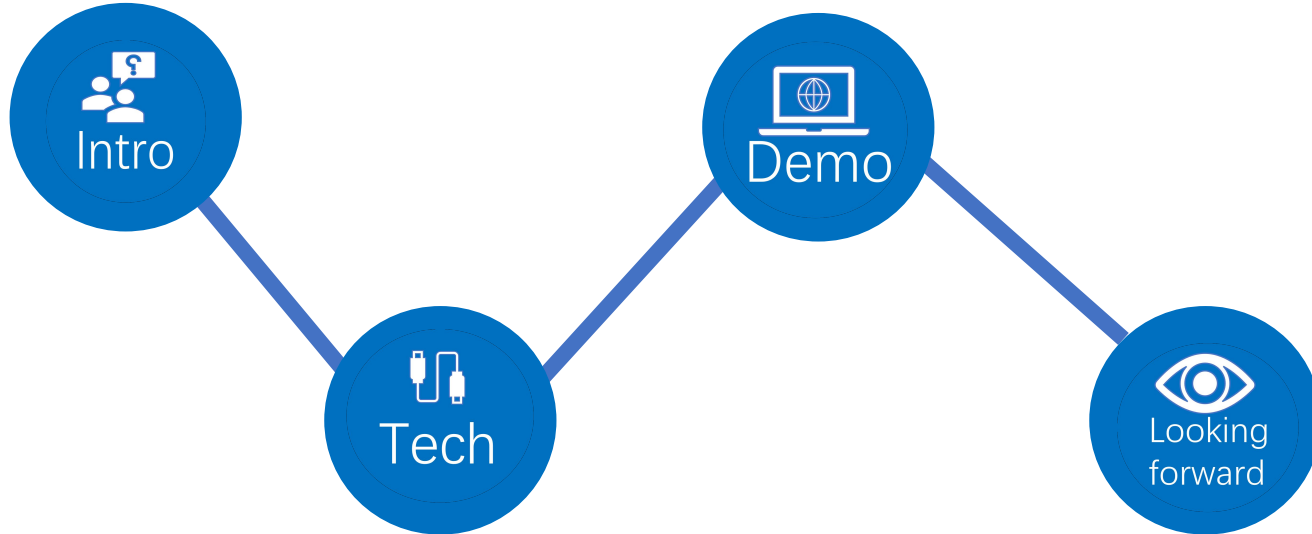
Team THR33

POI Management AI Assistant

Jiali Zhao
Simon Kuforiji
Ashray Shrestha



Content



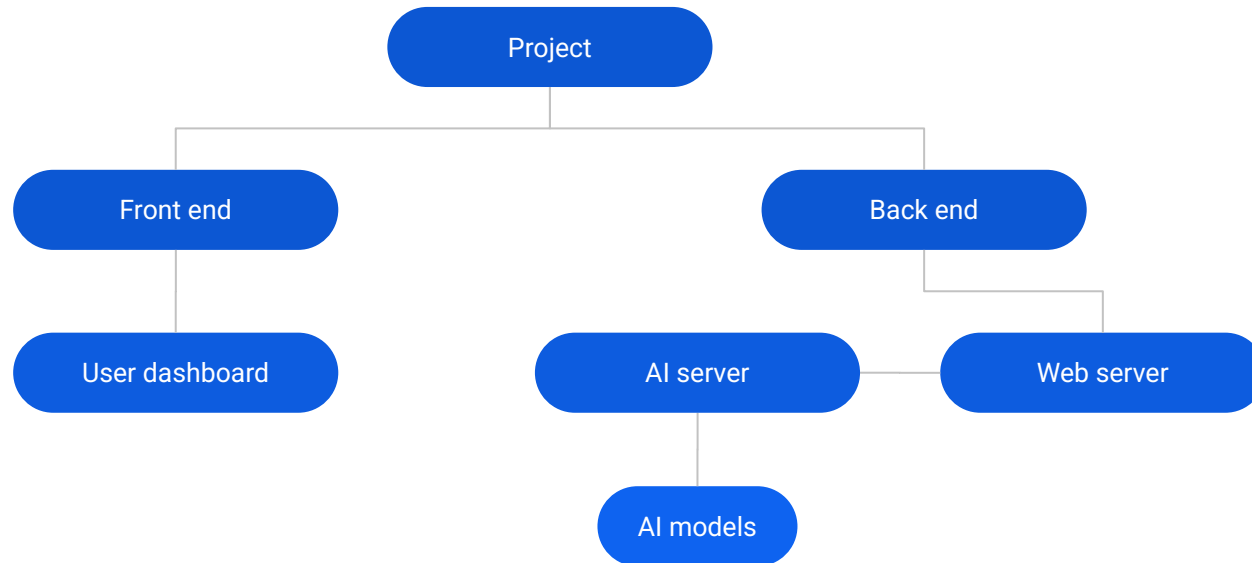
Intro

- A lot of **POI (Point of Interest)** data can be received from images captured by **IDS**
- The **POI Data** will need to be managed **effectively**
- Why not have a single source of truth- An **Interface** to manage POI data?
- Why not use **Artificial Intelligence** to enhance the **management** process?

POI Management AI Assistant

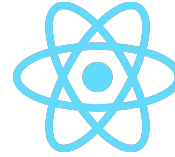
- Save time with AI suggestions
 - **Potential POIs** based on **structures** in images (**Shelves** in a **Warehouse**)
- Seamless Management
 - Create, Update, Delete **POIs** and **Attributes** (**Material, Color, Installation date**)
- Enhanced **Summary/Overview** of POIs and their current state
 - See the **current** state of everything at a **glance**

Project Structure



Technologies

- React.js
- Node.js
- LLM Studio (Provide **APIs** to the AI models)
- AI Models
 - Llama-3.2-1b-instruct
 - Deepseek-r1-distill-qwen-7b



∞ Llama 3.2

Select Structure

+

truck warehouse factory silo water tank cooling tower chimney conveyor systems pipelines power installation processing tower

Generate POIs

Choose POIs for truck

+

engine axle frame truck seat rearview mirror

Generate Attributes for All POIs

POI Summary

Here is the summary of the list items to the building manager: - The engine size is 50 cubic meters. - There are two axle types: GM and steel with a weight of 500 grams each. - The frame is made of steel, has a size of 50 square meters, and moves forward or backward depending on its orientation. - A truck seat has red leather upholstery for the driver and four seats available.

Generate Summary

POI List

POI Name	POI Attributes
engine	Show Details ✕
axle	Hide Details ✕
<div>material: steel +</div> <div>name: axle ✕</div> <div>type: GM ✕</div> <div>weight: 500g ✕</div> <div>length: ✕</div> <div>material: steel ✕</div>	
frame	Show Details ✕
truck seat	Show Details ✕
rearview mirror	Show Details ✕

Demo

- <https://drive.google.com/file/d/1oUiUjgsK5TC6ft1aRjOJQzxsYZ7fm1-t/view?usp=sharing>
- **Integration API** demo (Postman)

Looking Forward

- Enhance POI creation through AI **Object detection**
- Direct Integration with **KRpano**
- Make the **Summary** feature more flexible: Tell AI what to **focus** on

FUTURE



Thank You