

YATRA BAHASA

LANGUAGE TRANSLATOR
IMAGE DETECTOR
OFFLINE AI

MADE BY:
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CLASS - 8



1. OBJECTIVES OF IT

YATRA BAHASA IS AN INNOVATIVE LANGUAGE TRANSLATOR AND IMAGE DETECTOR DESIGNED TO ASSIST TRAVELERS IN INDIA. UNLIKE OTHER ALTERNATIVES, IT OFFERS OFFLINE AI CAPABILITIES, MAKING IT AN AFFORDABLE AND EFFICIENT TOOL FOR TRANSLATION, OBJECT RECOGNITION, AND COMPUTING ON THE GO.

2. KEY FEATURES :

- ◆ LANGUAGE TRANSLATION – CONVERTS NAMES AND TEXT INTO LOCAL INDIAN LANGUAGES OR ENGLISH.
- ◆ OBJECT RECOGNITION & DESCRIPTION – IDENTIFIES OBJECTS AND PROVIDES RELEVANT DETAILS.
- ◆ OFFLINE AI ASSISTANT – FUNCTIONS WITHOUT THE INTERNET, ALLOWING USERS TO ASK QUESTIONS ANYTIME.
- ◆ FULL COMPUTER MODE – CAN BE USED AS A BASIC COMPUTER FOR GENERAL TASKS.

3. SOFTWARE & HARDWARE SPECIFICATIONS

SOFTWARE USED:

- PROGRAMMING LANGUAGE: PYTHON**
- OPERATING SYSTEM: RASPBERRY PI OS**

HARDWARE USED:

- DEVICE: RASPBERRY PI 5 (8GB RAM)**
- INTERFACE: TOUCHSCREEN DISPLAY**

4. AI & TECHNOLOGIES USED

- 💡 IMAGE RECOGNITION: TENSORFLOW & KERAS**
- 💡 TRANSLATION SYSTEM: ONLINE API-BASED**

SOLUTIONS

💡 OFFLINE AI: POWERED BY LLAMA 3.2, INTEGRATED WITH LANGCHAIN AND OLLAMA

5. DEMONSTRATION

TO SEE YATRA BAHASA IN ACTION, VISIT:

 [PROJECT WEBSITE](#)

6. CONCLUSION

YATRA BAHASA IS A COST-EFFECTIVE, EFFICIENT, AND TRAVELER-FRIENDLY TOOL THAT SERVES AS AN ALTERNATIVE TO SMARTPHONES FOR TRANSLATION AND AI ASSISTANCE. WITH ITS OFFLINE FUNCTIONALITY AND AI-POWERED RECOGNITION, IT'S A MUST-HAVE COMPANION FOR EXPLORING INDIA.

**SCAN FOR PROJECT WEBSITE
AND DEMO OF THE PROJECT**



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