

Vision.ai - Complete Guide for Presentation

1. Opening and Introduction

- Greet the professor and audience.
- Introduce yourself and your team (if applicable).
- State the title: 'Today I am presenting the Design Process and Requirements Analysis of our project - Vision.ai.'
- Briefly mention what Vision.ai is: 'An AI-powered assistive system that generates captions for images and converts them into speech for visually impaired users.'

2. Project Objectives

- State clear goals:
 - Generate real-time image captions.
 - Convert those captions to speech.
 - Provide optional translation support.
 - Offer an accessible and modular system.

3. Problem Statement

- Explain the issue faced by visually impaired people in understanding their environment.
- Describe the gap Vision.ai fills by providing audio descriptions through AI.

4. Requirements Analysis

- Functional Requirements:
 - Upload image, generate captions, TTS output, optional translation.
- Non-Functional Requirements:
 - Accuracy, accessibility, real-time performance, modularity.

5. Design Process

- Step-wise process:
 - Upload Image -> CNN Feature Extraction -> Transformer Captioning -> NLP Refinement -> TTS
- > Audio Output

- Translation is optional and modular.
- Highlight that modules are loosely coupled for scalability.

6. Explaining Diagrams

- Use Case Diagram: Describe user interaction with system functionalities.
- Sequence Diagram: Describe how data flows step by step in execution.
- Class Diagram: Describe structure and responsibilities of each module/class.
- Component Diagram: Show system architecture and module independence.
- Deployment Diagram: Show how the system is deployed and made available to users.

7. Deployment Strategy

- Mention Docker for packaging the application.
- Streamlit used for frontend interface.
- Hosting options: Localhost or cloud deployment (Heroku, Render, etc.).

8. Summary Slide

- Reiterate key points:
 - Modular Design, Real-Time Captioning, Speech Output, Optional Translation, and Accessible UI.

9. Closing Notes & Tips

- Be confident and clear.
- Keep your tone simple and structured.
- Emphasize design choices like modularity, optional components, and NLP refinement.
- If asked about future scope, mention mobile app version, cloud deployment, multilingual support.
- End your presentation by thanking the audience and inviting questions.
- Say: 'Thank you. I am open to any questions.'