



Abilash

Final Project



PROJECT TITLE

"Image Descriptor: Enhancing Image Understanding with AI"

AGENDA



- Problem Statement
- Project Overview
- Solution and Value Proposition
- Modelling Approach
- Results and Impact
- Conclusion



PROBLEM STATEMENT

- Difficulty in comprehending images without human intervention.
- Lack of efficient tools for extracting meaningful information from images.
- Need for an automated solution to describe images accurately.



PROJECT OVERVIEW

- Introduce the Image Descriptor project.
- Briefly explain the technologies and frameworks used (e.g., Google Generative AI, Express.js, Multer).
- Highlight the aim of the project: To develop a system capable of generating textual descriptions for uploaded images.



WHO ARE THE END USERS?

- Content creators
- Social media managers
- E-commerce businesses
- Researchers
- Anyone requiring image understanding and analysis

YOUR SOLUTION AND ITS VALUE PROPOSITION



• Describe the Image Descriptor system:

- 1. User-friendly web interface for uploading images and entering questions.
- 2. Integration with Google Generative AI for image description generation.

• Value proposition:

- 1. Provides accurate textual descriptions for images.
- 2. Saves time and effort in manually annotating images.
- 3. Enhances accessibility for visually impaired individuals.
- 4. Improves search engine optimization (SEO) for images.

THE WOW IN YOUR SOLUTION





- 2. Seamless integration with existing applications.
- 3. Scalability to handle large volumes of image data.
- 4. Ability to customize prompts for generating descriptions.



MODELLING

• Explain the modelling approach:

- 1. Utilization of Google Generative AI's Gem-Pro Vision model.
- 2. Processing of image and text inputs for content generation.
- 3. Handling of multi-modal data for accurate descriptions.

RESULTS



- 1. Accuracy of generated descriptions compared to ground truth.
- 2. Speed of processing and response time.
- 3. User feedback and satisfaction ratings.
- 4. Potential applications and future improvements.

<u>Project Drive Link</u>