Concept Note for Project

Title: Finding Missing Persons Using AI

1. Introduction

- **Project Background:** Thousands of People, especially Children, go missing every day in India, Traditional Investigation methods such as manual inquiries, posters and CCTV footage reviews are time-consuming.
- **Purpose:** To develop a lightweight, AI-powered application that can help law enforcement, NGOs, and the general public to quickly identify and locate missing persons using facial recognition and crowd-sourced image matching.

2. Project Objectives

- **Main Goals:**
  - Use AI (MediaPipe Face Mesh) to match missing person photos with real-world images (e.g., CCTV footage, public submissions).
  - Enable multi-user access (admin, public) through mobile and web interfaces for real-time reporting and tracking.
- **Expected Results:**
  - Reduce time and human effort in identifying missing individuals.
  - Create a platform that is portable, open-source, and scalable for use by NGOs or city-level law enforcement.

3. Justification

- **Need for the Project:**
  - Manual matching is inefficient for the volume of missing persons and media data

- Existing systems lack AI integration and are not user-friendly for public reporting.

- **Impact on Community:**
  - Faster and wider reach for missing persons identification.
  - Empowers communities to actively participate in reporting and locating individuals.

4. Methodology

- **Strategic Approach:**
  - Develop the core application using Python, Streamlit, and MediaPipe.
  - Use SQLite for a lightweight, file-based database suitable for quick deployment.
- **Key Actions:**
  - Implement facial recognition and matching algorithm.
  - Design a mobile/web dashboard for both public users and administrators.

5. Budget Plan

Expense Item	Estimated Amount	Source of Funds	Notes
Development Tools	**Rs. 5000**	**Team Contribution**	**VS Code, Streamlit, testing tools**
Hosting/Deployment (optional)	**Rs. 2000 / Month**	**Sponsorship or Grants**	**Could use free tiers initially**

Marketing and Awareness	**Rs. 3000**	**NGO Partnership**	**Flyers, awareness campaigns**
Mobile App Testing Devices	**Rs. 10000**	**College, Incubator**	**For user testing, debugging**
Miscellaneous (Data, API)	**Rs. 2000**	**Team/ External Fund**	**Image dataset enhancement**

6. Project Timeline

Activity	Start Date	End Date	Key Milestones
Requirement Analysis	Jul 31	Aug 2	Finalize user roles, Input types
Frontend	Aug 2	Aug 3	Ready Framework
AI model Integration	Aug 3	Aug 4	Face matching model
Web App development	Aug 4	Aug 5	Basic Dashboard, image uploading
App Submission	Aug 4	Aug 5	Submission form handling
Testing and Feedback	Aug 5	Aug 5	Field Testing

Final Report	**Aug 6**	**Aug 6**	**Presentation, Lean Canvas and Documentation**

7. Conclusion

- **Summary:** This project leverages facial recognition AI to reduce the time and effort required to locate missing persons. Through a user-friendly web and mobile platform, it allows both authorities and the public to contribute to the cause efficiently.

- **Future Actions:**
  - Integrate cloud-based face recognition API for scale.
  - Collaborate with government agencies and smart city surveillance.
  - Add multilingual support and location-based alerts.