ROADMAP

Document Identification & Verification System

Phase 1: Project Setup & Planning

- Define the project scope and objectives.
- Identify required technologies (React, Tailwind CSS, Firebase, Gemini AI API).
- Set up the project repository and development environment.
- Design system architecture and workflow.

Phase 2: UI/UX Development

- Implement a user-friendly interface for document upload.
- Develop a sidebar for history and previous document retrieval.
- Create a responsive and accessible design using Tailwind CSS.

Phase 3: Core Functionality Implementation

- Implement file upload and preview functionality.
- Convert uploaded images to Base64 format.
- Send Base64 image data and MIME type to backend processing.

Phase 4: AI Integration

- Configure Gemini AI API for document identification and data extraction.
- Design an optimized prompt for accurate and structured responses.
- Implement API call handling and response formatting.

Phase 5: Response Handling & Storage

- Display AI-generated responses in the UI.
- Store processed document details in history for future retrieval.
- Implement a sidebar for easy navigation of past queries.

Phase 6: Error Handling & Optimization

- Implement robust error handling for file uploads and API failures.
- Optimize response formatting for better readability.
- Enhance security and privacy measures for document processing.

Phase 7: Testing & Debugging

- Conduct unit testing for file uploads and AI responses.
- Perform end-to-end testing to ensure seamless workflow.
- Gather user feedback for improvements.

Phase 8: Deployment & Maintenance

- Deploy the application on a cloud platform or Firebase hosting.
- Monitor performance and address any post-deployment issues.
- Plan for future updates and feature enhancements.

Future Enhancements:

- Support for additional document types and languages.
- Implement OCR for text extraction from scanned documents.
- Enhance security with authentication and access controls.
- Expand AI capabilities for better accuracy in document verification.