AI-Powered Presales Automation – Scope Document

1. Project Overview

This AI-powered tool aims to automate the presales process by analyzing client requirements, generating feature breakdowns, recommending architecture, estimating efforts, and creating UI wireframes automatically.

2. Scope of Work

2.1 Core Features & Deliverables (MVP)

2.1.1 AI-Powered Requirement Analysis & Feature Breakdown

- Users can upload client requirements via text input or document upload (PDF, Word).
- AI extracts key functional & non-functional requirements and generates feature breakdowns.
- Frontend UI for requirement input and result display.
- Backend APIs for file upload and text processing.
- AI Component: Uses NLP (OpenAI GPT-4 or Hugging Face) for feature extraction.

2.1.2 AI Business Analyst (BA)

- AI maps extracted requirements to user personas, workflows, and integrations.
- Categorizes features into must-have, nice-to-have, and future enhancements.
- Frontend UI to display categorized lists interactively.
- Backend storage and retrieval of BA analysis.
- AI Component: Uses knowledge graphs or fine-tuned models for classification.

2.1.3 AI-Based Architecture & Tech Stack Recommendation

- AI suggests scalable architecture based on extracted requirements.
- Identifies third-party API integrations.
- Displays architecture in a readable format (tables, simple diagrams).
- Frontend UI for architecture visualization.
- Backend API for storing/retrieving recommendations.
- AI Component: Uses predefined templates and NLP-driven suggestions.

2.1.4 AI-Driven Effort Estimation & Cost Calculation

- AI estimates efforts for development, testing, and DevOps with adjustable buffers.
- Uses historical project data or predefined datasets for timeline predictions.
- Calculates cost estimation based on standard pricing models (Junior, Mid, Senior developers).
- Frontend displays effort estimation & cost breakdown in tabular form (downloadable CSV).
- Backend storage for cost estimations.
- AI Component: Uses pre-trained LLMs (LangChain/OpenAI) for effort estimation.

2.1.5 AI-Generated Wireframes & UI Mockups

- AI generates low-fidelity wireframes based on extracted requirements.
- Box-based UI visualization (Figma API / HTML Canvas).
- Frontend UI to render wireframes.
- Backend storage for mockups.
- AI Component: Uses predefined UI templates based on feature categories.

2.1.6 Version Control & Real-Time Collaboration

- Allows multiple users to edit/refine proposals collaboratively.
- Frontend dashboard to show past proposals & revisions.
- Backend for tracking proposal changes.
- Integration: Basic notification system (email API) for updates.

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3. Deliverables

1. Fully functional AI-powered presales automation tool (MVP).
2. Codebase with well-documented APIs & AI models.
3. Presentation & demo explaining AI logic & system architecture.
4. Secure backend with role-based access control.
5. AI-generated reports and feature breakdown documentation.

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4. Responsibilities

4.1 Client Responsibilities

- Provide access to historical project data (if available) for AI model training.
- Define key evaluation criteria and project-specific customization requirements.
- Facilitate feedback loops for refining AI-generated proposals and estimations.

4.2 Development Team Responsibilities

- Design, develop, and deploy the AI-powered presales tool.

- Implement NLP-driven requirement analysis and effort estimation.
- Integrate AI workflows for architecture recommendation and cost analysis.
- Ensure data encryption and security compliance.
- Conduct extensive testing to ensure accuracy and usability.
- Provide documentation and training materials.

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5. Acceptance Criteria

- Successful deployment of the MVP with all core AI-driven functionalities.
- Accuracy of at least 90% in AI-generated feature breakdowns.
- Effort estimations should match historical project data within a 10% variance.
- Wireframes generated should align with feature descriptions at a minimum 85% accuracy.
- Real-time collaboration & version control features should function without data loss.
- API integrations must be secure, stable, and return responses within 2 seconds.

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6. Key Points of Evaluation

- AI model performance in requirement analysis, architecture suggestion, and cost estimation.
- Usability and ease of adoption by business development teams.
- Scalability and efficiency of the presales automation tool.
- Security compliance and data protection measures.
- Accuracy of AI-generated documents compared to manually created versions.
1.

Future Enhancements

AI-Created Proposal & Pitch Deck Generator

- Auto-generates a detailed proposal document including:
  - Executive Summary
  - Feature Breakdown
  - Architecture & Tech Stack
  - Timeline & Effort Estimation
  - Budget & Pricing
  - Statement of Work (SOW)
- Exports to PDF / PowerPoint slides.
- **Frontend**: UI for proposal review & edits.
- **Backend**: Stores proposal data.
- **AI Component**: Uses OpenAI GPT-4 for structured report generation.

Intelligent Recommendations & Improvements

- AI suggests additional features based on industry trends.
- Provides comparisons with **similar past projects**.
- AI detects missing edge cases & security concerns.

RFP document: Create the estimates and proposal for this document
https://drive.google.com/file/d/17rmWxc0z9Q40-o3aRyrcug1b8NiQ1yB_/view?usp=sharing

Example output of effort estimates (excel sheet):
https://docs.google.com/spreadsheets/d/1rM-C8uC3y67GW2R26eCAPMXcRO9fFtQqsqFZV0py6YM/edit?usp=sharing

Example of a proposal:

https://drive.google.com/file/d/1X7sdDUo4n3OsK6iiOcRcySx9Gm-TUsY2/view?usp=sharing