

# Business Requirement Document (BRD): "ReqGen" Document Generation Tool

- **Project Name:** ReqGen (Working Title)
  - **Version:** 1.1
  - **Date:** November 5, 2025
  - **Document Purpose:** To outline the business goals, functional requirements, and scope for a new application designed to streamline the creation and distribution of requirement documents and purchase orders, **with AI-assisted content refinement.**
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## 1. Project Overview

### 1.1 Business Problem

Sales teams, project managers, and business analysts currently gather client requirements in disparate formats (e.g., raw text files, emails, physical notebooks). This raw data must then be manually transferred and formatted into professional, branded documents like a Business Requirement Document (BRD) or a Purchase Order (PO). This process is time-consuming, prone to copy-paste errors, and often results in inconsistent branding. Furthermore, converting rough, incomplete notes into formal, structured documentation requires significant effort.

### 1.2 Business Objectives

The "ReqGen" application aims to solve this problem by providing a single, streamlined platform to:

- **Reduce administrative overhead** by combining note-taking, AI-powered refinement, and document generation.
- **Enhance content quality** by using AI to transform rough ideas into structured, professional documentation.
- **Increase professionalism** by ensuring all client-facing documents are consistently branded with company letterheads.
- **Accelerate the project/sales cycle** by enabling immediate creation and emailing of formal BRDs and POs from a single interface.
- **Improve versatility** by providing output in multiple, standard formats (Word and PDF).
- **Minimize errors** by providing a "Preview" function before final document creation.

### 1.3 Project Scope

#### In Scope

A simple text editor for requirement note-taking.

**An AI feature to refine and structure notes (via Hugging Face API).**

User settings to upload a company logo and add address details.

#### Out of Scope

A full-featured CRM or client management database.

**Training or hosting a proprietary Large Language Model (LLM).**

A payment processing or invoicing system.

In Scope	Out of Scope
Document generation engine with two templates: BRD and PO.	Real-time document collaboration (e.g., Google Docs style).
<b>A "Preview" function to see the document before generation.</b>	
Header and footer application (letterhead) using saved settings.	Advanced project management or requirements-tracking features.
Export functionality for generated documents (.docx and .pdf).	Version control or document revision history.
An integrated email feature to send the generated document to a client.	
Export to Sheets	

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## 2. Stakeholders

- **Primary User:** The individual using the application (e.g., Business Analyst, Salesperson, Project Manager) to capture notes and send documents.
  - **System Administrator:** The user (likely the Primary User) who sets up the initial company branding (logo, address) and **API keys (if required)**.
  - **Client (Recipient):** The external party who receives the final BRD or PO via email.
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## 3. Functional Requirements

The system's requirements are broken down by feature module.

### 3.1 Module 1: Requirement Capture (Note-Taking)

- **FR-1.1:** The system shall provide a simple text-entry interface (a "notes" area) where a user can type and perform basic formatting (e.g., bold, italics, bullet points, numbered lists).

### 3.2 Module 2: AI-Assisted Content Generation

- **FR-2.1:** The system shall include an "Refine with AI" button within the note-taking interface.
- **FR-2.2:** When the user clicks "Refine with AI," the system shall securely send the raw text from the notes area to a pre-configured Hugging Face API endpoint.
- **FR-2.3:** The system shall be configured to use a specific model (e.g., a text-generation or summarization model) suited for formalizing business notes.
- **FR-2.4:** The system shall receive the AI-generated text and replace or supplement the content in the notes editor for the user to review.
- **FR-2.5 (Configuration):** The "Settings" area must include a field for a user/admin to input their Hugging Face API key for authentication.

### 3.3 Module 3: Branding & Configuration

- **FR-3.1:** The system shall provide a "Settings" area.

- **FR-3.2:** In "Settings," the user must be able to upload an image file (e.g., .png, .jpg) to be used as the company logo.
- **FR-3.3:** In "Settings," the user must be able to input company address and contact details (as text) to be used in the letterhead.
- **FR-3.4:** The system shall securely store these settings for future use.

### 3.4 Module 4: Document Generation & Preview

- **FR-4.1:** After entering notes (or having them refined by AI), the user shall have an option to "Generate Document."
- **FR-4.2:** Upon clicking "Generate Document," the system shall prompt the user to select a document type (e.g., "Business Requirement Document" or "Purchase Order").
- **FR-4.3:** The system shall first generate a **read-only "Preview"** of the final document within the application, displaying the content with the company letterhead (header/footer) applied.
- **FR-4.4:** The user must be able to "Confirm & Create" or "Go Back" from the preview screen.
- **FR-4.5:** If "Confirm & Create" is selected, the system shall proceed to generate the final files.

### 3.5 Module 5: Export & Distribution

- **FR-5.1:** Once a document is confirmed, the user must have the option to download it in **Microsoft Word (.docx)** format.
- **FR-5.2:** Once a document is confirmed, the user must have the option to download it in **PDF (.pdf)** format.
- **FR-5.3:** The system shall provide an "Send Email" option.
- **FR-5.4:** Clicking "Send Email" shall open a modal or form with fields for: To (Client Email), Subject, and Body.
- **FR-5.5:** The generated document (as a PDF attachment) shall be automatically included in the email.
- **FR-5.6:** The user must be able to send the email directly from the application interface.

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## 4. Non-Functional Requirements

- **Usability:** The interface must be extremely simple and intuitive.
- **Performance:** AI refinement should return a response within 10-15 seconds. Document generation (PDF/Word) should be completed within 5 seconds of the user's request.
- **Compatibility:** Generated .docx files must be compatible with standard office software. Generated PDFs must be viewable in all standard PDF readers.
- **Security:** User-uploaded assets (logos) and company details must be stored securely. All API calls (especially to Hugging Face) must be authenticated and use HTTPS. API keys must be encrypted at rest.
- **API Dependency:** The "Refine with AI" feature is dependent on the availability and terms of service of the external Hugging Face API. The system must gracefully handle API-related errors (e.g., downtime, rate limits).

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## 5. Use Case Scenario

- **Actor:** Alex, a Strategic Manager.
  - **Goal:** To send a formal BRD to a new client after a discovery call.
1. **Setup (First-time use):** Alex goes to the "Settings" page in the app, uploads the CybaemTech logo, types in the company's head office address, and pastes in his company's Hugging Face API key. He saves the settings.
  2. **Note-Taking:** During a client call, Alex opens the app's "Notes" section and types out rough ideas: "*client needs login,*" "*wants dashboard,*" "*product page with filters,*" "*needs fast.*"
  3. **AI Refinement:** After the call, Alex clicks the "**Refine with AI**" button. The app processes the text and, after a few seconds, replaces his notes with structured content:
    - 1. *User Authentication: Implement a secure login and registration module.*
    - 2. *Main Dashboard: Develop a user dashboard displaying key metrics.*
    - 3. *Product Catalog: Create a product gallery page with advanced filtering capabilities (e.g., by price, category).*
    - 4. *Performance: The application must adhere to high-performance standards with fast page-load times.*
  4. **Generation & Preview:** Alex is happy with the text and clicks "Generate Document." He selects "Business Requirement Document." The app immediately shows him a **preview** of the final document, complete with the CybaemTech logo and his refined notes.
  5. **Distribution:** It looks perfect. Alex clicks "Confirm & Create." He is given the options to Download or Email. He clicks "Send Email." He enters the client's email address, a subject line ("BRD for Project Alpha"), and clicks "Send."
- **Result:** The client receives a professional, AI-structured, branded BRD within minutes of the call ending.