

# Universal AI Website & Database Assistant

## 1. Overview (What is this product?)

This product is a **plug-and-play AI chatbot platform** that any website owner can use to let users **ask questions about their website content and database in simple language**.

In simple terms: - Website owners connect their **documents** (PDFs, policies, FAQs) - They optionally connect their **database** (read-only) - They embed a **chatbot widget** on their website - End users ask questions - The AI answers using the company's **own data**, safely and accurately

This is built as a **SaaS (Software as a Service)** product, meaning: - One platform - Multiple companies - Monthly subscription

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## 2. Problem Statement (Why this product?)

### Current Problems Faced by Companies

- Important information is scattered across PDFs, databases, and dashboards
- Non-technical users cannot query databases
- Support and internal teams answer the same questions repeatedly
- Existing chatbots only handle FAQs, not real business data

### Example Problems

- "What is our refund policy?" → PDF
- "How many orders were delivered today?" → Database
- "Where is my order?" → Database
- "Explain leave policy" → Document

Companies want **one simple interface** to answer all these.

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## 3. Solution (What your product does)

Your product provides: - A **single AI chatbot** - That understands **documents + databases** - Works on **any website** - Requires **no AI knowledge** from the company

Key idea:

*Companies don't change their system – they just connect it.*

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## 4. Target Users

### Primary Users (Customers)

- SaaS companies
- Startups
- E-commerce websites
- Enterprises
- Internal teams (HR, Support, Finance)

### End Users (Who chats with the bot)

- Website visitors
  - Employees
  - Customers
  - Support agents
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## 5. User Roles

### 1. Platform Admin (You)

- Manages SaaS
- Handles billing & plans
- Monitors usage

### 2. Company Admin

- Creates workspace
- Connects database
- Uploads documents
- Configures chatbot

### 3. Team Members

- Uses chatbot
- Views analytics (if allowed)

### 4. Website Visitors

- Interact only with chatbot
  - No access to dashboard
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## 6. Core Features

### A. Document-Based Q&A (RAG)

- Upload PDFs (policies, FAQs, manuals)
- AI searches documents to answer questions
- Source-based answers

### B. Database-Based Q&A (Text-to-SQL)

- Connect Postgres / MySQL (read-only)
- Admin selects allowed tables
- AI generates safe SELECT queries

### C. Intelligent Router

- AI decides:
- Document question → Documents
- Numeric/data question → Database
- Mixed → Both

### D. Chatbot Widget

- One-line embed script
- Customizable color & position
- Mobile responsive

### E. Analytics Dashboard

- Total queries
  - Document vs DB usage
  - Popular questions
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## 7. How the System Works (Simple Workflow)

### Step 1: Company Onboarding

1. Company signs up
2. Creates a workspace
3. Invites team members

### Step 2: Data Connection

**Documents:** - Upload PDFs - System processes and indexes them

**Database:** - Admin enters DB credentials - Selects allowed tables - System reads schema only

### **Step 3: Chatbot Integration**

- Company embeds widget script on website

### **Step 4: User Asks Question**

1. User types question
  2. System classifies question type
  3. Fetches answer from:
  4. Documents
  5. Database
  6. Or both
  7. AI formats response
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## **8. Safety & Security**

### **Database Safety**

- Read-only credentials
- Only SELECT queries allowed
- No UPDATE / DELETE / DROP

### **Data Isolation**

- Each company has separate data
- No cross-company access

### **Access Control**

- Role-based permissions
- Table-level restrictions

### **Audit Logs**

- Who asked what
  - When
  - What data was accessed
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## **9. Tech Stack**

### **Frontend**

- React
- Tailwind CSS / ShadCN
- Chart libraries (Recharts)

## Backend

- Node.js
- Express.js

## Database

- PostgreSQL (main app DB)
- pgvector (for document embeddings)

## AI Layer

- OpenAI / Gemini / Claude
- Embeddings for document search

## Auth & SaaS Tools

- Supabase / Clerk (auth)
  - Stripe / Razorpay (billing)
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## 10. SaaS Architecture (High Level)

- Multi-tenant system
  - Each request tagged with company\_id
  - Shared infrastructure
  - Isolated data
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## 11. Monetization Model

### Pricing Example

Plan	Price	Features
Free	₹0	Limited queries
Starter	₹1,999/month	Docs + Widget
Pro	₹7,999/month	DB + Analytics
Enterprise	Custom	SSO + SLA

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## 12. Example Use Cases

### HR

- "What is leave policy?"
- "How many leaves do I have left?"

### E-commerce

- "Where is my order?"
- "How many orders today?"

### Support

- "Why was my ticket delayed?"
  - "Show pending tickets"
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## 13. Why This Project Is Strong

- Real-world enterprise use case
  - Combines frontend, backend, DB, AI
  - Highly resume-worthy
  - Can be converted into real SaaS
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## 14. Future Enhancements

- Multiple database support
  - Voice-based chatbot
  - Multilingual support
  - Custom AI models
  - Fine-grained permissions
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## 15. One-Line Pitch

**A universal AI chatbot that lets any website answer questions directly from its documents and database, securely and in plain language.**