AI Sales Qualification Bot

1. Problem Statement

Real estate businesses face a constant challenge of efficiently managing incoming buyer inquiries from multiple channels such as property listing sites, Facebook Ads, Google Ads, WhatsApp messages, and direct website forms.

While a high inquiry volume sounds positive, a deeper analysis reveals three major operational problems:

1. **Wasted Sales Resources**

   - Sales teams spend excessive time manually engaging with leads who may have no intention to purchase, lack the budget, or are simply browsing.

   - This reduces focus on high-quality prospects who could convert faster.

2. **Delayed Lead Engagement**

   - Human follow-ups often take hours or days, by which time the lead may have already contacted other realtors.

   - Even high-intent buyers slip away due to lack of immediate response.

3. **Missed Opportunities**

   - Without a structured qualification process, hot leads are buried in spreadsheets or overlooked in a busy agent's inbox.

   - Potential buyers are lost simply due to slow or inconsistent communication.

Goal:

Design and implement an **AI-driven lead qualification, scoring, and routing system** that automatically:

- Engages leads within seconds of inquiry

- Assesses buyer intent using intelligent questioning

- Assigns priority scores and routes leads accordingly

- Ensures all leads, even unqualified ones, receive timely communication for future nurturing

This solution aims to **maximize sales efficiency, improve conversion rates, and create a scalable, automated process**.

2. Tech Stack Used

The project leverages a low-code automation platform combined with AI services and communication APIs to build a scalable and intelligent qualification engine.

Core Tools

- n8n – The central automation and orchestration platform where the entire workflow logic is executed.

- OpenAI API – Provides AI-driven natural language understanding to hold meaningful qualification conversations and generate lead scores based on responses.
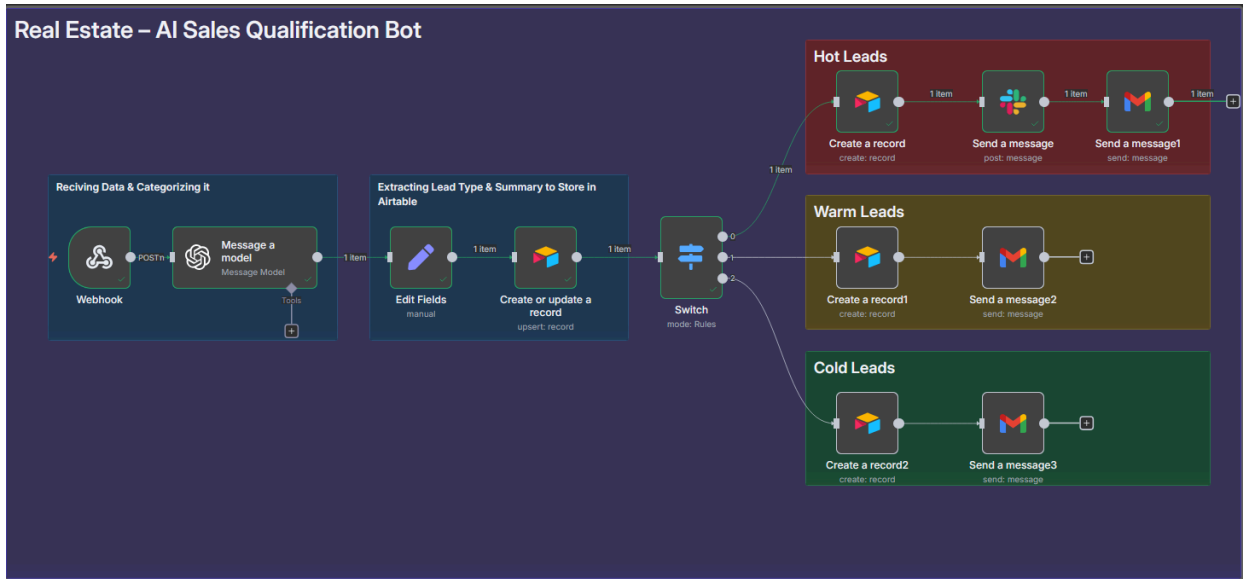
- Webhook – Acts as the entry point for incoming lead data from multiple external sources.

- Google Sheets / Airtable – Used as structured lead databases for storage, tracking, and analytics.

- Email / WhatsApp API – For instant outbound communication with leads and internal notifications for sales teams.

Optional / Enhanced Integrations

- Retell AI / Vapi – Enables AI-powered voice conversations for phone-based lead qualification.

- ElevenLabs – Generates natural-sounding AI voice for audio follow-ups or automated calls.

- AWS – Used for server hosting, backend processing, and secure data storage if needed.

This tech stack ensures fast deployment, flexibility, and easy integration with existing CRM systems.

3. Solution Workflow

Step-by-Step Flow :

The automation is structured in **six key stages**, ensuring that **every lead is processed, qualified, and engaged within seconds** of submission.

Stage 1: Lead Capture

- **Trigger:** A lead submits an inquiry via:

    - Website property interest form

    - Facebook/Instagram Lead Ads

    - WhatsApp chat widget

    - Google Ads click-to-message campaigns

- **Action:** A **Webhook** in n8n receives the data in real-time, capturing:

    - Name, contact details (email/phone)

- Property interest details (location, type)

- Budget range (if provided)

- Timeframe for purchase

Stage 2: AI Qualification

- **AI Conversation (OpenAI API):**

  - The bot sends an instant automated greeting and asks targeted qualification questions:

    - "What is your preferred location for purchase?"

    - "Do you have an approximate budget in mind?"

    - "When are you planning to make a purchase?"

  - The AI uses context-aware understanding to handle varied responses naturally.

- **Result:** Responses are fed into a scoring algorithm to determine buyer intent.

Stage 3: Data Structuring

- **Edit Fields Node (n8n):**

○ Cleans incoming text (e.g., converting "next few months" into a structured timeline like 2-3 months).

○ Formats currency values into standard numeric ranges.

○ Ensures all records have uniform structure for storage.

Stage 4: Lead Storage

● **Create or Update Record Node:**

  ○ The processed lead data is saved in **Google Sheets or Airtable** with timestamps, source channel, AI score, and status (High, Medium, Low).

  ○ This database acts as both a **CRM-lite** and a **reporting dashboard**.

Stage 5: Scoring & Routing Logic

● **Switch Node (n8n Decision Logic):**
  Based on the AI score:

  ○ **High Score (Hot Leads)**

    ■ Add to database

    ■ Send **instant WhatsApp/Email alert** to sales agents with lead details

- ■ Optionally trigger a voice call via Vapi or Retell AI

- ○ **Medium Score (Warm Leads)**

  - ■ Add to database

  - ■ Send **nurture campaign message** (e.g., property recommendations, financing tips)

  - ■ Schedule follow-up reminders in CRM

- ○ **Low Score (Cold Leads)**

  - ■ Add to database

  - ■ Send **polite thank-you message** with an option to connect in the future

  - ■ No immediate human follow-up

Stage 6: Automated Messaging

- ● Depending on score, the system sends:

  - ○ **Personalized WhatsApp messages** with relevant property links

  - ○ **Email follow-ups** using marketing automation

  - ○ Internal **Slack/Email notifications** for sales agents