

AI Full Stack developer Assignment – GrowEasy

Website: <https://growseasy.ai>

Stipend/Salary Structure

1. Full-Time Internship:
 - Fixed Stipend: ₹12,500 per month
 - Performance Bonus: Up to ₹2,500 per month
2. Full-Time Job (6+ Months Experience Required):
 - Fixed Salary: ₹25,000 per month
 - Performance Bonus: Up to ₹5,000 per month

Objective

Create a chat-based AI agent (simulated WhatsApp bot) that:

1. Receives a lead and initiates a conversation.
2. Qualifies the lead as:
 - Hot
 - Cold
 - Invalid

The agent must be configurable to represent different industries, starting with a real estate use case.

Scope & Requirements

♦ Core Functionality

1. Simulate WhatsApp-like conversation:
 - Agent starts a chat upon receiving a new lead.
 - Text-only communication (no actual WhatsApp integration).
 2. Conversational AI Logic:
 - Behaves like a human sales assistant.
 - Ask relevant questions (e.g., intent, budget, urgency).
 - Classifies leads as Hot, Cold, or Invalid.
 3. Configurable Behavior:
 - Prompts, domain knowledge, and qualifying criteria driven by a configurable business profile.
 - Implement for real estate first, but design for easy extension to other industries.
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Input & Output

♦ Input:

- Lead info: Name, phone, source, [optional] message.
- Business configuration: Industry, qualifying questions, rules.

♦ Output:

- Chat transcript (JSON or text).
 - Final classification (Hot/Cold/Invalid).
 - Extracted metadata (e.g., budget, location, timeline).
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Suggested Tech Stack

- Language: JavaScript (Node.js) — Mandatory
- Model: OpenAI GPT (or any LLM, can use Langchain)
- Interface: CLI, Web (React), or Postman-friendly API

- Note: No WhatsApp API required — simulate chat via **web UI**.
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Deliverables

1. GitHub repository with:
 - Code.
 - README with setup instructions.
 - Sample input/output.
 - Config file format for business profiles.
 2. Demo video (2–3 minutes) explaining the approach.
 3. Email above details to these emails- varun@groweasy.ai, CC: tej@groweasy.ai
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Expectations

1. Config file to customize:
 - Industry.
 - Location.
 2. Chat interface to interact with the agent.
 3. Storage of classification results (file, log, or database).
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Bonus Points

- Smart fallback for unresponsive leads.
 - Natural, empathetic responses.
 - Industry-agnostic plugin/config support.
 - Deployable API or web app demo.
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Deadline

Submit within 3 days of receiving this assignment.

Sample Chat Transcript


HOT LEAD EXAMPLE

Lead Info:

- Name: Rohit Sharma
 - Source: Website inquiry
 - Initial Message (Optional): *"Hi, I'm interested in buying a property."*
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AI Agent (GrowEasy Realtor):

[Automated greeting + first question]


: *"Hi Rohit! Thanks for reaching out. I'm your GrowEasy real estate assistant. Could you share which city/location you're looking for?"*

Rohit:


: *"Pune, preferably near Kalyani Nagar."*

AI Agent:

[Follow-up to gauge intent]


: *"Great! Are you looking for a flat, villa, or plot? Also, is this for investment or personal use?"*

Rohit:

: *"2BHK flat for personal use. Need to move in within 3 months."*

AI Agent:

[Budget check]


: "Understood! What's your budget range? (e.g., 50L–80L)"

Rohit:

: "Max 75L."

AI Agent:

[Urgency check]

: "Got it. Would you like to schedule a site visit this week? We have ready-to-move options matching your criteria."

Rohit:

: "Yes, please share available slots."

Classification & Metadata

Result:

- Lead Status: Hot (*High intent, clear budget, urgent timeline*)
- Extracted Metadata:
 - Location: Pune (Kalyani Nagar)
 - Property Type: 2BHK Flat
 - Budget: ₹75L
 - Timeline: 3 months

- Purpose: Personal use

COLD LEAD EXAMPLE

Lead Info:

- Name: Priya Patel
- Source: Facebook Ad

Chat Transcript:

: "Hi Priya! Welcome to GrowEasy Realtors. Are you looking to buy or rent a property?"


: "Just browsing options right now."

: "No problem! Which area interests you?"

: "Not sure yet, maybe Mumbai suburbs."

: "Got it. What's your approximate budget range?"

: "Haven't decided. Just send me some listings."

: "Sure! Here are 3 trending properties in Mumbai suburbs. Would you like to discuss financing options?"

(No response after 24 hours)

Classification:

- Status: Cold (*Vague requirements, no urgency, unresponsive to closing questions*)
- Metadata:
 - Location: Mumbai (unspecified)


- Intent: Browsing
 - Engagement: Low
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INVALID LEAD EXAMPLE

Lead Info:

- Name: "Test User"
- Source: Website form


Chat Transcript:

: "Hello! How can we assist you with your property search?"

: "asdfghjkl"

: "Could you clarify your property requirements?"

: "123456789"

: "This appears to be a test entry. Please contact us if you have genuine inquiries!"

(No meaningful response)

Classification:

- Status: Invalid (*Gibberish/non-serious input, likely bot/spam*)
- Metadata:
 - Reason: Fake/test entry
 - Action: Flagged for review

