

Career Insight Agent (MVP)

Submission for the Agentic Automation Bounty

1. Overview

The **Career Insight Agent** is a **Minimum Viable Product (MVP)** designed to demonstrate the potential of Agentic Automation in HR operations. This Proof of Concept (POC) showcases how raw employee feedback can be transformed into strategic documents by orchestrating Generative AI with legacy desktop applications.

Key Capabilities:

- **Human-in-the-Loop:** Web form interface for HR managers to submit reviews.
- **Specialized AI Skill:** Uses a custom-trained AI Skill (Classifier) for deterministic sentiment analysis.
- **Generative Orchestration:** Uses an LLM Agent to reason, fetch external data, and draft content.
- **Document Automation:** Automatically logs structured data to Excel and drafts confidential letters in MS Word.

2. Folder Structure

Ensure the extracted files maintain the following structure in your Control Room:

BotStore/ └─ CareerInsightAgent/ └─ Process_CareerReview (Main Entry Point - Process) └─ Agent_CareerCoach (The AI Orchestrator) └─ Skill_SentimentAnalysis (Generative AI Skill) └─ Tools/ └─ Tool_AnalyzeSentiment (Wrapper Bot for AI Skill) └─ Tool_GetMotivationQuote (API Task - ZenQuotes) └─ Tool_LogReviewData (Excel Automation) └─ Tool_DraftCareerLetter (Word Automation)

3. Prerequisites & Setup

Before running the agent, ensure the following are configured:

A. Local Files

- Create a folder on your C: drive: `C:\AgentBounty`
- The agent will automatically create/update `Career_Log.xlsx`, Word reports, and error logs in this folder.

B. Applications

- **Microsoft Excel:** Installed locally.
- **Microsoft Word:** Installed locally.

C. Automation Anywhere Configuration

- **Model Connection:** The Agent and AI Skill are configured to use `Agent 4.1` (or your preferred LLM connection).
- **Package Dependencies:** Ensure the "Generative AI" and "AI Agent Studio" packages are enabled.

4. How to Run

Do not run the Task Bots directly. This solution uses a Process for Human-in-the-Loop interaction.

1. Navigate to `BotStore/CareerInsightAgent/Process_CareerReview`.
2. Click **Run**.
3. A web form will appear in your browser.
 - **Employee Name:** Enter a name (e.g., "Sofia Martinez").
 - **Review Text:** Paste the annual review text.
4. Click **Submit**.
5. The process will execute the Agent, analyze sentiment, fetch a leadership quote, and generate the files.
6. **Verify Results:** Open `C:\AgentBounty` to view the generated Excel log and Word report.

5. Error Handling

As a robust POC, this solution implements local error handling for the desktop automation components.

- **Mechanism:** If Excel or Word fails to open or write data (e.g., file permission issues), the error is caught by the bot's `Try/Catch` block.
- **Logging:** The specific error message and timestamp are appended to `C:\AgentBounty\ErrorLog.txt` for troubleshooting.

6. Architecture & Tools

This solution uses a "Delegated AI" architecture where specific tasks are handled by specialized tools:

1. **Process_CareerReview**: The HITL container that captures user input and passes it to the Agent.
2. **CheckSentiment (Tool_AnalyzeSentiment)**: A wrapper bot that executes `Skill_SentimentAnalysis` . This uses a strict, deterministic prompt to classify text as "Positive", "Negative", or "Neutral".
3. **GetMotivationQuote (Tool_GetMotivationQuote)**: An API Task that connects to the ZenQuotes REST API to fetch a random leadership quote for morale improvement.
4. **LogData (Tool_LogReviewData)**: A Task Bot that handles structured data logging to Excel.
5. **DraftLetter (Tool_DraftCareerLetter)**: A Task Bot that creates a formatted, professional Word document.