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Assignment: AI Career Exploration and Skill Gap Analysis

Part 1: Job Description & Overview

Job Title: AI Agent Expert
Company Name: [Amzdudes | Karachi | Listed on Indeed]
Link to Posting: [Indeed Job Posting](#)
Date of Posting: (February 2024)

Overview:

This role focuses on designing, building, and optimizing AI agents using no-code platforms (e.g., Lindy.ai) to automate and streamline enterprise workflows. Key responsibilities include developing AI-driven solutions for email automation, scheduling, multi-agent collaboration, and ensuring secure AI interactions. The position is highly relevant to AI automation and security and generative AI, as it blends generative AI techniques with best practices in safety, evaluation, and prompt engineering to deliver robust, scalable, and secure enterprise applications.

Part 2: Skills Breakdown

Skill Requirement	Do I Meet?	Work Done / Relevant Qualifications
AI Agent Development	Partially	Developed a financial chatbot using large language models and NLP (RASA framework) during an AI Internship at Blutech Consultancy; completed relevant coursework in AI at Habib University.
Enterprise AI Solutions	Partially	Worked on an AI chatbot aimed at enterprise banking integration, demonstrating exposure to AI-driven automation; internship experience combined with relevant academic projects.

Multi-Agent Collaboration	Somewhat	Participated in collaborative projects such as the Sexism Identification project and the SkillSwap Platform, showcasing teamwork and project management skills, although with limited exposure to formal multi-agent system architectures.
AI Memory Management & Context Handling	Theoretical	Gained a strong theoretical foundation in Deep Learning and Introduction to Large Language Models through coursework at Habib University; however, no hands-on project specifically focused on optimizing memory-based interactions.
Task & Workflow Automation	Yes	Built web applications like the SkillSwap Platform using HTML, CSS, JavaScript, and Node.js, demonstrating proficiency in API integrations and workflow automation
User Experience & Prompt Engineering	Yes	Gained experience with prompt engineering during the course LLMS, familiar with designing dynamic AI prompts in GPT-based projects.
Bug & Complexity Management	Basic	Demonstrated debugging and problem-solving skills in several course projects and internships; however, exposure to AI-specific debugging challenges is limited.
Security & Access Control	No	Possess no cybersecurity knowledge; no direct hands-on experience in implementing secure AI interactions or role-based access protocols.

Part 3: Gap Analysis & Action Plan:

Skill/Area	Objective	Methods	Timeline
No-code AI Agent Development (Lindy.ai)	Gain hands-on experience with Lindy.ai and similar tools.	<ul style="list-style-type: none">- Enroll in Lindy.ai tutorials and online courses.- Complete a guided project using a no-code platform for a simple workflow.	3 months
Enterprise AI Integrations	Develop expertise in integrating AI into enterprise systems.	<ul style="list-style-type: none">- Study case studies on AI-driven lead generation and scheduling.- Experiment with Slack, Notion, and Linear API integrations in personal projects.	3-6 months
Multi-Agent Systems Management	Build skills in managing and debugging multi-agent workflows.	Build skills in managing and debugging multi-agent workflows.	4 months
Security & Access Control for AI Systems	Learn and apply best practices for secure AI deployments.	<ul style="list-style-type: none">- Take an online cybersecurity course focused on AI applications.- Implement role-based access in a sandbox AI project.	2-3 months
AI Evaluation & Performance Monitoring	Master AI-specific testing and performance evaluation.	<ul style="list-style-type: none">- Study methodologies for AI model evaluation.- Create unit tests and monitoring tools for an AI prototype project.	3-4 months

Advanced Prompt Engineering & Context Handling	Enhance skills in designing robust prompts and context management.	<ul style="list-style-type: none"> - Follow recent literature and tutorials on prompt engineering. - Iteratively refine prompts in ongoing projects and solicit feedback. 	Ongoing - Need to improve.
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Part 4: Reflection

This exercise has provided a clear framework to assess my current competencies against the job's requirements. While I have a solid foundation in AI concepts and general software development, the analysis highlighted specific areas—such as no-code AI agent development, enterprise integrations, and AI security—that require further growth. By outlining a structured action plan with defined objectives and timelines, I am better positioned to strategically upskill in these areas. This process not only boosts my readiness for similar roles but also shapes my overall professional growth by emphasizing continuous learning and targeted project experience.