



PROMPTS

ASSISTANTS

WORKFLOWS

Building Your First Custom GPT

Understanding LLMs and Creating Custom AI Assistants

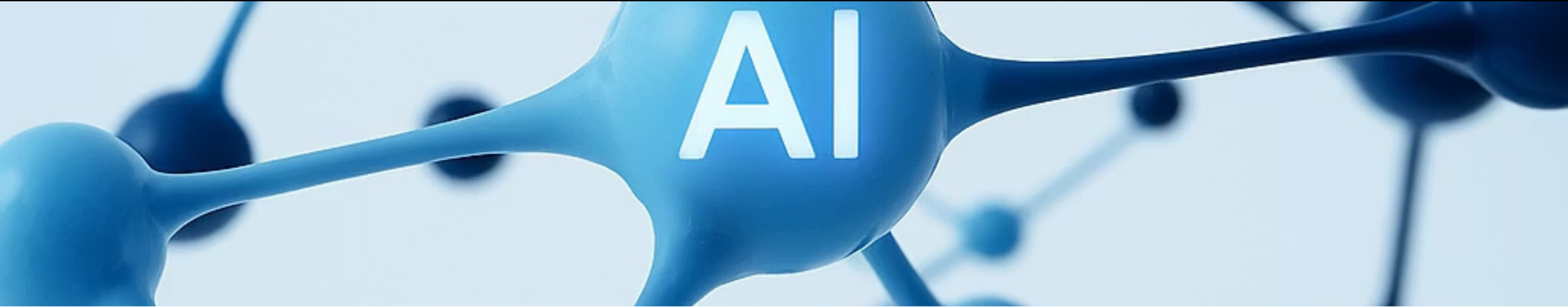
Recap

What We Covered in Lesson 3

- You learned how to build simple prototypes using AI prompts and [Lovable.dev](https://lovable.dev).
- Reviewed structured prompting methods.

Homework Review

- ☐ Did you practice structured prompting?
- ☐ Were you able to create a simple prototype?
- ☐ What challenges did you encounter?



From Prompts to Custom AI Assistants

Today, we are taking the first step toward turning AI into part of your business operations — by creating custom AI assistants aligned with your business-specific scenarios.

- ☐ We will start with understanding the Large Language Models (LLM's) as foundational knowledge engines.
- ☐ Introduce Custom GPTs (AI Assistants).
- ☐ Set-up your first **AI Assistant** inside ChatGPT projects.

Understanding Large Language Models (LLMs)

Large Language Models (LLMs) are advanced AI systems trained on massive amounts of data to understand and generate human-like language. **Think of LLMs as powerful knowledge engines that can be adapted for specific business needs.**



Tools like ChatGPT, Claude, Gemini, and Copilot are all General-Purpose LLMs.

- **Claude** excels at long-form writing.
- **ChatGPT** supports custom workflows with different versions (e.g., o4-mini-high is great for coding, and GPT 4.5 is great for writing and brainstorming).
- **Gemini** integrates well with Google Workspace tools.



Specialized LLMs - purpose-built and trained for specific industries or research fields.

- **Medical Research:** specialized LLM trained specifically on cancer research data for diagnostics.
- **Legal Field:** model trained extensively on case law to assist lawyers in analysis.
- **Historical Research:** trained on historical texts for accurate interpretation of historical contexts and events.

Building a Custom LLM — What it Takes

Creating a fully custom Large Language Model from scratch requires significant resources:

- **Large-scale, domain-specific data** for precise model training.
- **Specialized AI expertise** in machine learning and data science.
- **Powerful computing infrastructure** (high-performance servers, GPUs).
- **Considerable time and financial investment** for development and ongoing maintenance.

When Organizations Build Their Own LLM:

- Precision and domain accuracy are critical (e.g., medical diagnostics, legal research).
- Complete control over data privacy and intellectual property is essential.

You don't need to build an LLM from scratch to benefit from their capabilities; most businesses customize existing LLMs to meet their specific needs.

AI Assistant vs. AI Agent – Clarifying Differences

<i>Feature</i>	AI Assistant (GPT)	AI Agent
<i>Primary Role</i>	Conversational support	Autonomous task execution
<i>Analogy</i>	The Receptionist Helpful, but only answers when directly asked.	Project Manager Sets goals and coordinates tasks independently.
<i>Autonomy</i>	Reactive, prompt-based	Proactive, self-directed
<i>Setup Complexity</i>	Low, straightforward	High, requires integration
<i>Business use</i>	Customer support, internal Q&A	Workflow/process automation



What is an AI Assistant?

AI Assistants, also known as Custom GPTs, are specialized digital assistants built on existing Large Language Models (LLMs) like ChatGPT. They provide targeted conversational support for specific tasks within your organization.

Key Capabilities:

- **Conversational:** Clearly answers questions and engages users naturally.
- **Reactive:** Responds when prompted, without independent action.
- **Customizable:** Easy to set up for specific tasks without extensive technical resources.

Ideal for businesses seeking simple-to-deploy conversational tools to streamline communication and improve operational efficiency.

Building Your First AI Assistant

1 Choose a Base LLM:

Start with a model like ChatGPT (recommended for easy setup).

2 Create and Name Your Project:

Define a clear, descriptive name for easy future reference.

3 Upload Relevant Documents:

Add supporting knowledge like FAQs, policy documents, and manuals.

4 Add details to Instructions section:

The Instructions section is your explicit direction—written directly by you—for how your AI assistant must interact with users.

1. Clear Role Definition

"You are an AI assistant for [company name], specializing in HR policy support."

2. Tone and Style

"Always respond clearly and concisely, maintaining a professional yet friendly tone."

3. Allowed Content Scope

"You answer only questions directly related to our HR policies, employee onboarding, and benefits."

4. Specific Guidelines

"Responses should typically be under 200 words. Provide links to uploaded resources when applicable."

5. Limitations & Compliance

"Never provide financial advice, health-related diagnoses, or discuss confidential personnel information."

Starting Your First Chat: The Importance of Clear Prompting

When beginning to interact with your newly created Custom GPT (AI Assistant), clearly defining **context**, **role**, and **task** right at the start is critical for effective interactions.

Why Role-Based Prompting Matters:

- Clearly defines expectations for the AI Assistant.
- Provides context, helping the assistant give relevant, accurate, and well-structured responses.
- Ensures consistency in the assistant's answers, aligned with your business standards.

Testing and Refinement:

- Ask realistic, business-related questions to validate performance.
- Review answers for accuracy, clarity, and relevance.
- Continuously refine the **instructions** and information provided.



Hands-On Activity for This Week:

- **Create Your AI Assistant Project** in ChatGPT.
- **Upload at least three internal documents** (FAQs, guides, procedures).
- **Clearly Define the Assistant's Role:** tasks, tone, and instructions.
- **Perform Realistic Testing:**
 - Ask 3-5 practical questions the assistant should handle.
 - "Summarize our onboarding policy."
 - "Provide a concise outline of our latest sales training session."
 - "Draft a clear and professional email responding to a new customer inquiry about our pricing."
 - Evaluate accuracy, tone, and helpfulness of responses.

 **Next session (Lesson 5), you will dive deeper into practical GPT development tailored specifically to your workflows.**