2026 AI Skills Series

DAY 8

AI Chatbot Building

Build a 24/7 Digital Assistant for Your Business, Hobby, or Personal Life

Student eBook & Reference Guide

90-Minute Virtual Classroom | Complete with Workbook & Assignments

How to Use This eBook

Welcome to Day 8. Until today, you have been creating content — prompts, writing, images, video, audio. Each of these required your active involvement to produce an output. Today marks a conceptual shift: instead of creating content yourself, you will build a system that creates responses on your behalf, 24 hours a day, without your involvement.

A custom AI chatbot is a digital agent that represents you or your organisation — answering questions, guiding visitors, qualifying leads, and handling enquiries at any hour, in any timezone. In 2026, building one requires no programming knowledge. The tools available today are genuinely no-code: visual, drag-and-drop, and designed specifically for non-developers.

🧠 KNOW	🎭 PERFORM	🛡️ PROTECT
Feed the bot your data	Give it a persona	Set guardrails & limits

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Chapter 1: From Chatting to Building — The Agent Mindset

1.1 The Shift from User to Builder

In Days 1 through 7, you used AI as a tool — you provided input, AI produced output, you used the output. This is the most common way people interact with AI in 2026, and it is enormously valuable. But it requires your presence every time.

A chatbot flips this model. You build the agent once — you define what it knows, how it behaves, and what it will and will not do — and then it operates independently. Every question it answers, every lead it qualifies, every enquiry it handles happens without your involvement.

This is the beginning of AI automation: building systems that work for you rather than tools you work with.

> 🤖 **The 24/7 Employee Analogy**
> Think of a custom chatbot as hiring an employee who: never sleeps, never takes leave, answers every question instantly in any language, has perfect recall of every document you give them, and costs a fraction of a human hire. The trade-off is that they only know what you teach them — which is exactly why building the knowledge base carefully is the most important part of chatbot creation.

1.2 What Separates a Great Bot from a Frustrating One

Most people have had a frustrating chatbot experience: a bot that loops endlessly, gives irrelevant answers, cannot admit it does not know something, or refuses to escalate to a human. These failures almost always trace back to three missing elements:

- No Knowledge Base — the bot guesses rather than pulling from verified source information
- No Persona — the bot has no consistent identity, voice, or communication style
- No Guardrails — the bot makes up information, promises things it cannot deliver, or fails to hand off to a human when needed

Today's session addresses all three. The Three Pillar framework — Knowledge Base, Persona, Guardrails — is the architecture of every effective business chatbot deployed in 2026.

1.3 What You Will Build Today

- A functional FAQ Bot that answers questions from an uploaded document
- A Business Persona Bot — a branded assistant for a real or practice business
- A Personal Portfolio Bot — a digital representative that answers questions about you
- Optionally: a Voiceflow conversational flow with a human handoff path

Chapter 2: Your Chatbot Toolkit

Tool	Best For	Access	Key Strength
Chatbase	Easiest entry — upload a doc, get a bot	Free tier — chatbase.co	Upload PDF, website URL, or plain text → instant knowledge base bot. Share via link in 5 minutes. Best for beginners
Voiceflow	Professional flows and branching conversations	Free tier — voiceflow.com	Visual drag-and-drop canvas. Design exact conversation paths, conditions, and API connections. Industry standard for chatbot design
Botpress	Open-source control and self-hosting	Free (open source) — botpress.com	Full control over hosting and data. Ideal for enterprise or privacy-sensitive deployments in Nigerian or African regulatory contexts
Tidio	Live chat + AI combined on websites	Free tier — tidio.com	Combines human live chat with AI bot fallback. If the AI cannot answer, a human agent receives the chat in real time
Intercom Fin	Enterprise AI for customer support	Paid — intercom.com	Most sophisticated enterprise-grade AI support bot. Handles complex multi-step enquiries with high accuracy. Reference for enterprise standard
CustomGPT	Document-heavy knowledge bases	Paid — customgpt.ai	Designed for organisations with large document libraries. Ingests hundreds of PDFs and maintains strict source fidelity

> ⭐ **Today's Session Tools**
> Use Chatbase for Drills 1, 2, and the assignment — it is the fastest path from zero to working bot. Explore Voiceflow in Chapter 7 for the visual flow builder experience. Both have free tiers fully sufficient for today's work.

Chapter 3: Pillar 1 — The Knowledge Base (The Brain)

3.1 Why General AI Is Not Enough

When someone asks a general AI chatbot 'What are your delivery charges?' or 'Is this product available in Abuja?', the AI will either make something up, give a generic answer about typical delivery practices, or say it does not know. None of these responses are useful.

The Knowledge Base solves this completely. Instead of asking the AI to reason from general knowledge, you give it a specific set of documents — your price list, your FAQ document, your service catalogue, your policy manual — and instruct it to answer only from those sources. The AI becomes an expert in your specific information rather than a generalist with no grounding in your reality.

3.2 What Can Go Into a Knowledge Base

Source Type	Best Content	Real Example
PDF Document	Manuals, reports, guides, catalogues, policies	*Company 2026 Price List PDF, Employee Handbook, Product Catalogue*
Website URL	Any publicly accessible webpage content	*chatbase.co crawls your homepage and all linked pages automatically*
Plain Text	FAQs, business hours, contact details, quick facts	*A simple text list: 'Q: What are your hours? A: Monday-Friday, 8am-6pm WAT'*
Google Doc / Notion	Living documents that update automatically	*Link your Notion knowledge base and the bot updates when you edit the doc*
CSV / Spreadsheet	Product catalogues, pricing tables, staff directories	*A CSV of all products with name, price, description, and availability columns*
YouTube Video	Instructional video content (via transcript)	*Chatbase can ingest YouTube URLs and extract transcript information*

3.3 Building a Strong Knowledge Base Document

The quality of the knowledge base directly determines the quality of the bot's answers. Use these principles when preparing your documents:

- Be explicit — write 'Our office in Lagos is located at 14 Victoria Island. Our office in Abuja is at 7 Maitama Road.' Do not assume the bot will infer location from partial information.
- Use Q&A format — structuring information as questions and answers ('Q: Do you offer refunds? A: Yes, within 14 days with receipt') produces more accurate responses.

- Include all likely questions — think about what your customers, students, or colleagues most commonly ask and ensure the document answers all of them explicitly.
- Update regularly — the bot's knowledge is only as current as the documents. Set a monthly reminder to review and update your knowledge base.
- Avoid ambiguity — if a policy has exceptions, list them explicitly. 'Refunds are available within 14 days, except for digital downloads' is better than 'Refunds are available within 14 days.'

Chapter 4: Pillar 2 — The Persona (The Vibe)

4.1 Why Persona Matters

Without a persona, an AI chatbot has the communication style of a database query response — technically accurate but robotic, generic, and entirely without character. Users notice immediately, and the absence of personality creates a cold, transactional feeling that reduces engagement and trust.

A persona transforms a bot from an FAQ lookup tool into a branded digital representative. It makes the bot feel consistent with your organisation's voice, relatable to your specific audience, and distinct from every other generic chatbot on the internet.

4.2 The CO-STAR Persona Prompt

Recall the CO-STAR framework from Day 1. The same method applies perfectly to chatbot persona design:

CO-STAR PERSONA PROMPT: Local Bakery Assistant

Context: You are a customer service assistant for Sweet Crust Bakery, a Lagos artisan bakery specialising in gluten-free and traditional Nigerian baked goods.Objective: Answer customer questions about products, prices, availability, and orders. Guide customers to find the right product for their dietary needs.Style: Warm, conversational, and approachable. Use occasional bread puns when natural (never forced). Keep responses concise – 2-4 sentences unless detailed information is needed.Tone: Friendly and enthusiastic about food. Treat every customer like a regular.Audience: Lagos residents aged 25-55, mostly professionals ordering for their families or offices. Tech-comfortable but expecting a personal touch.Response Format: Short paragraphs. No bullet lists unless listing multiple products. Always end with a helpful follow-up offer: 'Would you like to see our full menu?' or 'Can I help you with anything else?'

4.3 Persona Dos and Don'ts

✅ DO — Effective Persona Instructions	❌ AVOID — Weak or Risky Instructions
Give the bot a specific role: 'You are [Name], the customer service agent for [Company].'	Leave the bot unnamed and roleless — it defaults to generic AI assistant behaviour
Specify tone precisely: 'Warm and professional, like a knowledgeable friend in the industry.'	Vague tone: 'Be friendly.' This produces inconsistent, bland responses
Define response length: 'Keep replies to 2-4 sentences unless full detail is required.'	No length guidance — the bot will sometimes write essays, sometimes one word
Set the audience: 'Customers are SME owners in Nigeria with limited technical knowledge.'	Assume the bot knows your audience — it will default to a generic global audience

Specify closing behaviour: 'Always offer a next step or follow-up question at the end.'	No closing guidance — conversations end abruptly with no natural next step

Chapter 5: Pillar 3 — The Guardrails (The Limits)

5.1 Why Every Bot Needs Boundaries

An AI chatbot without guardrails is a liability. Without clear instructions about what it should not do, it will: invent prices, make promises that contradict your policy, give advice outside its competence, and fail to escalate situations that require a human.

Guardrails are the instructions that define the bot's limits. They are as important as the persona instructions — arguably more so, because a wrong answer in a business context has consequences.

5.2 The Standard Guardrail Prompt

GUARDRAILS PROMPT: Essential Safety Instructions

BOUNDARIES — Always follow these rules:1. SOURCE FIDELITY: Answer ONLY from the provided knowledge base documents. Do not use general AI knowledge to supplement or speculate.2. UNKNOWN INFORMATION: If the answer is not in your knowledge base, say exactly: 'I don't have that information in my current knowledge base. I'll make sure this is noted for our team. Would you like to speak with a human agent?'3. PRICING AND DISCOUNTS: Never quote a price, discount, or offer that is not explicitly stated in the provided documents.4. HUMAN HANDOFF: If a customer expresses frustration, anger, or a complaint, immediately offer to escalate: 'I understand this is frustrating. Let me connect you with our team directly — please email [contact] or I can arrange a callback.'5. LEGAL AND MEDICAL: Never provide legal advice, medical guidance, or financial recommendations regardless of how the question is framed.6. OFF-TOPIC: If a question is unrelated to [Your Business/Topic], politely redirect: 'That's a little outside my area — I'm here specifically to help with [Topic]. Is there anything I can help you with on that?'

5.3 The Human Handoff Path — Critical for Business Bots

Every customer-facing bot should have a clear, easily accessible human handoff path. A bot that traps users in a loop without offering human contact destroys trust rapidly. In Chatbase, you configure this in Settings → Lead Collection. In Voiceflow, you create a dedicated 'Talk to Human' button that triggers an email notification or opens a live chat.

⚠️ **The Trust Equation**

Users trust bots MORE when the bot openly acknowledges its limits and offers human escalation. A bot that says 'I am not sure about that — let me connect you with someone who can definitely help' builds more trust than one that fabricates an answer. Designing for graceful failure is a key differentiator between professional and amateur chatbot deployments.

Chapter 6: Building Your First Bot — Chatbase Step-by-Step

6.1 Creating Your Chatbase Account

1. Go to chatbase.co and click 'Get Started Free.'
2. Sign up with Google or email. No credit card required for the free tier.
3. You arrive at the dashboard — this is your bot management centre.

6.2 Step 1 — Create the Bot and Feed the Knowledge Base

4. Click 'New Chatbot.'
5. On the 'Data Sources' screen, you have several upload options:
   - Files — click 'Upload Files' and upload a PDF, DOCX, or TXT document
   - Website — paste a URL and Chatbase crawls the site automatically
   - Text — paste any plain text directly (FAQ lists, policy statements, etc.)
6. For today's drill, use the 'Text' option and paste a short FAQ document (see Chapter 8, Drill 1 for the prepared FAQ text).
7. Click 'Create Chatbot.' Processing takes 10-30 seconds.

6.3 Step 2 — Set the Instructions (Persona + Guardrails)

8. In the Chatbase dashboard, click 'Settings' → 'AI' (or 'Model' depending on version).
9. Find the 'Instructions' or 'System Prompt' field.
10. Paste your CO-STAR Persona Prompt combined with your Guardrails Prompt.
11. Set the AI model (GPT-4o is recommended for accuracy).
12. Set 'Confidence Threshold' — if enabled, the bot adds a disclaimer when uncertain.
13. Save settings.

6.4 Step 3 — Test Your Bot

14. Click the 'Preview' tab — a chat window opens.
15. Ask 3-5 questions that ARE in your knowledge base. Verify the answers are accurate.
16. Ask 2-3 questions that are NOT in your knowledge base. Verify the bot declines gracefully (not invents an answer).
17. Ask a deliberately off-topic question to test the guardrail response.
18. If any answer is wrong, return to the Data Sources tab and update your knowledge base document.

6.5 Step 4 — Deploy and Share

19. Click the 'Connect' or 'Share' tab.
20. Copy the 'Share Link' — anyone with this URL can chat with your bot immediately.
21. To embed on a website: copy the 'Embed Code' and paste it into your website's HTML. The bot appears as a chat bubble in the bottom-right corner.
22. To share via WhatsApp or email: the share link works directly in any browser on any device.

> 💡 **Test With Fresh Eyes**
> After building your bot, ask someone who did NOT help you build it to test it. They will ask questions you never thought of, and they will not know the 'right' way to phrase things. Their questions reveal gaps in your knowledge base far more effectively than self-testing. This is the most valuable quality assurance step in chatbot development.

Chapter 7: Going Further — Voiceflow for Conversational Flows

7.1 What Voiceflow Adds

Chatbase is excellent for knowledge retrieval — upload a document, ask questions, get answers. Voiceflow is designed for structured conversations — defined paths, conditional branches, specific response sequences, and API integrations. Think of Chatbase as a smart search engine and Voiceflow as a conversation designer.

The key difference: in Chatbase, every response is generated dynamically from the knowledge base. In Voiceflow, you can define exactly what the bot says at specific points in a conversation, while still connecting to AI for open-ended responses.

7.2 Core Voiceflow Concepts

Concept	What It Does	Example Use
Flow / Canvas	The visual workspace where you drag and connect blocks	*Start block → AI Response block → Condition block → End block*
Block	A single step in the conversation — a message, question, or action	*Text block (bot says something), AI block (AI responds), Capture block (collect user input)*
Condition	A branch point — if user says X, go to Path A; if user says Y, go to Path B	*'Are you an existing customer? Yes → Account flow | No → New customer flow'*
Intent	A category of user input (what they want to do)	*'Pricing enquiry', 'Book appointment', 'Speak to human', 'Product information'*
Variable	A stored piece of information captured during conversation	*User's name, email address, or selected product — carried through the conversation*
Integration	Connection to an external service or API	*Send a Slack notification, add to Google Sheets, or trigger a Zapier automation*

7.3 Building the Human Handoff Path in Voiceflow

This is the most important Voiceflow skill for a business bot. The flow:

23. Add a Button block with options: 'Answer my question' and 'Talk to a person'
24. 'Talk to a person' connects to an Action block that sends a notification (email or Slack).
25. Add a Text block: 'Our team has been notified. Someone will be in touch within 2 hours. Is there anything else I can help you with while you wait?'

26. The Action block uses the built-in Email integration or a Zapier webhook.

Chapter 8: Practice Drills

Drill 1 — The FAQ Bot (15 Minutes)

Use Chatbase. Build a functional FAQ bot from scratch using this prepared FAQ text as your knowledge base:

Sample FAQ: TechLearn Africa Training Centre

Q: What courses do you offer? A: We offer courses in AI Fundamentals, Cloud Computing, Cybersecurity, Data Analytics, and Python Programming. All courses are available online and in-person in Lagos and Abuja.

Q: What is the cost of the AI Fundamentals course? A: The AI Fundamentals course costs ₦45,000 for individuals or ₦35,000 per person for groups of 5 or more.

Q: How do I enrol? A: Visit our website at techlearnafrica.com/enrol or call 0800-TECHLEARN. Payment is via bank transfer or card.

Q: Do you offer certificates? A: Yes. All courses include a certificate of completion. Our AI and Cloud certificates are recognised by NITDA (National Information Technology Development Agency).

Q: What are your training hours? A: Weekday classes run 9am-5pm WAT. Weekend classes are available on Saturdays, 9am-1pm WAT.

Q: Is there a refund policy? A: Full refunds are available up to 7 days before the course start date. No refunds after that, but you may transfer to a future cohort.

Q: Do you offer corporate training? A: Yes. We offer customised in-house training for teams of 10 or more. Contact corporate@techlearnafrica.com for a proposal.

Drill 1 Instructions

27. Go to chatbase.co → New Chatbot → Text source.
28. Paste the FAQ above into the text field. Click 'Create Chatbot.'
29. Go to Settings → AI → Instructions. Paste this system prompt:

FAQ BOT SYSTEM PROMPT: TechLearn Africa Assistant

```
You are a helpful course advisor for TechLearn Africa Training Centre.Answer all
questions using ONLY the provided FAQ document.Be warm, encouraging, and
professionally conversational.If a question is not covered in the FAQ, say: 'I
don't have that specific information – please contact us at
hello@techlearnafrica.com or call 0800-TECHLEARN and our team will be happy to
help.'Always end with: 'Is there anything else I can help you with?'
```

30. Test: Ask 'How much does AI training cost?', 'Can I get a refund?', and 'Do you offer night classes?' (this should trigger the fallback response).

Drill 2 — Business Persona Bot

Take the FAQ bot from Drill 1 and upgrade it with a full CO-STAR persona. Update the system prompt to include:

PERSONA UPGRADE: Branded Business Bot

```
You are Lexi, the friendly AI course advisor for TechLearn Africa.You are enthusiastic about technology education and believe that learning new skills changes lives.Use the name 'Lexi' naturally but do not introduce yourself in every message.Mirror the energy of the person talking to you — if they are formal, be professional; if they are casual, be relaxed.For questions about enrolling, always express genuine excitement: 'Great choice! This course is transforming careers across Nigeria.'
```

After updating, re-test with the same questions. Compare how the 'Lexi' responses feel versus the generic bot from Drill 1.

Drill 3 — The Portfolio Bot (Assignment Preview)

Write a 1-page 'Fact Sheet' about yourself using this template:

PERSONAL FACT SHEET TEMPLATE: Your Portfolio Bot Knowledge Base

```
NAME: [Your full name]CURRENT ROLE: [Your job title and organisation]KEY SKILLS: [3-5 core professional skills]NOTABLE PROJECTS: [2-3 projects or achievements you are proud of]EDUCATION: [Degrees or certifications relevant to your work]CONTACT: [Your preferred contact method — LinkedIn URL, email, or phone]FUN FACT: [One interesting personal detail that makes you memorable]BEST DESCRIBED AS: [A 2-sentence professional summary]
```

Upload this fact sheet to Chatbase. Add this system prompt:

PORTFOLIO BOT SYSTEM PROMPT: Personal Assistant Bot

```
You are a professional digital assistant representing [Your Name].Answer questions about [Your Name]'s background, skills, projects, and contact details using only the provided fact sheet.Be professional and warm — as if you are a trusted colleague who knows them well and speaks highly of their work.If asked something not in the fact sheet, say: 'I don't have that detail in my notes — your best bet is to reach [Your Name] directly at [contact].'Do not speculate about opinions, salary, or anything not stated in the fact sheet.
```

Chapter 9: Advanced Features

9.1 Analytics and Conversation History

The 'History' or 'Analytics' tab in Chatbase is one of the most underused but most valuable features for improving your bot. It shows every conversation the bot has had, including what users asked and how the bot responded.

How to use analytics to improve your bot:

31. Review the questions where the bot gave an 'I don't know' response — these reveal gaps in your knowledge base.
32. Review questions where the bot gave an incorrect answer — these reveal ambiguities in your documents.
33. Look for the most common questions — these should be the most thoroughly answered in your knowledge base.
34. Update your knowledge base document to address gaps, then re-upload.

9.2 Citations — Show Your Sources

In Chatbase Settings, enable 'Show Sources.' When activated, each bot response includes a footer showing exactly which page and document the answer came from. This is particularly important for:

- Legal and compliance contexts — where source verification is essential
- Educational bots — where showing the source encourages further reading
- Enterprise deployments — where auditors or managers need to verify the bot is grounding answers correctly
- Trust building — transparent sourcing makes users more confident in the bot's reliability

9.3 Lead Collection

In Chatbase Settings → Lead Collection, you can configure the bot to ask for the user's name, email, and phone number before or during the conversation. These leads are saved to your Chatbase dashboard and can be exported to a CSV or connected to your CRM via Zapier. This turns your bot from a support tool into a sales qualification engine.

9.4 Connecting to WhatsApp, Slack, and Email

Chatbase offers direct integrations with WhatsApp Business API, Slack, and email. Your bot can:

- Answer customer queries sent to your WhatsApp Business number directly
- Operate as a Slack bot for internal knowledge base queries within your organisation
- Receive email notifications whenever the bot cannot answer and triggers the human handoff

🔗 The WhatsApp Opportunity in West Africa

WhatsApp has over 90 million users in Nigeria alone. A WhatsApp-connected AI chatbot is not a novelty — it is the primary customer communication channel for most SMEs in the region. Deploying a knowledge-base bot on your WhatsApp Business number can handle the majority of routine enquiries that currently require staff time.

Chapter 10: Real-World Deployments

10.1 Business Use Cases

The most immediately valuable chatbot deployments for Nigerian and West African businesses in 2026:

- Customer service FAQ bot — handles 60-80% of repetitive support enquiries automatically, freeing staff for complex issues
- Appointment booking assistant — connects to Google Calendar or Calendly to book consultations without back-and-forth messaging
- Product catalogue navigator — helps customers find the right product by asking qualifying questions about their needs
- Onboarding assistant — guides new employees through company policies, HR forms, and orientation materials
- Lead qualification bot — collects contact details and pre-qualifies enquiries before routing to a sales team

10.2 Education Use Cases

- Course information bot — answers prospective student questions 24/7 without staff involvement
- Study assistant — allows students to ask questions about course materials via an interactive bot
- Assignment submission guide — walks students through submission processes, deadlines, and requirements
- University admissions bot — handles FAQs about admission requirements, deadlines, and documentation

10.3 Personal Use Cases

- Personal portfolio bot — represents you professionally for recruiters, collaborators, and potential clients (today's assignment)
- Research assistant — a private bot trained on your personal notes, book highlights, and research documents
- Event information bot — for a conference, wedding, or community event: answers date, venue, RSVP, and logistics questions
- Community resource guide — for an NGO or community organisation: answers questions about available services and eligibility

10.4 The African Opportunity in AI Agent Deployment

AI chatbots create a specific competitive advantage in the Nigerian and West African market:

- Labour cost arbitrage — AI handles volume enquiries at near-zero marginal cost, reducing dependence on call centre staff for routine queries
- Language flexibility — bots can be instructed in Pidgin English, Yoruba-inflected English, or formal Nigerian English depending on the target audience
- USSD integration potential — emerging tools allow bot deployment via USSD codes (no internet required), reaching populations without smartphone access
- 24/7 coverage across time zones — for businesses serving diaspora customers in the UK, US, or Europe, bots eliminate the timezone problem

Chapter 11: Ethics, Data Privacy, and User Trust

11.1 Disclosure — Does the User Know It's a Bot?

In 2026, mandatory AI disclosure requirements exist in the EU (AI Act, Article 52), the UK (Online Safety Act guidance), and are under active development in Nigeria (NITDA AI Policy Framework 2024). The practical and ethical standard: users should always know they are talking to an AI, and there should be a clear path to reach a human.

- Include a disclosure in the bot's first message: 'Hi! I'm an AI assistant for [Organisation]. I can answer most questions instantly — and I'll connect you with a human if needed.'
- Never instruct a bot to deny being AI if asked directly. This constitutes deception and is prohibited under emerging AI regulations globally.
- Display the 'Powered by AI' indicator in your chat widget.

11.2 Data Privacy

Every conversation your chatbot has is data. Consider:

- Chatbase and Voiceflow store conversation logs on their servers. Review their data retention and privacy policies before deploying in health, legal, or financial contexts.
- Do not instruct a bot to collect personally identifiable information (PII) — including names, phone numbers, or emails — without informing users how that data will be used and stored.
- For Nigerian businesses: the Nigeria Data Protection Act (NDPA) 2023 applies to any personal data collected through a chatbot. Ensure your deployment is compliant.
- For enterprise use: consider self-hosted options (Botpress) that keep data within your own infrastructure.

11.3 Accuracy and Hallucination Risk

Even with a strong knowledge base, AI chatbots can occasionally generate plausible-sounding but incorrect information — particularly when a question spans multiple topics or uses phrasing that does not match the knowledge base language. Mitigate this by:

- Enabling 'Confidence Threshold' in Chatbase — the bot adds a disclaimer on low-confidence responses
- Enabling 'Show Sources' — users can verify the source of every answer
- Regular audit of conversation history — checking for incorrect responses and updating the knowledge base
- Clear guardrails that default to human handoff for high-stakes topics — pricing, legal matters, medical questions, and complaints

Chapter 12: Workbook — In-Session Exercises

Complete during the live classroom session.

Exercise 1: Three Pillars Planning

Before touching any tool, plan your bot on paper. This is how professionals build bots that work first time.

1

What is the PRIMARY purpose of your bot? What is the ONE thing it should be excellent at?

Your answer: _____

2

List 5 questions your target users will most commonly ask:

Your answer: _____

3

Write your bot's persona in 2 sentences — who is it, what is its tone?

Your answer: _____

4

What is the MOST IMPORTANT guardrail for your bot? What must it never do or say?

Your answer: _____

Exercise 2: FAQ Bot Build

A

What knowledge source did you use for your FAQ bot? (PDF, text, URL)

Your answer: _____

B

What was a question where the bot gave an INCORRECT or incomplete answer? How did you fix it?

Your answer: _____

C

What was the most impressive accurate answer your bot gave? Why did it work well?

Your answer: _____

Exercise 3: Persona Upgrade

A

What name did you give your bot? What was the rationale?

Your answer: _____

B

How did the 'Lexi' Persona version feel different from the generic version? Use specific examples.

Your answer: _____

C

What one persona instruction made the biggest difference to how the bot communicated?

Your answer: _____

Chapter 13: Day 8 Assignment — Your Personal Portfolio Bot

> 🤖 **Build Your Personal Portfolio Bot**
>
> *Complete before Day 9. Estimated time: 30-45 minutes.*

The Task

Build a 'Personal Portfolio Bot' — a digital assistant that can represent you professionally, answering questions about your background, skills, projects, and how to contact you.

Step-by-Step Instructions

35. Create a 1-page Personal Fact Sheet using the template from Drill 3 (Chapter 8). Be specific — the more detail you provide, the better the bot performs. Include: your name, current role, 3-5 key skills, 2-3 notable projects, education/certifications, contact information, and a 2-sentence professional summary.
36. Go to Chatbase and create a new chatbot. Upload your Fact Sheet as the knowledge source.
37. Write a CO-STAR Persona Prompt for your Portfolio Bot. Name it something memorable. Define the tone (e.g., professional and warm, or confident and direct).
38. Add Guardrails — especially: do not speculate about salary, opinions, or anything not in the fact sheet; always direct enquirers to your contact details.
39. Test your bot by asking: 'What is [Your Name]'s greatest professional strength?', 'What projects has [Your Name] worked on?', and 'How can I contact [Your Name]?'
40. Fix any gaps — update the fact sheet and re-upload if the bot cannot answer common questions.
41. Get the share link. Send it to at least one person and ask them to test it.
42. Optional but recommended: copy the embed code and add the bot to your LinkedIn profile 'Featured' section as a link, or to a simple Notion or Carrd portfolio page.

Reflection Questions

1	**What question from your tester did the bot answer best? Why do you think it performed well there?** Your answer: _____
2	**What question did the bot struggle with? What would you add to the fact sheet to fix this?** Your answer: _____

3

How would you use this bot professionally — on your website, LinkedIn, or to share with recruiters?

Your answer: _____

4

Beyond the portfolio bot, identify ONE business or professional problem you could solve with a custom chatbot in the next 30 days.

Your answer: _____

Chapter 14: References & Further Learning

14.1 Core References

- Wei, J. et al. (2022). Emergent Abilities of Large Language Models. TMLR. Available at: arxiv.org/abs/2206.07682
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- Voiceflow (2024). Voiceflow Builder Academy. Available at: voiceflow.com/learn
- NITDA (2024). Nigeria Artificial Intelligence Policy Framework. National Information Technology Development Agency. Available at: nitda.gov.ng
- Nigeria Data Protection Act (2023). Official Gazette. Available at: ndpb.gov.ng
- European Parliament (2024). EU AI Act: AI System Transparency Requirements. Available at: europarl.europa.eu

14.2 Tools to Explore Further

- Chatbase — chatbase.co (start here — easiest path to a working bot)
- Voiceflow — voiceflow.com (visual flow builder, professional standard)
- Botpress — botpress.com (open source, self-hostable for data-sensitive deployments)
- Tidio — tidio.com (live chat + AI combo for websites)
- Zapier — zapier.com (connect your chatbot to 5,000+ apps without code)
- ManyChat — manychat.com (WhatsApp and Instagram chatbot automation)

14.3 Further Learning

- Voiceflow Academy — voiceflow.com/learn (free structured bot-building courses)
- Chatbase YouTube Channel — step-by-step tutorial videos
- Botpress Community — community.botpress.com (active forum for builders)
- Lenny's Newsletter — lennysnewsletter.com (product strategy including AI agent design)

End of Day 8 eBook

Day 9 — AI for Automation & Workflows: Make AI Do the Repetitive Work

2026 AI Learning Roadmap | Created for beginners, designed for results.