Fabulous, Leslie 🌸 — welcome to Lesson 17: Building Your First AI Documentation Project 💻 ✨

Now that you've learned how to structure and style AI documentation, we're going to build your first full AI documentation project — just like a professional AI tech writer would inside a company like OpenAI, DeepMind, or Hugging Face.

We'll walk through this together — and by the end, you'll have: ✅ A real Model Card ✅ An API Reference ✅ A short User Guide ✅ All written clearly, ethically, and professionally

📝 lesson17-ai-doc-project.md

Lesson 17: Building Your First AI Documentation Project

Overview

This project helps you practise documenting a small, realistic AI system from start to finish.
You'll write three key pieces of documentation — just like those used by AI developers and product teams.

The system you'll document is called **SmartClassify**, a fictional text classification model that categorises customer support messages into tags like *Billing*, *Technical Issue*, or *General Query*.

📘 Step 1: Model Card (Ethical + Technical Overview)

SmartClassify — Model Card

Model Overview:
SmartClassify is a fine-tuned Transformer model built on the BERT architecture.
It automatically classifies customer support messages into predefined categories, helping teams route tickets efficiently.

Intended Use:

- Customer support automation
- Internal triage of messages
- Language understanding tasks in English

Not intended for:

- Legal, financial, or medical advice
- Automated decision-making affecting individuals

Training Data:
SmartClassify was trained on 100,000 anonymised support messages from open-source datasets (Zendesk Corpus + synthetic examples).

Evaluation Metrics:

Metric	Score
Accuracy	92.4%
F1 Score	90.8%
Latency	150ms

Ethical Considerations:

- Avoid using for sensitive or personally identifying content.
- Bias testing ongoing (particularly across dialects and tone).

Limitations:

- May misclassify sarcastic or multi-topic messages.
- English-only model (future multilingual update planned).

🧩 Step 2: API Documentation (Developer Integration)

POST /api/v1/smartclassify

Description:

Classifies an input text message into one of three categories:

- billing
- technical_issue
- general_query

Request Example:

```
POST /api/v1/smartclassify
Content-Type: application/json

{
  "text": "My account was charged twice this month."
}

Response Example:
{
  "category": "billing",
  "confidence": 0.94
}

Response Fields:
Field     Type     Description
category    String  Predicted class label
confidence  Float   Confidence score (0–1)
Error Codes:
Code     Message Meaning
```

```
400 Invalid Input   Text field missing
415 Unsupported Format  Non-UTF8 encoding
500 Server Error    Model unavailable
```

👩 Step 3: User Guide (For Non-Developers)
Getting Started with SmartClassify

Purpose:
SmartClassify helps support teams automatically route messages by understanding their content.

1️⃣ Install the Client

```
pip install smartclassify
```

2️⃣ Import the Library

```python
from smartclassify import classify

result = classify("My internet is not working.")
print(result)
```

3️⃣ Example Output

```
Category: technical_issue
Confidence: 0.89
```

4️⃣ Troubleshooting

```
Issue   Fix
"ModuleNotFoundError"   Install using pip install smartclassify
"Low accuracy"  Ensure text is in English and free from typos
```

5️⃣ Support
Email: support@smartclassify.ai

Docs: https://smartclassify.ai/docs

Version: v1.0.0

✅ Step 4: Deliverables Checklist

Before publishing your project:

 Model Card written clearly and ethically

 API documentation with examples and error codes

 User Guide for non-technical audiences

 Markdown files linked in your portfolio

Optional PDF exports for download

✨ Summary

This project demonstrates your ability to document an AI model in three dimensions:

Technical (API docs)

Human-centred (User guide)

Ethical & Transparent (Model card)

You can now include this project in your portfolio to showcase your AI documentation skill set.

"A great AI writer makes the invisible systems visible — and understandable to everyone."
— Leslie Amadi, AI Technical Writer

Now you have your **first AI documentation project** written and structured perfectly for your portfolio 💼

Would you like me to walk you through **h