

# AI Mentor Chatbot for Innomatics (Telegram + n8n)

Innomatics Research Labs wants to build an **automated AI Mentor Chatbot** to support both **online and offline students**, especially during times when human mentors are not available. Students often face technical doubts late at night, on weekends, or outside regular mentoring hours, which delays their learning progress.

To solve this, Innomatics aims to create a **Telegram-based AI Mentor Chatbot** powered by **n8n automation** and **LLM models (Gemini/OpenAI)**.

This chatbot should respond instantly to student queries, provide technical explanations, and guide learners on topics like **Python, EDA, Machine Learning, and Deep Learning**.

## Objective

Build an **AI Mentor Chatbot** in Telegram using n8n that can:

1. **Greet students** when they say “hi”, “hello”, etc.
2. **Ask the student to choose a topic** (Python, EDA, Machine Learning, Deep Learning).
3. **Store the selected topic** for the current conversation.
4. **Ask for the student’s technical doubt**.
5. **Send the doubt to an LLM (Gemini / OpenAI)** for explanation.
6. **Reply to the student** with a clear, step-by-step AI-generated answer.
7. Work continuously 24/7 to support all students.

## Why This Chatbot Is Needed

- Mentors are not always available **after class hours**.

- Doubts may arise at any time during practice or assignments.
- Students need **instant, reliable guidance** to continue learning.
- Manual doubt-solving is slow and not scalable.
- A Telegram chatbot is easy to access for **all students**.

## **Scope of the Solution**

The chatbot will be built using:

- **Telegram Bot API** (for communication with students)
- **n8n workflow automation** (for logic + memory + routing)
- **LLM nodes (Gemini/OpenAI)** for generating answers

The chatbot must perform:

- Greeting
- Topic selection
- Doubt capture
- AI response generation
- Continuous conversation flow

## **Expected Impact**

- ✓ Students get **instant solutions** to technical doubts
- ✓ Mentors' workload reduces
- ✓ Higher **student satisfaction**
- ✓ Better **learning continuity**
- ✓ Support extends to **24/7 availability**

