Assignment: Build Your First AI Agent Business Case

Objective:

Identify a real-world business problem and outline how an AI Agent can solve it effectively — with measurable outcomes.

1. Use Case Chosen

Business Domain: Education

Use Case: Student Support and Doubt Resolution in Online Learning Platforms

2. Define the Problem

Online learning platforms face a common challenge: students often get stuck during lessons or assignments and must wait hours (or even days) for instructor responses. This leads to:

- ❖ Decreased student engagement and motivation
- ❖ High dropout rates
- ❖ Overloaded instructors handling repetitive queries
- ❖ Poor learning outcomes

3. Proposed AI Agent: "EduBot"

Overview:

EduBot is an AI-powered teaching assistant designed to provide real-time student support in online learning environments.

Tasks & Capabilities:

- ❖ Answers course-related queries instantly using trained knowledge base
- ❖ Provides step-by-step guidance on assignments and concepts
- ❖ Suggests relevant video clips, readings, or examples
- ❖ Escalates complex questions to human tutors when needed
- ❖ Tracks frequently asked questions and learning patterns

User Interaction:

- **Students:** Chat with EduBot via website or learning app
- **Instructors/Admins:** Monitor EduBot's dashboard to review common issues and feedback

📈 **4. Show the Impact (Measurable Benefits)**

1. **65% Reduction in Student Dropout Rates**
   By offering immediate doubt resolution and learning support.

2. **50% Reduction in Repetitive Instructor Workload**
   As EduBot handles basic and common queries independently.

3. **30% Increase in Student Course Completion Rates**
   Due to improved guidance and consistent support.

Bonus: Sketch of User Interaction

plaintext

[Student Dashboard Chat]

👨‍🎓 Student: I don't understand how to calculate the mean in this dataset.

🤖 EduBot: No problem! Here's how to calculate the mean:

Step 1: Add all the numbers

Step 2: Divide the total by the number of values

Would you like an example?

👨‍🎓 Student: Yes, please!

🤖 EduBot: Example: For 10, 15, 20 → (10+15+20) ÷ 3 = 15

You've got this! 🎓

Conclusion

By deploying *EduBot*, online education platforms can significantly improve learning efficiency, reduce instructor load, and retain more students — leading to better educational outcomes.