Project Proposal Fisco-Chat

Who are we working with

Fiscozen is a digital platform that simplifies VAT management for freelancers and sole proprietors in Italy by offering online tools and specialized tax consultancy services. Our project liaisons will be Francesco Pasini (Head of Finance and Data Analysis) and Aina Belloni (Data Engineer).

What is the problem

Fiscozen's chatbot is unreliable, it often answers incorrect or misleading information to clients. This creates a negative impression of the company, especially since the chatbot serves as the first point of contact for many customers.

What options were considered

Fiscozen initially looked into using available services online such as 'Chatbot.com' however decided not to as it was out of budget. Fiscozen then looked for an in-house solution but were understaffed and had to push the project back.

Project Objective

The goal of the Fisco-Chat project is to create a chatbot system that works as a bridge between three interaction points: chatting with AI, chatting with a CS Consultant, or scheduling an appointment with a Tax Advisor. This system will ensure a smooth experience for Fiscozen users while helping reduce the workload for consultants and advisors.

In the Fiscozen app, the chat icon will be the starting point of any conversation. When users click the icon, they will see a welcome message saying, "How can we help you?" from Fiscozen. The AI will handle the first part of the conversation, with the Fiscozen icon representing it. The AI will then decide whether to:

- Continue and deepen the conversation itself,
- Redirect the chat to a CS Consultant, showing their face and name, or
- Suggest scheduling an appointment with a Tax Advisor.

The goal is to make the chatbot as efficient and helpful as possible while ensuring that complex issues are directed to the right person.

The Team:

Name	Role
Massimo Ridella	Product Manager
Gloria Paraschivoiu	Data Scientist
Laura Cuellar	Data Engineer
Jorge Vargas	Machine Learning Engineer
Luis Gomez	MLOps Engineer
Sofia Vitorica	MLOps Engineer

How we intend on doing it

Our initial approach will be to use the ChatGPT API integrated with a webapp displaying the chatbot. As the course progresses we intend on implementing our own machine learning algorithm which we will then pass on to Fiscozen.

Expected timeline

Phase 1: Data Collection and Preparation

- Jan 28–Feb 2, 2025:
    - Collect data from Fiscozen's systems.
    - Define data requirements and scope.
- Feb 2–Feb 20, 2025:
    - Clean and preprocess data.
    - Begin researching approaches for building the chatbot.
    - Initial setup of the ChatGPT API for integration testing.
    - Start preparing the ChatAI system.

Phase 2: Chatbot Development (OpenAI Integration)

- Feb 18–Feb 26, 2025:
    - Incorporate preprocessed data into the OpenAI-based chatbot.
    - Evaluate the chatbot’s initial performance.
    - Finalize OpenAI trial version and test its efficiency.
- Feb 23, 2025: Mid-term project submission deadline.
- Feb 24–25, 2025: Mid-term presentations and personalized feedback.

Phase 3: Advanced Development

- Feb 27–Mar 31, 2025:
    - Design and train a custom machine learning model for the chatbot.
    - Fine-tune model parameters and validate results.