

Fiscozen Chatbot

V.01

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Purpose of the Document:

This document outlines the requirements for the Fiscozen Chatbot, a web application designed to assist users with Fiscozen App and Partita IVA-related inquiries, schedule appointments with Customer Success consultants, and seamlessly transfer conversations to human advisors when necessary.

Problem Statement:

Users often have basic questions about Partita IVA or on the Functionality of the app that do not require direct interaction with a Customer Success consultant. This creates inefficiencies for both users and advisors.

Product Overview:

The chatbot will serve as the first point of contact for users, providing quick and accurate responses to reduce the workload for Customer Success consultants and enhance user satisfaction.

Objectives:

1. Answer Partita IVA-related questions.
2. Answer App related questions.
3. Transfer conversations to human advisors when necessary.
4. Schedule appointments with a Tax Advisor.

Stakeholders:

- Fiscozen users and Customer Success Consultants
- Massimo Ridella (Product Manager)
- Sofia Victoria and Luis Gomez (MLOps Engineer)
- Jorge Vargas (Machine Learning Engineer)
- Gloria Paraschivoiu (Data Scientist)
- Laura Cuellar (Data Engineer)

Functional Requirements:

FR1: The chatbot should greet the user with an introductory message "How can I help you?" followed by the company logo.

FR2: As the Chatbot elaborates a response it should display the message 'Typing...'

FR3: If the user explicitly requests to speak with a Customer Success Consultant (e.g., by typing "Transfer me to a Customer Success Consultant"), the chatbot will redirect the conversation to a Customer Success Consultant.

FR4: If the user explicitly requests to speak with a Tax Advisor (e.g., by typing "Transfer me to a Customer Success Consultant"), the chatbot will redirect the conversation to a Customer Success Consultant.

FR5: If the Chatbot is not able to answer the question and the question is pertinent to Partita IVA, Fiscozen or the Fiscozen App, the conversation will be redirected to a Customer Success Consultant.

FR6: If the Chatbot is not able to answer the question and the question is not pertinent to Partita IVA, Fiscozen or the Fiscozen App, the Chatbot should answer with: "I'm sorry, I cannot assist with that. If you need further help, please contact our support team"

FR7: If the conversation is transferred to a Customer Success Consultant, they should have access to all the conversation.

FR8: If the user wishes to find an appointment with their Tax Advisor, the chatbot will display dates and times at which the client's designated Tax Advisor is available.

FR9: If the user wishes to find an appointment with a Customer Success Consultant, the chatbot will transfer the chat to a random customer success consultant from the group designated to the client.

FR10: If an appointment is successfully scheduled, a confirmation email will be sent to both the Customer Success consultants and the User. The email must

include the appointment date, time, advisor name, and a link to cancel or reschedule the appointment.

Non-Functional Requirements:

NFR1: The chatbot must respond to user queries within 2 seconds under normal load conditions.

NFR2: The appointment scheduling system must display available dates and times within 3 seconds of email submission.

NFR3: The chatbot must integrate with additional tax-related services in the future without requiring a complete redesign.

NFR4: The chatbot must have an uptime of 99.9% (less than 1 hour of downtime per month).

NFR5: In case of system failure, the chatbot must display a user-friendly error message and provide an option to retry or contact support.

NFR6: Access to conversation logs by Customer Success consultants must be restricted to only those conversations explicitly transferred to them.

NFR7: The chatbot interface must be intuitive and accessible to users with varying levels of technical expertise.

NFR8: The chatbot's codebase must be modular and well-documented to facilitate future updates and maintenance.

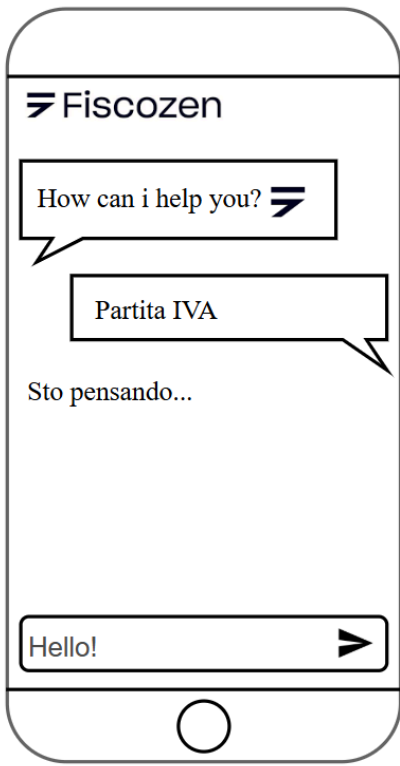
NFR9: The chatbot must handle unexpected user inputs gracefully, providing helpful suggestions or redirecting to Customer Success consultants when necessary.

NFR10: If the chatbot fails to transfer a conversation to a Customer Success consultant, it must notify the user and provide alternative contact options (e.g., email, phone).

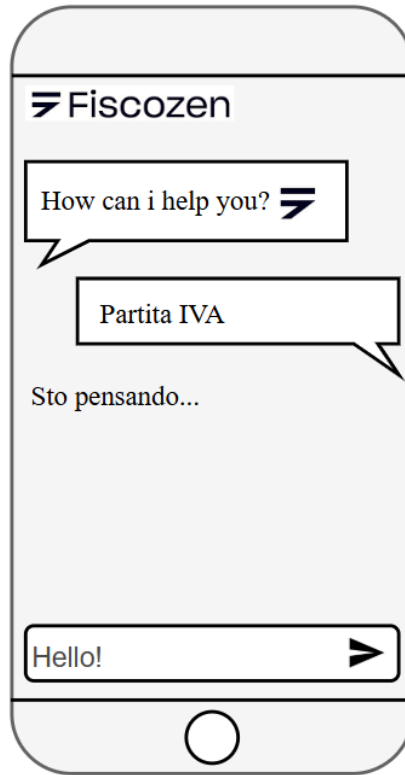
NFR11: The chatbot must support date and time formats specific to the user's region (e.g., DD/MM/YYYY).

NFR12: The chatbot must comply with all relevant tax advisory regulations in Italy.

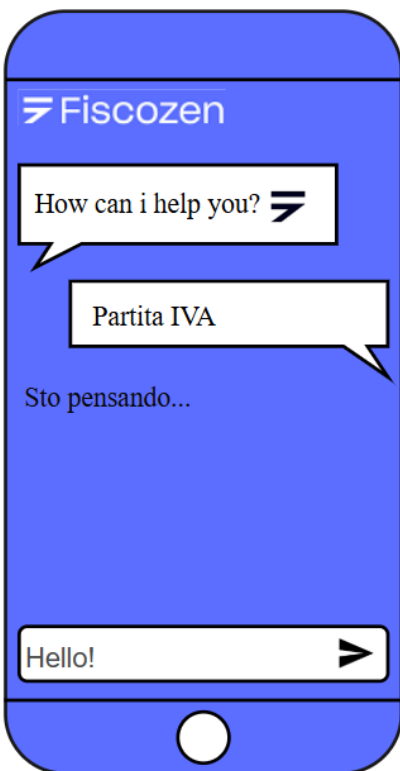
Design and User Experience



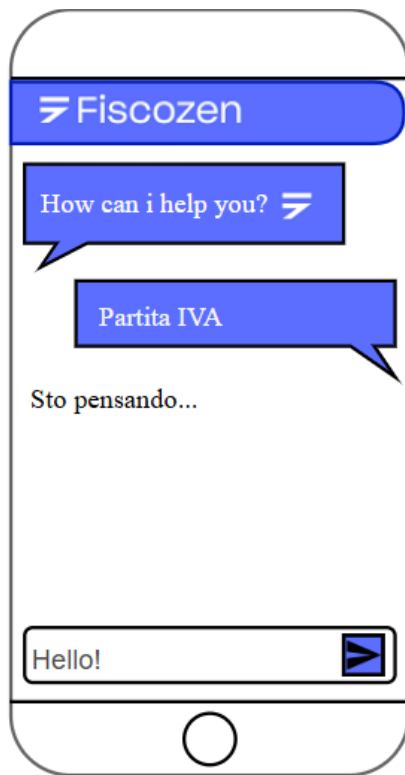
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Expected Timeline

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.