1. Overview and Goals

Weather Chatbot is a tool primarily aimed at casual users who want quick, human-like interactions to check weather-related information, including temperature, humidity, rain, wind conditions, and short-term forecasts.

The informations provided can be based on the current weather conditions of the city provided in the query, or a forecast if a date is provided.

The forecast can be for a single day, a specific time of the day or a summary for a range of days (for example, a week).

2. Technology and dependencies

The chatbot will be written in Python, and the model used for the query's classification iis the zero-shot classifier Bart (https://huggingface.co/facebook/bart-large-mnli).

Reasons:

- no training needed

- works well with small, clearly defined intents

- lightweight

The first launch of the application will require the installation of all the dependencies, but after the first launch the bot won't suffer from long launching times.For weather informations, OpenWeather https://openweathermap.org/api) will be contacted through API calls, passing in the requests the entities extracted from the query. A free key will be provided in the code (1000 API calls per day at most).