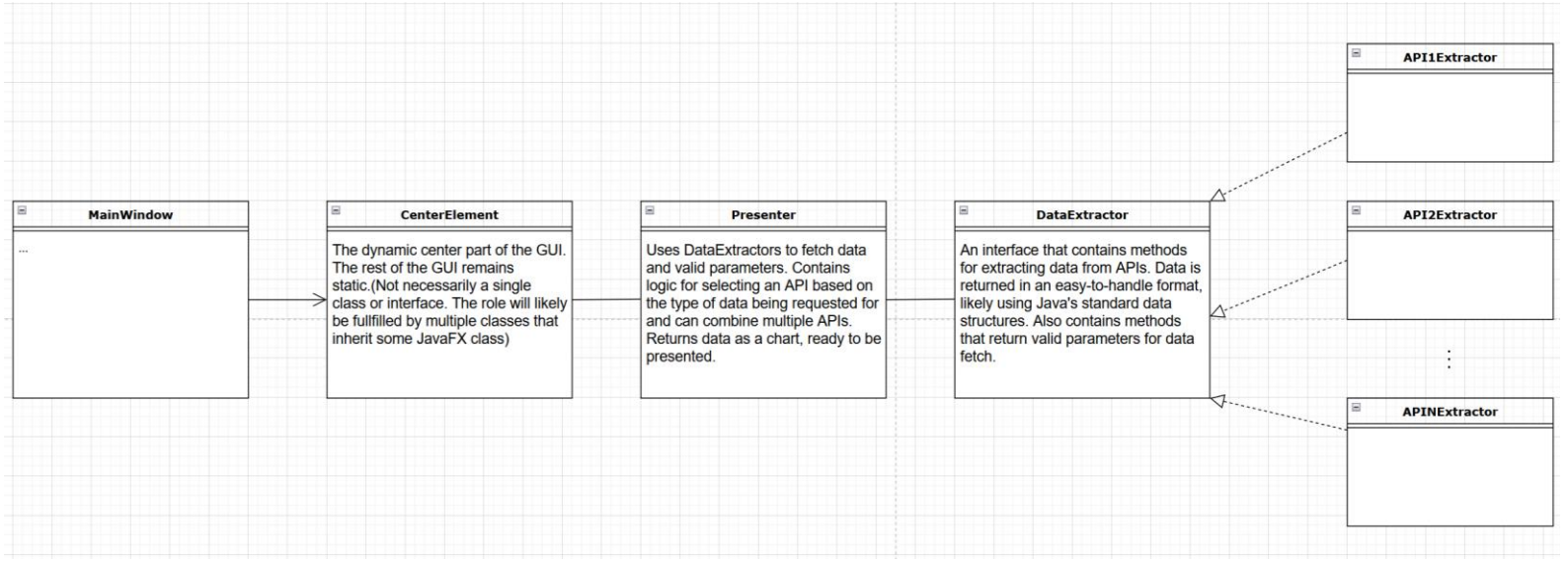
Design document

The application idea was generated by OpenAI's ChatGPT using GPT 3.5. Among the ideas it suggested we decided to choose "Environmental data logger". The idea of this application is to retrieve real-time data from different APIs and visualize the data in the form of charts and possibly maps. The user can choose the timespan for the data and what data is shown. The data we retrieve from the APIs includes temperature, humidity, and air quality. In addition, the user can save view settings for the next instance.

We have chosen four APIs as candidates for use. We may or may not use all of them. The first two are for weather data and the last two are for air quality data.

- Visualcrossing's Easy Global Weather API (https://www.visualcrossing.com/weather-api)
- Open-meteo's Historical Weather API (https://open-meteo.com/en/docs/historical-weather-api)
- Google's AIR Quality API (https://developers.google.com/maps/documentation/air-quality/overview)
- World Air Quality Index project (https://aqicn.org/json-api/doc/)

The application is modeled according to the MVP design pattern. Here's a rough plan of the program's structure:



https://drive.google.com/file/d/1XDwWXRYYCB1Tn1sTMHQxfeVh1ZvxSCg6/view?usp=sharing