

Coding Task Description

Implement a program that monitors weather forecasts for specific locations.

User Story

As a user, I can check if temperature exceeds given limits in the next five days, so that I know how to dress

Required functionality

- Read a list of locations and limit temperatures to monitor from a configuration file
- Periodically request a weather forecast service
 - The weather forecast service is any of your choice but must be free (you can for example use <https://openweathermap.org/api>)
 - The forecast checking frequency must be configurable by a setting in a configuration file
 - Our imaginary Product Owner has indicated that the weather provider might change in the future
- Check if any temperature limit is exceeded in the next five days and store the results
 - You are free to select any type of in-memory, local file system or remote storage
- Implement a REST API that returns the stored results
- Application should be able to recover from exceptional states including any network issue

Details

There is a lot of freedom to choose software technologies, tools and file formats to achieve the goal. Note that the task is meant for evaluating both coding skills and software architecture design skills. Pay attention to the design of applications you create. Be ready to defend your architectural decisions in a discussion.

It is necessary to **personally write the source code**.

It is required that the code you write is **clean** and is of **production quality**.

Deliverables

- The software is delivered with the full source code included
- All used source code must be freely distributable
- Include the instructions how to test, configure, run and use the application