**Meteo**

Documentation

# Author

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# Use Case Diagram

Diagram

Description automatically generated

# Overall application structure

Diagram

Description automatically generated

# Class Diagrams

1. TypeScript Angular Front End

Diagram

Description automatically generated

1. Java Spring framework Back end

Diagram

Description automatically generated

1. Java TCP Meteo Station Listener

Diagram, Teams

Description automatically generated

# Activity Diagrams

1. TypeScript Angular Front end

Diagram

Description automatically generated

1. Java Spring framework Back end

Chart, diagram, funnel chart

Description automatically generated

1. Java TCP Meteo Station Listener

Diagram

Description automatically generated

# Database Diagram

Graphical user interface, table

Description automatically generated

# Possible Errors

|  |  |  |
| --- | --- | --- |
| **Frontend** | | |
| **Error name** | **Possible reason** | **Possible solution** |
| HTTP Connection Refused | The backend is not running | Run Java backend |
| HTTP Get 404 Data not found | Selected data is not in database | Display an empty or incomplete graph, indicating that data is not present |

|  |  |  |
| --- | --- | --- |
| **Backend** | | |
| **Error name** | **Possible reason** | **Possible solution** |
| SQL Exception | Database Server is not running | Run the MySQL database server |

|  |  |  |
| --- | --- | --- |
| **Meteo Listener** | | |
| **Error name** | **Possible reason** | **Possible solution** |
| SQL Exception | Database Server is not running | Run the MySQL database server |
| Socket Exception | Received invalid connection | Close the connection |

# Third-party libraries implemented

|  |  |
| --- | --- |
| **Frontend** | |
| **Library name** | **Library use** |
| @Angular | Framework for whole application |
| Chart.js | Graph creation |

|  |  |
| --- | --- |
| **Backend** | |
| **Library name** | **Library use** |
| MySQLConnector | MySQL database connection |
| Spring maven dependencies | A lot of libraries used by the Spring framework |

|  |  |
| --- | --- |
| **Meteo Listener** | |
| **Library name** | **Library use** |
| MySQLConnector | MySQL database connection |

# Project Resume

* During the development of this project, I have learned a new language (TypeScript), and how to work with the @Angular and Spring frameworks.
* I intend to expand and polish this project, so this is not the last version of this project.
* I judge this project as a major success, because I learned a lot of new thing about front end development.