AGILEHAND Project –

WP6.3 Rapid Reconfiguration
Marelec Use Case – 1st software demonstrator

Documentation

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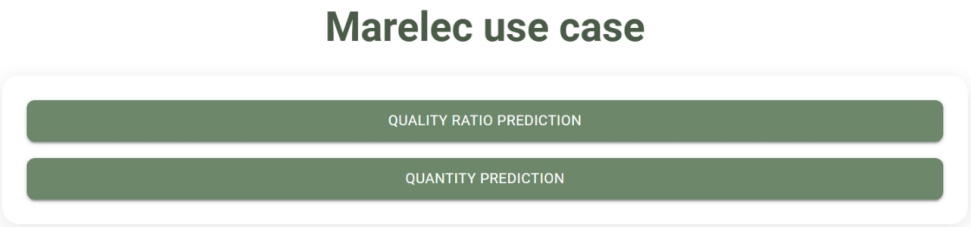

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Table of content

1. Introduction

This document describes the implementation of Marelec use case for the 1st demonstrator (August 2025).

The documentation is as follow structured: After a general introduction in chapter 1, the connection to the software demonstrator will be described in more detail in chapter 2. After that a general overview of menu of the software demonstrator will be presented in chapter 3. Moreover, in chapter 4 the implemented functions of the 1st Demonstrator will be explained. Additional to that, a video for guiding the user to the menu should support the usage of the demonstrator and is uploaded to the Agilehand Teams folder: 250820_Marelec_1_Demonstrator

2. Connection to the software demonstrator

Check the attached document with the title 250417_VPN_Connection_Fraunhofer.

To access it, it is necessary to be connected to the Fraunhofer IPT's network or VPN and enter the following URL in a browser:

- **Internal (only FHG access):** http://10.32.199.78:3000/
- **External (via VPN for Agilehand partner):** http://10.36.97.253:3001/

3. General Overview

This software is part of the AgileHand project (AgileHand Project - AgileHand) and aims to prediction the product quality and quantity based on historical data in the poultry industry.

On the initial screen, it's necessary to select the type of prediction (product quality or quantity). After selection the relevant inputs should be filled in from the user.

Choose screen

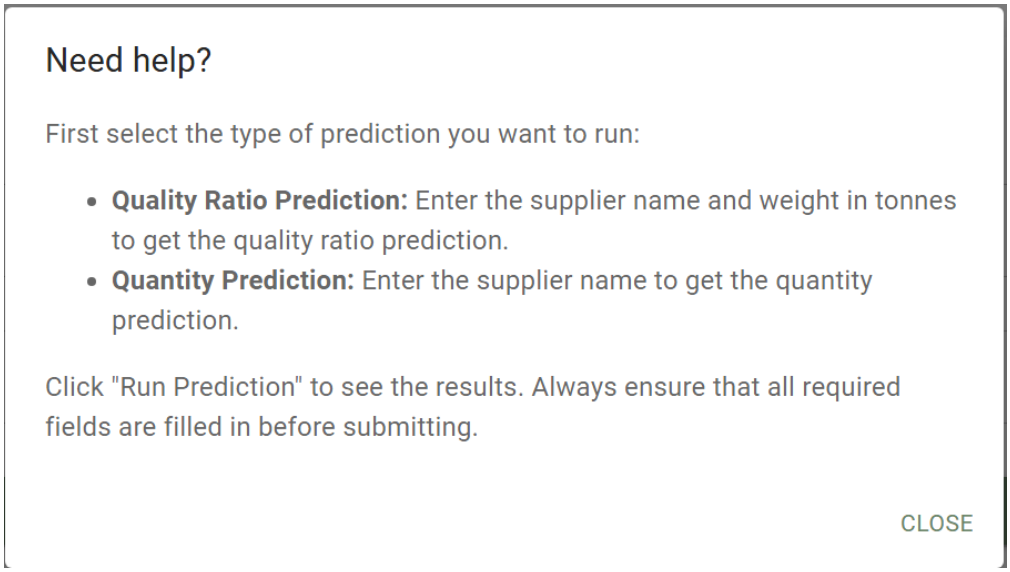
By clicking “QUALITY RATIO PREDICTION” a new screen with two inputs (Supplier name and Weight) will be loaded. On this screen, it’s necessary to fill both the fields to run a prediction and receive a result about the quality of classification B in percentage for the next week. The prediction value is depended on the actual session time and is taken into account historical data.

Quality prediction

By clicking the “QUANTITY PREDICTION” button, a new screen will appear with a Supplier Name input. Fill this input and run a prediction will show a result about quantity in tonnes for that supplier for the next week. Also, this prediction value is depended on the actual session time and is taken into account historical data.

Quantity prediction

The question mark button on the right top corner shows a pop up with a short explanation about how to use the application.



Help popup

Moreover, the used models were trained with a dataset which includes the following names of suppliers. For this demonstrator version, only this supplier names will work with the model.

Supplier Name

1. Supplier 368
2. Supplier 369
3. Supplier 370
4. Supplier 371
5. Supplier 372
6. Supplier 373
7. Supplier 374
8. Supplier 375
9. Supplier 376
10. Supplier 377
11. Supplier 378
12. Supplier 379
13. Supplier 380
14. Supplier 381
15. Supplier 382
16. Supplier 383
17. Supplier 384
18. Supplier 385
19. Supplier 386
20. Supplier 387
21. Supplier 388
22. Supplier 389

4. Implementation details of 1. Demonstrator

For the development of the 1. Demonstrator the main function is choose between two different types of predictions and run it to show its results on the screen.

4.1. Function #1 – Choose type

In this application it is possible to choose between to different types of prediction, quality and quantity. The first screen is where the type can be chosen.

4.2. Function #2 – Predictions

Fill the inputs and run a prediction will return data for the next week. It can be a prediction about quality or quantity depending on which type is running.