DHBW
Duale Hochschule
Baden-Württemberg
Stuttgart

Business Case

(TINF21C, SWE)

Project: Modelling Wizard Improvements

Customer: Markus Rentschler

Christian Holder

Team:

Project Manager	– Robin Ziegler (inf21100@lehre.dhbw-stuttgart.de)
Developer	– Nils Hoffmann (inf21194@lehre.dhbw-stuttgart.de)
Test Manager	– Michael Grote (inf21111@lehre.dhbw-stuttgart.de)
System Architect	– Fabian Kreuzer (inf21106@lehre.dhbw-stuttgart.de)
Tech. Documentation	– Dana Frey (inf21099@lehre.dhbw-stuttgart.de)
Product Manager	– Maximilian Trumpp (inf21123@lehre.dhbw-stuttgart.de)

Change History

Version	Date	Author	Comment
0.1	26.09.2022	Robin Ziegler	Initial Setup
0.2	27.09.2022	Robin Ziegler	Ch. 1-3
0.3	28.09.2022	Robin Ziegler	Ch. 4-6
0.4	05.10.2022	Robin Ziegler	Revision and Grammar
1.0	10.10.2022	Robin Ziegler	Preliminary Finish
1.1	08.11.2022	Robin Ziegler	Grammar and Articulation

Table of Contents

1. Purpose and Scope

The Modelling Wizard was created in several predecessor projects, it started as a plugin for AutomationML but was transformed into a standalone app. With this app you can create devices and interfaces or import supported files to edit existing devices. Created projects can be exported in numerous file formats for further use.

This project aims to improve the existing GUI for better user experience as well as fixing bugs.

2. Value for the customer

Value	Comment
Efficiency enhancement	With an improved GUI users can more easily accomplish tasks, as well as have a better experience while using the product, increasing workflow and reducing time needed for completing basic and complex tasks.
Better quality	Through the enhancements made in the project the product will have an improved quality, fixed bugs will improve workflow, improved GUI enhances user experience. The program will be more accessible to users no matter the experience.

3. Expected restrictions and risks

It is to be expected that there will be interruptions during the project because the team members have other obligations to fulfill such as other projects form different classes or projects from their employer that can have precedence. Other expected Interruptions may come from sickness or injury, vacation also plays a role but can normally be mitigated ahead of time.

It is expected that the project will be finished on time, but possible remaining bugs or other smaller issues cannot be ruled out.

4. Time frame

The project has a time frame of six months from 05th September 2022 – 29th May 2023 but with the restriction that during December, January and February team members are also working for their respective employers, during that time interruptions to the work being done on the project are expected.

The first half of the project, until December 2022, is reserved for getting to know the existing application, creation of the different artifacts for the client and a GitHub for the source code. Other tasks include a usability analysis, testing for potential bugs, and a first prototype. A preliminary presentation will be held at the end of this phase.

In the later half the changes will be implemented. The prototype will be revised, and a final version created, in addition tests will be implemented to rule out further bugs. The remaining documentation needs to be created and existing updated to match current progression. The project ends with a working application and a presentation outlining the work process.

For this project a work pensum of 150h per person is proposed, which will be broken down in the following table.

Time in hours	Robin Ziegler (PM)*	Nils Hoffmann (Dev)	Fabian Kreuzer (SA)	Dana Frey (TD)	Maximillian Trump (PM)**	Michael Grote (TM)
Documentation	20	10	10	50	10	10
Analysis	10	10	20	10	10	10
Design	10	10	20	10	20	10
Code	20	50	50	20	30	40
Test	0	40	20	10	20	50
Meeting	20	20	20	20	20	20
Customer interaction	10	0	0	0	10	0
Project Managing	30	0	0	0	10	0
GitHub	10	0	0	20	0	0
Presentation	20	10	10	10	20	10
Total	*150*	*150*	*150*	*150*	*150*	*150*

Table 1: Work pensum

* Project Manager

** Product Manager

5. Costs

The costs can be structured into the following sections:

Analysis: Get the status of the project and look for improvement ideas.

Design: Conceptualizing of an improved GUI, in form of concept and prototype.

Programming: Implementation of prototype and changes to the project.

Testing: Programming or creation of tests to prove implemented functions work.

Project management: Creation of concept, planning upcoming meetings and making sure communication between members does not break down.

Documentation: Includes documentation of meetings and artifacts.

Position	Salary €/h	Cost total in €
Project manager	44	6600
Product manager	55	8250
System architect	44	6600
Developer	31	4650
Tech. Documentation	25	3750
Test Manager	31	4650

The total cost for the team comes to **34.500€** in salary, to that a buffer of +10% can be recommended. Bringing the total to **37.950€** in salary costs. For a real-world project, you would also have to include things like licenses.

6. Offer

To get an acceptable return on investment for the project a profit margin of 30% was decided. Bringing the total offer to **49.335€**.