Rollende Küche

Graduate

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Introduction: The "Rollende Küche" is a service organized by the Spitex Wädenswil ZH, that delivers menus to elderly people. The service allows a customer to enjoy living and eating at home, without the hassle of cooking or ordering through conventional meal delivery services.

In 2001, the first step towards digitization was made in the form of an application that utilizes Microsoft Access to store customer data, plan routes, and print reports such as daily delivery plans, a weekly overview of all orders and monthly invoices. Even though the application was updated in 2011, it still has limitations. The most significant are the route limit of five and that it is not possible to edit the orders.

The goal of this project was to replace the existing application. The new implementation should include all features of the current solution without its limitations.

Approach / Technology: To organize project management, a combination between RUP and SCRUM was used. A meeting with the key stakeholders was conducted at every sprint end, to show the progress of the project and get feedback.

A desktop application was created using the onion architecture to create an independent business layer. Dependency injection was used to decouple individual components. .NET 5 was used for the implementation. The data is saved in a simple SQLite database, to make data backups easy and eliminate the need of an additional service that needs to run on the host machine. It further uses WPF as the UI framework.

Result: The resulting application has an intuitive design, is very flexible and the limitations of the existing application could be fully eliminated. Due to time constraints the scope had to be reduced.

Although the application is ready to be used in a productive environment, a few quality of life features are missing. Therefore the current state of the application is not able to fully replace the existing solution.

The new application is currently used in tandem with the current one. The software development will be continued outside of the scope of this project.

Examiner
Prof. Frank Koch
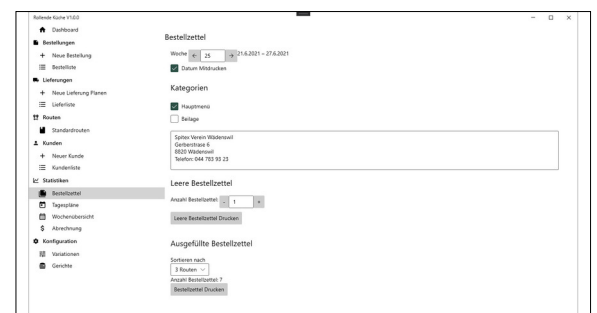
Co-Advisor
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Subject Area
Software, Application Design

Project Partner
Spitex Verein, Wädenswil, ZH

Delivery planning screen
Own presentment

Print Order Sheets Screen
Own presentment

Order Input Screen
Own presentment