



FOM Hochschule für Oekonomie & Management

university location Nürnberg

Projektarbeit

in the study course Wirtschaftsinformatik

**im Rahmen der Lehrveranstaltung
Preparatory Seminar for the Bachelor Thesis**

on the subject

**Design and Development of a Prototype for a Real-Time Contact Management
System in a Dynamic Corporate Structure**

by

Joschua Böhm

Advisor: Dr.-Ing. Peter Vatter

Matriculation Number: 604968

Submission: June 11, 2024

Contents

List of Figures	III
1 Introduction	1
2 Problem Statement	1
3 Research interest	2
4 State of Research	3
5 Objectives and Research Question	4
6 Methodology and Research Methods	5
7 Draft outline	6
8 Schedule	7
Literaturverzeichnis	

List of Figures

Figure 1: Gantt Graph	7
---------------------------------	---

1 Introduction

In an age in which agile working and frequent reorganizations are on the rise in large companies, it gets increasingly complicated for teams to stay structured and organized. Those challenges can be tackled with a great internal infrastructure and company fitted tools. The following thesis will focus on the conception and development of a tool that will help different teams to find and contact the right people in the company for their specific needs.

A company's internal structure can be very complex and hard to understand for a lot of employees. Companies often have a lot of different departments and teams, which can be hard to keep track of. A contact management tool helps in a variety of different ways. Firstly it helps to increase efficiency by making it quick and easy to find the right contacts for a specific task. Furthermore the tool solution is customizable. It will be developed in a way to be less susceptible to changes or reorganizations, Finally, the tool will act as a catalyst for cooperation and communication between different teams.

The following sections will provide a detailed overview of the project goals, technologies as well as methodologies that will be used in the course of the project.

2 Problem Statement

Despite a high level of digitization and automation in the business world, there are still great challenges to overcome. For many of those challenges, custom software solutions can be developed to solve those problems. One of those fields, that can still be optimized is the search for suitable contacts within a company. In day-to-day business, it is almost daily necessary to work together with colleagues from other departments or teams to tackle a variety of problems. Right now, most of the time a handful of colleagues have to be asked via chat or email to find the right contact. Although tools like Microsoft Teams, Jira or Slack offer the possibility to search for colleagues, they are not specialized in finding colleagues based on a specific topic or problem. This is where this project tries to offer a solution.

3 Research interest

The findings of this paper will show the impact of an optimized knowledge transfer. Time savings, efficiency gains and the impact on synergy effects will be presented in the course of the project. In addition, the prototype that will be developed in course of this project can be used as a template or basis for companies that want to develop a similar contact management tool and contact database. When focusing on the scientific aspect of this work, it will show the impact of optimization in this area, and findings can also be used in related fields, possibly even creating new perspectives in some areas.

4 State of Research

5 Objectives and Research Question

Goal of this Project is the conception as well as the development of a prototype for a real-time contact management tool. This Objective can be broken down into the following sub-goals:

- Requirement analysis: In the first part of the project, the goal will be to gather information and documenting the individual requirements of the Telekom field-operations team regarding the contact management system, as they will be the ones involved in testing later on.
- Design of the prototype: The second part of the project will focus on the design and conception of the prototype. There, a combination of functional but also user-friendly design will be the main target. On the one hand it should be possible to find the right contacts for a given problem in a variety of ways, on the other hand the possibility to maintain and manage contact data should be given.
- Implementation and testing of the prototype: The third and final part of the project has the sub-goal to develop and test the previously designed prototype. Tests will include usability as well as functionality aspects.

The project won't focus on long-term implications. Also, security aspects will mostly be ignored. The main focus will be on the functionality and usability of the tool.

6 Methodology and Research Methods

Regarding requirements analysis, members of the Telekom field-operations team, which consists of mobile technicians, will be interviewed. The project will just focus on a group of selected potential stakeholders, as the project is limited in time and resources. This makes it possible to stay in control over the time of the project. Literature research will also take a part in the requirements analysis. The goal is to use the already available findings productively and to elaborate on those findings if possible.

Prototyping will be another important research method. With this method, the goal is to develop a working prototype with just the most important features. This saves the project time and resources, and also makes it possible to get feedback from the stakeholders as early as possible.

Lastly testing will be utilized as a research method. People who are not involved in the development project will be asked to test the prototype. The goal is to get feedback on usability and functionality, and to get an outside perspective on the project.

7 Draft outline

1. Introduction

- a) Problem Statement
- b) Objective
- c) Structure of the Thesis
- d) Methodology
 - i. Requirements Analysis
 - ii. Prototyping
 - iii. Testing

2. State of Research

- a) Terms and Definitions
- b) Contact Management Tools
- c) Telekom Field Operations Mobile

3. Theoretical Framework

- a) Requirements Engineering
- b) Design of the Prototype
- c) Implementation and Testing of the Prototype

4. Implementation of the Methods

- a) Requirements Engineering
- b) Design of the Prototype
- c) Implementation and Testing of the Prototype

5. Evaluation of the Prototype

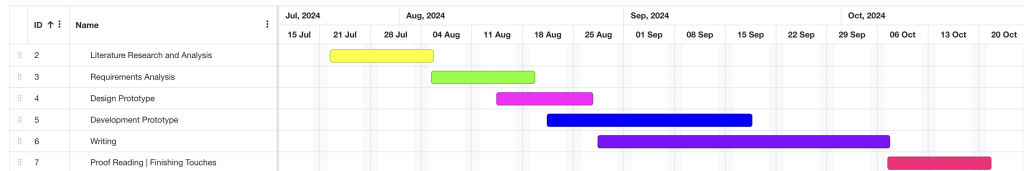
- a) Usability Testing
- b) Functionality Testing

6. Conclusion and Outlook

- a) Conclusion
- b) Outlook

8 Schedule

Figure 1: Gantt Graph



source: <https://www.onlinegantt.com/>

Declaration in lieu of oath

I hereby declare that I produced the submitted paper with no assistance from any other party and without the use of any unauthorized aids and, in particular, that I have marked as quotations all passages which are reproduced verbatim or near-verbatim from publications. Also, I declare that the submitted print version of this thesis is identical with its digital version. Further, I declare that this thesis has never been submitted before to any examination board in either its present form or in any other similar version. I herewith **agree/disagree** that this thesis may be published. I herewith consent that this thesis may be uploaded to the server of external contractors for the purpose of submitting it to the contractors' plagiarism detection systems. Uploading this thesis for the purpose of submitting it to plagiarism detection systems is not a form of publication.

— Nürnberg, 11.6.2024 —
(Location, Date)

A handwritten signature in black ink, consisting of a stylized 'J' followed by 'B' and a horizontal line.

—
(handwritten signature)