SOCIAL MEDIA AT TECHNISCHE UNIVERSITÄT ILMENAU

EXECUTIVE REPORT FOR USER CENTRIC ENGENEERING II

Submitted by:

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1. INTRODUCTION

Description of project idea and target audience

Experiencing new environments always brings along thousands of unfamiliar challenges for every individual. These challenges become more striking when it comes to studying abroad, far from home. Yearly, thousands of students enter Germany from different countries with various backgrounds. Adapting to a new environment, would be the most significant factor that elevates personal success of these students, that is not possible but with gaining information.

To support our community of students at "TU Ilmenau", we came up with the idea of having a social media application for new students who need information in different fields of living and studying in Germany. Residential matters, Language barrier, academic problems, cultural differences and dealing with bureaucracy in Germany are the main challenges that we identified through our target audience research. Therefore, our project is based on approaches to cope with these problems. Moreover, this application tries to act as a bridge between alumni and new students to spread the information and experiences of studying at TU Ilmenau.

Description of document content

Being developed for the students who come to Germany without having prior experience or enough knowledge about the system in this country, the biggest challenge would be to make this application the most effective, efficient and provide satisfaction to the users when they use it for the first time. So, for this very purpose, an empirical evaluation on the prototype of our app is done on test users with a structured procedure that includes an interview whereby the subject is introduced to the prototype and asked a few questions. The subjective evaluation along with identification of user needs are carried out in this procedure.

This document descriptively narrates the interview procedure. To start with, the interview planning process is explained on the basis of the structure of questions formulated. Followed by the interview conduction including selected test participants, the results are then analyzed for refinement of the prototype. The names of test participants are mentioned in the interview part. Furthermore, the persona models are described, which is succeeded by defined core tasks which are implemented on this prototype. The prototype is then presented, evaluated, and refined by our group including all the members. The end product is an updated prototype which is refined at least two or more times based on the evaluation from the test users.

This will ensure more usability of this application in the final stage.

2. USER ANALYSIS

2.1. INTERVIEWS PLANNING

Short description of the interview planning process:

In some ways, planning the details and questions of the interview is the most important step of the entire user analysis process. Decisions made at the outset of the planning process will dictate the way we proceed and the results we will end up with.

1. How were questions defined
   i. Problem areas that we wanted to focus on were defined and questions were framed and grouped (general questions, subjective questions, and alumni questions) based on the problem areas.
   ii. Types of users who would be using the application as well as test the application were identified, these users are representatives of our user personas.
   iii. All the questions were framed in such a way that the users did not get any hint about the application.

2. How were questions tested?

   i. We let the users to explore the application, while doing so we asked what they were expecting in particular with respect to buttons or description on the application as per their understanding.
   ii. We also gave a scenario and let the users finish the scenario and noted down the difficulties and expectations the user faced to complete the end-to-end test flow.
   iii. Without influencing the users, we also observed the way they approached to each button and functionality.

3. Were the questions refined?
   i. Although the questions were not refined, it was tweaked based on the participants.

   ii. When the users were performing a task/functionality and faced any difficulties, the questions were refined to understand the difficulties rather than explaining how the task needs to be done.
   iii. Based on each step, along with planned questions, few questions were refined to understand the users' expectations and satisfaction.

4. List group members who participated
   i. Golnoush Masihpour

    ii.   Noel Toms
   iii.   Prathyusha Velamoor Srinivasan
   iv.   Qasim Ali
    v.   Rana Muhammad Faheem
   vi.   Saber Ghasemtabar
  vii.   Varshitha Chamanahalli Ramanna
 viii.   Venkata Lokesh Reddy Munagala

2.2. INTERVIEW CONDUCTION

Description of the interviews

User interview gives an insight into what users think about an application, website, product, or process. It also throws light on the needs of users and problem they face with respect to the application, website, product, or process.

We first familiarized ourselves with the participants as a warmup before the interview and in order to create a relaxed atmosphere. Context of the interview was set along with a short description and approximate duration. Some unplanned follow-up questions were asked, when necessary, based on the obtained information during the interview. Few questions were asked in different ways in order to determine user's actual opinions. We were flexible with regards to the questions and improvised them in some cases so that we did not miss out on important insights. Finally, we closed the interview by communicating the appreciation of the participants' time.

1. Participants
    i.   Participant 1 - Touseef Ashraf
   ii.   Participant 2 - Maurice Teuber

2. How were the interviews conducted?
    a.   Who moderated? Qasim Ali
    b.   Who took notes? Prathyusha Velamoor Srinivasan
    c.   How long did they take?
        i.   Participant 1, Touseef – 10 minutes
       ii.   Participant 2, Maurice – 12 minutes

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  vi.   Saber Ghasemtabar
 vii.   Varshitha Chamanahalli Ramanna
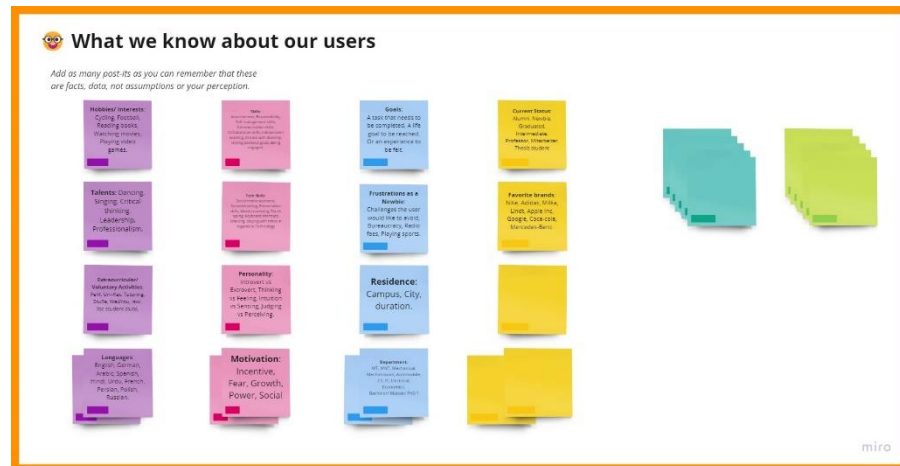viii.   Venkata Lokesh Reddy Munagala

2.3. INTERVIEW ANALYSIS

1. How was data analyzed, i.e., how was Affinity diagram built

After the interview conduction, we were confronted with many pieces of data in apparent chaos that were cluttered. The main goal of this part is to organize and collect data for further analysis. So, an affinity diagram is beneficial for this purpose. An affinity diagram is a tool that collects a lot of data like ideas, attitudes, and issues and groups them according to how naturally they relate to one another. Therefore, after conducting interviews, we organized and grouped data according to their affinity, or similarity to have an overview of students' challenges and problems. For affinity processing, we followed 4 steps. First, we recorded each attribute and requirement on a separate sticky note in Miro. Second, we placed those that appeared to be related in some way side-by-side. Third, for each grouping or category, we tried to identify the categories and develop summary or header cards. And for the last step, if necessary, we consolidated groups into supergroups, and then we put all of those under header cards to be assigned to the identified categories.

As a result, we created different categories with sticky notes in 4 sections with similar colors and common topics or structures. In the first section, we put Hobbies/ Interests, Talents, Extracurricular/ Voluntary Activities, and Languages. In the second section, there are Talents, Skills, Technology Skills, Personality, and Motivation. In the third section, you can find Goals, Frustrations as a Newbie, Residence, and Department. And for the last section, Current Status and Favorite brands can be found. Organizing each attribute and requirement of survey results in its specific category can help us to develop relationships and analyze them and to identify core tasks.

2. Affinity diagram (summarized, full as attachment or via Link)

https://miro.com/app/board/uXjVOqwAkn0=/?share_link_id= 236565730303

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   viii. Venkata Lokesh Reddy Munagala

2.4. PERSONA MODELS

1. Explain how affinity charts were translated into Persona models

From the two persona-based approaches which are present namely Demographics-based personas and Behavior-based Personas. Latter offers you more insight into how one can improve customer experience and service in general.

The tool used for drawing persona model was Miro, one can either choose from the variety of profiles available or customize a new design. First step of the design was to gather information about the target group of customers/ students (imaginary). It is easier to start with hypotheses if one validates it afterwards in order to collect reliable data. Then comes the task of segmenting the audience. It is important to analyze the research data one has collected and identify behavioral attributes like the kind of task one is trying to accomplish, their goals, etc. Third step of the task is to decide on the layout, there are multiple options for choosing the template on Miro, one can explore to see which fits for the task. Consequently, one should deal with demographic information like giving Personas meaningful names, picking a photo for the Persona. Fifth step is to set and describe Persona's background, this step helps

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you to get wonderful insights to avoid unnecessary information that might cause cluttering and confusion. It should also serve in driving one's empathy and contain valuable information about the Persona. Next step is to define goals of these Personas, it allows you to see how your goals align with the goal of end customers. Seventh step in designing a persona is to define motivations and frustrations, this will help build a purposeful connect with audience and win their hearts and loyalty. At this point, one has reached the finish line in creating a Persona. But there is always room for improvement, one can add more sections to describe in a more detailed manner.

2. Include the designed Persona models
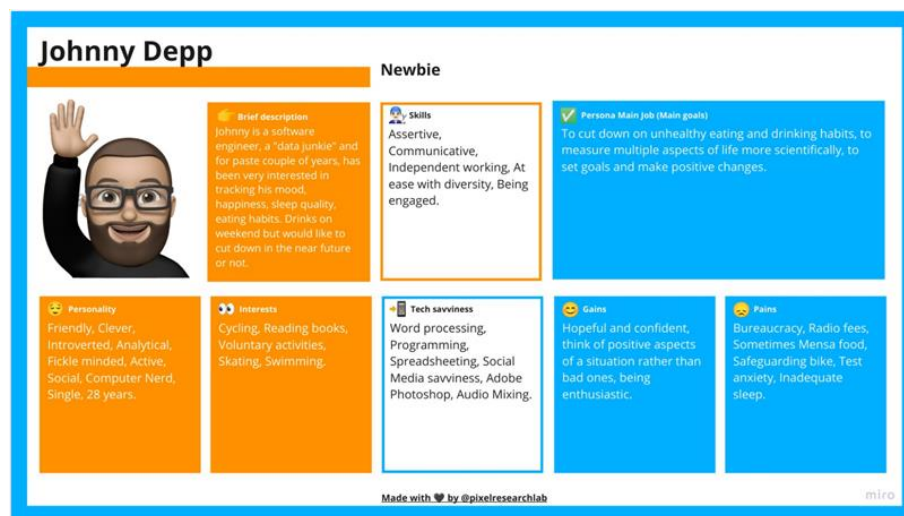
3. Explain whether there were refinements

The persona model which was designed initially (attached above) was further improvised and refined to create persona models of potentials users of the application, these personas would either be prospective students at the university or alumni.

Refined persona models :

https://cloud.tu-ilmenau.de/s/e5DNJ9RRpJwPf8N

https://cloud.tu-ilmenau.de/s/k2W9q5zFc4rZpLD

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3. PROTYPING – EVALUATION

3.1. CORE TASKS DEFINITION

1. How were the core tasks of the app defined? From User Analysis Stage

In our case, the consumer of the application were students. During the analysis stage, all the raw data was collected from the students through interviews. In these interviews the goal was to comprehend and analyze as for what tasks were students looking to perform with all the available resources to them and if they were able to perform or execute their task with ease or if they came across hurdles to perform the task.

Through this interview method, we were able to collect the relevant data leading us to define the core tasks which students wanted to execute.

2. Description of Core Tasks (Story Boards)

Core tasks:
  i. **Bureaucracy:** one shall expect a lot of paper filling in the beginning, since it is some way useful. Example forms which explain previous scenario. Experienced person for translation of documents.
  ii. **Food:** Varieties of food is served but mostly not serving the taste palates of everyone. One can find a lot of restaurants in and around Ilmenau. If interested, one can join the committee and influence recipes they make.
  iii. **Moodle2 or Exams:** One shall get introduced into the whole online system usage. Like opentimetable, thoska terminal, exam moodle, library catalogues.
  iv. **Medical appointments:** How one can make appointments at Krankenhaus or Zahnartz.

Storyboards: https://cloud.tu-ilmenau.de/s/eJCyxkFEY7EAWfK

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3.2. PROTOTYPES – EVALUATION

1. Present each developed prototype

Prototype Version 1 : https://www.figma.com/proto/9MGtfbIjwEqGUz4rr47ITy/TUISG?node-id=158%3A142&scaling=scale-down&page-id=0%3A1&starting-point-node-id=154%3A21&show-proto-sidebar=1

Final Prototype : https://www.figma.com/proto/cXb5KbC4NeYE0oBAObS7gn/UniversityApplication?node-id=2%3A2&scaling=scale-down&page-id=0%3A1&starting-point-node-id=2%3A2

Survey for the application : https://survey.survicate.com/e84dafd4385a90a9/?_svbep=P3A9aW50ZXJjb20mZmlyc3RfbmFtZT17e2ZpcnN0X25hbWV9fSZsYXN0X25hbWU9e3tsYXN0X25hbWV9fSZlbWFpbD17e2VtYWlsfX0mdWlkPXt7dXNlcl9pZH19

Explanation of the features in the final prototype:
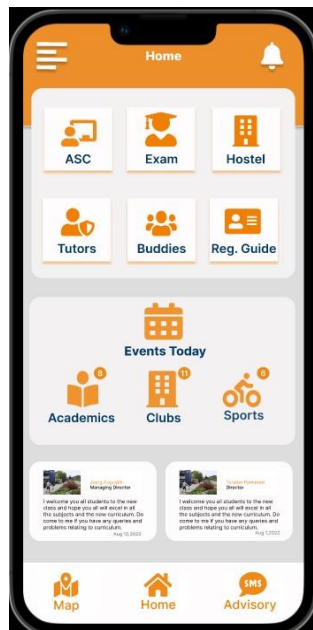
i. **ASC (Academic Service Center):** In this feature the user would be taken to the homepage of academic service center where the user would be able to see the related information along with the office hours for the particular contact person along with his/her contact details as shown in the image displayed below
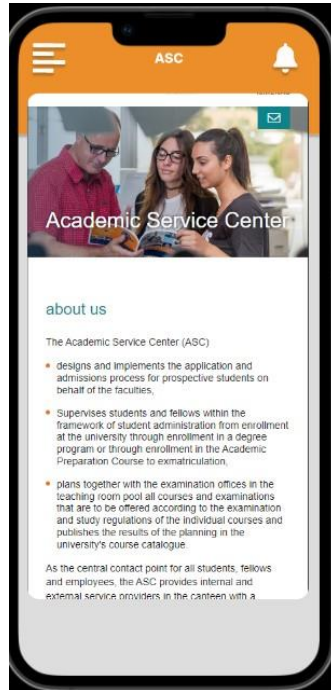
ii.   **Exam:** Once the user clicks on the exam button, it takes him to the following interface as displayed below where he/she can see the office hours for the concerned person and meet in person after setting an appointment via email. This would help the student to know all the necessary information he/she needs to know about the exams.
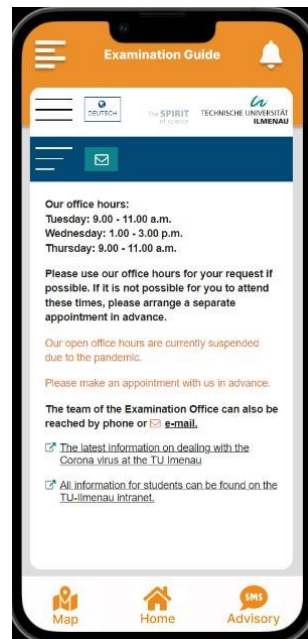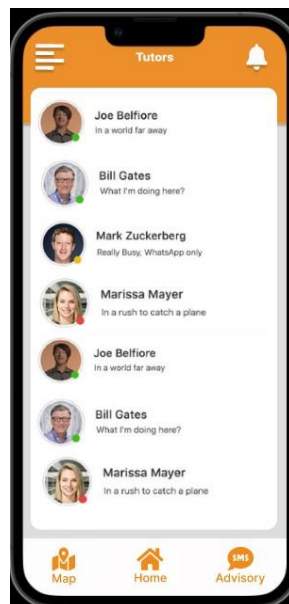

iii. **Hostel:** It shows that once the student gets the room in the hostel, he/she signs the contract for that particular room for a specific duration along with the terms and conditions to

be followed which are explained to him/her before signing the contract.

iv.   **Tutors:** In this feature you get all the information about all the tutors along with their contact details.


v.   **Buddy:** This shows the list of buddies along with their contact details in case, a student needs helps with regards to any specific task which needs to be executed.
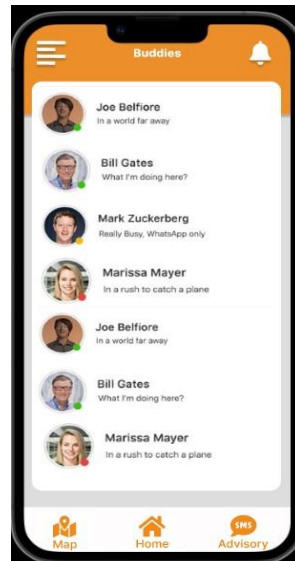
vi. Registration Guide: (Referred to as Bureaucracy in our core tasks)

    a. City registration: These are the steps which after completion allow you to attain a mandatory document that you need to receive from the Town hall as evidence that you are a resident in the following city along with your address and other necessary information mentioned in the form.
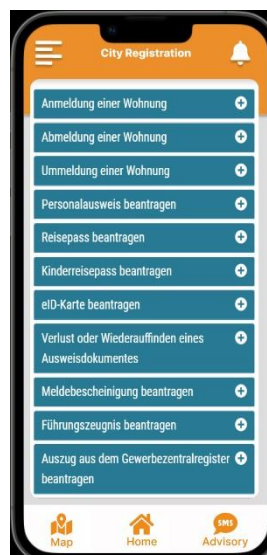
b. **University registration:** referred to as enrollment (matriculation number: this number indicates that you are enrolled in the university).
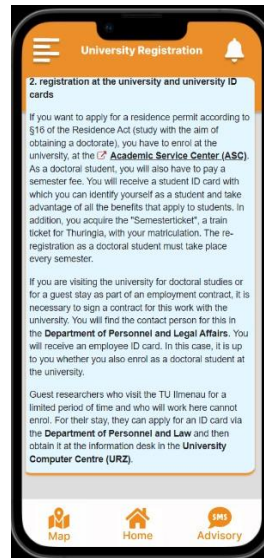

c. **Residence Permit:** In this form you get all the information in regard to the visa extension and all the necessary information that you need to have in order to avail the residence permit. All the terms and conditions are mentioned in it so you could have the clear picture of what do and what not to do to stay away from trouble in a foreign country.
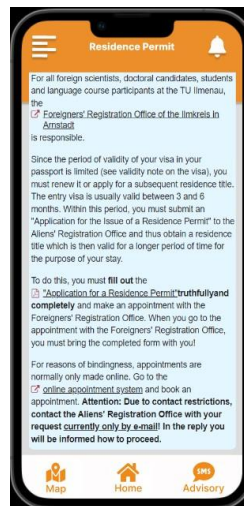
d. **Bank registration:** In this feature you have the access to the look into what is required in order to have your account in a German bank. What legal documents would be required at your end for the bank to verify your details and follow the protocols so facilitate you with a German bank account.
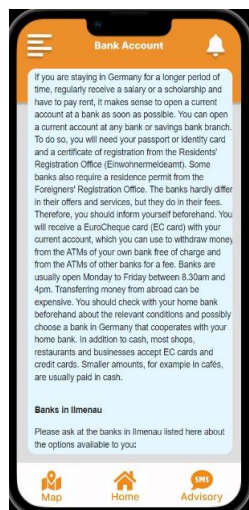
e. **Health Insurance:** Everyone must take care of him or herself first therefore, this form illustrates as for what are the requirements for a student to avail the health insurance and how could he benefit himself/herself by having this and have a backup plan incase if anything happens to him health wise.
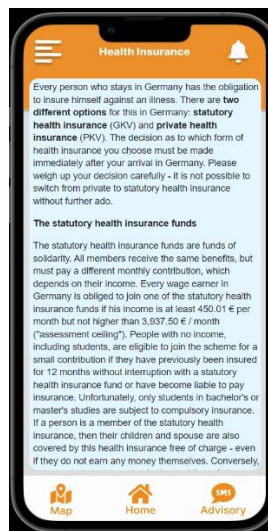

vii. **Event feeds:**

a. **Academics:** You receive notification or feeds in regard to all academic events happening around the campus

b. **Clubs:** You have the facility to receive feeds for the events happening in university clubs (e.g., **Stura**, which actually somehow connects all the students, national and international) on the campus and off the campus and hence, allowing to bridge up and exchange the beauty of different cultures through

cultural events leading to an aesthetic environment for the students.

c. **Sports:** You get the feeds in regard to all the sport events happening on campus.
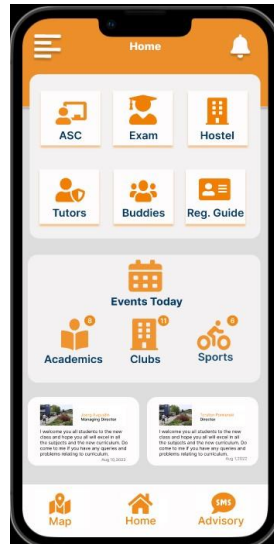
viii. **Campus maps:** This is self-explanatory which allows the student to navigate and reach the desired destination.

ix. **Advisory:** Through this feature you have the access to reach for the helpline and directly speak to the advisors.
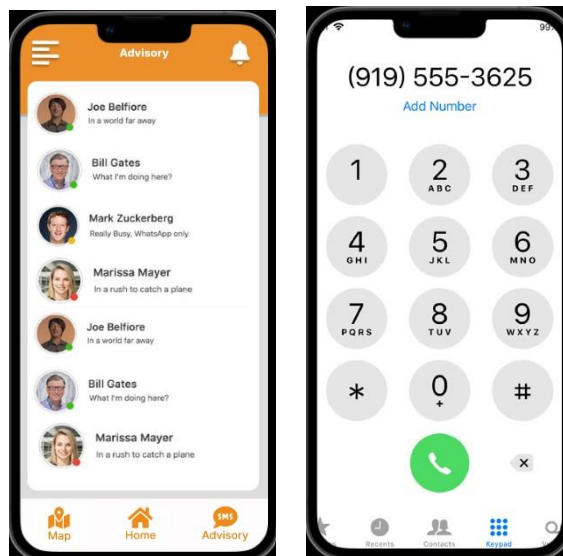
2. Evaluation results:
   a. Participant – Fabia Kohlhoff
   b. Findings -> Refinements
      i. User overwhelmed by too many buttons
      ii. 'Cancel' button takes user back to main page instead of previous page

    iii. 'Edit' button missing in the page

    iv. 'Help' section should also consist of FAQs about basic questions for quick solutions

    v. More details about mensa food, grocery shopping, everyday life, etc needs to be included

    vi. Appointment system (Bureaucracy related) might be complicated, just providing the contact information and other details such as address, open timings, etc should be listed instead.

The above-mentioned findings helped in refining the final version of our prototype.

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