2021

Icon

Description automatically generated

Student Housing

Project documentation

Group 4: Rosen Stanchev, Tihomir Kandev, Anna Kadurina

Table of Contents

[I. Our group 2](#_Toc89441897)

[II. Introduction of the project 2](#_Toc89441898)

[III. Stakeholders 2](#_Toc89441899)

[The developers 3](#_Toc89441900)

[Clients 3](#_Toc89441901)

[The end-users 3](#_Toc89441902)

[Customers 3](#_Toc89441903)

[IV. Weekly plan for our work 3](#_Toc89441904)

[Week 13 3](#_Toc89441905)

[Week 14 4](#_Toc89441906)

[Week 15 4](#_Toc89441907)

[Week 16 4](#_Toc89441908)

[Week 17 4](#_Toc89441909)

[V. Problem descriptions 4](#_Toc89441910)

[Administration 4](#_Toc89441911)

[Information management 4](#_Toc89441912)

[Communication between users 5](#_Toc89441913)

[Access to the housing agency 5](#_Toc89441914)

[VI. Solution descriptions 5](#_Toc89441915)

[Creating admin as user type 5](#_Toc89441916)

[Displaying the information for the different users 5](#_Toc89441917)

[Making communication possible 6](#_Toc89441918)

[Not everyone can log in 6](#_Toc89441919)

[All the other functionalities shown with the help of MoSCoW method 6](#_Toc89441920)

[VII. User types and their functionalities 7](#_Toc89441921)

[The Administrator 7](#_Toc89441922)

[The Student 8](#_Toc89441923)

# Our group

Our group consists of three people – Rosen Stanchev, Tihomir Kandev and Anna Kadurina. We are first year students at Fontys University of Applied Sciences in Eindhoven, The Netherlands. At this moment, we are at the Advanced Phase for Software Engineering. We all come from different backgrounds and combine our strengths to make a software application in the best possible way. Our group number is 4 and throughout hard work and communication we get things done.

# Introduction of the project

Welcome to our housing agency! Every year many new students start searching for a place to live and this task is extremely hard as most of them are moving to a different country and do not know from where to start. We, from Student Housing, are here to provide the best living places. We have a variety of property types such as studios, apartments, houses, and single rooms. There is something for everyone! Our agency is becoming bigger and bigger with every year, which lead to our next step – create a software application to manage all the users, new people, schedules, announcements, etc. This project is going to make the communication between administrator and students easier, the management of the events and chores and the general overview of all the important information about every student’s rented place are going to be easy to access and change if needed.

# Stakeholders

The stakeholders in a project are the people that are actively involved in the project, affected by the outcome, or can influence the outcome. The stakeholders in this project are the end-users who interact with the system (the students with apartments and the administration) and the engineers that developed the system.

## The developers

Although the developers probably will not use the application after it is created, they are the ones that are making the whole project ‘alive’, and they will be responsible for any possible mistakes and problems. The users are going to see their work and either the project will be a success or just a useless application that is hard to use.

## Clients

Client is the person or organization for whom the application is developed. They are the ones that pay for the project. Clients are the people that are going to approve and manage the application.

## The end-users

The end-users are people who use the software once it is sent to the client. Having a software application for the housing agency is extremely important. Without it, it is hard for the user to manage everything, to communicate with the administration and the other students, and see the information that is relevant for him/her. If the application is poorly made or is not useful, no one is going to benefit, and the users will still have a hard time taking care of the problems that are occurring and keeping track of everything that is happening.

## Customers

A customer is every person that can buy the software after it is ready.

# Weekly plan for our work

## Week 13

We did the documentation and preparation for making the application. We discussed the problems we are going to face and the possible solutions. In addition to that, we made a MoSCoW table to see the priorities that will be a must, could, won’t, etc.

## Week 14

During this week, we will continue working with the application, having in mind the already created documentation and MoSCoW table that has our top priorities.

## Week 15

We are going to continue working on the application by extending it. In addition to that, we are going to submit an interim version of the application for feedback.

## Week 16

Along with extending our problem, we are going to start our report and presentation.

## Week 17

We need to deliver the final version of the project.

# Problem descriptions

## Administration

In a housing agency, having a superior user is a vital part. Someone needs to manage all the profiles, information, and problems in order everything to work properly.

## Information management

Without the software application, it is extremely hard to manage all the information for everyone. All the users should be up to date with everything that is going on and affects them somehow. There are a few types of users that have access to a variety of information. There are problems occurring when the clients are not able to access the description of their apartment, the schedule, etc. In addition to that, the administration is not able to control and manage all the data.

## Communication between users

Our housing agency believes in the rights of a person. Everything should be properly discussed, so that all the users are in an agreement. It is important that every student has a voice and can easily complain about something, report a problem, and communicate with the admin and the other students. This goes both ways. It is vital for the administrator to have an overview of everything that is going on in the rented places and get feedback from the students.

## Access to the housing agency

If there is a registration form, everyone would be able to access the application and make an account. That will lead to unwanted users and useless accounts.

# Solution descriptions

Basically, with our application, we are going to solve the problems that are occurring for the clients and the administration. The users are going to have the best possible experience with Student Housing.

## Creating admin as user type

The students won’t be the only ones that can log in. The second type of users will be the admin. He has power to change details about the clients and their properties. With his control, the management of the data will work accordingly to the way it is supposed to.

## Displaying the information for the different users

When someone logs in, he/she is sent to a new form based on the user type. All the necessary information is displayed and if possible, the user can change it. There are buttons for the different functions that can be used to change, update, delete information, etc. That way, the clients have the details for the apartment they rented displayed alongside with some other functionalities, such as complaints and agreements. Furthermore, the administration can manage the students’ apartments and everything that their clients need to see.

## Making communication possible

The students can make agreements with each other so that everything is fair. Both must agree with the condition for the agreement to be valid. The administrator does not accept the agreement, but he/she can see it and if necessary, delete it. The student can directly send complaints to the admin, making solving the problems around the rented place easier. The admin has access to all the information, which gives him/her feedback if everything is okay around the students’ properties.

## Not everyone can log in

The admin creates the accounts for all the students that have rented an apartment by randomly generating username and password. Only then, the students can log in and see their apartment and everything else that is relevant. Therefore, the application is protected from unwanted users and only the clients and the administration have access to it.

## Table Description automatically generatedAll the other functionalities shown with the help of MoSCoW method

# User types and their functionalities

## The Administrator

After the admin is logged into the application, he/she can see the User data, Apartment data, Users with apartments, Users without apartments, Complaining messages, Schedule, and the Student agreements.

When clicking on the User data, the admin can see the information about the students and specifically the ID, Username, Password, Apartment. In addition to that, he/she can create, update, and delete in the User data tab.

In the Apartment data tab, the admin sees the ID, Gender, Price, type of property, Interior, Bedrooms, Rooms. He/She can again create, update, and delete information. Those actions are possible because of the ComboBoxes and a NumericUpAndDown that helps the admin to properly choose the values of every field.

The next tab is the Users linked to their apartments. Here are displayed only the students with already rented place available. Like that, the next tab shows only the students that still do not have a place to live.

By clicking the tab Complaint messages, the admin sees the messages, the student ID, and the apartment ID. There is a button that enables deleting a complaint.

The Schedule for the apartments consists of ID, ID for the apartment, ID for the user, Day, and Job. The admin can again create, update, and delete with the use of ComboBoxes.

The last tab is the Student Agreements. The admin can see all the agreements between the students, the information about the students that are part of the agreements. The admin can delete the agreements.

## The Student

After logging in, the student can see in the first tab the Apartment info, specifically the ID, Gender, Price, type of the property, Interior, Bedrooms, Rooms.

By clicking the next tab, the student can write a complaint and send it directly to the admin.

On the third tab the student sees the weekly schedule with all the chores and tasks.

On the last tab, the student can see his/her agreements with other students and make new ones.