Fontys Hogescholen

Process Report

Student Housing B. V

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1. Introduction

The purpose of this document is to describe the main goal, process, and results of the Student Housing B. V project.

The following chapters will cover:

- Background and Problem Description: the situation before the implementation of the project and the problem which the client faces.
- Process and Results: description of our final result.
- Conclusions and Recommendations: the state of the project according to the given requirements, and some suggestions for further improvements.
- Personal Reflection: how the project went, what we are happy about and what can be done differently.

2. Background and Problem Description

Student Housing BV, own different buildings where students can stay during their study in the Netherlands. The buildings are composed of rooms, as well as shared facilities such as toilets, bathroom, kitchen, hallway, storage space, etc.

All students share the responsibility for cleaning the shared facilities, and therefore they ought to divide the tasks among themselves, but due to the lack of mean to communicate properly with each other, some tasks were not being done by the students, which can cause an unfriendly environment.
Another issue faced by the students is that common groceries are not being done or paid for by some of them.
Furthermore, the company was receiving complaints regarding unannounced parties and events, and they suspect that there are more issues which they are not aware of.

For those reasons, the client requested an application which can solve the same problems by introducing a way of communication between the students and Student Housing.

3. Process and Results:

As mentioned in the previous chapter, the application is to provide a way for the student to communicate with each other as well as with the Administrators. The app should also facilitate dividing the tasks among the students and show who should do what and when.

The app consists of two interfaces, each belongs to a different type of user (tenant Interface, Admin interface).

Both users can login/logout from the app

the Admins can:

- add new users of any type.
- Read complaints from users and reply to them.
- Communicate with the students making announcements.
- Get notified when room temperature reaches a specific threshold.
- See the common room temperature and receive notification when the temperature is too high/low.
- Add/remove house rules.

The Tenants can:

- View, add and remove products from the groceries list, and split the cost between tenants.
- Plan and respond to an event made by other students.
- Make a complaint anonymously to the admin.
- See and interact with the task schedule.
- Make agreements with other tenants and respond to agreements.

4. Conclusions and Recommendations

The Project was completed successfully, and all requirements were met, plus some extra functionalities.

As a team we recommend to further improve the app with the following functionalities:

- Database.
- Notification which get displayed to the admin when the temperature is too high/low in the common areas.
- Encrypt passwords.
- Forget credentials functionality.
- Messaging system between the students as well as between the students and the admin.

5. Personal Reflection

All in all, the implementation of the project went smoothly, except for some minor issues during the first week with GitLab.

Personally, I learned a lot during this project, and I was able to use some advanced programming techniques such as Inheritance, Polymorphism and Singleton and some more.

As a team, we divided the tasks fairly between us, and we offered to help each other when that was needed, and we were mostly finishing work according to plan.

What I would like to do differently next time, is having a concrete design from the get-go, and then work on the functionality.