# STUDENT HOUSING BV

**PARTICIPANTS** 

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## 1 INTRODUCTION

The majority of universities students are renting an apartment or a room, and our goal is to help them not only to find the best place to live, within their budget, but also to improve the staying in our housing by finding solutions to common problems they have to face on a daily basis. We will develop a software application that will be able to find these solutions and help our tenants to enjoy living in our accommodations.

## 2 USER DESCRIPTION

#### **Students**

Student housing BV has the goal to help as much students as possible all around the world. The whole idea is to help international students find the best place to live in during their study in the Netherlands. For example, most of Dutch students have a place to stay during their study, but the internationals ones, from all around the world, need an apartment to live in. That is where Student Housing BV comes in hand. Our clients are mostly international students, with a little percentage of Dutch students that are moving to another city or just do not want to live with their family anymore.

These people are all searching for a new place to live in. We try to help them finding a place that suits all their needs. As students, most of them have specific budget that they need to fit in. We take all their wishes in consideration and do our best to help them find what they need. Of course, there can be some people that are not students, but most of our clients are students trying to find a place to stay in in the Netherlands.

#### Administator

Administrators have the needed tools to manage efficiently the apartments within each building. They can manage accounts, see who hasn't paid rent, receive complains, send announcements and add or remove rules.

## 3 PROBLEMS

#### 3.1 Cleaning Facilities

One of the main problems is how to organize the cleaning schedule in order to have always a more or less clean apartment. This problem is extremely common when there is a lack of communication and organization. Students have many things to do in a day therefore it easy for them toforget to clean or repeat in their minds "I will do it later".

#### 3.2 Groceries for shared items

In an apartment with other people, it is obvious that there are going to be some items that needs to be shared like dish soap, paper toilet and many others. A lot of times there are only one or two people buying these items foreveryone, which is not fair. It also happens that if one of these things it is finish no one will rebuy it, which can lead to some inconvenient situations.

### 3.3 Garbage disposal

Every week, once a week, the garbage should be taken out the night before and taken in in the morning.

Unfortunately, it often happens that students forget to take the trash out and this could be a really big problem especially of big student houses, which produce a lot of garbage.

In fact, there are 2 different types of garbage, and each type is taken every other week so if the trash is not taken out in the due day it will have to wait 2 more weeks.

In addition, this can cause the presence of insects and mice

#### 3.4 Unannounced parties

Unannounced parties can be very annoying especially it they happen all the time and they are noisy. When having an announced party, it can get very loud for other roommates and perhaps also messy where the party is located in the house. Unfortunately, a lot of people have to deal with this problem and can cause a conflict between roommates if this happens a lot

#### 3.5 Loud or annoying housemates

Having loud or annoying housemates can be one of the most annoying things have experience in your student house. This problem can disturb other roommates when they are working or studying and more.

#### 3.6 Other People's Partners

When one of your housemates has their boyfriend or girlfriend over that's fine, but if they stay for a long period of time this can be problematic. There can be a problem with the landlord if there is someone living there who isn't on the tenancy.

#### 3.7 Broken Facilities

When something breaks in a student house this can be a problem for everyone. This can be dangerous depending on what breaks and also annoying for other people if they also use these objects for their daily life. When something breaks no-one really wants to repair or get a fixed version of the object that is broken.

## 4 SOLUTIONS

#### 4.1 Cleaning Facilities

Our solution for this problem is to create a weekly schedule.

This schedule would be created so that the facilities to clean are divided equally between the tenants and it is not always the same person who cleans.

The main idea would be to have a date picker from which a date can be selected then the room that will be cleaned will be <u>selected(kitchen, hallway etc.)</u> and finally you and your roommates will see when you are going to clean and they can manage their time to prepare for their turn.

#### **4.2** Groceries for shared items

In this case the solution that we would like to propose is a common bank.

The concept of the common bank is that each tenant should give a small sum of money every month to buy the shared items like paper toilet, dish soap etc....

The user, with our software application, should be able to give us a monthly budget, which will be divided by the number of students in the house.

Every month a tenant will have to buy the items with the money that himself, and the others gave him.

Every time a student is in charge to buy the shared items, he should always provide the recipe so that it is sure that no money is stolen. In the case where the bill is less than the money given the rest should be keep for the next month.

#### TENANT IN CHARGE

DATE	Tenant 1	
DATE	Tenant 2	
DATE	Tenant 3	

#### 4.3 Garbage Disposal

The best solution we found to solve this problem is to make a monthly or weekly schedule. Every week, once a week, the garbage should be taken out thenight before and taken in in the morning. (We should decide if we want it weekly or monthly let me knowwhat you think) The best way to work is to make something like what we did toorganize the cleaning.

TENANT IN CHARGE

DATE	Tenant 1	
DATE	Tenant 2	
DATE	Tenant 3	
DATE	Tenant 4	

#### 4.4 Unannounced parties

The best solution to this problem is to set a monthly limit to the parties that can be thrown per person.

The tenant that wants to throw the party should ask in advance to the other tenants and after the party everything should be clean.

A possible solution for this is asking 1 week prior to the date that you want to have a party in your house. For example, if you register on November 10<sup>th</sup>, then you can throw a party 1 week after it, in this case 17<sup>th</sup> of November.

"Meeting" in the tenant's room should not be considered as parties as long as too much noise is not made read it

#### 4.5 Loud or Annoying Roommates

When the roommates are being loud or annoying there should be a way to send a warning to them. There will be a limit to how many warnings you can put. If they still don't comply after a certain number of warnings. Then a complaint will be sent to the landlord after he or she exceeds the limit of warnings.

### 4.6 Other People's Partners

A way to avoid this problem is to set a general rule by making by not letting the housemate's boyfriend or girlfriend stay for more than 2-3 nights or if more, then you should advice the housemates prior so they will now around how long they are staying for.

#### 4.7 Broken facilities

Everything could break in our apartments. It happens. It is possible and we do not hide that from our clients. What will happened in this case scenario? First our tenants need to inform us so we can take this into consideration. We will send a man to the address and he will check, if the problem is fixable. Most of the things could be fixed, but it is possible that the item or the machine needs to be replaced. In this case we will do our best to analysis if the problem was made from the tenant or for example the problem could be in the machine, so if the problem is just the machine getting old, we will fix it and be responsible to replace it, but if the tenant broke the machine, they need to pay for it. This is our rules about braking facilities.

# **5 PROBLEMS-SOLUTIONS OVERVIEW**

PROBLEM

## SOLUTION

CLEANING FACILITIES	Create a weekly schedule
GROCERIES FOR SHARED ITEMS	Create a common bank
GARBAGE DISPOSAL	Create a monthly/weekly schedule
UNANNOUNCED PARTIES	Set a monthly limit for parties
COMMUNICATE THE PROBLEMS	Create a portal (our software application)
	where the user can register
LOUD OR	Make it possible to complain about
ANNOYING	a housemate, and if the complaints
HOUSEMATES	are too
	many the rent price will get higher
OTHER PEOPLE'S PARTNERS	Set a limit to the number of days the
	partners/friends can stay in
BREAKING FACILITIES	Request change for the broken part

# **6 RISKS AND MANAGEMENT**

No.	Risk(s)	Impact	Consequence(s)
1.	Covid-22 infection	Medium	Group members are forced to have meetings in an online environment.
2.	Hardware damage, technical difficulties	High	Will slowdown project development until a solution is found. Discuss with the tutor what to do.
3.	unexpected difficulties with the software application.	High	There is going to be a spontaneous change in the schedule. Discuss with the tutor what to do.
4.	If we come up with new features to implement our program	Low	The project analysis will be updated including the new features and functionalities. Talk with the customer.

## 7 FUNCTIONALITIES

For our Software application we are going to implement some functionalities that the users will be able to see in the GUI (Graphic User Interface).

#### 7.1 Register/Log in

Whit this functionality the user will be able to register in our software or log in if he already has an account. This will make it possible to access to all the other functionalities.

#### 7.2 Complaints Portal

Here the user can send complaints to the Students Housing Bv where they are going to be processed and take in account. In this functionality the following problems are included:

- o Other people partners
- o Idk maybe something else also?

#### 7.3 Calendar organizing turns

This functionality will be used to provide to the user a detailed calendar with turns and how to organize the activities.

In this functionality the following problems are included:

- Cleaning Facilities
- o Garbage Disposal

#### 7.4 Portal for Administrators

With this portal the landlords will be able to "book" a visit to the house so that the house members will know in advance when the landlord will come. This will partly solve the problem with intrusive landlords.

#### 7.5 Rules tab

We are going to create a dedicated page to what the rules that thetenants should follow are. The rules can be changed from the Landlord whenever he wishes. Example:

In this the following will be included:

- Unannounced parties.
- Other people's partners

#### 7.6 Broken item tab

Another tab will be created to try to solve the problem of broken facilities.

FUNCTIONALITY	PRIORITY
REGISTER/LOG IN	Must
COMPLAINTS PORTAL	Must
CALENDAR ORGANIZING TURNS	Must
PORTAL FOR ADMINISTRATORS	Should
RULES TAB	Must
BROKEN FACILITIES	Could
DATABASE IMPLEMENTATION	Should
USING ARDUINO	Will not

# 8. Task overview

Stoyan	Milan	Boris
Complaint system	Login system	Savings implementation
Rules system	Register	Documentation
Schedule system	Main pages	Git creation
Garbage system		Project design
Groceries system		

# 9. Gantt chart

#### **Student Housing BV**

