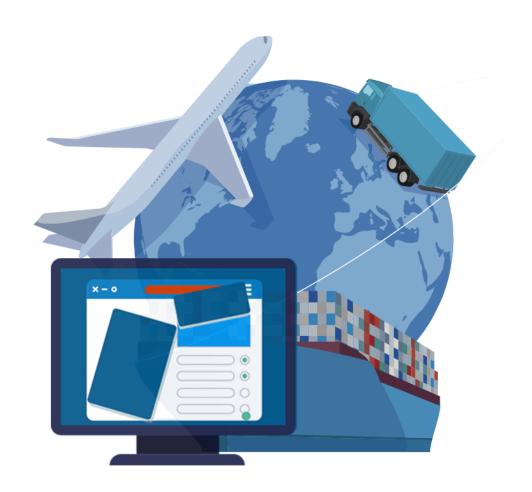# Project plan

Software Engineering

Software solution for student houses

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Project definition:

Project background:

 Student Housing BV, own different building where students (our clients) can stay during their study in the Netherlands. Our buildings are composed of rooms, which are rented by our clients, but also shared facilities such as toilets, bathroom, kitchen, hallway, storage space, etc.
As every business, there are issues regarding organisation, or things that could be improved especially regarding tenants doing their chores, a system for organising parties, a system in which announcements can be made, etc.

Problem definition

The company faces problems with the tenants' day-to-day life. For example, appointed persons not cleaning the shared facilities, garbage disposal is not done on time, unannounced parties, gatherings, etc, groceries are not done or paid for shared items such as toilet paper, dish soap, etc. Also, some administration problems: administration not being able to respond quickly to a problem, not being able to identify troublesome clients in time.

Project goal

The absolute requirements are to create an application where our clients can record and see agreements made between them but also the possibility the see the house rules and to file complaints anonymously. As an extra service, we have to offer a software solution to better arrange day-to-day situations so hopefully this will reduce the number of issues in general.

Way of working

Each group member will be assigned with a task considering their personal skills regarding the required task. Any of the member can assist another member regarding any issue. At the end of every week, each member's work will be checked, and if it turns out that the member

could not finish the assigned task in time, other members will intervene and help resolve the problem.

Scope

Our main objective is to create a working application solving the listed problems and resolving the issues with communication and payment between tenants.

Deliverables

Our main objectives are the following:

- Creating a properly working application that will ease the communication between the residents and the landlord;

- An application where complaints can be made anonymously;

- An application where announcements and pools can be made;

- An informative page where all the house rules are listed;

- An application in which the tenants can schedule/pay for the shared utilities (toilet paper, cleaning products, etc.);

Must include:

- Anonymous complaints form;

- Weekly chores distribution – we assign weekly chores to tenants by algorithm;

- Rules of the house;

- The ability to create events and announcements that can be edited or deleted by admins;

- The ability to register (using a one-time key) and to login so the landlords and tenants have different permissions; - of each account, 1st one being the company, 2nd one being the admin, etc (an id for each account);

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Should include:

 - Exchanging chores after an agreement between the two parties;

- The ability to keep track of the received complaints (landlords can see the data)

 - A special page for the administrative (dashboard);

 - A house layout;

Could include:

 - Admin login page which can modify the numbers of rooms/floors;

 - A way to split the shared facilities bills;

 - Initial setup after first start-up (configuring the number of buildings, rooms, floors, etc.)

Would include:

- Dark and bright mode in settings;

- Later, make it online, using a database;

- Arduino card system instead of login;

- Admins can generate a one-use token for creating an account, which will be sent by email to the new tenant;

Risk assessment:

Risk	Probability	Impact
Members not delivering their work	Unlikely	High
Low team motivation	High likelihood	High
Members not showing up	Unlikely	High
Git problems	Medium likely	Medium
Disagreements about implementation	Unlikely	Low
Unclear plan	Unlikely	Medium
Lack of communication	Unlikely	High
Incorrect division of work	Very unlikely	Medium
Not having a backup	Unlikely	High