

Project Report

Fontys University of Applied Sciences

ICT

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Introduction

The Student Housing BV Project is aimed at improving the living conditions of students who are residing in accommodations managed by Student Housing BV. This project addresses the complications of maintaining shared facilities, ensuring scheduled garbage disposal, and encouraging residents to live in harmony with one another.

Student Housing BV has had a number of problems, including unannounced gatherings, a failure to complete shared tasks, and dissatisfaction with the way shared spaces are managed. These problems have highlighted the need for a user-friendly solution to improve communication, complaint management, and improve the division of shared tasks among residents.

Our project aims to deliver an ICT solution focusing on C# programming to create a Windows Forms application that meets the unique needs of Student Housing BV and its students. The application will include a shared agenda for organizing meetings and tasks, a complaint submission system with an option for anonymity to ensure proper use, and features to improve following community rules.

This effort is a step toward creating a better living environment for the students and improving Student Housing BV's reputation. These goals are all made possible by a well-organized staff, well-defined goals, and an awareness of the risks and challenges involved.

Current Situation

Currently, Student Housing BV is in charge of several dorms for students around the Netherlands. The shared spaces including hallways, storage spaces, restrooms, and kitchens are all included in the price of these accommodations. Despite having a large number of students that live in these accommodations, the company continues to have difficulties when it comes to operating the place and this lowers the standard of living experience for the students.

The frequent complaints from residents about the state of living are among the biggest issues. Unannounced gatherings, nonaccomplished cleaning tasks, postponed waste disposal, and unequal contributions to basic shared resources like dish soap and toilet paper are some examples of the issues the company faces. These issues become problematic since they interfere with the resident's everyday life which causes dissatisfaction with the accommodation.

These issues highlight significant slackness in task management and communication within the housing system. Fixing these issues is a must since it will improve the maintenance and satisfaction of Student Housing BV's clients as well as to establish a nicer and more cooperative living environment.

Problem Statement

Identified Issues

1. **Ignored Cleaning Duties:** Residents often fail to sustain their tasks in maintaining shared spaces, leading to unsanitary and uncomfortable conditions.
2. **Delayed Garbage Disposal:** Scheduled garbage disposal is not done consistently, resulting in bad smells and making the living conditions unhygienic.
3. **Unannounced Gatherings:** Late-night parties and gatherings cause anger within the residents since it disrupt quiet.
4. **Unequal Contributions:** Dissatisfaction among residents results from arguments that commonly occur over the purchase and distribution of necessary community goods.

Importance

The frequency of complaints and dissatisfaction generated among the residents creates a huge risk to the reputation and success of the company. Unresolved issues in shared housing facilities can result in a decrease in clientele since it gives a bad image to the company. Fixing these issues is not only beneficial for improving the state of living for the residents but also essential for building the feeling of a community and keeping the organization competitive with other companies. By implementing solutions, Student Housing BV can improve its ability to manage shared housing and provide a more comfortable living experience.

Process and Results

Project Development

1. **Analysis:** The starting phase involved a detailed analysis of complaints and feedback from residents to identify the main problems.
2. **Design:** The design phase focused on developing a Windows Forms application customized to the unique requirements of Student Housing BV. Key components were made to ensure functionality and ease of use.
3. **Implementation:** Using C# programming, the team developed an application with several core features, including a shared agenda that allows residents to organize and schedule tasks/activities appropriately. A Complaint Submission System where residents can submit their complaints, on the other hand where staff can lessen and associate an abuse of the system, and the last component contains a Community Rules Enforcement where the rules will be written down, this would reduce conflicts and will help in respecting the policy within the residence.
4. **Testing:** Prototypes of the application were tested when showing the professors the product and whenever we got feedback we applied them to our Form.

Deliverables

- **Windows Forms Application:** A user-friendly ICT solution designed to improve task management, and communication, and resolve complaints within the residence.
- **Documentation:** a completed user manual that makes it easier for staff and residents to implement and use.
- **Testing Report:** An in-depth description of the testing procedure that shows the application's performance and compliance to its intended use.

Conclusion and Recommendations

Conclusion

The Student Housing BV Project serves as an example of how technology-driven solutions can fix problems within the operating system of shared housing environments. The development of the application will mainly resolve complaints, improve communication, and provide a structured platform for managing tasks. By making sure of the needs of the users and adopting a collaborative approach within our ICT team and the company, we believe the project will achieve its goal of improving the residential experience for students.

Recommendations

1. **Usability:** The application should be implemented across all platforms managed by Student Housing BV to maximize its impact.
2. **Training:** Both staff and residents should be provided with training sessions to make sure they can use the application.
3. **Feedback Mechanism:** Creating a flowing feedback process will help in improving the application based on user experiences and evolving needs.

Evaluation/Reflection

Team Reflection

The development of this application within this group was hard and easy. The complicated part was that when it came to coding, the division of tasks was not easy since there were certain methods that we had to do so that updated code wouldn't get deleted. What we did to fix this issue was some members were coding in CSharp and others in databases and documentation. This enhanced productivity and whenever we faced problems we would gather and discuss them as a group. It made it easy for us to communicate, which translates to our final product's success.

Lessons Learned

1. **User Involvement:** It was very important to ensure that we were testing the project with sufficient User Testing. This gave us a better understanding of what we could implement or even improve to make it more efficient and user-friendly.
2. **Risks:** The decision to include features for anonymously submitting complaints was not appropriate, as students could submit complaints without reasoning.

