

DormMate

DENISA MARIA VANCEA
UNIVERSITATEA TEHNICĂ DIN CLUJ-NAPOCA,
CENTRUL UNIVERSITAR NORD BAIA MARE
Facultatea de Științe
Specializarea: Informatică
Email: deni.vancea@gmail.com



Abstract

The present paper presents the motivation, purpose and method of work of my project. Entitled „DormMate”, this website is dedicated to the management of student dorms and to the improvement of the students experience during their accommodation. The most important aspects of the project are: Facilitating the accommodation process, the website providing an intuitive and easy-to-use platform for booking and managing accommodation in student dorms.

Optimizing roommate selection with a personality quiz that helps dorm managers group students based on their personality, hobbies, and other compatibility factors.

Management of events and activities, the website providing information about the events and activities organized in the dormitory, such as social or sports activities, conferences etc.

Online assistance and support, the website providing a facility for reporting maintenance related issues such as infrastructure breakdowns, need for room repairs or any other administrative issues in the dorm room.

Management of payments and deadlines, the website providing functions for managing payments for accommodation.

Keywords: *website, dorm, students, html, php, css*

Introduction

In the digital age we live in, speed and efficiency are becoming increasingly important in all aspects of our lives. With the advancement of technology, people increasingly feel the need for digital solutions that simplify and optimize their daily activities. Among the fields benefiting significantly from this transition to technology is the academic environment, where digital tools are a determining factor in improving the student experience and optimizing administrative processes.

Thus, universities and student campuses are increasingly receptive to innovations that facilitate the student experience and improve administrative efficiency.

In this context, the present website proposes a modern and integrated solution for managing aspects related to student accommodation in university dorms.

Through the website, users can complete and send the registration forms for accommodation in the desired dorm, thus simplifying the process of applying and managing the accommodation. They can also explore and view detailed information about dorm events and activities, as well as available dorms—pictures, prices and location—to make the best choice when it comes to choosing a dorm.

In addition, after applying the registration request, users will be redirected to an interactive quiz, through which the grouping of students in the rooms will be more balanced, thus facilitating the process.

Already housed students can access important announcements, such as upcoming events or useful information, as well as the daily canteen menu. They can also report any problems or malfunctions in the rooms through the app, and the admins can efficiently manage requests and schedule necessary repairs.

Another very important aspect is that students can make online payments for accommodation, making time management easier.

In addition, admins can manage the students housed much more easily, they can publish announcements to share news much faster and they can take care of all aspects related to the management of the dorm much more easily.

Thus, this website aims to become a centralized and accessible hub, adapted to the specific needs of the community.

Methodology

The methodology of my project involves the following stages:

- Detailed analysis of the functionalities required for effective dorm and student management. This stage involves evaluating all the processes involved in managing the dorms and student life, including managing informations about students profiles, facilitating communication between students and dorms staff, managing events and announcements, as well as other important functionalities such as submitting repair requests or managing payments. It is important to identify key functionalities that will add value and facilitate existing processes. This stage serves as the foundation for the subsequent design and implementation of the website.
- Development of a design scheme and site architecture that provides intuitive navigation and a pleasant user experience. This stage includes the design of the graphical interface, the database and the necessary functionalities.
- Implementation of HTML, CSS, PHP and SQL technologies to develop the website according to the specifications established in the previous stage. Creating interactive and dynamic web pages that allow users to access relevant information.

Using HTML (HyperText Markup Language) and CSS (Cascading Style Sheets), I created the structure and visual appearance of web pages. HTML is used to define the structural elements of the page, such as text, images, and links, while CSS is used to format and style these elements so that they provide a pleasing aesthetic experience to users. Thus, I carefully built each web page to be accessible and easy to navigate.

I used PHP (Hypertext Preprocessor) to implement the logic behind the web pages and to provide interactive and dynamic functionality. It allows interaction with the database and data processing, thus providing a personalized experience adapted to the needs of each user.

I used SQL (Structured Query Language) to manage and query the database, ensuring efficient storage and retrieval of relevant data. Through SQL, I created and manipulated database tables and relationships, ensuring data integrity and security.

- Carrying out tests to ensure the correct operation of the site and to identify and fix any errors or performance problems. During testing, I identified and documented any bugs or issues

encountered, including functionalities that do not work as specified, compatibility issues between different devices and browsers, or suboptimal performance in certain usage scenarios. The ultimate goal of testing is to ensure that the website is fully functional, reliable and performing.

Through this methodology, I created an intuitive, user-friendly and useful website for students and staff who manage students accomodation, thus contributing to the improvement of the university campus life experience.

Conclusion

In conclusion, in this work, I explored the topic of developing and implementing a web application focused on optimizing the management of accommodation in university dorms. I addressed a number of critical objectives to achieve a comprehensive solution, thereby improving the student experience and administrative efficiency. The main topics covered include:

Highlighting the importance of implementing a web application to simplify the processes related to accommodation, communication and administration in university dorms.

Implementing a multi-functional website where users can view informations, submit repair requests, make online payments and many more.

Implementing modern technologies and web programming tools to create a friendly interface and robust functionality within the application.

Through "DormMate," I hope I have made a significant contribution to the field of optimizing the student experience in university dorms.