Development of a Mobile and Web Application for Hiring Small Services

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Abstract. *The main idea behind the development of this system is to facilitate communication between the client and the service provider in negotiating small services. By using a basic location system, we make the platform visually more objective and direct, simplifying contact between users. 'Contrata-me' aims to make the entire contractual relationship safer and faster, providing access to all professional information even before the service is hired.*

1. Introduction

Over the years, it has become evident that hiring small services is often difficult. It is common to see street signs with phone numbers for hiring specific services. However, there is no method to verify or confirm the quality of the service, putting the client's safety at risk, as their property may be damaged or their life endangered, as in cases involving electricity, for example. Therefore, it is clear that there is a need for an easily accessible system to assess the quality and guarantee of the service, with an identity verification system and public reviews of the trade.

2. Methodology

For the development of the project, a brainstorming session was held first among the team members. There was also a survey conducted with instructors, colleagues, and acquaintances to identify a common difficulty among all. After analysis, it was decided to proceed with the project using an agile methodology to improve the overall efficiency of the team. Using Trello, a Kanban method, the project activities were divided among the team members into:

2.1. Code Structure

Initially, it was decided that the project's foundation would be built in a strongly typed, object-oriented language. The options were between TypeScript and Java, and it was decided to proceed with the former for practical reasons, as it allows the use of an MVC model, which facilitates the resolution of potential code errors. Additionally, the structuring of the PostgreSQL database was worked on using the PgAdmin4 platform. In **Figure 1** below, it is possible to see the initial structure of the logical model for the database system.

2.2. Visual Development

After the initial idea was projected, research was conducted regarding the main design of the software. The research focused on studying color theory to determine the tone the project should convey. The decision was made to choose blue as the dominant color of the system, as blue can represent principles such as security, technology, and professionalism. Another study was conducted to find a more comfortable visual experience for the client. It was realized that the visual structure, such as the presentation of features and ease of navigation, is crucial for professional software.

2.3. Feasibility Analysis

Prior to the software structuring, a market feasibility study was conducted. It was observed that there are systems with similar proposals, but none with the expected functionalities were found. As a result, the possibility of carrying out the project became clear, as the initial ideas of the system, along with its proposal, appear to be unique and have not been found in any other available application.

2.4. Referential Research

To gather references, research was conducted on the development of other major software in the market, even those not directly related to the service hiring proposal. The main reference systems researched were Uber, which facilitates communication between drivers and passengers; iFood, which uses a delivery system based on user location; LinkedIn, the largest reference in the service hiring field, although in a different way than planned for our system; and Reclame Aqui, a system based on user reviews for purchasing and hiring other services, which is a key reference for customer feedback.

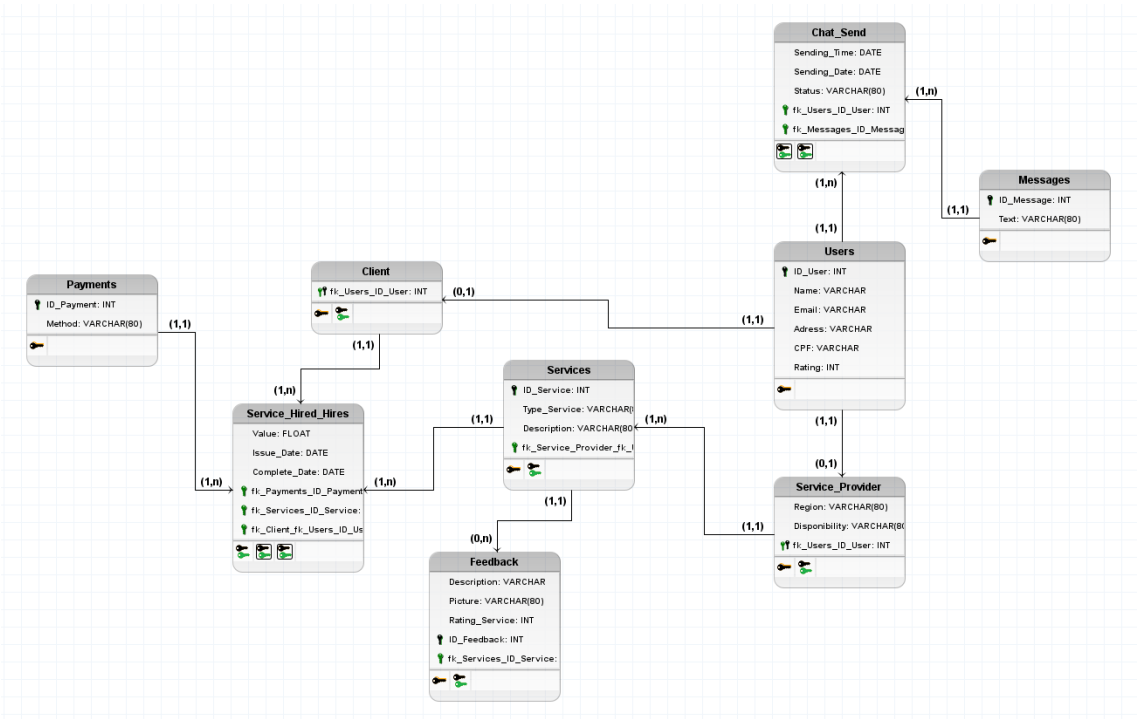

Figure 1. Logical model of the database

3. Results and Discussion

4. Conclusion

5. References