PROJECT PROPOSAL CST 243-3

AN ONLINE SYSTEM FOR HOUSEHOLD SERVICES.

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1 Introduction

In this fast growing technology, we still have to take the appointment of person who solves the problems related to our daily life like plumbing related problem, mechanical problem, electrical problem, electronic problem etc. When an individual relocating from one area to a different because now a day's everyone wants to save lots of time and shot out their problems within time with none problem. Therefore, online home services are very beneficial for people.

When someone need aid with small but major household tasks, the trouble arises when service skilled persons are unavailable or the trusted providers are impossible to find, who delivers consistently flawless service on instance. Our online system for household services provides the most expedient and annoys free way to get your domestic work done. We aim to help in providing optimal solutions to all your household troubles with more efficiency, ease and majorly, a delicate touch. A single click system describes booking highly skilled in-house professionals and gets your service done on time.

Customers' overall willingness to pay is significantly and positively correlated with the expectation that fee-based services would be better, and with the belief that "pay for what you get" is the right thing to do. Keeping that in sense our proposed system is basically a marketplace for household services and it is the platform where the rates were standardized and there is no necessitate haggling over prices.

Several aspects like painting, home cleaning, plumbing, electrical works, building works, machines' repair and carpentry services are involved in a system to provide happy and healthy home atmosphere in order to satisfy consumers.

2 Project Background.

The on demand home service system is incredibly useful for everybody who wants to urge home services. Online system for household services can be used by any authorized user intending to seek for household services through an ingenious system.

When we contact these service workers through the phone or physically, we face some kind of troubles like these. To take the appointment of service provider we have to call him or with the personal meeting we can meet him, and it is not sure that we get the appointment of the service provider at a time because there are many problems occur, like the service provider is busy at somewhere else or he is not present at his office when we go there or he wants heavy cost for fix the problem etc. We are not getting any service on time and also not proper changes of services. It is also not secure in terms of safety concern.

To overcome these types of problems we are going to make our system where the people get appropriate result. This online system for household services is about delivering the home services at the door step just by one click. This system is very dynamic and very easy to understand. The interface of the System is very easy and anybody can easily work on it. This System can provide all the description and important information about the problem. The Household service System is also very useful because the customer don't have to visit to service provider's office; user can easily book user order via this application. So user can book order without any kind of disturbance. It will provide security for the customer.

The scope of our project is to designing a complete environment to provide a safe and user friendly environment for online service booking. The main aim of the project is to provider an easy to use application for services provided for user.

3 Methodology

Here we select the Rapid application model(RAD) for our project. It describes a method of software development which heavily emphasizes rapid prototyping and iterative delivery. It welcomes changing requirements, even late in development. All stakeholders communicate frequently and in real time to measure progress, solve problems, and improve efficiency.

A rapid application development cycle consists of four steps:

1. Define project requirements:

The requirements are gathering from common people, through the asking questions. The users provide a vision for the product. Requirements include goals, expectations, timelines and budget. RAD is the ability to change requirements at any point in the development cycle.

2. Prototype.

The goal is too rapidly produce a working design that can be demonstrated to the client.it will be achieved through the javafx. Through prototyping, the development team can easily evaluate the feasibility of complex components.

3. Rapid construction & feedback gathering.

Software and applications are thoroughly tested during this phase, ensuring the end result satisfies client expectations and objectives. Developers work with users and end users to collect feedback on interface and functionality, and improve all aspects of the product.

4. Finalize product / implementation.

The implementation phase is where development teams move components to a live production environment, where any necessary full-scale testing or training can take place. Teams write thorough documentation and complete other necessary maintenance tasks, before confidently handing the client a complete product.



Figure 3.1: The phases of Rapid Application model

Tools:

For our design part

- We use the Star UML for our designing our diagrams.
- We use scenebuilder for our sample prototype designning For our coding part
- We use Intellij IDEA Community edition

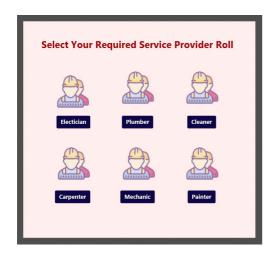
<u>Language</u>

- We are going to use Java and Javafx to design our system.
- We are going to use MySQL for our database purposes.

Sample of our project prototype













Use case Diagram

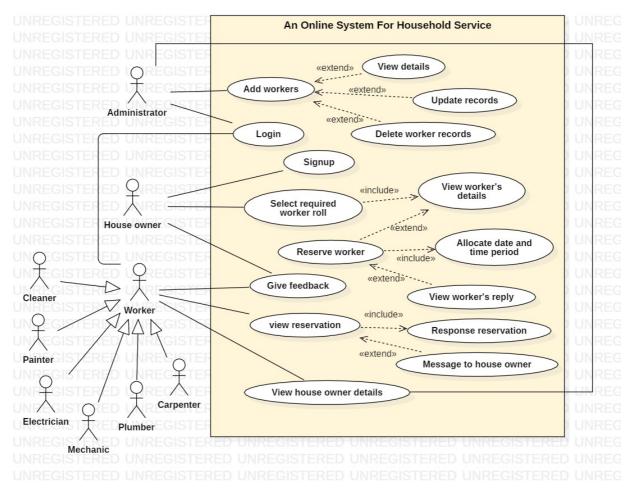


Figure 3.2: Use case diagram of our system.

Entity Relationship Diagram

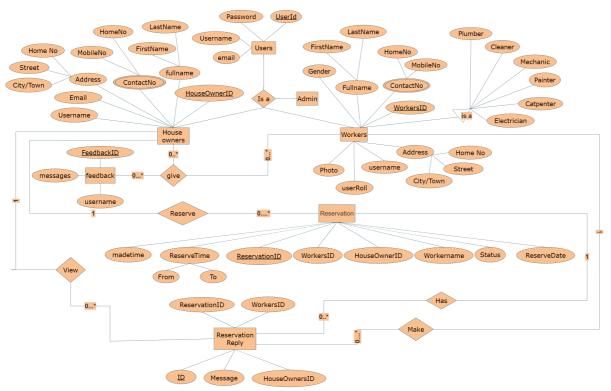


Figure 3.3: Entity Relationship diagram of our system.

Time frame

Tasks	Time(Weeks)												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Finding Topic &gathering requirements&Proposal submission													
Application designing													
Prototype development &database development (phase I)													
Progress Report													
Prototype development &database development (phase II)													
Testing & validation													
Final submission & presentation													
Documentation													

Conclusion

The online household services application provides some of the home services which are most frequently used. This system accommodates the changing needs of the end user. The overall system can be designed so that its capacity can be increased in response to the further requirements for which the application provides an appropriate service overseas. Further this application can be prolonged by merely adding up the required services and additional payment systems. For example, the current system provides the following services such as home painting, home cleaning, packers and movers, plumber repair and service further the system can be extended as per the requirements of the user.

References

- 1. https://www.ijert.org/research/an-online-system-for-household-services-IJERTCONV6IS13012.pdf
- 2. https://kissflow.com/low-code/rad/rapid-application-development/
- 3. https://ukdiss.com/examples/android-app-for-household-services.php

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