

An Online System for Household Services

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Abstract:- In present scenario, people are buried up in a heavy work culture, as everyone is engaged with busy schedules, and hectic tasks which make them deviate from family life. If any issues encounter unexpectedly, it distracts them and makes them choose over the work they have to accomplish primarily. It is important to manage both professional and family life. In such circumstances, every one of us would have fantasized about a kind of house which doesn't have any leaks in pipes, if it doesn't have any mess in fixing a furniture and a kind of house which never face any maintenance issues and every one of us have thought that a life would be much better if no point of issue arises in getting a service at your door step and if there is no mess in bargaining a labor for home service. In such situation's E-Commerce plays a vital role in today's life as it has so many advantages in our life because it makes convenient in daily life of the people [1].

So, giving a thought to that aspect of life is to design and develop a system that provides many services at your doorstep in just one click. A System that provides variety of services like plumbers, movers and packers, repair persons, cleaners, electricians, painters, taxi service laundry and many more. To make it comfortable for all the users our system also provides a mobile environment which offers ease in accessing our services. A very simple process is carried out to book a service(s), and our system is specialized with providing a confirmation email about the selected service. People can choose the particularity of service required by uploading the image of desired specification. System is versatile as service can be booked from everywhere to anywhere you desire.

General Terms:- Services, Authentication, Customers, Registration

Keywords:- Credentials, Payment Gateway, Web Portal.

1. INTRODUCTION

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 servicedone 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 [2]. 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, pest control, home cleaning, plumbing, electrical works and carpentry services are involved in a system to

provide happy and healthy home atmosphere in order to satisfy consumers.

2. OBJECTIVES

The primary objective of the online system for household services is about delivering the home services at the door step just by one click. This paper discusses about main theme of the online home services, numerous services provided and how the ordering and delivery of services takes place. Online system for household services can be used by any authorized user intending to seek for household services through an ingenious web based system or a mobile application. To provide an authenticated and authorized login module for the users such as service seekers, service providers and the admin, by providing appropriate credentials at the time of registration. Todevelop a web based online system for opting household services and to develop an identical mobile application for opting the services. To design a interactive User Interface for seeking services on the go. To provide a secured online payment gateway for service seekers. To acknowledge the conformation of services opted by the users.

3. SYSTEM REQUIREMENTS

3.1 Software Requirements

Table 1 : Software Requirements

SERVER SIDE	Operating System	Linuxx86_64
	Application software	PhpMyAdmin, cPanel 64.0 (build 19)
	Software tool	WordPress 4.7.2 (HTML, PHP, JavaScript, CSS, XML, Perl 5.10.1)
	Database	MySQL 10.0.30-MariaDB
	Payment Gateway	Any Payment Gateway viz., Papal, Instamojo.
CLIENT SIDE	Operating System	Any Operating system that supports Browser
	Application software	Any JavaScript enabled web Browser

2.2 Hardware Requirements

Table 2 : Hardware Requirements

SERVER SIDE	*A hosting service based on cloud from OneSite (Skywalker) is purchased.	
CLIENT SIDE	Processor	Any Processor x86 or x64 supportive to software required.
	Disk Space	25-50 MB (for Browser Installation)
	RAM	256 MB

3. SYSTEM DESIGN

4.1 System Tools

Major Tools used in our system.

4.1.1 WordPress

The WordPress based on SQL as a backend where the admin stores all the credentials of the service seekers and service providers. the service seekers can opt for the required services from a highly interactive user Interface which is build using some of the scripting languages and WordPress. The WordPress provides a free payment gateway called Woo commerce. This Woo Commerce gateway plug-in is combined with a business account from Inspire Commerce, where it will allow you to accept transactions from all major credit cards such as Visa, MasterCard, American Express, Discover, Diners Club, and JCB. Inspire Commerce meets the highest standards of security and reliability. Mobile payments a value-added feature can also be included. The key features of this Woo Commerce are 1) Prevent Fraud where it detects suspicious transactions with the value-added products and built-in fraud tools. 2) Risk Management where the Woo Commerce gateway is PCI Level 1 compliant. So, all card data is stored securely. 3) Receive Payments quickly where within two business days the payment amount for the required services are automatically deposited into the business bank account. 4) Accept all major credit cards.

4.1.2 PHP

A number of dynamic features involved in PHP makes exigent task for both programmers and tools to reason about programs. while features such as eval are being

detached over time, more inhibited dynamic features such as variable properties are becoming more general [11]. Preliminarily as a collection of scripts for building personal homepages, PHP is now one of the most widespread programming languages for building server-side web applications. Like other scripting languages, PHP includes a number of dynamic language features, such as an eval expression to run code provided at runtime as strings. special methods (referred to as magic methods) that handle accesses of object fields and uses of methods that are either not distinct or not evident and the ability to use expressions instead of literal identifiers, to give the names of variables, functions, methods, classes in new expressions, and While these features often make the programmer's job easier[12]. WordPress and Media Wiki explores a use of variable features, magic methods, and eval have changed over time [13]. WordPress explains trend in usage of features like Variables, Function Calls, Method Calls, Object Creation, and Property Uses.

The major challenge for resolving software configuration errors is to find the violating configuration options, a challenge that is aggravated in multi-layer systems. Multi-layer systems consist of multiple layers, each of which hides the complexity of a lower layer, and has its own objects and configuration mechanisms [14]. In case of WP (Figure 1), which is currently the most popular content management system, and a typical example of a multi-layer system consisting of a LAMP stack (Linux, Apache, MySQL and PHP), the WP PHP application and a several of WP plugins.

4.2 System Modules

4.2.1 Registration Module

Customers who want to avail our services are invited to register for a free account in our portal with few simple steps, by providing valid credentials a customer is requested to confirm account creation. Once they are done with registration, a confirmation mail about a new account with verification link is directed to the Email-id provided. Now a customer is free to use our services when they are done with account verification.

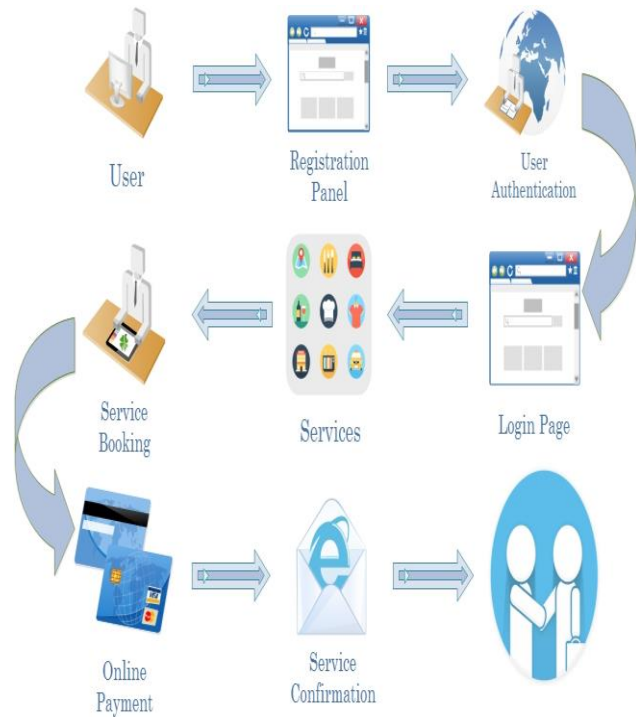
4.2.2 Service Module

When customers want to schedule a service, they can do it by logging in to their account. The portal is specialized with an interactive user interface which provides attractive way of booking a service, where customers are requested to provide the details about the services required. If required customers are asked to upload the pictures of their particulars, if they are confused with any of the services. When done, the request is submitted and it is directed to payment page for the payments to be done.

4.2.3 Payment Module

Further process is preceded to the next module where the customer needs to pay for the services opted. It is done through an external payment gateway which guarantees a secure and safe transaction. Once the payment is done, a confirmation acknowledgement is forwarded to the user about all the details of services opted and also an onsite confirmation is displayed on the website. When the service is booked and confirmed, service men from our organization will reach you to deliver the service.

The idea proposed in this paper is one among the new innovations where it reduces the trouble for customers to search for the labors and avoids form bargaining to get the profitable services to be done. Once the service is completed our customers are requested to rate the overall service done by our professionals and asked for any valuable feedback or improvements to be done in providing a better service. If the customers are unsatisfied with the service provided then with some valid reasons a return policy is approved, or a re-service may be done to make you feel convenient with our service.



4.3 Use Case diagram for the proposed model

The Proposed system involves three actors which include a Admin, Service provider, and a Customer. Admin has the beginner rights to access and modify the website where he/she needs to login to do so. Then next to admin comes the customer who wants avail our services should precede with the registration and login process. If required a customer can upload a file that describes about the services. Once the request has been done then he can forward it to payment process and to confirm service after the service has been done a customer can rate the service. And in worst case if the customer is not satisfied with the service they can move with the return policy process. At last a service provider who is the one who provides a service, where they should also go with the registration and login process and they should proceed with files uploaded and once the service is confirmed they are intimated to provide the service and when done after service if the customer is unsatisfied with it based on the customers review if required they should provide the re-service.

Figure 1 : Workflow of Proposed model

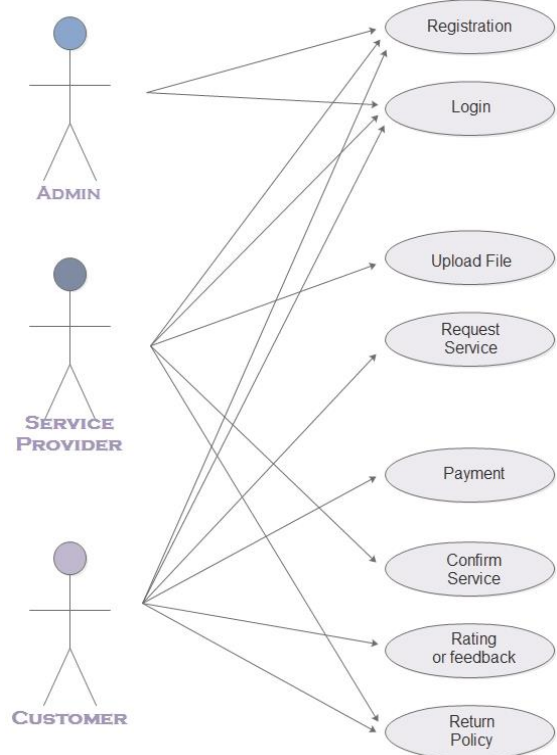


Figure 2 : Use Case diagram

5. CONCLUSION

To reduce burden in finding in-house solutions for the services, the proposed system provides several services by providing service specialists at your doorstep in one click. A systematic mobile environment to system clients offers

ease in accessing our services in a more comfortable way. With well qualified and background demonstrated professionals we make all your home cleaning, plumbing, furniture maintenance, electrical works, appliance repair, house painting, vehicle service and many other services to be done in a click anytime from anywhere as easy as available.

6. FUTURE SCOPE

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. The system can have prolonged by adding the services such as mobile and computer repair, laundry services, catering services and many more. The discussion payment methods our system has, for example currently system has online payment by only MasterCard users further it can be extended by adding the payment services for visa users also.

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