Volume: 09 Issue: 04 | Apr 2022 www.irjet.net p-ISSN: 2395-0072

A WEB-BASED SERVICE MARKETPLACE

Dr. Kiran Bhandari¹, Karan Dhiman², Mohamed Zain Kazi³, Mayuresh Phansikar⁴, Rutuja Thakur⁵,

¹Professor, Department of Computer Engineering, University of Mumbai Affiliated Institute

Terna Engineering College, Mumbai, Maharashtra, India

²⁻⁵Undergraduate Students, Department of Computer Engineering, University of Mumbai Affiliated Institute

Terna Engineering College, Mumbai, Maharashtra, India

Abstract - A service marketplace is a website that allows you to buy and sell services. Freelancers, private individuals, and corporations from a variety of industries can offer their skills and be hired by those who want their aid. The most successful service markets transform the way we live by adapting to a certain market. Customers enjoy them since they make comparing prices and things from a single source simple. Being a part of a well-known online marketplace fosters trust between you and the buyer. We have developed a service marketplace that will deliver a wide collection of services from a variety of service providers. Customers may make servicing appointments on this user-friendly website according to their schedule and convenience.

Key Words: Service, Marketplace, Website, Customer, Service Provider, Booking, Use Case, Database Design, State Chart,

1. INTRODUCTION

We have developed a Web-based service marketplace that will offer a diversified range of services from a variety of service providers. We suggest in this paper that the existing online service marketplace should be rebuilt such that third parties can not only offer their new independent services but also expand the capabilities of existing service marketplaces. This is a user-friendly website where clients may arrange appointments for services that are convenient for them. Buyers may view order data such as the address, appointment time, and total amount on the checkout screen. Consumers will get an email confirmation of their order after it has been validated. Before registration, the customer will also receive an OTP (One Time Password) on their email address which will be used for verification. The service can be hired both on an as-needed and in advance basis.

2. PROPOSED SYSTEM

The administrator begins the simulation by entering his or her credentials (ID and password). Once that is done, the administrator may access the main admin page, where he or she can alter the categories, services, and examine the orders that have been placed. The order

number, customer ID, Service name, price, and booking date are now presented in a window. After completing his or her service, the client is invited to submit their address and other contact information, where the total charge is displayed, and the customer may click the 'Submit' button to get a message confirming their booking.

e-ISSN: 2395-0056

When you enter the admin portal, you may add, change, or remove a service as well as create a new service category. Once the specified action is done, the end result, i.e, The added service or the updated service list is displayed, and if you deleted a service, that service is removed from the categories page on the service marketplace website, which the consumer may access.

3. DESIGN AND IMPLEMENTATION

The website is written in PHP, HTML, CSS, and JS, and the datasets are kept in the PhpMyAdmin SQL database as well as the Admin Panel, to which only the registered Admin has access. We built a web-based marketplace for services. A desktop or laptop computer with a browser, an internet connection, and the XAMPP control panel is required for our website. For the early creation of the website, we analyzed a few services in our databases. Our system's implementation includes a real-time feedback system, which allows the admin to verify the booking details of the service on the service marketplace website and update the customer bookings once a client purchases a service.

The entire website's code is executed on Sublime Text Editor, using Google Chrome as the primary browser. We created the database using PhpMyAdmin, which was only possible due to the XAMPP control panel installed on our machines. First, we built the marketplace's front-end, where we used our own logo for the Tool-box services brand and focused more on CSS to make our website even more appealing to use.

Then, in PhpMyAdmin, we created the database to begin working on the backend of our website, which was crucial because it would allow us to save all of the information from the front-end into the backend of our website while also improving the responsiveness of our

Volume: 09 Issue: 04 | Apr 2022 www.irjet.net p-ISSN: 2395-0072

project. Last but not least, we built our management system's Admin Panel, which was the most important component since it would preserve all of the information that the customer entered into the website and also allow the admin to manage the services, categories, and bookings made.

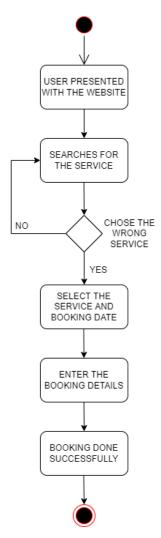


Fig. 1: Customer State Chart

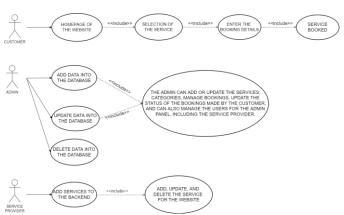
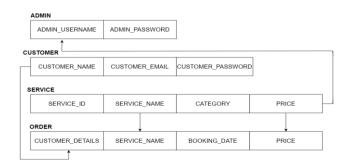


Fig. 2: Use Case Diagram



e-ISSN: 2395-0056

Fig. 3: Entity Relationship Diagram

4. LITERATURE SURVEY

Nowadays, there are several businesses and websites that provide a variety of services. This has made people's lives much easier than they were previously. People may use their phones to receive any services they choose. They may enjoy these services from the comfort of their own homes because they are brought right to their door. However, because there are so many companies offering so many services, people must deal with a plethora of different apps for each company and the service that they provide. That is why we wanted to establish a website where individuals could access all of these various services from any one location. People's lives will be made much easier and more convenient as a result of this.

They wouldn't have to deal with so many different applications and websites for various services. Our platform allows many firms and sellers to market their services. Customers can compare prices and services, as well as read user reviews, to help them choose the company and the service that they provide. We will also provide our own services on our website. So, our main goal is to make life easier and more convenient for everyone.

5. SCOPE AND FEATURES

A. Objective:

- To reduce the time and effort and get services done at your homes by booking the service of your choice present on our website.
- This system can be used by all the family members who are busy with their everyday tight schedules and require help doing everyday chores.
- Users may search for any service at any moment and receive immediate confirmation through email.

Volume: 09 Issue: 04 | Apr 2022 www.irjet.net p-ISSN: 2395-0072

B. Features:

- Front-end:
 - Client Login page
 - Front-end
 - Service Categories
 - Service Information
 - Flexible booking date and time
 - Payment modes
 - Confirmation Notifications via mail
 - Contact Customer Service
 - Accepting Customer Reviews
- Backend:
 - Admin Login page
 - Back-end operations
 - Managing categories
 - Managing front-end information
 - Managing booking date and time
 - Managing Payments and Cancellations

C. Scope:

- This internet application has the chance of growing into an Android app. This will be made available to customers via mobile devices, and its application will be increased.
- The service is available on an as-needed basis and can be scheduled ahead of time.
- We plan to integrate digital wallets into our website in the future to make it easier and faster for users to make payments.

6. DESIGN AND CONNECTIVITY

The process through which designers develop integrations on software or electronic devices with a concentration on appearances or style is referred to as user experience or design (UI). Designers try to increase both user-friendliness and user enjoyment. UI design includes the graphical user interface and many forms of user interfaces. To build a System Layout Architecture, we'll need a UI and a database, which we'll link via PHP.

7. DATABASE DESIGN

Databases may be likened to a sophisticated digital panel. This is what will help us categorize all or most of the data in our application. We have full authority

over our database's installation, modification, and deletion. Tables, which may be thought of as file references, generate data. Tables are descriptive sections that can be thought of as individual pages within a file folder. Each time a fee is collected, we will add new entries to that database, just as we would add new pieces of paper to our file folder. Our database includes a huge amount of information, such as the services, category, customer id, customer name, booking, categories, and so on.

e-ISSN: 2395-0056

8. DATABASE DESIGN

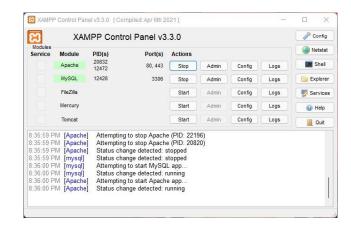


Fig. 4: Xampp Server

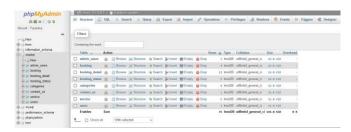


Fig. 5: Phpmyadmin Database

Volume: 09 Issue: 04 | Apr 2022 www.irjet.net p-ISSN: 2395-0072

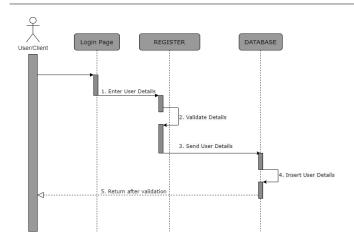


Fig. 6: Sequence diagram for User Registration & Login

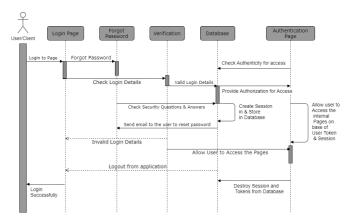


Fig. 7: Sequence diagram for Admin Login

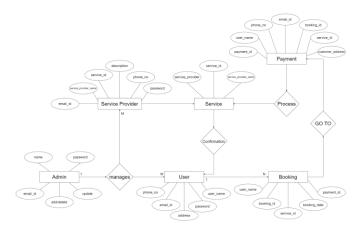


Fig. 8: Data Model Diagram

9. TOOLS AND DESIGN

- **A.** Xampp: Apache: The Apache Software Foundation established Apache, sometimes known as Server, as an open-source Java Servlet Container.
- **B.** MySQL server: It handles large databases much faster than prior systems. It consists of a multithreaded SQL server that supports many back

ends, as well as a range of client applications and libraries, administrative tools, and application programming interfaces (APIs). Because of its connectivity, speed, and security, MySQL Server is well-suited for accessing databases through the Internet.

e-ISSN: 2395-0056

- **C. HTML:** HyperText Markup Language, or HTML, is the standard markup language for writings intended to be displayed in a web browser. Technology such as Cascading Style Sheets (CSS), which we also use to style our website's web pages, can help.
- **D.** *PHP:* Hypertext Preprocessor is a general-purpose programming language that originated with the development of online applications. PHP code is performed in a certain order, beginning with a PHP interpreter, which is subsequently implemented as a web server module. The web server combines the output of both the interpreted and executed PHP code, which can be of any kind that is connected with the produced web page.
- **E. JavaScript:** The acronym JS refers to a computer language that, together with HTML and CSS, is one of the World Wide Web's major technologies. On the client-side, JavaScript is used to regulate web page behaviour on more than 97% of websites, with third-party libraries being frequently used.

10. RESULTS

A. Backend: Admin/Service Provider Panel:

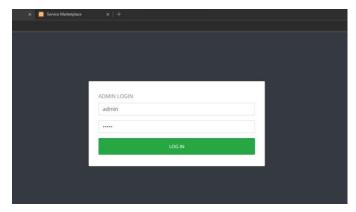


Fig. 9: Admin/Service Provider Login Panel

Volume: 09 Issue: 04 | Apr 2022 www.irjet.net p-ISSN: 2395-0072

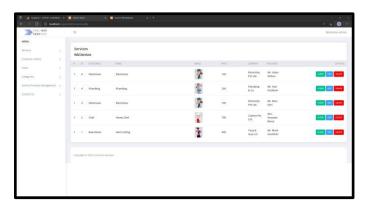


Fig. 10: Admin Service Panel

(The panel where the admin can add, delete and update any service. Can also make a particular service active or inactive.)

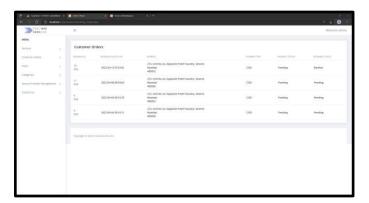


Fig. 11: Customer Bookings Panel

(The panel where the admin can have a look at any service that is booked by a customer and can update the status of that particular booking.)

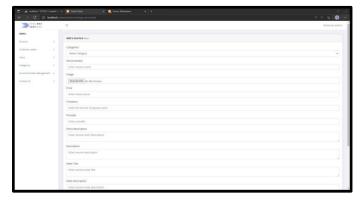
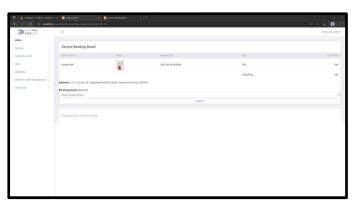


Fig. 12: Service addition form panel

(It is the panel where the admin/service provider can add their own service and this will be reflected in the service panel.)



e-ISSN: 2395-0056

Fig. 13: Service booking detail panel

(This is the panel where the admin will be able to update the status of the customer's booking in real-time.)

B. Front-end: Service Marketplace Website:

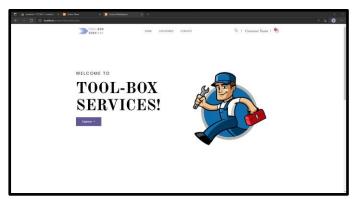


Fig. 14: Front-end of the Service Marketplace

(The customer will be presented with the front-end of our website whenever they sign into the website.)

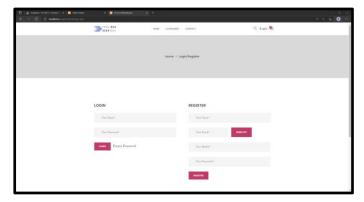


Fig. 15: Customer Login/Registration Page

(This page has the option to sign in, register and forgot password features with OTP verification for email id as well.)

Volume: 09 Issue: 04 | Apr 2022 www.irjet.net p-ISSN: 2395-0072

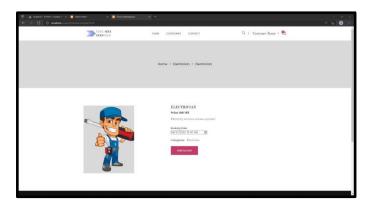


Fig. 16: Service details and booking page

(This is the page where the customer can look at the details of a particular service and can book the service by selecting the date and time as per their preference.)

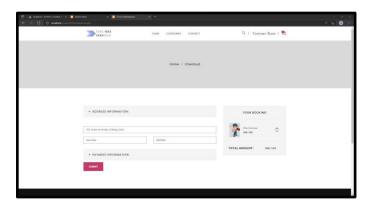


Fig. 17: Checkout Page

(The page where the user will enter his/her address along with other details and select the payment option.)

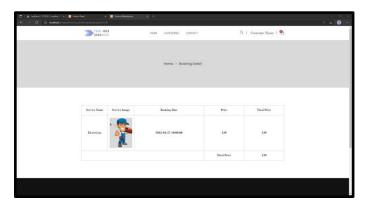
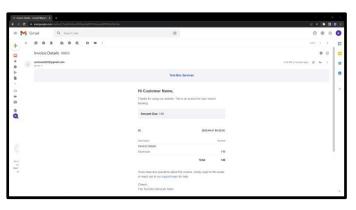


Fig. 18: Booking Details page

(The page where the customer can have a detailed look at the booked service and can check for the booking status.)



e-ISSN: 2395-0056

Fig. 19: Invoice email

(An email will be sent to the customer on their registered email id after the confirmation of their booked service)

11. CONCLUSION

We created a service marketplace that offers a diverse range of services from a number of service providers. Customers who want to purchase, as well as corporations and individual vendors who wish to sell their service and expand their business, may arrange appointments for services on this user-friendly website depending on their schedule and convenience.

REFERENCES

- [1] Kreiczer-Levy, Shelly. (2021). "The Duties of Online Marketplaces." Issued by: Korean Association of Distribution Sciences . San Diego Law Review. 58. 269. DOI: 10.15722/jds.18.8.202008.75
- [2] Meyer, Jeanine. (2011). "Web Site Database: Using PHP and MySQL." 10.1007/978-1-4302-4033-4_10.
- [3] Khaoula Benmoussa, Majida Laaziri, Samira Khoulji, Kerkeb Mohamed Larbi, Abir El Yamami "A new model for the selection of web development frameworks: application to PHP frameworks." International Journal of Electrical and Computer Engineering (IJECE) p-ISSN 2088-8708, e-ISSN 2722-2578 DOI: http://doi.org/10.11591/ijece.v9i1.pp695-703,
- [4] Almeida, Fernando & Monteiro, José. (2017). "The role of responsive design in web development." Webology. 14. 48-65.
- [5] Musciano, Chuck, and Bill Kennedy. HTML & XHTML: The Definitive Guide: The Definitive Guide. "O'Reilly Media, Inc.", 2002.
- [6] lansit, B. Douglas. "An Introduction to Cascading Style Sheets (CSS)." Journal of Electronic Resources in Medical Libraries 5, no. 4 (2008): 395-409.

Volume: 09 Issue: 04 | Apr 2022 www.irjet.net p-ISSN: 2395-0072

- [7] Chavan, Varsha, Priya Jadhav, Snehal Korade, and Priyanka Teli. "Implementing customizable online food ordering system using a web-based application." International Journal of Innovative Science, Engineering & Technology 2, no. 4 (2015): 722-727.
- [8] Thakur, Amey. (2021). "Car Rental System". International Journal for Research in Applied Science and Engineering Technology. 9. 402-412. http://dx.doi.org/10.22214/ijraset.2021.36339
- [9] A. Thakur and K. Dhiman, "Chat Room Using HTML, PHP, CSS, JS, AJAX.", International Research Journal of Engineering and Technology (IRJET), 1948–1951, 08 June 2021. https://doi.org/10.6084/m9.figshare.14869167
- [10] A. Thakur and K. Dhiman, "Chat Room Using HTML, PHP, CSS, JS, AJAX.", ArXiv, abs/2106.14704 (2021)
- [11] Dhiman, Karan & Phansikar, Mayuresh. (2021). Online Food Ordering Management System. 9. 2096-2107. http://dx.doi.org/10.22214/ijraset.2021.36835
- [12] Thakur, Amey & Satish, Mega. (2021). "Digital Bookstore". International Journal for Research in Applied Science and Engineering Technology. 9. 1326-1337. http://dx.doi.org/10.22214/ijraset.2021.36609
- [13] Kumari, Punam, and Rainu Nandal. "A Research Paper On Website Development Optimization Using Xampp/PHP." International Journal of Advanced Research in Computer Science 8, no. 5 (2017).
- [14] Widenius, Michael, David Axmark, and Kaj Arno. MySQL reference manual: documentation from the source. "O'Reilly Media, Inc.", 2002.
- [15] Friendly, Lisa. "The design of distributed hyperlinked programming documentation." In Hypermedia design, pp. 151-173. Springer, London, 1996.
- [16] Prokofyeva, Natalya, and Victoria Boltunova. "Analysis and practical application of PHP frameworks in the development of web information systems." Procedia Computer Science 104 (2017): 51-56.
- [17] Subramanian, Siddharth, Laura Inozemtseva, and Reid Holmes. "Live API documentation." In Proceedings of the 36th international conference on software engineering, pp. 643-652. 2014.

e-ISSN: 2395-0056