A REVIEW PAPER ON AN ONLINE TECHNICIAN SERVICE PROVIDER ON JSP

Aastha Malvi, Apoorwa Gawande, Richa Udaypurey, Sonal Dahare, Shivam Tekpure
Computer Science and Engineering
SBITM, Betul, Madhya Pradesh, India

Abstract Online Technician Service Provider (TSP) for Home Services is a one step platform built on JSP (Java Server Pages) and hibernate, which is designed to fulfil the requirements of a Client regarding domestic home services (related to all technical problems) online by bringing together the users and service providers. The registered users can demand service available through the application and based on the user’s location, the nearest service provider will cater the user’s request for service. Locating the user and the service provider is done by using the GPS (Global Positioning System) that gives the exact location on the earth. The applications are simple and straight forward interface, instant service; feature for rating and sending feedback, makes it incredibly useful and relatively easy to use for all users. Further we have allotted a separate page for Spare Parts of two wheel vehicle on same website. where a person in need of any spare parts for any two wheel vehicle could easily get on this website. Another new concept we have added to this project is Bulk Mart where B2B (Business to Business) and B2C (Business to Customers) is used i.e. a similar product could be purchased singularly or in a bulk quantity.

Keywords— TSP, JSP, GPS, B2B, B2C.

I. INTRODUCTION

Technician Service Provider System is based on online mechanism. We are making this project to give benefits customers and technicians. In these days, we have to face many problems to search the technician for the particular time and technicians, too, have to face many problems to find their own work in that time. That’s why we are making this portal to solve these problems; so that technicians, customers and portal admin can earn the profit and also resolve the problems at that time. It works on interaction of the customers and technicians, and communicates to each other from TSP portal help similar as Amazon, alibaba, flipcart etc. This project facilitates our customers to save time, to work as a research technician. Due to this our technician is getting employment and the customer needs to work for his work in which he needs technicians.

II. LITERATURE REVIEW

At the moment, there are very limited technical portal, web portal or app around us that can solve this problem. In rural areas there are only manual based technicians around us, who gives no guarantee of services provided by them. The services provided by them are even expensive and if they found to be technically enrich, then there is probability that he might cheat the customer. First of all, the customer gets nervous when it comes to find a technician manually and even if they found one, they do not expose the charges for their services There is also a similar technician with them because they do not get the job of their fulsome times due to which they keep roaming freely unemployed.

In this research paper we have taken a reference of Asst. Prof. of Computer Science and Engineering, Department BITM, Ballari N. M. Indravasan1, Adarsh G2, ShruthiC3, ShanthiK4, Dadapeer 51.2,3,4Department of Information Science and Engineering, BITM, Ballari. The primary objective of the online system for household services is about delivering the home services at the door step just by one click. 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. To develop 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 secured online payment gateway for service seekers. To acknowledge the conformation of services opted by the users.

III. PROBLEM STATEMENT

In recent time we are getting problems to find out technicians for the daily routine works example as electronics related works, car painter related works, water purifier related works, painting related works, plumber related works etc.
And also technicians are facing unemployment problem for their field related work for earning. If they are getting the work that time they are taking too much cost for their service because they don't get the work daily. For that reason customers do not believe at the technicians that's why both are facing problems. For resolving this problem we are making this project. We are creating the platform for daily work for our technicians and technician facilities for customers for different problems. Due to this project, the trust of the technicians in the customer will increase and the technician will also get sufficient income. With this, technicians who have trouble funding us will also be able to get solutions and our technicians will get enough income.

IV. OBJECTIVES
We will be able to provide the technician's facility at the right time to our customer. We will first know what is the problem of the customer in our project, then after this, let us know our technician. If our technicians are able to solve the problem, then we will direct them to visit the customer's place so that they can solve the problem. If the customer understands the solution given by us, then we will solve the problem by telling the above mentioned charges. At the end, we will save the customer's data in the second table and also take feedback for our services so that we can improve our services further.

V. SYSTEM REQUIREMENTS

### TABLE 4.1 HARDWARE REQUIRED

<table>
<thead>
<tr>
<th>Client Side</th>
<th>Processor</th>
<th>Core to Dual or Higher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hard Disk</td>
<td>20 GB</td>
<td></td>
</tr>
<tr>
<td>Memory</td>
<td>1GB RAM or Higher</td>
<td></td>
</tr>
</tbody>
</table>

### TABLE 4.2 SOFTWARE REQUIRED

<table>
<thead>
<tr>
<th>Operating System</th>
<th>Windows 7 or Higher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Server Technologies</td>
<td>Apache tomcat server 9.0, Wamp server 3.14 or higher</td>
</tr>
<tr>
<td>Back End Technologies</td>
<td>MySQL Database, MySQL jdbc Driver Connector 8.0</td>
</tr>
<tr>
<td>Front End Technologies</td>
<td>JSP (JDK_8.01 toolkit) Java(j2se,j2ee)</td>
</tr>
<tr>
<td>IDE</td>
<td>Eclipse IDE neon 1.0 or Higher</td>
</tr>
<tr>
<td>Frame Work</td>
<td>Hibernate</td>
</tr>
<tr>
<td>Payment Gateway</td>
<td>Any Payment Gateway, Papal, Paytm etc.</td>
</tr>
<tr>
<td>Operating System</td>
<td>Any Operating system that supports Browser</td>
</tr>
<tr>
<td>Application software</td>
<td>Any JavaScript enabled web Browser</td>
</tr>
</tbody>
</table>

VI. METHODOLOGY
This web portal uses three actors which is admin, Technician and customer. Admin has authorities to access a customer and technician account. Second one is Technician Which is service provider gives services to customers' and last one is Customer who wants to avail our Services. Attributes of our use case Diagram is explain below:-

Registration Module- All three actors of our web portal needs to do this registration process.

Admin- The admin have rights to register or modify the customer and technician profile also have rights to do registration of technician and customer.

Technician-Technician can make a profile on our portal as per their profession or area from they belong in city. for particular area particular technician is assigned.

Customer-Customer can registered their self on our web portal via OTP system.
Figure 1: Use case Diagram

Login Module – all three actors can login with the help of registered Id and password.

Service Request - Customer can request for a service to technician. Services can be plumbing, painting, electrician, kitchen related etc. all the technician related problems.

Confirm Service Module - this module can be accepted by technician for accepting a customer request which comes on technician area, if technician is busy than other area technician will be allotted otherwise busy status will shown to the Customer.

Bulkmart Module - This service can be taken by customer or technician both. If they wants to purchase a product in a bulk or a single product like indiaMart

Vehicle Rent Module - Customer or technician both can book a vehicle for rent.

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.

Feedback- After service if the customer is unsatisfied with our services they can gives the feedback to our portal.

VII. ADVANTAGES
1. Provides instant solution for the customer problems.
2. Reduces tension for searching technician for related work in thinking.
3. Work employment for technician every day.
4. The system saves time and reduces human efforts.

VIII. DISADVANTAGES
1. It requires internet connection.
2. On customer dependency.

IX. PRACTICAL USE
1. We are providing a platform for the technician from whom they are getting their own field work and reducing their unemployment and getting reliability of customers into the valuable cost for their service.

2. We are providing a platform of the customers who can relate the expert technician for their technical problems. From these circumstance customers are getting service in sufficient charges in little time.

3. We are getting right use of our software technology for a common person.

X. CONCLUSION
Our project primarily depends on technician and customer activity. In today's time, there is no time for any person, if there is a technical problem in his daily routine, he can’t do it himself and if it requires a technician, then this portal will prove to be very useful for that.

As a result, our customer is getting facilities sitting in the house as well as the technician is getting employment.

XI. FUTURE SCOPE
1. To provide the services technician and customer.
2. District level, state level and country level and in many fields for instance medical science technician services industrial technician’s services, forest workers and labour categories.

XII. ACKNOWLEDMENT
We express our special gratitude to our honorable principle Dr. Amit J. Modak, who gave us an opportunity to work on this project. Being the students of Shri Balaji Institute of
Technology & Management, it was our pleasure working on this project and it made us learn lot of new things.

I would like to thank our Project guide and Project Coordinator, Prof. Satish Chadokar and Prof. Pravin Malviya, who with their friendly nature helped us to complete this project and guided us continuously, this list would be incomplete without our Head of the Department, Prof. Vinay Sahu, who coordinated with us and gave us her valuable time.

XIII. REFERENCE


