Online Domestic Assistant

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Abstract— **This project is aimed at developing an online hiring system for work professional. This is a web-based application. Any user can request for a professional. Our website provides all sort of housekeeping services which consist of Plumbers, Electricians, Carpenters, Cleaning etc. Our website enables its users to hire the professional that he is in need of and contact him online. All the details of the work can be shared by the users to the professional through a chat system. This is an end to end connection between the user and the professional.**

Index Terms— **housekeeping services, Domestic Assistant .**

I. INTRODUCTION

One of the primary problems facing by most people is not being able to find workers for their day to day activities. The purpose of this project is to help people find the right professionals that will help them fulfil their needs. This will enable the users to find any service professionals like plumber, a painter, a carpenter, an electrician, a yoga teacher, an interior designer etc.

Some of the basic features of this project are as follows:

1. User verification through OTP sent to their mobile number.

2. Maintaining a database to record user and worker history.

3. Rating for the work done.

4. End to End messaging between the user and the professional.

II. METHODOLOGY

- In this modern world it is very difficult for us find a worker.
- The main of this project is to help both the user and the worker to locate each other so that both of their needs are fulfilled
- People tend to be online most of the time, so by developing a platform where we specify our type of work, we can find a suitable person who can help us.
- The features such as messaging through the application itself as well as the ratings given to the worker will enable to select the best person at work.
- Most importantly this is an end to end system and there is no middle man involved in this process.

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III. SYSTEM ARCHITECTURE

This work is proposed in such a manner that it gives the use of Web Technology to common people.
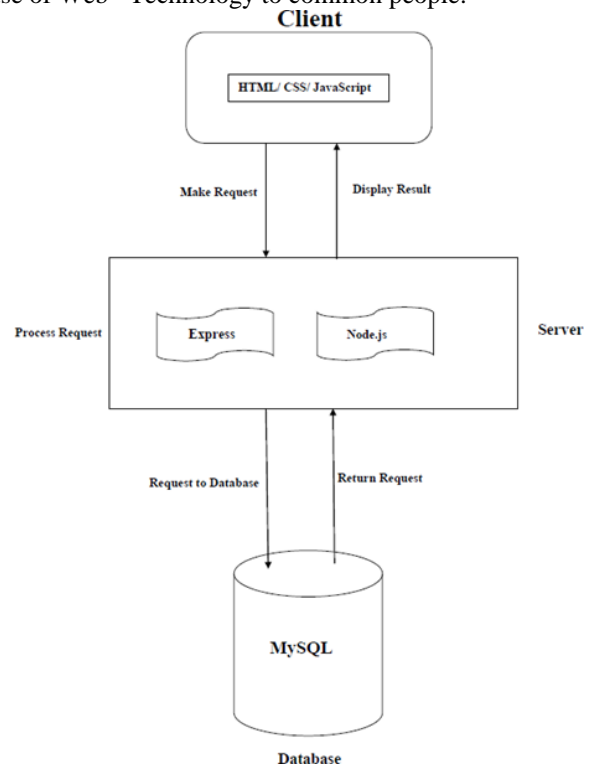
The request made by the client is fed to the server which in turn sends the request to the database so that the information is retrieved and displayed to the client working on the system.

HTML and JavaScript are used at the frontend which are responsible for communicating with the server [2]. CSS is used for giving rich textures and looks for the frontend.

Next, request enters second stage where we have Node.js a server-side language and Express.js as backend web framework. Node.js handles all the client\server request [1] whereas Express.js is used for making request to the database [3].

MySQL is used as a database. It retrieves data and sends it to Express.js. All the information provided by the user will be stored in the database which will eventually help the user to retrieve his data.

IV. IMPLEMENTATION

Online domestic assistant is a web-based project. We have used JavaScript, HTML for front end and Node.js and Express.js for backend. We have also used CSS and Bootstrap to make our page interactive and responsive. We have used MySQL database to store the data. We have also used WampServer which is a Web development platform on

Windows that allows you to create dynamic Web applications with Apache2, PHP, MySQL and MariaDB. We have used Embedded JavaScript (EJS) which is a simple templating language that lets you generate HTML mark-up with plain JavaScript.
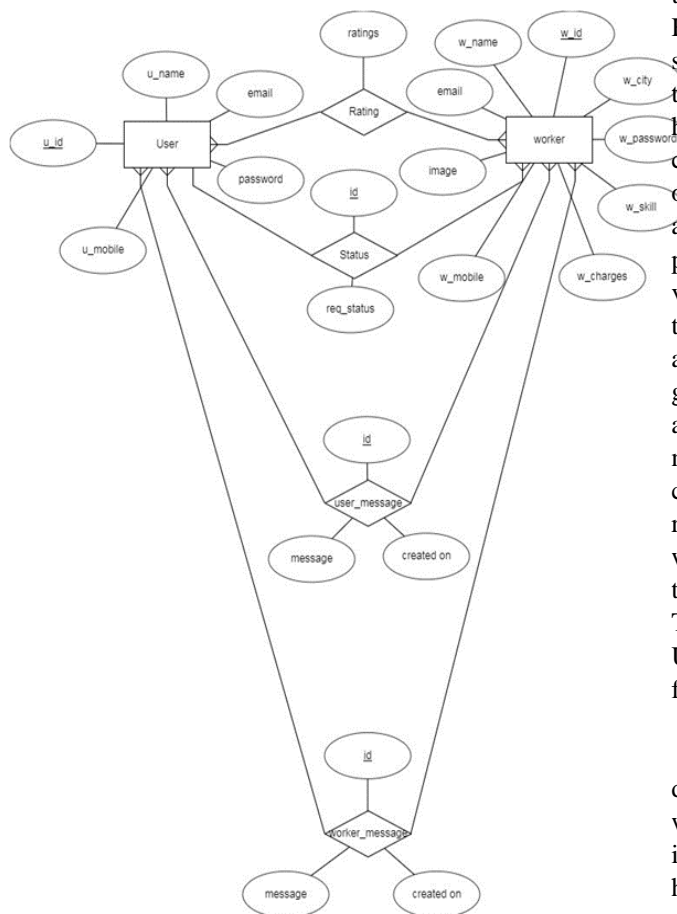
This ER-Diagram represents the structure of our database and how the tables are related to one another.

- The User Table is used to store the information of the clients who wish to hire professionals. He can give his mobile_no or email-id as the login-id.
- The Worker table is meant for the professionals who wish to portray their talent in their respective field.
- The rating table stores the ratings given by the user to the professional based on this work. The review system helps us to hire the best professional that is available for the respective work.
- The Status table is used by the worker to either accept the request of the user. The worker also has the power to decline the request if he is not satisfied by the kind of work the client is making him do.
- The message table is used to store the messages of both client as well as the professional. Before accepting the request, the worker can clarify his doubts regarding the job.

For Clients who want to hire:

When we run the project on local host, the home page is displayed. The home page has two responsive images of worker and customer. When the user clicks on the customer image, he will be redirected to the login page. If he doesn't have an account, he should create an account. To create an account, he has to provide details like Full name, email id,

location, mobile number and password. An OTP will be sent to the user's mobile for verification. We generate a random number and send it to user's mobile. We check whether the otp sent and the otp entered by the user match. If they match than his account will be created and he will be redirected to the login page otherwise an error message will be displayed. He can login using his mobile no. and password. After successful login the user will redirected to his homepage. In the home page he can view all the workers who have accepted his request along with their photo, name, city, profession, charge, contact number and the average rating provided by other users. He can also view how many of his requests got accepted, got rejected by the worker, how many requests are pending and the total number of requests that he has sent to various workers. User can give rating to the worker according to their work between 1 to 5 stars where 1 being the lowest and 5 being the highest. To hire a worker, he has to go to the get service provider page where he can see all the workers along with their photo, name, city, profession, charge, contact number and the average rating provided by other users. He can send request to the workers depending on their charges, rating and city. He can chat with worker regarding location, work, charges, etc. Once the workers complete the work as told by the user, the user can provide ratings to the worker. The user can also hire multiple workers at the same time. User can also update this detail if needed. The user can logout from his profile at any time.

For Professional Workers:

When we run the project on local host, the home page is displayed. The home page has two responsive images of worker and customer. When the worker clicks on the worker image, he will be redirected to the login page. If he doesn't have an account, he should create an account. To create an account, he has to provide details like full name, email id, city, mobile number, profession, charges per day and password. He has to also upload his image. We haven't added OTP verification module to worker but it can be added just like for the user's registration. After registration, worker can login using his mobile number and password. After successful login the worker will redirected to his View Request page. In the View Requests page, he can see the details of the users who want to hire him. He can chat with the users who want to hire him and then accept or reject their request depending on the location, difficulty of the work, etc. The worker can also update his details. The worker can logout from his profile at any time.

V. CONCLUSION

Online Domestic Assistant is an end to end service which allows its users to find the workers easily. Users don't need to find the workers here and there. They can login into the website, chat with the workers and send request to the one who they think are suitable for the work. Workers can accept or reject the requests depending on the location, difficulty of work, etc. Workers on this platform are verified. So, the user can hire them without much worrying. Thus, Online Domestic Assistant allows its users to find the right professional for their work and also increases the employment rate of its workers.

VI. ACKNOWLEDGEMENT

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