Web App for Freelancing Developers and Designers

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Abstract— Freelancing is doing a job under contract rather than full employment. Usually, people who freelance are self-employed and for whom they will work and they decide for how long. Freelancing offers a lot of freedom and flexibility which regular jobs cannot. The freelancer can choose the type of the work, time of the day they can work and how long they work, a location they work and volume of work take on. The freelancer can control work relationships and control workload. Platform freelancing has many websites and anyone can register as freelancers or job posters. The aim of this project is to develop a web application where various types of software developers and designers can collaborate with each other and work on business projects by sharing the code, solving issues in the code and as well as companies can hire freelancers.

Index Terms—Designers, Developers, Freelancing, MERN stack, Web App.

I. INTRODUCTION

Online freelance marketplaces serve as platforms that connect individuals or organizations seeking electronically deliverable services with freelancers who offer these services. Technological advancements, such as the availability of fast internet connections and electronic delivery of jobs, have made it possible for more remote work opportunities to be performed by freelancers. The use of online freelance marketplaces has also made it easier and more cost-effective for geographically distant players to bring their business ideas to fruition. However, due to the high level of competition on these platforms, less experienced or amateur freelancers may struggle to increase their productivity and stand out from their peers.

Emerging economies, such as the Indian subcontinent and Eastern Europe, have a plethora of skilled workers who enjoy a low cost of living. In contrast, developed countries have a high cost of living and a high demand for skilled workers, leading many businesses to outsource their work to remote workers on these websites. By utilizing these websites, businesses can easily access a pool of skilled workers who offer highquality services at a lower cost than local labor. This approach provides businesses with a cost-effective solution while providing freelancers with access to a wider range of job opportunities.

Furthermore, these websites provide a cutting-edge platform for freelancers to showcase their skills and experiences, making it easier for them to attract and retain clients. With the ability to highlight their expertise and work history, freelancers can differentiate themselves from their competitors and secure more job offers. Overall, these websites have created an opportunity for businesses to access skilled workers from around the world while providing freelancers with a platform to showcase their skills and connect with potential clients. This approach offers a win-win situation for both parties, leading to increased efficiency and profitability.

The main objectives of the Project are as follows:

- To provide a centralized platform for freelancers to showcase their skills, connect with potential clients, and secure job opportunities.
- To enable clients to easily find and hire skilled freelancers for their projects, regardless of their location.
- To facilitate collaboration and communication between freelancers and clients, allowing for efficient project completion.
- To provide a user-friendly and intuitive interface for both freelancers and clients, ensuring a positive user experience.
- Ensuring a seamless and user-friendly experience for both clients and freelancers, with easy navigation and clear instructions.
- Freelancers will be categorized by the domain they specialize in, this will make navigation much

easier to obtain specific individuals for specific purposes.

II. LITERATURE REVIEW

The research paper titled "Design and Implementation of a Collaborative Freelancers' Sourcing Platform" proposes a platform that connects freelancers with job opportunities that match their skills and expertise. The platform is designed to facilitate collaborative work among freelancers and improve the efficiency of the sourcing process. The paper highlights the impact of the Information Age on the workforce, including the increase in global job competition, which has led to the rise of freelancing and self-employment. The authors emphasize the need for a platform that matches freelancers with appropriate job opportunities based on their skills and talents. The proposed platform uses PHP, MySQL, JavaScript, and Node JS for the serverside implementation. The authors explain how Node.js, with its event-driven architecture and support for asynchronous I/O, is a suitable choice for optimizing throughput and scalability for web applications with many input/output operations. [1]

The research paper titled "Reduction of Online Fraudulent Activities in Freelancing Sites Using Blockchain and Biometric" proposes the use of blockchain technology and biometric authentication to reduce fraudulent activities in online freelancing sites. The paper highlights the increasing prevalence of fraudulent activities in online freelancing sites and the need for effective measures to prevent them. [2]

The research paper titled "Online Freelancing Website" presents a comprehensive overview of online freelancing websites, which are online platforms that allow employers to post job opportunities and freelancers to bid on those jobs. The paper discusses the history and evolution of online freelancing websites, their benefits and drawbacks, and the challenges they face. The paper provides a detailed description of the different types of online freelancing websites, including general platforms that offer a wide range of jobs in various industries, specialized platforms that cater to specific industries or types of work, and hybrid platforms that combine elements of both general and specialized platforms. [3]

The research paper titled "Feasibility Study and Prototype Design of Freelancer Online Marketplace" presents a feasibility study and prototype design of an online marketplace for freelancers. The study aims to investigate the feasibility of developing a platform that connects employers and freelancers while offering a user-friendly and secure environment. The paper provides a detailed literature review of the existing literature on freelancing and online marketplaces, highlighting the benefits and challenges of these platforms. The authors discuss the rise of the gig economy and the increasing demand for flexible work arrangements, which have led to the growth of online marketplaces for freelancers. [4]

The paper entitled "A Study on The Freelancing Remote Job Websites" specifies the need for Freelancing Jobs in this new modern, low cost Internet broadband technologies and enterprise capabilities of highly powerful yet cheap computers and also the requirements of the companies to hire Freelancers. These Freelancers work on short-term assignments for multiple firms and often they have specific qualifications and are hired for particular knowledgeintensive tasks based on the requirements of the company. [5]

The aim of this paper is to present the current research trends in software development that are supported by freelancers. This will aid in identifying the software development domains that have received more research attention, those that have empirical evidence to support decision-making by management, and those that require further research attention. [6]

The study aims to provide an overview of the research trends in freelancer-supported software development and identify the areas that require further research. It also aims to identify the software development areas that have received more research attention, those that have empirical evidence to support decision-making by management, and those that require further research attention. [7]

III. PROBLEM STATEMENT

In today's digital economy, businesses are increasingly seeking skilled freelancers for their projects. However, the process of finding and hiring the right freelancers can be time-consuming and challenging, and the lack of a centralized platform can make it difficult for businesses to access a broad pool of qualified candidates. At the same time, freelancers struggle to find suitable clients and projects that match their skills and experience. Additionally, the lack of a collaborative environment can make it challenging for freelancers to work together on larger projects, limiting their potential for growth and development.

To address these challenges, there is a need for a centralized web application that connects businesses with a diverse pool of freelancers, providing them with a range of project management tools and collaborative environments to ensure success. This web app provides a user-friendly and streamlined experience for both clients and freelancers, ensuring efficient hiring and project management while offering secure and reliable services that protect the work and interests of all parties involved.

IV. PROPOSED SYSTEM

The proposed system for the Web App for Freelancing Developers & Designers is a comprehensive and userfriendly platform that allows freelancers and clients to seamlessly connect and work together on projects. The system is implemented using the MERN stack, which includes MongoDB, Express.js, React.js, and Node.js. The system features user authentication that allows users to select their profile as either a freelancer or a client. The profile management feature enables freelancers to create and manage their profiles, highlighting their skills and experiences to attract potential clients. The project management feature allows clients to create and manage their profiles, providing information about their businesses and projects.

The frontend of the system is implemented using React.js, which ensures a smooth and responsive user experience. Data routing is carried out using an API built using Node.js and Express.js, providing highspeed data transfer. MongoDB is used as the database due to its flexibility and speed, ensuring that the system can handle large amounts of data with ease.



Fig. 1. System Architecture

The system includes a ratings and feedback feature, which allows clients to leave reviews of freelancers, helping other clients to make informed decisions when hiring a freelancer. The backend of the system includes order management and chat modules. The order management module provides a gateway for clients to make payments and access transaction summaries.

Once a freelancer is hired by a client, they can work together using the chat feature, allowing them to collaborate and discuss project details in real-time. Payment for the completed project is made through the payment module implemented using StripeJS, ensuring a secure and reliable payment process. After successful completion of the transaction, the system redirects to the success page, providing clients and freelancers with a seamless experience.

V. METHODOLOGY

The flowchart in Fig. 2. outlines the step-by-step process for both Freelancers and Clients on the platform. The first step involves signing into the platform by providing relevant personal details and selecting either the "Freelancer" or "Client" option. Freelancers are required to input their academic and professional details to showcase their skills, while Clients must provide background information about the organization. After completing the sign-up process, Freelancers can browse the available work posted by Clients and apply for jobs that match their skill set.

Before being approved and hired, Freelancers must provide additional details to the Client. This can include their project timeline, hourly rate, and previous work experience. Clients can hire multiple Freelancers to form a team for a project, depending on the scope and complexity of the project. Once hired, Freelancers can begin working on their tasks and collaborate with other Freelancers and the Client to ensure project success. They can communicate with the Client through the platform's messaging system and provide regular updates on their progress. Upon project completion, Clients are responsible for paying Freelancers through the platform's secure payment system. Clients can leave reviews and ratings based on their experience working with the Freelancer, helping other Clients make informed decisions when hiring Freelancers in the future.

In summary, the flowchart outlines a straightforward and efficient process for both Freelancers and Clients on the platform, ensuring a seamless experience for all parties involved in the project. The platform provides a comprehensive solution for Freelancers and Clients to connect, collaborate, and complete projects together, ultimately driving business growth and success.



The Project proposes a web application where freelancers from all around the world will join the platform in search of work, where they will add there professional details and they will get hired based on the professional details they have provided on the platform and after a client hires the freelancer they can work together with the developers of the company to solve their projects. The platform is also available for various clients where they will find highly skilled freelancers and can hire the freelancers to solve the problems in their projects.

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