Minor Project Synopsis Report

MattersUrSkill

Project Category: University Based Project

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By

Khushi Chauhan | Roll No: 2401201167
Shweta Jha | Roll No: 2401201127
Akanksha Kumari | Roll No: 2401201162
Vikram | Roll No: 2401201217
Kartik Malhotra | Roll No: 2401201160

Under the supervision of

Supervisor Name

Department of Computer Science and Engineering

School of Engineering and Technology

K.R Mangalam University, Gurugram- 122001, India

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INDEX

ABSTRACT

Unemployment and lack of access to skill-based work opportunities remain significant challenges, particularly for students, housewives, and individuals with limited formal education. Many people possess practical skills such as cooking, tailoring, handicrafts, packing, repair work, and local services, yet they struggle to find genuine and flexible employment due to the absence of trusted digital platforms. Simultaneously, work providers often face difficulties in finding reliable workers for short-term, local, or home-based tasks. This gap results in dependency on middlemen, underutilization of skills, and economic instability.

To address these challenges, this project proposes **MattersUrSkill**, a MERN stack based web application designed to connect work providers directly with skilled and unskilled individuals based on their skills, availability, and location. The platform offers separate registration for workers and work providers, allowing workers to list their skills while providers can post task requirements with relevant details. Secure authentication using JSON Web Token (JWT), user verification, and a rating and feedback system ensure trust and transparency within the platform. Location-based matching enables users to access nearby service opportunities, while flexible work options support women empowerment and allow students to earn while studying.

By eliminating middlemen and focusing on practical skill recognition rather than formal qualifications, MattersUrSkill promotes inclusive employment, economic independence, and social empowerment using modern web technologies.

KEYWORDS:

Skill-Based Employment, Unemployment, MERN Stack, Web Application, Women Empowerment, Local Services

1. INTRODUCTION

Rapid urbanization, economic transformation, population growth, and changing social structures have significantly impacted employment patterns across developing countries. While economic liberalization has created new opportunities, it has also widened the gap between skilled and unskilled individuals. A large section of society, including students, housewives, and people with limited formal education, continues to face unemployment or underemployment due to lack of access to suitable work opportunities. Poverty, inequality, and dependence on informal employment further worsen this situation.

Unemployment is not only an economic issue but also a social challenge that affects mental well-being, financial stability, and overall quality of life. In many cases, individuals possess valuable practical skills such as cooking, tailoring, handicrafts, repair work, or local services, yet these skills remain unrecognized due to the absence of reliable platforms that connect them directly with work providers. Middlemen often exploit workers by controlling access to jobs and reducing fair wages, which leads to mistrust and inefficiency.

The COVID-19 pandemic and subsequent lockdowns further intensified unemployment across India, forcing many families into financial distress. Students lost part-time work opportunities, housewives were confined to home without income options, and informal workers struggled to find consistent employment. This highlighted the urgent need for flexible, accessible, and trustworthy digital solutions that enable individuals to earn based on their skills rather than formal qualifications.

With the increasing penetration of the internet and digital technologies, web-based platforms can play a crucial role in addressing unemployment by bridging the gap between work providers and workers. A secure and skill-focused employment system can promote economic independence, reduce dependency on middlemen, and encourage inclusive growth. **MattersUrSkill** aims to address these challenges by providing a digital platform that connects individuals with genuine, skill-based, local, and home-based work opportunities, thereby empowering underserved sections of society.

2. MOTIVATION

Unemployment and underemployment continue to be major socio-economic challenges, especially for students, housewives, and individuals with limited formal education. Despite possessing practical and valuable skills, many people struggle to find suitable work opportunities due to lack of awareness, time constraints, and absence of trusted platforms. Traditional job portals primarily focus on full-time employment and formal qualifications, leaving a large segment of the population underserved.

The COVID-19 pandemic further intensified this issue by causing job losses, reduced income opportunities, and increased financial insecurity among vulnerable groups. Students lost part-time earning options, housewives were left with no means to contribute financially, and informal workers faced difficulty in finding consistent work. This highlighted the urgent need for flexible and skill-based earning opportunities that can adapt to individual availability and circumstances.

Another major motivation behind this project is the dependency on middlemen for accessing work, which often leads to exploitation, unfair wages, and lack of transparency. There is a clear need for a secure digital platform that enables direct interaction between work providers and workers, ensuring trust, fairness, and efficiency.

The motivation for developing MattersUrSkill is to create an inclusive, accessible, and technology-driven solution that empowers individuals by valuing practical skills over formal education. By leveraging modern web technologies, the platform aims to promote economic independence, women empowerment, and skill recognition while addressing unemployment at a grassroots level.

3. LITERATURE REVIEW

Several studies and platforms have explored digital employment and service-based work opportunities. Popular platforms such as Urban Company, Fiverr, TaskRabbit, and Apna App provide job or service connections between workers and clients. However, these platforms mainly cater to professionals, freelancers, or full-time job seekers and often require formal qualifications or prior experience.

Research on the gig economy suggests that flexible work opportunities benefit students and part-time workers, but access remains limited for housewives and individuals with informal skills. Studies related to women empowerment emphasize the need for safe and reliable home-based work options, yet most existing platforms do not prioritize this segment.

Additionally, many existing systems rely on intermediaries or platform-controlled communication, leading to lack of transparency and exploitation of workers. These limitations highlight the absence of an inclusive, skill-based digital platform that supports local, home-based, and flexible employment while ensuring trust and direct interaction between users.

📋 Literature Review Table :

Author / Platform	Year	Focus Area	Limitations Identified
Urban Company	2014	Professional Services	No uneduvated worker focus
Fiverr	2010	Online Freelancing	No local/home-based work
TaskRabbit	2008	Local Physical Tasks	Limited women empowerment
Apna App	2019	Job Listings	No task-based earning
Economy Studies	2020	Flexible work	Accessibility issues

4. GAP ANALYSIS

From the review of existing employment platforms and studies related to the gig economy and informal workforce, it is evident that several digital systems aim to connect workers with job opportunities. However, most of these platforms primarily focus on professionals, freelancers, or full-time job seekers and rely heavily on formal qualifications, experience, or technical expertise. While these systems are effective for a specific segment of users, they fail to address the needs of students, housewives, and individuals with limited or no formal education who possess practical skills.

Many existing platforms concentrate either on online digital freelancing or professionally trained service providers, leaving a significant gap in supporting local, home-based, and flexible work opportunities. Additionally, dependence on middlemen, platform-controlled communication, and lack of transparency often result in unfair wage practices and limited trust between workers and work providers. User verification and security mechanisms are also insufficient or inaccessible for economically weaker sections.

Furthermore, current systems rarely integrate all essential features—such as skill-based task posting, location-based matching, direct communication, and trust-building mechanisms—into a single unified platform. This fragmentation creates inconvenience for users and limits accessibility.

The proposed project, **MattersUrSkill**, addresses these gaps by providing an inclusive digital platform that brings together skill listing, task posting, location-based matching, direct worker–provider interaction, and secure authentication under one system. By emphasizing practical skill recognition over formal education and enabling flexible, home-based, and local work opportunities, the platform offers a comprehensive solution aimed at reducing unemployment and promoting economic independence.

5. PROBLEM STATEMENT

The closed-circuit television (CCTV) is one of the devices used to monitor the secured area for any intruders. The presence of surveillance cameras can act as a strong deterrent to criminals and thieves, as it is possible to identify people and track their movements, using the recorded footages.

The use of traditional CCTV to monitor the secured area, but they have their own set of limitations, some of which are requiring a huge volume of storage to store all the videos regardless there are intruders or not, does not notify the users when there are motions detected, and users must always check the CCTV recorded videos regularly to identity any intruders or unusual event occurring in the area and manually check for each mishappening. This creates a need of smarter CCTV cameras, which can ease the user's task by automating most of these tasks. Such a camera would prove to be better in terms of providing security, mitigating risks of crime, preventing crimes and also monitoring and recording the footage if the crime occurs.

6. OBJECTIVES :

1. To design and develop a scalable web-based platform that enables skill-based employment opportunities for students, housewives, and unemployed individuals.

2. To provide separate and secure registration for workers and work providers, allowing workers to showcase their practical skills and work providers to post task requirements.

3. To implement location-based matching to connect workers with nearby local service and home-based work opportunities.

4. To eliminate dependency on middlemen by enabling direct communication between workers and work providers through the platform.

5. To ensure trust and transparency by incorporating user verification, secure authentication, and a rating and feedback system.

6. To support flexible work options that allow students to earn while studying and housewives to work from home.

7. To utilize modern web technologies (MERN stack) to create a user-friendly, responsive, and secure application.

The objective of this project is to bridge the gap identified in existing employment platforms and to create an inclusive, skill-focused system that promotes economic independence, practical skill recognition, and social empowerment.

7. Tools/Technologies Used

For this project, various modern web technologies have been used to design and develop a skill-based employment platform. These technologies were selected to ensure scalability, security, and ease of use for both workers and work providers.

Programming Language: JavaScript

JavaScript is used as the main programming language for both frontend and backend development. It allows the creation of interactive and dynamic web applications and provides seamless communication between client and server. JavaScript is widely used, platform independent, and supported by all modern browsers.

Reasons for Selecting JavaScript :

1. Easy to learn and widely supported
2. Used for both frontend and backend
3. Fast execution and flexible
4. Large developer community
5. Supports modern web frameworks

- **Frontend Technology: React.js :**

  React.js is used to build the user interface of the application. It helps in creating reusable components and provides a smooth and responsive user experience.

- **Backend Technology: Node.js & Express.js :**

  Node.js and Express.js are used to develop the server-side logic and RESTful APIs. They enable efficient handling of user requests and smooth interaction with the database.

- **Database: MongoDB :**

  MongoDB is used to store user and task-related data. It is a NoSQL database that provides flexibility and scalability.

- **Security & Tools :**

  JWT and Bcrypt.js are used for secure authentication and password encryption. Git, GitHub, Postman, and Visual Studio Code are used for development and testing purposes.

8.METHODOLOGY

MattersUrSkill is a MERN stack based web platform designed to connect skilled and unskilled individuals with genuine work opportunities in a secure and transparent manner. The system follows a structured methodology to ensure smooth interaction between workers and work providers.

Initially, users register on the platform by selecting their role as either Worker or Work Provider. User authentication and authorization are handled using JWT (JSON Web Tokens) to ensure secure access. Passwords are encrypted using Bcrypt to protect user credentials.

After successful login, workers can create their profiles by adding skills such as home-based work, part-time tasks, freelancing, or local services. Work providers can post job requirements including job description, location, duration, and payment details. All user and job data is stored in MongoDB using structured schemas.

The system uses location-based matching to connect nearby workers with job providers, reducing dependency on middlemen. Users can communicate securely through the platform, and after task completion, both parties can provide ratings and feedback, ensuring trust and transparency.

The React-based frontend provides an interactive and user-friendly interface, while the Node.js and Express.js backend manages APIs, business logic, and database interactions. This complete process enables efficient job matching, skill recognition, and employment generation.

Interactive Design :

1. Start

The system initiates when a user accesses the MattersUrSkill web platform through a browser.

2. User Registration / Login

New users register by providing basic details, while existing users log in using their credentials.

3. Role Selection (Worker / Work Provider)

The user selects a role based on their requirement—either to offer services as a worker or to post work as a provider.

4. Authentication using JWT

Secure authentication is performed using JSON Web Tokens to validate users and protect unauthorized access.

5. Worker Adds Skills / Provider Posts Job

Workers list their skills and availability, while work providers post job details such as task description, location, and payment.

6. Data Storage in MongoDB
All user profiles, job postings, and activity data are securely stored in MongoDB using structured schemas.

7. Location-Based Job Matching
The system matches workers and jobs based on location to ensure nearby and convenient work opportunities.

8. User Communication
Workers and providers communicate directly through the platform for task clarification and coordination.

9. Task Assignment & Completion
Once both parties agree, the task is assigned and completed within the defined time and conditions.

10. Rating and Feedback System
After task completion, users rate each other, improving trust and transparency on the platform.

11. Secure Data Update
All task status, ratings, and feedback are updated securely in the database.

12. End
The process concludes successfully after task completion and feedback submission.

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