

AFFORDABLE DEALS PRIVATE LIMITED 515, Patparganj Industrial Area New Delhi - 110092 GSTIN :07AAOCA9638B1ZI

### To Whomsoever it may concern

This is to certify that **Karan Ghai**, student of Thapar Institute of Engineering and Technology Patiala, (Roll No 101915185) has done a project/work entitled "City Livelihood Centre(CLCUP)" during his/her industrial training program at our organization, **Affordable Deals Private Limited**. The company has no objection for submitting this report at TIET for final presentation and viva for the award of B.Tech.(Electronics and Communication Engineering/ Electronics and Computer Engineering), TIET Patiala. The industrial training program of the student was started from 5th Jan 2023 and to be concluded on 5th July 2023.

Name of Industrial Mentor/HR

ASHIOTOSH AGRAWAL

Signature of Industrial Mentor/HR Charles

Date: 31st May 2023

# 1. Acknowledgement

I would like to take this opportunity to express my heartfelt gratitude to all the individuals and institutions who have played a significant role in the successful completion of my six-month internship training. Their support, guidance, and encouragement have been invaluable throughout this journey.

First and foremost, I would like to extend my sincere thanks to my faculty mentor, Dr. Dinesh Bharadwaj. Your unwavering support, expert guidance, and insightful feedback have been instrumental in shaping my understanding of the subject matter. Your dedication to my growth and development as a professional has been truly commendable, and I am grateful for the time and effort you invested in mentoring me during this internship.

I would also like to express my deepest appreciation to my industry mentor, Mr. Ankush Singla. Your extensive knowledge, industry expertise, and practical insights have provided me with invaluable learning experiences. I am truly grateful for the opportunity to learn from you and for your continuous support throughout the internship.

Furthermore, I would like to extend my thanks to Thapar Institute of Engineering and Technology, Patiala, for providing me with this incredible opportunity. The institute's commitment to experiential learning and industry collaborations has played a pivotal role in shaping my professional growth. I am thankful for the resources, facilities, and platform that the institute provided, enabling me to gain hands-on experience and apply my academic knowledge to real-world scenarios.

I would also like to acknowledge the contributions of all the faculty members at Thapar Institute of Engineering and Technology, Patiala. Their dedication to imparting knowledge and fostering a nurturing learning environment has been instrumental in shaping my academic and professional journey.

Lastly, I would like to express my deepest appreciation to my family, friends, and loved ones for their unwavering support and understanding throughout this internship. Their encouragement, belief in my abilities, and constant motivation have been crucial in helping me overcome challenges and stay focused on my goals.

To everyone mentioned above and to all those who have supported me in various ways but may not be named here, I offer my heartfelt gratitude. Each of you has played a significant role in shaping my internship experience and contributing to my personal and professional growth.

Thank you.

Karan Ghai

#### 2. Abstract

This report provides an overview of my six-month internship training conducted with the support of Thapar Institute of Engineering and Technology, Patiala. Under the mentorship of Dr. Dinesh Bharadwaj,my faculty mentor, and Mr. Ankush Singla, my industry mentor, I had the opportunity to gain practical experience and bridge the gap between theoretical knowledge and its real-world application. The internship aimed to enhance my skills, expand my knowledge base, and develop a deeper understanding

of industry challenges. Throughout the internship, Dr. Dinesh provided expert guidance, supervision, and continuous feedback, enriching my understanding of the subject matter and assisting me in executing tasks effectively. Mr. Ankush Singla, my industry mentor, shared invaluable insights derived from his extensive industry experience, offering a unique perspective on the application of theoretical concepts in practical scenarios. His mentorship and guidance helped me navigate industry challenges and deepen my understanding of its operations. Thapar Institute of Engineering and Technology, Patiala, played a crucial role in facilitating this internship, providing the necessary resources, facilities, and support. The institute's commitment to industry-academia collaboration and experiential learning opportunities contributed significantly to my professional growth and development. This report documents the projects, tasks, and experiences encountered during the internship, highlighting the objectives, methodologies, and outcomes. It underscores the practical application of theoretical concepts and reflects upon the invaluable contributions of my mentors and Thapar Institute

of Engineering and Technology, Patiala, in making this internship a transformative learning experience.

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# 4. Affordable Deals Private Limited

An ISO 9001:2015 certified organization "Affordable Deals Private Limited" was established in the year 2016. We are registered in the Start-up India program launched by the Honourable Prime minister Of India. We are also registered under MSME of the Government of India. We want to be known across the consumer world as an Organization which makes any Service, buying / purchase affordable for a customer, backed with core values like Integrity, Ethics and Reliability

#### **Our Values**

- **ETHICS**: The foundation of this company is built on the main pillars of ethics, honesty and integrity, and have never we compromised with these elements of our business values
- TRANSPARENCY & INTEGRITY: We have nothing to hide.
- **QUALITY:** Inculcate uncompromised quality within every element of the organization and the services we provide
- **AFFORDABILITY:** Make every customer interaction affordable and pocket friendly
- **DEPENDABILITY:** Build trust through commitment and customer delight

#### **Our Quality Policy**

Affordable Deals Private Limited will consistently provide products and services that meet or exceed the expectations of our Customers. We will actively pursue ever improving quality through programs that enable each employee to do their job right the first time as well as every time and maintain the highest quality standards with no compromise in ethics and integrity

- Improving Customer Satisfaction through uncompromised ethics and Integrity
- Reducing Cost with Increased Profitability
- Developing employees through a process of continuous learning and engagement
- Enhancing environmental and social responsibility

## 5. Introduction

City Livelihood Centre(CLCUP) is a groundbreaking web application, meticulously crafted on the Django framework, with a SQL Lite database at its core. This transformative platform has been specifically designed to address the employment needs of Ayodhya, a city located in Uttar Pradesh. By connecting skilled individuals with diverse employment opportunities, ranging from cooks and drivers to service providers, CLCUP aims to stimulate economic growth and empower the local community. Serving as a vital intermediary between job seekers and government or private organizations, CLCUP facilitates cooperation, fostering a collaborative environment that benefits both individuals and businesses.

With its user-centric design and cutting-edge features, CLCUP revolutionizes the job-seeking process in Ayodhya. By providing a seamless and efficient platform for individuals to showcase their talents and skills, CLCUP opens up a world of opportunities previously inaccessible to many. Through its comprehensive database and advanced search functionality, employers can easily discover and connect with local talents, ensuring a robust and dynamic job market that fuels the city's economic progress.

In addition to its role as an employment portal, CLCUP goes beyond the traditional jobmatching approach. It actively contributes to the overall development of Ayodhya by promoting entrepreneurship and community engagement. By facilitating connections between citizens and organizations, CLCUP nurtures a sense of unity, collaboration, and shared growth. By harnessing the power of technology and fostering cooperation, CLCUP becomes a catalyst for positive change, driving Ayodhya towards a prosperous future where economic opportunities flourish and citizens thrive.

# 6. Background

Ayodhya, located in Uttar Pradesh, India, is a city with a rich cultural heritage and historical significance. As a renowned pilgrimage site and a hub of cultural activities, Ayodhya possesses immense potential for economic growth and development. However, like many cities in India, Ayodhya grapples with the challenge of unemployment and the underutilization of local talent.

To address these pressing issues and tap into the city's vast potential, the CLCUP project was conceived as a collaborative effort between the local government and private stakeholders. The project aims to create a robust web application that serves as a comprehensive platform connecting job seekers with employment opportunities in Ayodhya. Leveraging the power of technology and built on the reliable Django framework, CLCUP aims to bridge the gap between skilled individuals and organizations seeking their services.

The driving force behind CLCUP is the vision to stimulate economic growth and enhance livelihoods for the residents of Ayodhya. The city boasts a wealth of skilled artisans, culinary traditions, and cultural heritage, which can be harnessed to create sustainable employment opportunities. CLCUP seeks to tap into these local resources and foster a dynamic job market that enables individuals to showcase their skills and connect with potential employers.

Furthermore, the CLCUP project aligns with broader government initiatives focused on promoting entrepreneurship, skill development, and job creation. By prioritizing local employment, CLCUP aims to reduce dependency on distant job markets and retain talent within Ayodhya, thereby contributing to the overall socio-economic development of the city.

# 7. Training Period

As a Software Developer Intern on the CLCUP project, I began my training period by familiarizing myself with the project's objectives and scope. This allowed me to identify the technical requirements needed to achieve the project goals. During the initial weeks of my internship, I focused on learning the tech stack, which included Django, Rest API and SQLite.

To acquire the required knowledge and skills, I spent time reading relevant documentation and referencing online resources. This approach proved to be effective in gaining a good understanding of the technologies involved. However, the real challenge came in understanding the source code. This required a considerable amount of time and effort, but I remained committed to developing a solid understanding of the codebase. Apart from the above training, I was also imparted knowledge on basics of UNIX, MobaXterm.

My training period as a Software Developer Intern on the CLCUP project has been a rewarding experience as of now. It has provided me with an opportunity to learn new technologies, improve my skills, and gain valuable industry experience

#### 8. Phase 1-Formation of the Basic Functionalities

# • Worked on the UI of the home page to make it more relatable to the official government website

In order to create a seamless user experience and establish trust among users, significant efforts were dedicated to enhancing the user interface (UI) of CLCUP's home page. By aligning the design elements, color scheme, and overall aesthetics with the official government website, we aimed to create a sense of familiarity and authenticity. The user interface was carefully curated to reflect the government's branding guidelines, ensuring that visitors feel comfortable and confident while navigating the platform. The redesigned home page features a clean layout, intuitive navigation, and clear sections, allowing users to easily access relevant information and engage with the available features.

#### • Built a comprehensive registration form for employees

To enable individuals to join the CLCUP platform and access employment opportunities, a user-friendly registration form was developed. The registration form collects essential information from potential employees, including personal details, contact information, skills, and employment preferences. By ensuring the form is easy to understand and fill out, we aimed to streamline the registration process and encourage a higher number of registrations.

#### Implemented a robust login system for both employees and employers

To ensure secure access to the CLCUP platform, a robust login system was implemented for both employees and employers. The login system requires users to provide their registered Aadhar Number and password to access their respective accounts.

# • Creation of an employee form and connection with a SQL database to store relevant information.

The creation of an employee form involves the development of a form that collects information on employees such as their name, number of employees required, for what skills and other relevant data. The collected data must be stored securely in a SQL database, allowing authorized personnel to access the information when required. This process should be optimized to ensure efficiency, accuracy, and security.

### 9. Phase 2: WorkFlow of the Web-App

 Integration of the ONIT backend with CLCUP as an on-demand service, including the development of an input form, posting requests on the ONIT backend, and retrieving information via REST APIs.

This involves the seamless integration of the ONIT backend with CLCUP, enabling the provision of on-demand services to customers. The development of an input form is required to collect the necessary fields and data required to process the customer's request. Posting requests on the ONIT backend using REST APIs is necessary to initiate the service request and retrieve the requested information. The integration process should be designed to be efficient, user-friendly, and secure.

• Familiarization with and integration of the Razor Pay payment gateway demo version into the employer's module for payment processing.

The integration of Razor Pay payment gateway demo version requires a thorough understanding of its features and functionalities. Once familiarized, the gateway must be integrated into the employer's module to allow for easy and secure payment processing. The integration process should be seamless, ensuring a user-friendly experience for the employer.

• Development of a feature to retrieve a list of available employees +2 for processing the requested services.

This involves the development of a feature that retrieves a list of available employees, who have the required skills and expertise to process the requested services. The feature should filter out unqualified employees and only display those who meet the specified criteria.

• Limit the employees information to be shown only after the payment is being settled.

To ensure data privacy and security, access to employee information should be limited until payment settlement is complete.

 Addition of an internal service booking feature in the employer's module to streamline the process of requesting services.

This involves the development of an internal service booking feature that allows

employers to quickly and easily request services. The feature should be userfriendly, allowing employers to select the services they require and input any relevant information. This process should be optimized to ensure efficiency and accuracy in service booking.

• Improvement of the UI gallery with a responsive design suitable for all pixel sizes, including the addition of a feature to delete images in the administrator module.

Improving the UI gallery involves enhancing the user interface by making it responsive to different screen sizes. This process includes the addition of features that enable the administrator to delete images and manage the gallery efficiently. The design process should be optimized to ensure a seamless user experience across all devices.

#### 9. Phase 3: Final Workflow

• Facilitating effective communication and timely updates between employers and employees.

The CLCUP platform incorporates a comprehensive notification system that ensures seamless communication and timely updates between employers and employees. By providing notifications, CLCUP enhances communication channels, improves productivity, and promotes transparency in the employment process.

 Aesthetically pleasing design elements for an engaging and user-friendly experience.

The user interface of CLCUP has undergone significant enhancements, incorporating visually appealing design elements to create an engaging and user-friendly experience. The revamped interface focuses on intuitive navigation and aesthetically pleasing visuals, enhancing usability. These improvements optimize user experience, allowing employers and employees to easily navigate the platform, access relevant information, and perform tasks effortlessly, resulting in an enhanced overall user experience.

• Efficient Attendance System for Accurate tracking of employee presence for streamlined workforce management.

CLCUP features an efficient attendance system that enables employers to accurately record employee presence. This system provides a reliable means of tracking employee attendance, facilitating streamlined workforce management. By efficiently capturing and managing attendance data, employers can make informed decisions regarding resource allocation, work schedules, and performance evaluations, ultimately improving productivity and ensuring transparent attendance tracking within CLCUP.

• Integrated Attendance System in Admin Module: Centralized access to employee attendance records for comprehensive record-keeping.

To centralize attendance management, the attendance system has been seamlessly integrated into the admin module of CLCUP. This integration allows administrators to easily access and review employee attendance records, including dates of presence or absence. By providing centralized access to attendance data, the admin module facilitates comprehensive record-keeping, ensuring compliance with employment regulations and promoting efficient management of employee attendance within CLCUP.

 Manual Attendance System for Salary Receipt Management: Simplifying salary documentation for accurate compensation.

developed a manual attendance system that enables employers to download and upload salary receipts, simplifying salary documentation. This system ensures accurate charging and management of employee salaries based on their attendance records. By providing a user-friendly interface for handling salary receipts, CLCUP simplifies the salary management process, ensuring accurate compensation for employees and facilitating efficient payroll management within the organization.

• The CLCUP platform incorporates an integrated system that leverages SMS notifications to enhance communication with registered employees.

Following a successful employee registration process, the system automatically triggers the delivery of text messages to the provided mobile numbers. These text messages serve as immediate confirmations of successful registration and provide pertinent information, including login credentials, instructions for profile activation, and relevant guidelines. By utilizing SMS notifications, CLCUP ensures timely and efficient communication, enabling employees to stay informed and engaged with the platform

## 10. Current Phase

 Course Management Module: Empowering instructors to add courses and provide training to unskilled employees.

A key component of CLCUP is the development of a comprehensive Course Management Module. This module enables instructors to seamlessly add courses and training programs tailored to the needs of unskilled employees. By utilizing this module, instructors have the ability to create detailed course descriptions, specify training objectives, and define course durations. This empowers instructors to play a vital role in bridging the skills gap by offering valuable training opportunities to unskilled workers, equipping them with the necessary skills and knowledge to excel in various employment sectors.

• User Registration Module: Enabling unskilled workers to register for training courses and access valuable learning resources.

To facilitate the registration process for unskilled workers, CLCUP integrates a User Registration Module. This module allows aspiring individuals to easily register themselves for the available training courses. Through a user-friendly interface, prospective trainees can create their profiles, provide necessary personal details, and select the desired courses they wish to enroll in. By integrating this module, CLCUP ensures accessibility and inclusivity by providing unskilled workers with a seamless pathway to acquire new skills, expand their employment opportunities, and enhance their overall professional growth.

# 14. Plan and Ideology Followed:

- Begin by thoroughly understanding the requirements of the new feature to be implemented.
- Engage with project stakeholders to clarify any uncertainties and ensure that all necessary details are understood.
- Develop a comprehensive and well-thought-out logic for executing the feature.
- Write clear and organized source code that follows established best practices.
- Optimize the code for optimal performance through careful analysis and modification.
- Test the feature against all applicable constraints to ensure it meets all requirements and performs as expected.
- Follow a professional and systematic approach throughout the process to ensure successful implementation of the feature.

## 15. Screenshot of the Web-App

# 16. Challenges Faced

- Acquiring knowledge of new technologies, such as Django, RestApi, and Postman, was a significant challenge that required dedicated effort.
- Debugging code to locate errors was a frequent obstacle that required patience and attention to detail.
- Developing efficient solutions often required analytical thinking and the ability to devise logical approaches.

#### 17. Outcomes

- Django
- SQL Lite
- Postman
- HTML/CSS

In addition to that, I have further developed my skill set by acquiring proficiency in employing top-notch software engineering methodologies, producing well-organized and legible code, managing project effectively and delivering presentations, as well as managing my workload while collaborating with the team.

# 18. References