



EMPLOYEE TRACKING SYSTEM USING ANDROID APPLICATION

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Abstract: The *Employee Tracking System Using Android Application* is an innovative solution aimed at enhancing employee management and improving organizational productivity by leveraging mobile technology. Utilizing GPS technology, the system provides accurate and reliable location data, ensuring that employees are where they are expected to be during work hours. This feature is particularly valuable for companies with staff or is frequently in the field, ensuring transparency and accountability in their daily operations. The mobile application simplifies attendance management by allowing employees to log in and out directly from their devices, eliminating the need for manual timesheets or traditional punch cards. This digital approach reduces the administrative burden on team manager and management teams while also minimizing errors in attendance records. In addition to attendance tracking, the system offers functionalities such as task assignment, which enables managers to allocate tasks and monitor progress seamlessly. The ability to assign tasks and monitor completion in real-time improves task visibility and enhances communication between managers and their teams, fostering a more structured workflow.

Index Terms -Attendance tracking, location monitoring, cncs Algoritham, check in /check out.

I. INTRODUCTION

Application is a digital platform designed to make *employee tracker* more convenient by giving users an intuitive interface to simplify the process with automate mobile application to avoid many employees no longer confined to a traditional office environment, businesses must adapt their workforce management strategies to ensure accountability and maintain productivity. Traditional methods, such as manual timesheets, physical punch cards, or desktop-based tracking systems, have proven to be inefficient, prone to errors, and often inadequate for managing today's flexible work arrangements. These systems typically require significant manual effort, are susceptible to inaccuracies, and cannot provide real-time data, which is critical in a fast-paced work environment. The *Employee Tracker Using Mobile Application* offers a modern, technology-driven solution to these challenges by harnessing the power of mobile devices and real-time tracking. Through the use of mobile technology, employees can conveniently log their attendance, check in at job sites, and record their working hours directly from their smart phones, eliminating the need for physical infrastructure or manual record-keeping. This system also allows for real-time location tracking, ensuring that managers can verify an employee's presence at the required location without the need for constant communication or physical oversight. This feature is particularly valuable for organizations with remote or mobile employees, such as

sales teams, delivery personnel, or field service technicians, where knowing the location of team members is critical to operational efficiency. The application not only ensures that employees are held accountable for their time and location but also provides managers with real-time insights into their teams' activities. Managers can track the attendance status of employees, view their current locations, and monitor task progress, all from a single, user-friendly interface. This simplifies management processes and allows for quicker decision-making. In addition to attendance and location tracking, the system supports task assignments and performance monitoring, enabling managers to set specific goals and track the progress of tasks throughout the workday. By automating the tracking process and providing instant access to employee data, the *Employee Tracker Using Mobile Application* minimizes the risk of human error, increases transparency, and enhances overall organizational productivity

For this study secondary data has been collected. From the website of KSE the monthly stock prices for the sample firms are obtained from Jan 2010 to Dec 2014. And from the website of SBP the data for the macroeconomic variables are collected for the period of five years. The time series monthly data is collected on stock prices for sample firms and relative macroeconomic variables for the period of 5 years. The data collection period is ranging from January 2010 to Dec 2014. Monthly prices of KSE -100 Index is taken from yahoo finance.

II. LITERATURE SURVEY

1 “TITLE: STREET-LEVEL LEADERSHIP: RE-CONCEPTUALIZING THE ROLE OF THE MANAGER”

Author: Anne Mette Moller, Caroline Howard Gron.

Street-level workers are notoriously difficult to manage. Over the years, scholars have highlighted the importance of social dynamics and informal and collective leadership in street-level contexts. Yet, the question of how formal managers can support street-level workers' performance and well-being remains underexplored. Building on insights from the street-level and generic leadership literatures, the authors seek to delineate a role for formal managers that take seriously the particularities of the street-level context. The authors develop a concept of street-level leadership that is underpinned by a relational approach and focused on activating street-level workers' professional knowledge and building supportive communities, with the purpose of supporting professional uses of discretion, conscientious prioritizations, and the ability to handle moral dilemmas and emotional strain. Empirical examples illustrate street-level leadership in practice.

2 TITLE: DESCRIPTIVE AND PREDICTIVE METRICS OF HRM-PATHWAY TOWARD ORGANIZATIONAL PERFORMANCE

AUTHOR: RAJASSHRIE PILLAI, BRIJESH SIVATHANU.

To understand human resource (HR) practices outcomes on HR decision making, strategic human resource management (HRM) and organizational performance by exploring the HR data quality along with descriptive and predictive financial and non-financial metrics. This work utilizes the grounded theory method. After the literature was reviewed, 113 HR managers of multinational and national companies in India were interviewed with a semi-structured questionnaire. The collected interview data was analyzed with NVivo 8.0 software. It is interesting to uncover the descriptive and predictive non-financial and financial metrics of HR practices and their influence on organizational performance. It was found that HR data quality moderates the relationship between the HR practices outcome and HR metrics. This study found that HR metrics help in HR decision-making for strategic HRM and subsequently affect organizational performance.

3 TITLE: EMPLOYEE TIME THEFT: CONCEPTUALIZATION, MEASURE DEVELOPMENT, AND VALIDATION

AUTHOR: [CRYSTAL M. HAROLD.](#)

Despite its prevalence, high cost, and practical import, employee time theft has received scant research attention. To facilitate future scholarship on this important topic, the present research endeavors to clarify the conceptualization of time theft and advance understanding regarding the range of its behavioral manifestations, develop and validate an instrument to assess time theft, and provide preliminary insights into its nomological net. Results, gathered across nine samples of employees who are paid on an hourly wage scale, suggest that time theft is a multidimensional formative construct, is distinct from other deviant work behaviors (e.g., withdrawal, property theft), and is influenced by instrumental (e.g., pay satisfaction) and expressive motives (e.g., boredom). Finally, time theft explained incremental variance in criterion variables (e.g., receipt or enactment of interpersonal help) controlling for the effects of other discrete manifestations of deviance (e.g., withdrawal). Implications for future scholarship and managerial practice are discussed.

4 TITLE: ENHANCING FIELD EMPLOYEE PRODUCTIVITY AND PERFORMANCE WITH ANDROID SOFTWARE SOLUTION AND MACHINE LEARNING-BASED PREDICTIVE ANALYTIC MODEL

Author: Vijayakumar Chilamkurthi, Bhupesh Deka.

This project presents an innovative Android software solution designed to enhance the productivity and performance of field employees through the integration of machine learning-based predictive analytics. Recognizing the challenges faced by employees in dynamic work environments, the software leverages GPS tracking and real-time data analysis to optimize routes, monitor on-field activities, and provide actionable insights. By utilizing predictive models, the application can anticipate potential obstacles, such as traffic delays or low battery levels, enabling users to make informed decisions that improve efficiency. Through a user-friendly interface, employees can access essential features, including navigation assistance and productivity indicators, thereby streamlining their daily tasks. This project not only addresses the fragmentation of existing solutions but also aims to foster a culture of continuous improvement and enhanced performance in field operations.

5 TITLE: TRACWORK: AN ON-FIELD EMPLOYEE TRACKING SYSTEM

Author: Mobeen Nazar, Choudhary Saif Ali, Hassnain Khan.

The internet has transformed the world into a global village, benefiting our society as a whole and empowering people in a variety of ways. Many mobile applications are becoming a part of people's daily lives and assisting them in their jobs or daily routines, thanks in part to the phenomenal growth of Internet usage over the last 21 years. Previous research has found a scarcity of high-quality apps that cover all bases. This project's primary goals are to combine fragmented market systems into a product capable of performing functions such as tracking an employee's on-field movement using GPS; assisting employees in navigating to their next destination; maintaining and improving productivity levels using indicators such as battery status; current and past location; and so on. We highlight previous work and how we learned to extract a model that harmonises current systems while also improving quality of life in this study. We investigated numerous approaches, methods, and procedures before applying them to the development of the system. This integrated approach not only simplifies daily operations but also enhances the overall quality of life for users by reducing the time spent switching between apps and improving task efficiency.

III. EXISTING SYSTEM

Capabilities and are often incapable of providing detailed insights into employee productivity or their exact location during work hours, leading to issues with accountability and inefficiency. In many organizations, employee tracking is still performed using outdated systems like manual attendance registers, desktop-based attendance software, or physical punch cards. These systems are not only time-consuming but

also error-prone and difficult to manage for field-based or remote employees. Traditional systems lack real-time

DISADVANTAGES

- Manual processes like filling out timesheets or using punch cards require significant time from both employees and managers, leading to inefficiencies in tracking attendance.
- Traditional systems do not provide real-time tracking, making it challenging for managers to oversee employee attendance and productivity effectively.
- Physical punch cards and manual registers are lead to manual errors .
- This system has more manual work.
- It is very time consuming process.
- It manages the record in unorganised format.

IV. PROPOSED SYSTEM

The Employee Tracker Using Mobile Application presents a contemporary solution to the challenges of employee tracking by harnessing mobile devices and tracking technology for real-time attendance and location monitoring. With this innovative system, employees can conveniently log their attendance using their smart phones, ensuring accurate timekeeping without the need for manual processes. Managers can assign tasks directly through the app, allowing for better workflow management and task delegation. The application enables real-time monitoring of employee activities, and support. Additionally, it generates performance reports on-demand, providing managers with critical insights into team productivity and engagement. The mobile platform enhances organizational transparency and accountability by allowing both employees and managers to access pertinent information quickly. By integrating these features, the proposed system eliminates the inefficiencies associated with traditional tracking methods and promotes a more agile and it also has the feature of tracking the employee within particular range of distance if the employee is not in that range of areas manager gets the notification message at responsive work environment.

ADVANTAGES

- The application provides real-time data on employee attendance and location, enabling managers to monitor their teams effectively.
- This android application saves valuable time ensures and greater accountability in system activities.
- Managers can assign tasks directly through the app, making it easier to manage workloads and prioritize tasks for team members.
- The system generates performance reports on-demand, providing valuable insights into employee productivity without the need for manual data compilation.
- By automating attendance tracking and reporting, the system decreases the time spent on administrative tasks, allowing managers to focus on strategic initiatives.
- The application can implement robust security measures to protect sensitive employee data, reducing the risks associated with traditional manual systems that are prone to security issues.

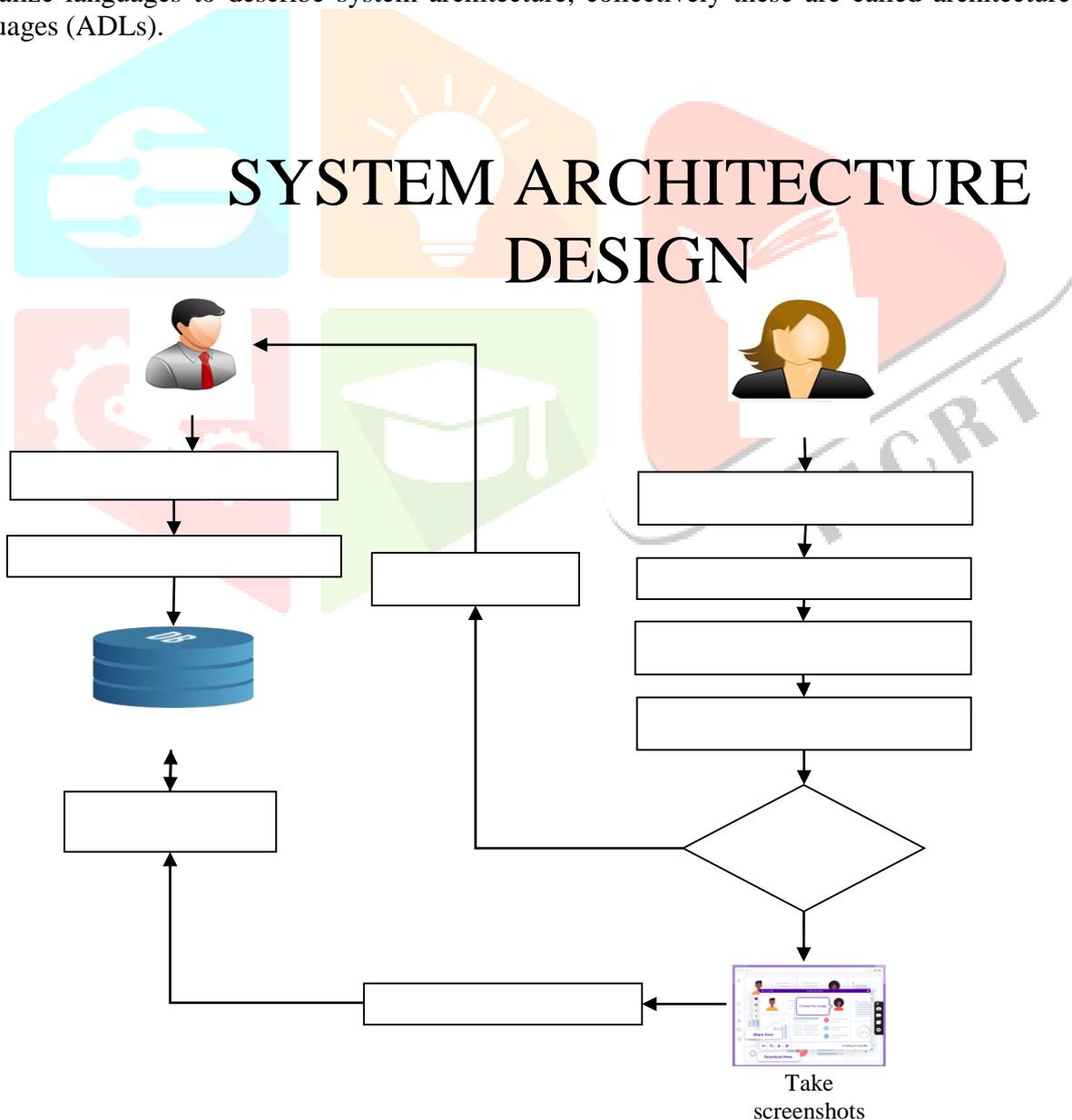
. V.METHODOLOGY

- Feature Extraction: CNNs are designed to automatically extract meaningful features from images and videos, without the need for manual feature engineering. This makes them well-suited for complex tasks such as object recognition, face detection, and scene segmentation.
- Spatial Invariance: CNNs are capable of learning features that are invariant to translation, rotation, and scaling of the input image. This means that they can recognize objects and patterns regardless of their location or orientation in the image.

- Hierarchical Representation: CNNs learn hierarchical representations of the input data, with lower layers learning basic features such as edges and corners, and higher layers learning more complex features such as object parts and textures.
- Parameter Sharing: CNNs use shared weights across different regions of the input image, reducing the number of parameters required to train the model and improving its generalization performance.
- Data Augmentation: CNNs can be trained on augmented versions of the input data, such as randomly cropped or rotated images, to increase the size of the training set and reduce overfitting.
- Real-time Performance: CNNs can be optimized for parallel processing using GPUs or other specialized

VI.SYSTEM ARCHITECTURE

A system architecture or systems architecture is the conceptual model that defines the structure, behavior, and more views of a system. An architecture description is a formal description and representation of a system, organized in a way that supports reasoning about the structures and behaviors of the system. System architecture can comprise system components, the externally visible properties of those components, the relationships (e.g. the behavior) between them. It can provide a plan from which products can be procured, and systems developed, that will work together to implement the overall system. There have been efforts to formalize languages to describe system architecture, collectively these are called architecture description languages (ADLs).



VII.CONCLUSION

In conclusion, the Employee Tracker Using Mobile Application offers a forward-thinking solution to the complexities of employee tracking and management in today's dynamic work environments. By leveraging mobile devices the application facilitates accurate attendance logging, efficient task assignment, and real-time activity monitoring, all of which contribute to enhanced productivity and accountability. Additionally, the innovative feature ensures that managers are promptly notified if employees step outside designated areas, reinforcing generate acknowledgement message to manager.

VIII.ACKNOWLEDGEMENTS

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