***“*Develop A Smart Attendance Capturing Mobile App*”***

**A Project Report Submitted to**

**Rajiv Gandhi Proudyogiki Vishwavidyalaya**

**Towards Partial Fulfillment for the Award of**

**Bachelor of Engineering in Computer Science Engineering**

***Submitted by:***

***Guided by:***

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***Acropolis Institute of Technology & Research, Indore***

**July - Dec 2022**

EXAMINER APPROVAL

The Project entitled ***“*Develop A Smart Attendance Capturing Mobile App*”*** submitted by **Shubham Patel(0827CS201237), sarwesh lowanshi(0827CS201219),Shivam chouhan(0827CS201228),Vikash rawat(………)** has been examined and is hereby approvedtowards partial fulfillment for the award of ***Bachelor of Technology*** ***degree in Computer Science Engineering*** discipline, for which it has beensubmitted. It understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein, but approve the project only for the purpose for which it has been submitted.

**(Internal Examiner)** **(External Examiner)**

**Date:** **Date:**

GUIDE RECOMMENDATION

This is to certify that the work embodied in this project entitled **“Develop A *Smart Attendance Capturing Mobile App* ”**submitted by **Shubham Patel(0827CS201237), sarwesh lowanshi(0827CS201219),Shivam chouhan(0827CS201228),Vikash rawat(………)**is asatisfactory account of the bonafide work done under the supervision of ***Ankit Jain***, is recommended towards partial fulfillment forthe award of the Bachelor of Technology (Computer Science Engineering) degree by Rajiv Gandhi Proudyogiki Vishwavidhyalaya, Bhopal.

**(Project Guide)** **(Project Coordinator)**

STUDENTS UNDERTAKING

This is to certify that project entitled ***“*Develop A *Smart Attendance Capturing Mobile App”*** has developed by us under the supervision of ***Antik Jain***. The whole responsibility of work done in this project is ours.The sole intension of this work is only for practical learning and research.

We further declare that to the best of our knowledge; this report does not contain any part of any work which has been submitted for the award of any degree either in this University or in any other University / Deemed University without proper citation and if the same work found then we are liable for explanation to this.

**Shubham Patel(0827CS201237)**

**Sarwesh lowanshi(0827CS201219)**

**Shivam Chouhan (0827CS201228)**

**Vikash Rawat(…………………………..)**

Acknowledgement



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**Shubham Patel(0827CS201237), Sarwesh lowanshi(0827CS201219), Shivam chouhan (0827CS201228) Vikash rawat (……………….)**

Executive Summary



**Develop A *Smart Attendance Capturing Mobile App***

This project is submitted to Rajiv Gandhi Proudyogiki Vishwavidhyalaya, Bhopal (MP), India for partial fulfillment of Bachelor of Engineering in Information Technology branch under the sagacious guidance and vigilant supervision of ***Ankit Jain***.

The project is based on Machine Learning, concerned with algorithms inspired by the structure and function of the brain called artificial neural networks. In the project, TensorFlow is used, which is an open-source software library created by Google for machine learning applications. It is used for detecting, identifying and tracking objects through the camera in real time. The project uses a pre-trained model on Microsoft Common Objects in Context (COCO) data set , which contains approximately all common objects. The purpose of this project is to implement 'Students and vehicles counter' in the college in real-time.

**Key words** : Image Processing, Neural Networks, Tensorflow

*“Where the vision is one year, cultivate flowers;*

*Where the vision is ten years, cultivate trees;*

*Where the vision is eternity,*

*cultivate people.” - Oriental Saying*

Introduction



In current scenario, marking attendance in the company is the essential tasks of the record handlers. The management and maintenance of employee information is a key task for any company. it is not easy to manage the details and attendance of all the employees in paper. so, for overcome this problem we can design a proper software for attendance. Later, this task is carried out by the desktop applications. The desktop application is a standalone application installed in the particular desktop or laptop and the tasks can be performed only with that particular desktop system.

Another method for attendance entry is web-based application. In this method, the attendance and their performance details are uploaded in a server through internet and the users such as employee, company manager, company leader can view the performance and attendance through browsers with internet using any one of the devices such as desktop, laptop, and hand-held mobile devices. This system is active only when the internet is on since the data are not been updated with the local database.

These limitations of the traditional systems are overcome by the mobile applications. The mobile application allows the users to install this application in their mobile devices. The user can update the employee attendance details in the local mobile database by connecting their mobile devices with the server which keep the attendance details through internet. Hence, the updated attendance details can be viewed even offline. In order to reduce the manual work and to achieve more efficiency in managing the student information, a mobile application use to manage the employee attendance more easily and effectively. The proposed application can store employee information to the server database and it can be retrieved by the mobile phone and save that information in their local mobile database. Through this system, manager can easily record the employee attendance and can generate the reports.

**Problem Statement**

* Niger Insurance PLC makes use of a pen and notebook to check attendance of its employees with this system, employees write their names, time of arrival and signature in ruled columns in the notebook. This data is used to process the salary of employees given account of times when they were late and absent. The issue with this system is that employees tend to falsify entries and indirectly

***OBJECTIVE***

Some of the objectives of attendance taking are: **To know the whereabouts of every employee for safety and other reasons**. To determine the districts average daily attendance for state aid reimbursement. Attendance management system **keeps track of daily attendance, working hours, breaks, login, and logout time**. It prevents staff's time theft. An attendance management system integrates all attendance devices such as smart cards, biometric, and facial recognition devices in real-time.

So, by designing the proper attendance capturing mobile app, it is easy to maintain. And it is faster process. It works by detecting the face or by the help of QR Coad, fingerprint etc. So, it is very useful software not only for company purpose but also for college and many other places also

***SCOPE OF THE PROJECT***

-Provides facility for the automated attendance of students.

Uses live face recognition to recognize each individual and mark their attendance automatically.

-Utilizes video and image processing to provide inputs to the system.

Facility of marking manual attendance.

Notification via email if there is a lack of attendance.