

BMS EDUCATIONAL TRUST

BMS COLLEGE OF COMMERCE AND MANAGEMENT

**No.97, Kavi Lakshmisha Road, VV Puram,
Bengaluru-560004**



**BACHELOR OF COMPUTER APPLICATIONS
(BCA606P)**

A project report on

**ATTEDANCE MANAGEMENT SYSTEM USING QR-CODE
VERIFICATION**

Submitted in partial fulfilment of requirement
for the award of the degree

BACHELOR OF COMPUTER APPLICATIONS

of

Bengaluru City University

By

**DHANUSH RAJU S [R1922819]
MANOJ S [R1922831]**

Under the guidance of

Mrs. Roopashree CS
Asst. Prof, Dept. of Computer Applications
BMS College of Commerce and Management,
Bengaluru-560004



BMS College of Commerce and Management
No.97, Kavi Lakshmisha Road, VV Puram,
Bengaluru-560004

2022

BMS College of Commerce and Management
VV Puram, Bengaluru-560004
Department of Bachelor of Computer Applications

2022



CERTIFICATE

This is to certify that the project entitled

ATTEDANCE MANAGEMENT SYSTEM USING QR-CODE VERIFICATION

Submitted in partial fulfilment of requirement for the award of the degree of

BACHELOR OF COMPUTER APPLICATIONS

of

Bengaluru City University

is a result of the bonafide work carried out by

**DHANUSH RAJU S [R1922819]
MANOJ S [R1922831]**

During the academic year 2022

Internal Guide

Mrs. Roopashree CS
Asst. Prof, Dept. of Computer Applications
Bengaluru

Principal

Dr. Pankaj Choudhary
Principal, BMSCCM.

ACKNOWLEDGEMENT

The satisfaction and euphoria that accompany the successful completion of any task would be incomplete without the mention of the people who made it possible, whose constant guidance and encouragement crowned our efforts with success.

I convey my sincere gratitude to **Dr. Pankaj Choudhary, Principal, BMS College of Commerce and Management** for providing all the facilities needed for the successful completion of the project.

I convey my sincere gratitude to my Guide, **Mrs. Roopashree CS, Asst. Professor, Dept. of Computer Applications, BMS College of Commerce and Management** for providing all the facilities needed for the successful completion of the project.

I am thankful to all the teaching and non-teaching staff of Dept. of BCA, BMS College of Commerce and Management, who have shown their keen interest and supported for the successful completion of the project.

Above all, I would like to thank my parents and friends for their valuable help and support throughout the course of the project. Last but not least, I thank all those who have helped me directly and indirectly in bringing out this project with bright colors.

DHANUSH RAJU S [R1922819]
MANOJ S [R1922831]

DECLARATION

I Dhanush Raju S, Manoj S, VI semester BCA student of **BMS COLLEGE OF COMMERCE AND MANAGEMENT**, Bengaluru do hereby declare that the project entitled “**ATTENDANCE MANAGEMENT SYSTEM USING QR-CODE VERIFICATION**” is the original work carried out by me towards partial fulfillment of the requirement of Bachelor of Computer Applications, Bengaluru City University.

I further declare that the project has not been submitted previously by me for the award of any degree or diploma to any other college.

Date : 26-08-2022

Place : Bengaluru

DHANUSH RAJU S [R1922819]

MANOJ S [R1922831]

ABSTRACT

Student attendance has become one of the concerns at colleges in recent years. Teachers marking the attendance of students manually has become a tedious job and time consuming. The other way is by introducing recourses such as semi-conductor chips in the student's identity card which are not cost-effective as semi-conductor chips put in extra cost. Along with that there has been a shortage of semi-conductor chips in recent years and post pandemic the technology has evolved a lot due to online classes and many more. To overcome, we need a cost-effective and an automated attendance management system is required. Attendance Management System Using QR-Code Verification Technique is one such online application developed for the ease of marking the attendance of the students. The proposed system is one of the effective, time saving and cost-effective software developed. The software uses Quick Responsive codes (QR codes) to mark the attendance of students by reducing the manual work. The problems of a student creating clone version of app or creating parallel space to log in to other student's account to mark proxy can arise. Another problem that might arise in the existing systems are that the QR codes can be shared among the students due to which the students can mark their attendance from anywhere even though they are not attending the classes. The proposed application comes with advanced features where all these problems are resolved, assuring the application to be dynamic and safe. The students can even view and maintain their attendance from this application by attending classes. This makes the system efficient in speeding up the process. The lecturer can even track the student attendance easily with the application round the clock. This application has been made completely smooth and responsive to the user making it feasible from the beginning.

TABLE OF CONTENTS

Acknowledgement	i
Abstract.....	ii
Table of content	iii
1 INTRODUCTION	1
1.1 Problem Statement	1
1.2 Goals & Objectives	2
1.3 Motivation	2
1.4 Application	3
1.5 Overview of Technical Area	3
1.6 Database Used	4
1.7 Brief Overview	4
2 LITERATURE SURVEY.....	5
3 SYSTEM REQUIREMENTS.....	6
3.1 Hardware Requirements	6
3.2 Software Requirements	6
3.3 Non-Functional Requirements	6
3.4 Functional Requirements	6
3.5 Cost Overview	6

4. SYSTEM ARCHITECTURE.....	7
4.1 Data Flow Diagram	8
5. IMPLEMENTATION.....	9
6. RESULTS AND TESTING.....	94
6.1 Testing	94
6.2 Results	96
7. CONCLUSION AND FUTURE ENHANCEMENTS.....	104
References	105