A REPORT ON

Development of a Geolocation-Based Attendance Tracking Mobile Application

Submitted by,

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Under the guidance of,

Mr. Tanveer Ahmed

in partial fulfillment for the award of the degree of

BACHELOR OF TECHNOLOGY

IN

COMPUTER SCIENCE AND ENGINEERING

At

GAIN MORE KNOWLEDGE
REACH GREATER HEIGHTS

PRESIDENCY UNIVERSITY

BENGALURU

MAY 2025

PRESIDENCY UNIVERSITY

PRESIDENCY SCHOOL OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that the Internship/Project report **"Development of a geolocation based attendance tracking mobile application"** being submitted by "K. Harshitha, P. Reshma Reddy, Saanjh Mohanty, Shreya Dhatri Gowda, Syeda Shariffa Moosa" bearing roll number "20211CCS0015, 20211CCS0181, 20211CCS0070, 20211CCS0155, 20211CCS0135" in partial fulfillment of the requirement for the award of the degree of Bachelor of Technology in Computer Science and Engineering is a bonafide work carried out under my supervision.

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DECLARATION

I hereby declare that the work, which is being presented in the report entitled **"Development of a geolocation based tracking mobile application"** in partial fulfillment for the award of Degree of **Bachelor of Technology** in **Computer Science and Engineering**, is a record of my own investigations carried under the guidance of **Mr. Tanveer Ahmed, Assistant Professor, Presidency School of Computer Science and Engineering, Presidency University, Bengaluru.**

I have not submitted the matter presented in this report anywhere for the award of any other Degree.

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ABSTRACT

Meeting attendance and streamlining employee attendance tracking is becoming a challenge for organizations especially in large companies with multiple office locations in order to ease this burden, we propose developing a mobile application that will automatize employee sign-in and sign-out using geolocation features. This app will log attendance as employees enter or leave a 200-meter radius from their respective offices without manual actions required.Automatic geolocation check-in/check-out Each employees entry and exit are logged, recorded in the app by both geolocation and timestamp at the designated office region, ensuring that all check-ins are paired with corresponding check-outs.

Manual Check-in/check-out for offsite Locations Verification removals for mobile employees or remote workers allows these client sites to input their attendance, while the app will provide GPS coordinates of nearby verified locations.Working Hours Calculation: Total hours worked will be automatically calculated and updated in real time using recorded time of entry and exit.Data Reliability and security: Safeguarding of all records will be guranteed as secure attendance logs will be kept in real time synchronized storage to avoid data loss or malicious alterations.

The guidelines provided by GAIL (India) Limited for the Smart India initiative stipulate that all technologies used for development will be free and open source.

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