Feb 11, 2025

John Baltazar B. Cervantes

USC President

Surigao del Norte State University Main Campus

Narciso St., Brgy. Taft, Surigao City

Dear Sir;

Good Day!

We, the 3rd-year Bachelor of Science in Computer Science (BSCS) students of Surigao del Norte State University (SNSU), have successfully completed the development phase of our thesis project titled "**A Comprehensive Mobile Web-Based Attendance Monitoring System with Integrated Analytics for School Event of the University."**

Incorporating the valuable recommendations from our proposal defense panel members (Mr. Renz M. Buctuan, MIT; Mr. Robert R. Bacarro, MECE, MBA; and Mrs. Unife O. Cagas, DTE), we have developed a fully functional system that addresses the challenges of traditional attendance monitoring methods.

System Overview:

Our developed system features the following key functionalities:

1. Multi-Factor Verification System
    - QR Code scanning for event access
    - GPS location tracking to verify physical presence
    - Selfie verification with back-camera to capture to prevent proxy attendance
    - Digital signature capture for authentication
2. Automated Event Management
    - Event creation and management dashboard
    - Automated QR code generation for each event
    - Real-time attendance monitoring and updates
    - Student information auto-population (name, course, year level)

3. Integrated Analytics Dashboard
    - Real-time attendance statistics and trends
    - Visual analytics including histograms showing check-in patterns
    - Peak attendance time analysis
4. Reporting and Data Export
    - Downloadable attendance reports in university-standard format (PDF/CSV)
    - Individual student photos included in attendance sheets
    - Comprehensive system logs for audit trails
    - Customizable report generation

With this in mind, we respectfully request your permission to:

1. Deploy the Event Attendance System following a systematic three-phase approach:
    - Phase 1 (BSCS Pilot Testing): Initial deployment with BSCS students across all year levels during BSCS-specific from CCIS department events. This phase focuses on gathering detailed feedback, identifying bugs, and validating core system functionality with a focused user group.
    - Phase 2 (CCIS-Wide Deployment): After incorporating feedback and resolving issues from Phase 1, expand deployment to all CCIS program (BSICT, BSIS, and BSCS). This phase validates the system's effectiveness across diverse user groups within the university.
    - Phase 3 (University-Wide USC Events): Following successful validation across the entire CCIS department, deploy the system for university-wide events that organized by the University Student Council (USC), making it available to the entire SNSU community.
2. Conduct User Acceptance Testing (UAT) with actual event participants during each phase, starting with BSCS students, then expanding to all CCIS students, and finally to the entire University.
3. Gather real-time feedback from system users during the pilot deployment phase to assess performance, security, and reliability under actual operating conditions.
4. Monitor system performance including response time, concurrent user handling, GPS accuracy, and QR code scanning efficiency during live events.
5. Provide training session to USC Officer on system administration, event creation, QR code generation, and report generation.

We believe that this systematic three-phase deployment approach is crucial for validating our research findings and demonstrating the practical benefits of our proposed solution. Starting with BSCS students allows us to:

1. Gather focused, detailed feedback from students familiar with technology systems.
2. Identify and resolve bugs in a controlled environment.
3. Refine the system based on real-world usage before wider deployment.
4. Ensure the system meets the needs of diverse user groups through progressive expansion.

Your approval and support for this deployment phase are essential to completing our research and contributing a valuable tool to our university community. We are fully committed to ensuring the successful implementation and evaluation of this system.

Thank you very much for considering our request. We are available to discuss any questions or concerns you may have and to present a detailed demonstration of the system at your convenience.

We look forward to your favorable response and the opportunity to serve SNSU through this innovative research project.

Sincerely:

NILO JR. OLANG
BSCS Student

CRICEDINE P. PEÑARANDA
BSCS Student

Noted by:

UNIFE O. CAGAS, DTE
Thesis Professor

Recommending Approval:

VIRNILLE C. FRANCISCO, PhEd
BSCS-Program Chair

Approved by:

JOHN BALTAZAR B. CERVANTES
USG President