Security and Increasing Productivity in BYOD Classrooms at School

A PROJECT REPORT Submitted by,

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Under the guidance of,

Dr. Sudha Y

in partial fulfillment for the award of the degree of BACHELOR OF TECHNOLOGY

IN

COMPUTER SCIENCE AND ENGINEERING (CYBER SECURITY)

At



PRESIDENCY UNIVERSITY
BENGALURU
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PRESIDENCY UNIVERSITY

SCHOOL OF COMPUTER SCIENCE ENGINEERING CERTIFICATE

This is to certify that the Project report "Enhancing Classroom Productivity and Security: A BYOD Management Framework for Schools Using Web-Based Filtering and Firewall Integration" being submitted by "THARUN CK, KODURI SAI CHAITANYA, KUDALA CHAKRDHAR REDDY and KOTHAKOTA RAJ KUMAR" bearing roll numbers "20211CCS0089, 20211CCS0004, 20211CCS0193 and 20211CCS0002" 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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SCHOOL OF COMPUTER SCIENCE AND ENGINEERING DECLARATION

We hereby declare that the work, which is being presented in the project report entitled Security and Increasing Productivity in BYOD Classrooms at School in partial fulfillment for the award of Degree of Bachelor of Technology in Computer Science and Engineering, is a record of our own investigations carried under the guidance of Dr. Sudha Y, Assistant Professor(Selection Grade), School of Computer Science and Engineering, Presidency University, Bengaluru.

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ABSTRACT

The proliferation of digital learning tools has redefined the modern classroom, introducing opportunities for engagement alongside challenges in management and security. The BYOD (Bring Your Own Device) Classroom Management System offers a robust, web-based solution designed to empower educators by providing enhanced control over student devices during lessons. This system addresses critical issues like maintaining focus, ensuring academic integrity, and safeguarding against cybersecurity threats in a BYOD environment.

By integrating cutting-edge technologies such as wireless access points, firewalls, and advanced analytics, the platform enables teachers to monitor, restrict, and manage internet access on student-owned devices such as laptops, tablets, and smartphones. The system also includes a comprehensive reporting feature that allows educators to track device usage and make data-driven decisions to enhance learning outcomes.

The solution's scalable architecture ensures seamless integration with existing school infrastructures, supporting personalized access controls and dynamic content filtering. This fosters a secure, distraction-free environment conducive to learning while minimizing the administrative burden on educators. As a holistic tool, the BYOD Classroom Management System bridges the gap between technological freedom and classroom discipline, providing an innovative pathway to transform digital education.

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