MECHANISM TO SAVE MEDICINIE FROM GETTING WASTED

A PROJECT REPORT

Submitted by,

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Under the guidance of,

Mrs. SHAIK SALMA BEGUM

in partial fulfillment for the award of the degree of

BACHELOR OF TECHNOLOGY

IN

COMPUTER SCIENCE AND ENGINEERING

At

PRESIDENCY UNIVERSITY BENGALURU

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PRESIDENCY UNIVERSITY

PRESIDENCY SCHOOL OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that the Project report **"MECHANISM TO SAVE MEDICINE FROM GETTING WASTED"** being submitted by "TEJASWINI TN, ANUSHA S, KOVALEKUNTLA SAI KRUPA" bearing roll numbers "20211CSD0048, 20211CSD0111, 20211CSD0062" 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

We hereby declare that the work, which is being presented in the project report entitled **MECHANISM TO SAVE MEDICINE FROM GETTING WASTED** 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 **Mrs. SHAIK SALMA BEGUM, Assistant Professor, Presidency School of Computer Science and Engineering, Presidency University, Bengaluru.**

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

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ABSTRACT

Medicine wastage poses a significant challenge to healthcare systems, leading to increased costs, inefficiency, and environmental concerns. This project focuses on designing an intelligent, machine learning-based inventory management system for hospital medical stores to address these issues. By analyzing historical data, the system monitors patients' medicine consumption patterns, including usage, adherence, and wastage trends.

The proposed mechanism incorporates predictive analytics to forecast medicine requirements for individual patients and hospital stock levels. By correlating data on past prescriptions, patient demographics, treatment history, and medicine wastage, the system identifies optimal quantities of medicines to be distributed. This prevents overdispensing while ensuring patients receive adequate treatment.

At the medical store level, the system integrates stock management by predicting the overall demand and preventing overstocking or understocking. The solution leverages advanced algorithms to automate stock replenishment and track near-expiry medicines, ensuring timely utilization or redistribution.

Additionally, the project explores the integration of dashboards for real-time monitoring and reporting, allowing healthcare providers to make informed decisions. This initiative aims to minimize costs, reduce wastage, and promote sustainable practices, thereby contributing to an efficient and responsible healthcare environment. The model is scalable and can be adapted for use across various hospitals and healthcare institutions globally.

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