## TITLE OF THE PROJECT

#### A PROJECT REPORT

Submitted by,

TEJASWINI T N ANUSHA S KOVALEKUNTLA SAI KRUPA 20211CSD0048 20211CSD0111 20211CSD0062

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 JANUARY 2025

### PRESIDENCY UNIVERSITY

# SCHOOL OF COMPUTER SCIENCE 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 number(s) "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.

Mrs. SHAIK SALMA BEGUM

Assistant Professor School of CSE&IS Presidency University Dr. SAIRA BANU ATHAM

Professor &HoD School of CSE&IS Presidency University

Dr. L. SHAKKEERA

Associate Dean School of CSE Presidency University Dr. MYDHILI NAIR

Associate Dean School of CSE Presidency University Dr. SAMEERUDDIN KHAN

Pro-Vc School of Engineering Dean -School of CSE&IS Presidency University

#### PRESIDENCY UNIVERSITY

#### SCHOOL OF COMPUTER SCIENCE ENGINEERING

#### **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 ful-

and Engineering, is a record of our own investigations carried under the guidance of Ms. SHAIK SALMA BEGUM, Assistant Professor, School of Computer Science Engineering, Presidency University, Bengaluru.

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

SI.No	Roll Number	Student Name	Signature
1	20211CSD0048	Tejaswini TN	
2	20211CSD0111	Anusha S	
3	20211CSd0062	Sai Krupa	

#### **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.

#### **ACKNOWLEDGEMENT**

First of all, we indebted to the **GOD ALMIGHTY** for giving me an opportunity to excel in our efforts to complete this project on time.

We express our sincere thanks to our respected dean **Dr. Md. Sameeruddin Khan**, ProVC, School of Engineering and Dean, School of Computer Science Engineering , Presidency University for getting us permission to undergo the project.

We express our heartfelt gratitude to our beloved Associate Deans **Dr. Shakkeera L** and **Dr. Mydhili Nair,** School of Computer Science Engineering, Presidency University, Saira Banu Atham", and Dr. "Head of the Department, School of Computer Science Engineering & Information Science, Presidency University, for rendering timely help in completing this project successfully.

We are greatly indebted to our guide Ms. Shaik Salma Begum, Assistant Professor and Reviewer Mr. Chandrashekar, School of Computer Science Engineering & Information Science, Presidency University for his/her inspirational guidance, and valuable suggestions and for providing us a chance to express our technical capabilities in every respect for the completion of the project work.

We would like to convey our gratitude and heartfelt thanks to the PIP2001 Capstone Project Coordinators **Dr. Sampath A K, Dr. Abdul Khadar A and Mr. Md Zia Ur Rahman,** department Project Coordinators Assistant Professor and Git hub coordinator **Mr. Muthuraj.** 

We thank our family and friends for the strong support and inspiration they have provided us in bringing out this project.

Tejaswini TN Anusha S Sai Krupa