

Alandi(D), Pune Affiliated to



SAVITRIBAI PHULE PUNE UNIVERSITY

Academic Year 2024-2025

A

Industrial Project Report

On

URL Shortener Microservices

By

Mr. Rushikesh Sitaram Kotwal

Roll No: SM1147

University Roll No. 4025

Under the guidance of **Prof. Jyoti Gaware.**

In partial fulfilment of

Master Degree In Computer Science



CERTIFICATE

This is to certify that **Mr. Rushikesh Sitaram Kotwal** Roll No. SM1147, University Exam No. 4025 have successfully completed the industrial training at Softra System Pvt Ltd, as laid down by the Savitribai Phule University for semester IV of the academic year 2024-25.

Date:

Prof. Jyoti Gaware	Prof. Sangita Birajdar
(Project Guide)	(HOD Sci. & Computer Sci)
Internal Examiner:	External Examiner.

ACKNOWLEDGEMENT

I would like to take this opportunity to extend my heartfelt gratitude to everyone who

contributed to the successful completion of my internship project, "URL Shortener

Microservices." First and foremost, I am deeply thankful to Mr. Santosh Chavan for his

unwavering mentorship, insightful guidance, and constant encouragement throughout this

journey. His support played a pivotal role in shaping my learning experience.

I also wish to express my sincere appreciation to the entire team at Softra System Pvt. Ltd.,

Pune, for fostering a professional and collaborative work culture. Their support and feedback

significantly enriched my technical and interpersonal skills.

My sincere thanks go to Prof. Jyoti Gaware, my Internship Guide at MIT ACSC, Alandi,

whose valuable suggestions, continuous monitoring, and motivation helped me stay aligned

with my objectives. Her support was instrumental in ensuring steady progress throughout the

internship.

I would also like to acknowledge Dr. B. B. Waphare, Principal of MIT Arts, Commerce &

Science College, Alandi, for providing this opportunity and for his dedication to promoting

student learning and professional growth.

Last but not least, I am deeply grateful to my family and friends for their constant support,

patience, and motivation.

This internship has been a transformative chapter in my academic and professional journey,

and I am sincerely thankful to everyone who contributed to its success.

Date: Student Name: Rushikesh Kotwal

Class: SYMSc[CS]

DECLARATION

I, hereby declare the IT report on Dot Net Developer internship at Softra System Pvt

Ltd. Is written and submitted by me to MAEER's MIT ACSC, Alandi, Pune, towards the

partial fulfilment for the study of MSC Computer Science in year 2024-2025 is original work

done by me, which is based on Internship completed by me.

The content provided are true to the best of my knowledge and belief.

I further declare that, this project report has not been submitted to any other college or

university for any other degree or course earlier.

Place: Alandi(D), Pune,

Date:

Rushikesh Sitaram Kotwal

SYMSC[CS]



Alandi (D), Pune – 412 105

INDEX

TITLE	PAGE NO.
ABSTRACT	1
CHAPTER 1: INTRODUCTION	2
1.1 Problem Statement	3
1.2 Purpose/ Objective And Goals	3
1.3 Project Scope And Limitations	4-5
CHAPTER 2: SYSTEM ANALYSIS	6
2.1 Scope And Limitations Of Existing system	6
2.2 Project Perspective, Features	6-7
2.3 Stakeholders	8
2.4 Requirement Analysis:	9
1. Functional Requirements	
2. Performance Requirements	
3. Security Requirements	
CHAPTER 3: SYSTEM DESIGN	10
3.1 Design Constraints	10
3.2 System Model: UML Diagrams	11-19
3.3 Data Model	20-25
3.4 User Interfaces	26-27
CHAPTER 4: IMPLEMENTATION DETAILS	28
4.1 Hardware Specification	28
4.2 Software Specification	28
REPORTS	29
TESTING	30
CONCLUSION AND FUTURE SCOPE	31-32