AN INTERNSHIP REPORT
ON

ADVANCE SEARCH FEATURE FOR A FORENSIC CUSTOMER PORTAL

Submitted by,

Mr. Pranay Srinivas - 20211CAI0056

Under the guidance of,

Mr. JAI KUMAR B

in partial fulfillment for the award of the degree of

BACHELOR OF TECHNOLOGY

IN

COMPUTER SCIENCE AND ENGINEERING
(Artificial Intelligence and Machine Learning)

At

GAIN MORE KNOWLEDGE
REACH GREATER HEIGHTS

PRESIDENCY UNIVERSITY

BENGALURU

MAY 2025

PRESIDENCY UNIVERSITY

PRESIDENCY SCHOOL OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that the Internship/Project report **"ADVANCE SEARCH FEATURE FOR FORENSIC CUSTOMER PORTAL"** being submitted by "Pranay Srinivas" bearing roll number "20211CAI0056" in partial fulfillment of the requirement for the award of the degree of Bachelor of Technology in Computer Science and Engineering (Artificial Intelligence and Machine Learning) is a bonafide work carried out under my supervision.

Mr. Jai Kumar B
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Dr. Zafar Ali Khan
Professor & HoD
PSCS
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Dr. MYDHILI NAIR
Associate Dean
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Dr. SAMEERUDDIN KHAN
Pro-Vice Chancellor - Engineering
Dean –PSCS / PSIS
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PRESIDENCY UNIVERSITY

PRESIDENCY SCHOOL OF COMPUTER SCIENCE AND ENGINEERING

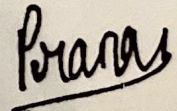
DECLARATION

I hereby declare that the work, which is being presented in the report entitled **"ADVANCE SEARCH FEATURE FOR FORENSIC CUSTOMER PORTAL"** in partial fulfillment for the award of Degree of **Bachelor of Technology** in **Computer Science and Engineering (Artificial Intelligence and Machine Learning),** is a record of my own investigations carried under the guidance of **Mr. Jai Kumar, Assistant Professor, Presidency School of Computer Science and Engineering, Presidency University, Bengaluru.**

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

PRANAY SRINIVAS

20211CAI0056



ABSTRACT

During my internship at Samartha Infosolution, I was actively involved in the development of an advanced search feature for a forensic customer portal. My primary contribution focused on designing and implementing an efficient and scalable search mechanism that could fetch relevant data quickly and accurately across multiple datasets.

I integrated MySQL Full-Text Search into the backend, which significantly improved the performance and accuracy of keyword-based queries. This approach enabled the system to perform faster, more intelligent text matching across large tables, ensuring relevant results were returned even with partial or imprecise input. The search logic included dynamic table mapping using JSON configurations, with fallback strategies for unmatched queries, making the system more robust and user-friendly.

On the frontend, I also developed a navigation-enabled interface, allowing users to seamlessly explore search results and drill down into detailed views. This provided a smooth and intuitive user experience, aligning well with the forensic portal's goal of rapid and precise data access.
Overall, the project not only enhanced the system's search capabilities but also added value in terms of user efficiency, system performance, and data accessibility.

ACKNOWLEDGEMENTS

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**, Pro-VC - Engineering and Dean, Presiency School of Computer Science and Engineering & Presiency School of Information Science, Presidency University for getting us permission to undergo the project.

We express our heartfelt gratitude to our beloved Associate Dean **Dr. Mydhili Nair,** Presidency School of Computer Science and Engineering, Presidency University, and **Dr. ZAFAR ALI KHAN**, Head of the Department, Presidency School of Computer Science and Engineering, Presidency University, for rendering timely help in completing this project successfully.

We are greatly indebted to our guide **Mr. Jai Kumar B** and Reviewer **Dr.Sivaramakrishnan**, Associate Professor, Presidency School of Computer Science and Engineering, Presidency University for their inspirational guidance, and valuable suggestions and for providing us a chance to express our technical capabilities in every respect for the completion of the internship work.

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

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PIP4004 Internship/University Project Project Submission check list

SL. No	ITEM	Give Completion Status as Yes / No. If No - Mention the problem you have.
1	Are the contents in the report arranged in the specified sequence?	Yes.
2	Are the page dimensions and binding specifications followed?	Yes
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5	Include certificate(s) of any Achievement/Award won in any project-related event enclosed if any	No.
6	Similarity Index / Plagiarism Check report clearly showing the Percentage (%)- first page enclosed?	4-1.
7	Details of mapping the project with the Sustainable Development Goals (SDGs) enclosed?	Yes.
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Guide Name: MTai Kumar B.
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Semester: 8
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Date: 16/05/25.
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