MINI PROJECT REPORT ON
"BIKE PREFERENCE SURVEY"

Submitted by

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Submitted in the partial fulfillment of the requirements

for the fifth Semester Mini Project Course Code (BIS586)

BACHELOR OF ENGINEERING IN
INFORMATION SCIENCE AND ENGINEERING
UNDER THE GUIDANCE OF

DR. KUMAR B I D

Professor and HOD

Department of Information Science & Engineering

AMRUTA INSTITUTE OF ENGINEERING AND MANAGEMENT SCIENCES, BIDADI

2025-26

BONAFIDE CERTIFICATE

This is to certify that the project report entitled, " **Bike Preference Survey**" is a Bonafide record of work of the following candidate who carried out the Mini Project work under my supervision during 2025-2026:

SIMON LEO ALEXANDER – USN: 1AR23IS042

Dissertation submitted in partial fulfilment of the requirements for the award of the Degree of

BACHELOR OF ENGINEERING

in

INFORMATION SCIENCE & ENGINEERING

of Amruta Institute of Engineering and Management Sciences, Bidadi, affiliated to Visvesvaraya Technological University, Belgaum during the fifth semester, academic year 2025-26.

It is certified that all the corrections / suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of Mini Project work (**BIS586)** prescribed for said Degree.

Signature of the project Guide	Signature of the HOD	Signature of the Principal

…………………..   ………………..

(Internal Examiner)   (External Examiner)

Semester End Examination held on   /   /2025

<u>DECLARATION</u>

I Simon Leo Alexander – 1AR23IS042 student of Amruta Institute of Engineering and Management Sciences, hereby declare that, this project work entitled "**Bike Preference Survey"** is an original and Bonafide work carried out at Amruta Institute of Engineering and Management Sciences in partial fulfilment of Bachelor of Engineering in Information Science & Engineering affiliated to Visvesvaraya Technological University, Belgaum.

We also declare that, to the best of our knowledge and belief, the work reported here in does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion by any student.

Simon Leo Alexander – 1AR23IS042

<u>ABSTRACT</u>

The modern automotive industry has evolved from a utility-driven market to a highly segmented landscape, offering consumers a vast array of choices ranging from fuel-efficient commuters to high-performance sports bikes. While this variety is beneficial, it has created a "paradox of choice" for prospective buyers, who are often overwhelmed by conflicting advice and subjective opinions regarding features like power, mileage, and comfort. This project aims to address this confusion by providing a data-driven analysis of consumer behavior in the local two-wheeler market.

To achieve this, primary data was collected via a structured survey (Google Forms) focusing on demographic profiles (age and gender) and their correlation with specific vehicle preferences. The collected data was processed using **Python** and the **Pandas** library for statistical analysis. Unlike static reports, this project implemented a dynamic solution by developing an interactive web dashboard using **Flask** and **Dash**.

The analysis revealed significant correlations between age groups and feature prioritization; specifically, younger demographics demonstrated a higher propensity for performance-oriented vehicles, while older segments prioritized comfort and economy. By visualizing these trends through interactive charts, this project provides a tangible tool for understanding market dynamics, helping consumers make informed decisions based on objective community data rather than anecdotal evidence.

CONTENTS:

Plagiarism report