VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama" Belagavi – 590 018

PROJECT REPORT ON

"Coffee Vending Machine"

Submitted in partial fulfillment of the requirements for the award of degree

BACHELOR OF ENGINEERING
IN
ELECTRONICS & COMMUNICATION ENGINEERING

Submitted By

Name	USN
Amaresha M	4AL21EC006
Kalmesh G G	4AL21EC037
Kaluva Chandrashekar	4AL21EC038
Mailaragouda N P	4AL21EC047

Under the Guidance of

Dr. Guruprasad B

Sr. Assistant Professor

Department of E&C Engineering

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

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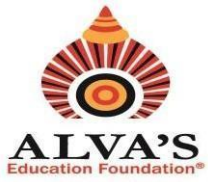

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MOODBIDRI – 574 225

(Affiliated to VTU, **BELAGAVI**)

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

CERTIFICATE

*Certified that the project work entitled "***AUTOMATED COFFEE VINDING MACHINE** *" is a bona fide work carried out by*

Amaresha M	**4AL21EC006**
Kalmesh G G	**4AL21EC037**
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in partial fulfillment for the award of **BACHELOR OF ENGINEERING** in **ELECTRONICS & COMMUNICATION ENGINEERING** of the **VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI** during the year 2024–2025. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the Bachelor of Engineering Degree.

Signature of the Guide	**Signature of the H.O.D**	**Signature of the Principal**
Dr. Guruprasad B	**Dr. Dattathreya**	**Dr. Peter Fernandes**

EXTERNAL VIVA

Name of the Examiners	Signature with date
1…….....	.....
2…….....	.....

ABSTRACT

In the rapidly evolving landscape of food consumption, where lifestyles have drastically shifted, the creation of specific distribution channels like vending machines has received surprisingly little attention, despite their burgeoning presence and potential. Italy, at the forefront of this trend, not only boasts the highest number of vending machines across Europe but also leads the continent in both machine manufacturing and advanced management services, with a particular emphasis on enhancing food quality. Yet, this surge in vending machine usage seems paradoxically disconnected from the agriculture sector, which remains underrepresented in the supply chain, leaving a crucial gap in locally sourced offerings. To address this, a novel localized product recommendation system emerges, designed to refine the automatic vending machine experience by tailoring food suggestions to the unique preferences of diverse regions. This system, a hybrid concoction of statistical methods, classification, clustering, and meta-heuristics, leverages transaction data to analyze product attributes and align them with local tastes [8].

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