VISVESVARAYA TECHNOLOGICAL UNIVERSITY
"Jnana Sangama" Belagavi – 590 018

PROJECT REPORT ON

"SMART SHOPPING TROLLEY USING ARDUINO -A PROTOTYPE"
Submitted in partial fulfillment of the requirements for the award of degree
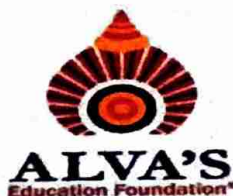**BACHELOR OF ENGINEERING**
IN
ELECTRONICS & COMMUNICATION ENGINEERING

Submitted By

Name	USN
Monika D B	4AL20EC025
Monisha P	4AL20EC026
Pooja P	4AL20EC031
Shubhashri S	4AL20EC052

Under the Guidance of
Mr. Sushanth Anil Lobo
Assistant Professor
Department of E&C Engineering

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

A+, Accredited by NAAC & NBA (ECE & CSE)

Shobhavana Campus, Mijar – 574225

2023 - 2024

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

A+, Accredited by NAAC & NBA (ECE & CSE)

Shobhavana Campus, Mijar – 574225

(Affiliated to VTU, BELAGAVI

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

CERTIFICATE

Certified that the project work entitled "SMART SHOPPING TROLLEY USING ARDUINO-A PROTOTYPE" is a bona fide work carried out by

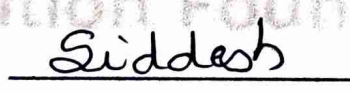|	
Monika D B	4AL20EC025
Monisha P	4AL20EC026
Pooja P	4AL20EC031
Shubhashri S	4AL20EC052

in partial fulfillment for the award of **BACHELOR OF ENGINEERING** in **ELECTRONICS & COMMUNICATION ENGINEERING** of the **VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI** during the year 2023–2024. 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
Mr. Sushanth Anil
Lobo

Signature of the H.O.D
Dr. Siddesh G K

H.O.D.
Dept. Of Electronics & Communication
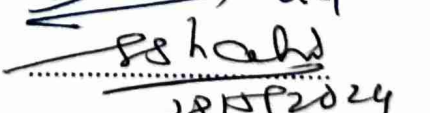Alva' Institute of Engg. & Technology
Mijar, MOODBIDRI - 574 225

Signature of the Principal
Dr. Peter Fernandes
PRINCIPAL
Alva's Institute of Engg. & Technology,
Mijar, MOODBIDRI - 574 225, D.K.

EXTERNAL VIVA

Name of the Examiners

1. Dr. Dattathrya

2. Dr. Sri Krishna Shastri

Signature with date

28/5/24

28/5/2024

ABSTRACT

The advent of smart technologies has revolutionized conventional shopping experiences, with the introduction of innovative solutions like the Smart Shopping Trolley (SST). This abstract proposes the development of an SST employing Arduino microcontroller technology to enhance shopping efficiency and convenience. The SST integrates various sensorssuch as weight sensors, RFID readers, and barcode scanners to enable automatic item detection and tracking within the cart. Arduino's flexibility allows for real-time data processing, enabling features such as inventory management, aisle navigation, and personalized shopping assistance through a user-friendly interface. Furthermore, the SST's connectivity capabilities facilitate seamless integration with mobile applications for payment processing and personalized promotions. This abstract outlines the design and implementation of a prototype SST, highlighting its potential to revolutionize traditional shopping paradigms by leveraging Arduino's versatility and smart technologies for enhanced user experiences.