Paper 1 Vaishnavi Dhole1, Palash Lakhe2, Vinod Lanjewar3, Mayur Bowade4, Mayuri Jaypurkar5

The author, in this paper, discusses the challenges faced in commercial spaces such as airports, train platforms, hospitals, bus stops, shopping malls, and other public venues regarding floor-cleaning solutions. These issues are especially acute in countries such as India, where frequent power outages, particularly during hot weather, render electrically powered gadgets ineffective, providing severe limits at locations such as bus stops. To address these concerns, the authors propose a solar-powered, mobile floor-cleaning machine as a low-cost and practical alternative to conventional cleaning equipment.   
  
The authors describe how to model and analyze the floor-cleaning machine using commercial software. The machine's components are made of common, easily available materials. Furthermore, a finite element study was performed, indicating that the stress levels in the mobile-operated floor-cleaning machine

Paper 2 ***Priyanka Rumane #1, Kranti Kshirsagar #2, Sonawane Akshay#3, Mr. Bhagvan.Bodke#4***

In this work, the author presents the design and operation of a floor-cleaning machine with wireless Bluetooth control. The system is made up of a set of DC motors incorporated into a wheeled plastic container, which has a scrubber linked to one of the motors at the bottom and a reservoir for cleaning solution on top. A CPU fan helps to dry and clean the floor properly. This equipment is intended to be user-friendly, making it appropriate for use in homes, hospitals, schools, and other settings. The system is operated by a Bluetooth module that links to a smartphone app or a remote. Users may easily control and move the machine by directing it via the app. The system is very customizable to user preferences, which increases convenience.

Paper 3

The author of this paper analyzes advances in robotics technology that have considerably improved the ease and comfort of human living. This study describes a low-cost robot built for people who cannot afford or have access to premium amenities. While there are numerous autonomous robots on the market, each with a unique set of capabilities, the majority are prohibitively expensive. The suggested method bridges this gap by including a transmitter application within an Android mobile app, allowing the robot to smoothly follow user orders. The system is based on a microcontroller (Arduino UNO) with fourteen input/output pins and includes components like a cleaning mechanism and a robotic arm. After receiving instructions from the Android device via a Bluetooth receiver, the microcontroller decodes

Paper 4

**Prof. A.S. Shirkande\*1, Chavan Aniket Nitin\*2, Bhosale Gorakh Sudam\*3,**

**Parekar Datta Ashroba\*4**

The author of this paper outlines the creation of the Wireless Floor Cleaner Robot, a key invention in home automation and robotics that addresses domestic cleaning issues. This self-driving robot can intelligently traverse and clean a wide range of floor surfaces, including hardwood, tile, and carpet.  
  
The robot has an array of sensors, including ultrasonic and infrared sensors, that allow it to recognize and avoid obstructions, assuring safe and efficient operation in congested areas. Its wireless connectivity allows for remote control and monitoring, which adds convenience for users. By automating the cleaning process, the robot streamlines household duties while also reducing the risks connected with typical corded vacuum cleaners. Furthermore, its adaptability to diverse space layouts and floor kinds emphasizes its versatility,

Paper 5

The author of this paper describes the creation of a smart floor-cleaning robot that cleans floors efficiently based on user directions. This unique robot simplifies the cleaning process by allowing for quick and efficient operation, with commands supplied wirelessly via an embedded Bluetooth module. Users may easily operate the robot with their smartphones to accomplish chores like moving in different directions and washing the floor. The author highlights that this system is both cost-effective and low-maintenance, requiring substantially less human work. This makes it a dependable and practical solution for modern households, meeting the demand for automation and simplicity in daily cleaning duties.