MANAV RACHNA UNIVERSITY

LIST OF PROJECTS

Name of Student	Project Name	Problem Statement	SDG Goals
HARSHIL ARON UJJAWAL ARORA	DIYA CRUSHER	Recycling diyas that are wasted or broken after usage	SDG 9, SDG 11
RAGHAV GAUR PRATHAM DEEP	CROP & SOIL MANAGEMENT	Farmers face several challenges related to crop selection, soil management, disease identification and other factors, which can impact agriculture productivity and sustainability. To address these challenges, we need an application to help farmers for full fledged farming.	SDG 2
MAYANK CH. HIMANSHU DIXIT	REVOLUTIONIZING URBAN MOBILITY: THE SMART CAR PARKING SYSTEM	Design and implement a Smart Cart Parking System to address the increasing need for efficient management of parking spaces in urban areas. The system should utilize smart sensors, IoT technology, and data analytics to optimize parking space utilization, minimize congestion, reduce vehicle emissions, and enhance user convenience.	SDG 9
JATIN KAUSHIK KARTIK SHAUKEEN	SHORTEST PATH FINDER ROBOT		SDG 9
VAMSHI TEJA CHANDRASHEKHAR	AUTOMATIC SANITIZATION SYSTEM	Due to travelling of heavy passengers in the trains there is a possibilty of getting infected with the people suffering from various disease. To address the issue, a system is to be developed for proper sanitization without manual involvement.	SDG 3
NITIN KUMAR AYUSH SHARMA GURVEER SINGH HARSHITA MAGOO	LINE FOLLOWER ROBOT	The Line Follower Robot Project aims to demonstrate the capabilities of autonomous robotics in tasks such as logistics, surveillance, and automated guided vehicles, while also serving as an educational tool for students and hobbyists interested in robotics and automation	SDG 4 SDG 9
Pratham Gera Bhavay Sharma Eshaan Gupta	Face Recognition Attendance System using Raspberry pi	Automate attendance, enhance security, save time, real-time monitoring, cost-effective.	SDG 9
Sathwik Sai Teja Siddhartha	Digital combination lock	Provide secure access, eliminate physical keys, user-friendly, customizable security codes.	SDG 9
Tanvi Gupta Mansi Bhardwaj	finger print door lock	The objective of this project is to create a robust and user-friendly fingerprint door lock system using Arduino, implementing efficient fingerprint recognition for secure access control, and ensuring the	SDG9,SDG11,SDG16,SDG17
Shivani Sharma Sneha Kumari Dogga Pavan Sekhar Narapureddy Durga Prasad Reddy	Smart Datesheet	It aims to automate the process of generating schedules for academic examinations based on input data provided in an Excel file, then processing the input data to generate a schedule that assigns dates to each subject's examination, ensuring that the dates fall within the specified start and end date range and follow any gap day requirements.	SDG 4, SDG9, SDG17
Gul Mittal Mohan Yaduvanshi Sanchit Panker	Smart Cart	Designing a smart cart for individuals that navigates and independently scans product barcodes to enhance the	SDG 9
Krish Malik Manish Narwat Mudit Garg	Automated Home Light System	The primary objective of this project is to develop an intelligent and energy-efficient lighting system tailored for library shelves. By integrating motion-sensing technology, our goal is to create a device that automatically activates lighting when a person is in proximity and deactivates it when the area is	SDG7, SDG11
Automated Solar Tracker	Automated solar tracker	The objective of this project is to maximize the energy output of solar panels by continuously adjusting their orientation towards sun rays. By applying automated solar tracker, it contribute to the promotion of renewable energy sources and	SDG7, SDG11

ABHINAV RONIT VIJAY SARTHAK AGGARWAL	CAR Parking System	Optimize parking space usage, improve vehicle management, reduce congestion.	SDG 11
AKSHAR KUNAL SHARMA YASH KUMAR YADAV	Fire Alarm Circuit	Detect fires early, alert occupants, enhance safety, prevent damage.	SDG 9, SDG 11
AYON DANDAPATH DHRUV KUMAR SINGH HARDIK PATHAK	Arduino Plant Watering System	Automate irrigation, conserve water, ensure plant health, reduce effort.	SDG 2, SDG 6
BHAVNA SMRIDDHI VAIDEHI SINGH PARMAR	Traffic Light	Regulate traffic flow, enhance road safety, reduce accidents, improve efficiency.	SDG 11
GARIMA SRIVASTAVA SNEHA SINGH ABHINAV KUMAR	Patient Health Monitoring System	Continuously track vital signs, ensure patient safety, prompt alerts.	SDG 3
GARIMA SINGH VARUN KUMAR	Force Sensor Anti Theft System	Detect unauthorized access, prevent theft, enhance security, prompt alerts.	SDG 9, SDG 11
HARSH BHARDWAJ KANIKA SHARMA TAMANNA	RFID Door Lock Project	Secure access, eliminate keys, enhance convenience, control entry.	SDG 9, SDG 11
KATHERINE PARSHAD RAHUL SHARMA	Bluetooth Controlled LED (Home Appliance)	Remotely control lights, improve energy efficiency, enhance convenience.	SDG 7, SDG 9
GAUTAM JANA SHASHANK SINGH JAI PRATAP SINGH RACHIT PHAGNA	Fingerprint Door Lock	Secure access, eliminate keys, personalize entry, improve security.	SDG 9
KUSHAGRA SINGH MOHIT SUMIT LAKHANI	Propeller Display of Message by Virtual LEDs	Display messages creatively, attract attention, enhance communication.	SDG 9
SWAYAM ARORA ANUSHKA CHAURASIA	Digital Clock with GPS Synchronisation	Display accurate time, synchronize globally, ensure precision.	SDG 9

PAYAL RAWAT DEV RAWAT SALONI RAWAT	Touch Sensor Using 555 Timer IC	Detect touch input, enhance interactivity, improve user experience.	SDG 9
VARUN PALAK CHAUDHARY BHARTI	Smart Digital SchoolBell With Timetable Display	Automate bell ringing, display schedules, improve punctuality.	SDG 4 ,SDG 9
PAWAN JOSHI ANSHUL SEMWAL HIMANSHU NAHELIA	Laser Security Alarm System	Detect intrusions, prevent unauthorized access, enhance security.	SDG 9, SDG 11
DANDAVENI THRINETHRA SUNKARI VARUN	Digital Thermometer	Measure temperature accurately, ensure health monitoring, prompt alerts.	SDG 3
Shaina Das, Lovanya, Rohan, Ramakrishna,Tushar	Blind Stick	Aid navigation, detect obstacles, enhance mobility, improve safety, ultrasonic-based.	SDG3
Shivam, Sanjay, Naman	Ultrasonic sensor based security system for short distances.	Detect nearby intrusions, enhance security, provide alerts, short-range.	SDG9
Aryan, Anuj, Arun	Image transformations using MATLAB.	Apply image processing techniques, analyze transformations, improve visuals.	SDG10
Sandeep, Ishpreet, Pravar	Image Style Transfer using MATLAB	Transfer artistic styles, enhance images, create visually appealing results.	SDG11
Aatish, Karanveer, Rohit , Amaan, Satyam	Street light monitoring system using IOT.	Monitor streetlights, improve energy efficiency, enable remote control, IoT-based.	SDG9
Garima Shashank Aalekh	Sensor Guided Robot	Navigate autonomously, avoid obstacles, perform tasks, sensor-based guidance.	SDG9
Vibhor Suraj ShanU	water level indicator	Monitor water levels, prevent overflow, ensure optimal usage, provide alerts.	SDG6
Gaurav Yashita Garvita	Motion sensor light	Detect movement, automate lighting, save energy, enhance security.	SDG 7, SDG 11
Vishesh Om Parth	Automatic Solar Tracker	Optimize solar panel orientation, maximize energy capture, increase efficiency.	SDG 7, SDG 13
Harsh Vansh Mayank Bishal	Smoke Detection and Gas Leakage Monitoring System	Detect smoke, monitor gas leaks, provide alerts, enhance safety.	SDG 3, SDG 9
Abhinav Ayush Nisha Khushi	Fire Detector Alarm	Detect fire presence, trigger alarms, enhance safety, early warning.	SDG 3, SDG 11
Syeda Ishank Taniya Jalaj	clap switch	Control devices using claps, improve convenience, simplify automation.	SDG9

Mallika Nikita Tamanna	VEHICLE SPEED LIMITER	Control vehicle speed, enhance safety, prevent speeding, regulatory compliance.	SDG 3, SDG 11
Venkatesh Pavan Rishik	MUSIC RYTHM LED FLASH LIGHT	Sync LEDs to music, create visual effects, enhance entertainment.	SDG9
Nishant Verma Nishant Gupta Satyam	Automatic street light	Automate lighting based on ambient light, save energy, improve efficiency.	SDG 7, SDG 11
Kabir Nikhil Anuj Deepak	Temperature operated switch	Activate devices based on temperature, automate control, enhance safety.	SDG 9, SDG 11
Prashant Lokesh Ayaz	Automatic parking system	Automate parking process, improve efficiency, reduce human intervention, enhance convenience.	SDG 9, SDG 11
Rahul Bhavishya Hiten	Weather Station	Monitor weather conditions, provide real-time data, enhance forecasting.	SDG 9, SDG 13
SAURAV KUMAR	Fire alarm	Detect fires early, alert occupants, enhance safety, prevent damage.	SDG 9, SDG 11
VANSH MALIK AMAN P R HARSH MALIK	Floor cleaning Robot	Automate floor cleaning, save time, improve cleanliness, reduce effort.	SDG 9
AVULA CHANDRA SEKHAR REDDY CHALLAGUNDLA NARENDRA CHENNAMPALLI NAGARJUNA CHILUKURI CHETAN SIDHARTHA KOTTALA SAI SANDEEP KUMAR	accident prevention and indication	Prevent accidents, provide alerts, enhance safety, reduce risks.	SDG 3,SDG 11
AZEEM PARVEZ VANSH SHARMA VISHESH YASH RAWAT NISHANT SINGH	Water level indicator	Monitor water levels, prevent overflow, ensure optimal usage, provide alerts.	SDG 6
AMIT YADAV NITIN PANDEY YOGITA SAURAV BHARDWAJ	Air quality analyser	Monitor air quality, detect pollutants, improve health, provide data.	SDG 3,SDG 11
ALLA MOKSHAGNA REDDY ANUMANTHULA VIGNESH YADAV BADHAM DIVYA RAGHAVENDRA TEJA DAPPILI MANVITHA KONKAYALA SAI SRIKANTH REDDY	Smart irrigation system	Automate irrigation, conserve water, ensure plant health, reduce effort.	SDG 2,SDG 6,SDG 12

Shaina Dass Lovanya	Design and simulate the following using CMOS inverter circuit using Tanner EDA, ensuring 5V supply voltage. Calculate delay and power consumption of each schematic. 1. CMOS Inverter 2. 2-NAND 3. Full adder	Design and simulate CMOS circuits; calculate delay and power consumption.	SDG 4, SDG 9, SDG 12
Aryan Singh Chauhan Shivam Kumar Meena Nishchay Raj Tushar Suhag	Design and simulate the following using CMOS inverter circuit using Tanner EDA, ensuring 5V supply voltage. Calculate delay and power consumption of each schematic. 1. CMOS Inverter 2. 3-NAND 3. D Flip Flop	Design and simulate CMOS circuits; calculate delay and power consumption.	SDG 4, SDG 9, SDG 12
Naman Verma Rohan Sharma	Design and simulate the following using CMOS inverter circuit using Tanner EDA, ensuring 5V supply voltage. Calculate delay and power consumption of each schematic. 1. CMOS Inverter 2. 2-OR 3. Half Substractor	Design and simulate CMOS circuits; calculate delay and power consumption.	SDG 4, SDG 9, SDG 12
Prawar Aswal Rama Krishna Reddy Deenisanaala Tagore Sanjay	Design and simulate the following using CMOS inverter circuit using Tanner EDA, ensuring 5V supply voltage. Calculate delay and power consumption of each schematic. 1. CMOS Inverter 2. 3-NOR 3. D Flip Flop	Design and simulate CMOS circuits; calculate delay and power consumption.	SDG 4, SDG 9, SDG 12
Anuj Sharma Arun Rana	Design and simulate the following using CMOS inverter circuit using Tanner EDA, ensuring 5V supply voltage. Calculate delay and power consumption of each schematic. 1. CMOS Inverter 2. 2-AND 3. Half Adder	Design and simulate CMOS circuits; calculate delay and power consumption.	SDG 4, SDG 9, SDG 12
Ishpreet Kaur Sandeep Gupta	Design and simulate the following using CMOS inverter circuit using Tanner EDA, ensuring 5V supply voltage. Calculate delay and power consumption of each schematic. 1. CMOS Inverter 2. 2-NOR 3. Full Substractor	Design and simulate CMOS circuits; calculate delay and power consumption.	SDG 4, SDG 9, SDG 12