

TE Mini Project List 2019 - 20

Sr. no.	Title	Sr. no.	Title
1	Curtain control device	56	Object Detection using Ultrasonic SONAR
2	Real time Water Quality Measurement	57	blood pressure measurement unit
3	SMPS 5 V, 5A	58	emotion recognition
4	Digital Speedometer and odometer using Hall effect Sensor	59	railway track crack detection robo (use metal Channels)
5	Laser music system	60	Electronic Puppet
6	Safe Driving System	61	Fall detection for elderly person and health monitoring
7	Electronic Optical System	62	Noise Detection In Library
8	Instrument tuner and tutor	63	posture detection
9	Disaster management and dam controlling system	64	waste management system
10	detection of emission of various gases with the help of MQ	65	arduino currency counter using IR and color sensor
11	automated farm monitoring & irrigation system	66	camera stabilizer (gimble)
12	Smmps 5V , 2A	67	smart elevator by using voice recognition
13	LPS +/-15 3A	68	human stress indicator
14	Fish tank automation	69	cellphone operated land rover (pic us)
15	Glass panel cleaning BOT	70	Self driving car using deep learning (SPEED, BREAK, ETC)
16	Object sorter using motor and sensors	71	Automatic railway gate controller
17	Spacial Mapping of airspace using UAV for drone navigation	72	Unknown distance and angle measurement of objects
18	Automatic door system using Face detection	73	vehicle over speeding measurement
19	smart public bus transport	74	Dry waste collector and segregator BOT (PIC)
20	GSM ECG tele alert system	75	Attendance monitoring system(Ardiuno based fingerprint scanner)
21	voting machine using fingerprint scanner	76	Board wiper for class rooms/windows
22	pattern generation for tactile sensing using paraffin wax actuators	77	Music control system at silent zones
23	String based instrument tuner	78	dynamic traffic management system using IOT
24	Maze - a puzzle game	79	speaking system for mute people using hand gesture
25	smart glares for visually disabled	80	Digital IC tester
26	audio controlled running 3D light	81	android based home automation
27	visitor counter using RGB, APDS-9960 using database	82	malware detection in web
28	Temperature conterolled chamber	83	Gesture Controlled Mouse
29	Piano note detector	84	Digital clock
30	Text to speech converter	85	Farm water management and monitoring system
31	semi autonomous football kicking BOT (Arduino/controller)	86	Traffic Management System using beagle bone black
32	temperature controlled (DIGITALLY)soldering iron	87	LPC 2148 development board
33	Lab view based data acquisition system	88	Automatic Target System
34	RGB led pattern	89	Virtual City Explorer with User identification, indicating safe locations for women and place locator
35	CNC PCB drilling machine	90	Programmer for 8051
36	Biogas plant	91	Smart Pick and Place bot using Atmega 2560 based firebird V.
37	OP-AMP IC TESTER	92	Smart Home Automation using IOT
38	HARMONIC DISTORTION MEASUREMENT	93	Face recognition system
39	Earthquake detection.	94	Ardiuno based color sorter
40	DIFFERENTIAL AMPLIFIER USING MOSFET	95	smart irrigation system
41	obstacle avoiding BOT with inclinometer (Arduino)	96	SMPS 5 AND 12 V 2A
42	ultrasonic mist maker with power supply (using piezo, MC 340)	97	Battery operated automatic Vacuum Cleaner for car/small spaces
43	development of real time life sequare and tracking system for runners	98	Motion based spot light controller.
44	Road sign processing for blind	99	PAPER SHREDDING SYSTEM (APPLICATION)

45	SMART CART- A smart shopping cart system (PIC UC using RFID, load cell, zigbee)	100	Color sensing in textile (Using LDR, all color)
46	water cleaning BOT with segregator	101	Triggering circuits DIGITAL SYSTEMS
47	Smart Trash Compressor	102	Audio amplifier (PORTABLE PUBLIC ADDRESS SYSTEM)
48	Robotic based grass cutter with lawn coverage	103	Robotic PICK-PLACE SYSTEM USING PIC MICROCONTROLLER
49	women safety - Taser gun (Stm 32f 103)	104	Controlled heating chamber (heat rate, cool rate, stepping)
50	ROBOT for inspection and cleaning of tanks on ships (Arduino)	105	Implementation and Analysis of different Coding techniques (ITCCN) using LABVIEW.
51	Pedometer	106	Digital IC tester
52	biometric finger print electronic voting system (Arduino)		
53	health monitoring (heartbeat sensor, temperature, arduino)		
54	Op Amp adder, subtractor, averaging amplifier		
55	detection of safe drinking water using TDS and PH sensor		

TE Mini Project List 2020 - 21

Sr. No.	Title	Sr. No.	Title
1	Microstrip Antenna Design	57	Student data Analysis
2	Alcohol sense engine lock and gps	58	curtain automation
3	Smart Result Analysis	59	Iot smart gardening sensor
4	IOT Based Patient Health Monitoring System Using ESP32 webserver	60	soldering station
5	IoT-based Event Management System Using RFID and ThingSpeak	61	smart Aquarium tank
6	Cotton detection using controller	62	Solar panel cleaning system
7	Chat application	63	Waste segregation
8	DC motor Speed and direction Control using Microcontroller	64	Home automation
9	Face recognition attendance system	65	Question paper generator
10	Security Alarm for door using IOT	66	Smart Medical Shipment Box
11	ARDUINO-UNO BASED 3-PHASE INVERTER FOR 120 , 180 DEGREE OPERATION	67	Interview helper
12	Iot based smart agriculture system	68	LPG Gas Monitoring System
13	Automatic solar grass cutter	69	Crop protection from rain
14	Water quality measurement and control system	70	Dancing fountain
15	Home automation with iot	71	Enemy tank detection and firing circuit
16	Petrol Impurity Check	72	Finger pulse Oximeter
17	Eyeball sensor for automatic wheel chair for handicap person	73	SMPS 5v 1 A
18	Pick and Place Robot	74	Drowsy Driver Alert System
19	Use touch screen to present pictures and information about electronics components (2D,3D)	75	Password based locking system
20	Universal Solar Charger	76	frequency synthesizer
21	IOT based Theft Detection Using Raspberry Pi	77	Water Meter
22	Plant disease detection and its associate pesticides	78	weather monitoring system
23	Contactless thermometer	79	Automated conveyor line
24	Petrol Tank monitoring anf flow measurement	80	Temperature calibration system for various temperature sensors
25	Covid safety check.. (detects if a person is wearing a mask or not)	81	Remote Health Monitoring (oxygen, pulse, ECG and Temperature)

26	Smart Wireless Water meter	82	SMART WASTE MANAGEMENT
27	Surface alingnment tool	83	Image processing billing system for vehicles
28	Digital Harmonium	84	Financial statement analysis using image processing and data analitics
29	Resistor colour coder	85	Design, Simulation and Fabrication of Antenna (Microstrip Patch/Coaxial feed antenna)
30	Taekwondo scoring system	86	Smart shopping cart
31	Water level monitroing system	87	Smart Irrigation System
32	Colour Sorting System	88	Intelligent traffic control for emergency vehicles
33	RFID controlled door access	89	Design, Simulation and Fabrication of Antenna (Microstrip Patch/Coaxial feed antenna)
34	Rain Sensing and Measurement	90	Raspberry pi controlled trash detection system for USVs and AVs assistance.
35	Rat in a Maze problem	91	Traffic Signal violation detector system
36	Temperature Chamber Using Peltier	92	GPS Handcuffs With Geographic Prohibitions
37	Dual axis solar tracking system	93	Smart Gate Security System
38	Quiz preparation	94	Sentimental analysis of Amzon review
39	Wireless SOS/Panic button for patients and elderly with GPS and GSM tracking capability	95	FACE RECOGNITION DOOR LOCK SYSTEM
40	Sixth Sense media player	96	AUTO PUMP SWITCHER
41	Customizable vending machine	97	REVERSE CAR PARKING SYSTEM
42	Stage lighting system	98	Gesture Based Gloves for Deaf and Dumb
43	Keyless entry using RFID	99	Automatic surface disinfecting robot using ultraviolet lights
44	Electricity audit system	100	Emotion Based Music Player Using Face Recognition
45	Aptitude game/puzzle	101	RFID based automated school attendance DBMS
46	LIDAR Sensor	102	Power bank for laptop
47	Mini range Radio/Radio transceiver	103	Automatic plant watering system
48	Smart Irrigation control system	104	Contactless control mouse
49	Breathalyzer	105	SMART ALCOHOL SENSOR
50	Short Range Monitoring Radar System.	106	Artificial Intelligence for market analysis and trading
51	Efficient Elevator Mechanism	107	World clock using Node Mcu
52	Adjustable height and wings drone	108	Density Based Traffic Signal System
53	LPS +/- 12 v 1 A	109	Temperature, mask and oxygen scan entry system for covid prevention
54	Digital IC tester	110	Home security using GSM model
55	Automation of home using speech		
56	Predictive Entry Management System		

TE Mini Project List 2021 - 22

Sr. No.	Title	Sr. No.	Title
1	Smart Parking system	57	Burglar Alarm
2	object detection and range measuring system	58	Soil Moisture Monitoring System
3	locker security management system	59	Gesture Stick
4	Water Quality Measurement	60	Ultrasonic radar system
5	Endless Runner (Game)	61	Android password based door opener
6	PID controller for Self Balancing system	62	Smart Garbage Monitoring System
7	It's All Relative	63	Home Automation
8	Noticeboard system	64	Smart Street Lights
9	Driver drawiness detection system	65	Threat detection on railway tracks

10	Automatic traversing bot	66	Home automation and power utilisation
11	oximeter	67	Sign language glove with voice support
12	Automatic sanitization system	68	Water tap temperature control
13	Auto intensity control of lights	69	Steering Based Smart Headlight
14	LED Cube	70	Window Cleaner
15	Marble Maze Game	71	Dancing Lights Bluetooth Speaker
16	Ration distribution system	72	Smart Pill box
17	Curtain control system	73	Battery charging system
18	Smart WiFi Door Lock	74	Automatic curtain control
19	fastest finger first	75	Digital Lock
20	Multidirectional radar system	76	Automatic attendance using Face Recognition
21	Digital Clock	77	Digital Clock
22	Hovercraft	78	Home Automation
23	Hand gesture control Media	79	Driver Drowsiness Detection
24	Home Security System	80	Smart number plate recognition system
25	Garbage Bins Management	81	Prepaid canteen card
26	Attendance System	82	Image processing based fire detection
27	Vector Graphics Plotting Machine	83	8 bit computer
28	Battery monitoring system	84	Touchless Hand Sanitization system
29	Music Fountain	85	Gesture control in prosthetics
30	Temperature controlled medical Utility	86	Color Based Sorting System
31	Railway Platform accident prevention system	87	Contactless water tap
32	Sun tracking Solar Panel	88	Communicating Cars
33	Water level cleaing boat	89	Smart Gloves for deaf and dumb
34	Wireless Transmitter for UART Sensors	90	Mobile Recharge Station
35	Smart Aquarium	91	Light and Smoke Detector System
36	Dual power supply	92	Water Level Control for purifier
37	Human Motion Detection	93	Frequency to voltage converter
38	Endless Runner (Game)	94	Poultry Farm Automation
39	Smart key chain	95	Laser Alarm Security System
40	Water and fertilizers distribution system	96	DAM water level control and warning system
41	Smart Shopping cart system	97	Hexapod
42	Autonomous Garbage Collector Bot	98	Live Bus Tracking System
43	Dual Power Supply	99	Smart Home Automation
44	Dual Power Supply	100	LPG leakage detection
45	Op amp IC tester	101	Music Fountain
46	Obstacle detection	102	8 channel quiz buzzer
47	IoT based Home Automation	103	Patient health Monitoring
48	Digital IC tester	104	Digital Thermometer
49	Dual Variable power supply with current boosting	105	Automatic Room Freshner
50	Pollution detection in Mines	106	Bi-Directional visitor counter
51	Emotion Based Music Player	107	SDR based Transmitter & receiver
52	Portable Cooler	108	Solar panel cleaning bot
53	Emotion Based Music Player	109	4 DOF mobile controlled robotic arm
54	Flight controller for Drone	110	School bus tracking system
55	weather monitoring system	111	Digital voltmeter
56	GSM controlled bot	112	Paper shredding System

TE Mini Project List 2023 - 24

Sr. No.	Title	Sr. No.	Title
1	Sound Detection and Smart Crop Protection from Animals and Birds	57	Smart Helmet
2	Quality based water useability system	58	Medicine ATM
3	Energy management system	59	Transformer Health Monitoring System
4	Home Air Quality Monitoring System	60	smart Plant orchestra
5	Inspection of milk quality	61	GenZ DriveInsights (Blackbox)
6	Plant leaf disease detection system	62	Smart air purifier with environment monitoring system
7	Health tracking system with yoga pose detector	63	Automatic number recognition (ANPR)
8	Water Pump Automator	64	Manual Controlled Robotic Arm with Locomotion
9	Smart Exhaust Fan	65	Password Based Circuit Breaker
10	Light Automation	66	Fan speed regulation based temperature
11	Fire And LPG Gas detector	67	Remote Sensory Control using WiFi
12	Track Navigating Robot	68	Clap Based Fan Switching System
13	Food Spoilage Detection System	69	Home Automation
14	Mobile Charging on Coin Insertion	70	RF Transmitter and receiver
15	Automatic Water level detection	71	Fingerprint authentication system
16	Health Monitoring System of Street Lights	72	Fire fighting Robot
17	PID temperature controller	73	Inebriety recognition and auto engine disabling system with ESP32 and telegram notification
18	Sign Language To Text Conversion Using Flex Sensor	74	USB Rubber Ducky for social engineering attacks
19	Switched-Mode Power Supply	75	Maintaining RPM of DC motor for various condition
20	Facial Recognition Based Smart Door Lock System	76	face recognition door lock system
21	Soldier Health and position tracking system	77	Gesture Control Home Appliances
22	WristWatch For Alzheimer Patient	78	Air Quality Management
23	Smart Traffic System for Ambulance.	79	Automated Car parking and Visitor counter
24	IR Contactless Thermometer Phone	80	Smart Energy Meter
25	SMART BUS TRACKING SYSTEM	81	medicine reminder using nodemcu
26	Digital smart Watch	82	Coal Miner safety monitoring using LoRa
27	Smart Aquarium	83	Power Over Ethernet (Passive)
28	Task Tracker using E-paper	84	Physiotherapy: Glove controlled 3D hand
29	AES cryptography using VLSI	85	Analysis of graphene based patch antenna.
30	IOT based Energy optimising meter for Home application	86	Railway Crossing Barrier Automation
31	CRC Encoder and decoder using Verilog HDL	87	Wireless Energy Transfer on Road for Electric Vehicles
32	Patient health monitoring system	88	Voice Based Lab assistant
33	Touchscreen based Hotel Menu Ordering System	89	Biometric vehicle starter
34	Drishti Yaan- A vision beyond horizon	90	Implementation of Routing Protocols using MicroController
35	Digital Noticeboard using LiFi System	91	Smart Car Parking System using IoT
36	Vacant car parking slot monitor	92	Measuring and Controlling of Temperature using LabVIEW
37	Smart Canteen Management System	93	Smart blind stick using multiple sensors
38	Railway Track Crack Detection Tool	94	
39	Satellite based tolling system	95	

40	Bio guard access control system	96	
41	Colour Detection and sorting system for food Items	97	
42	Industry power consumption penalty minimization	98	
43	Rescuemate	99	
44	Leaf Disease Detection System	100	
45	Transceiver using NRF24	101	
46	Enhance energy efficiency through power factor optimization	102	
47	EV Battery management system	103	
48	Air Pollution Detector	104	
49	RADAR System	105	
50	Motor control Hub	106	
51	VLSI design of FFT architecture	107	
52	Internet controlled Robotic ARM	108	
53	Advanced footstep power generation	109	
54	SMART-GAS LEAK SHIELD (S-GLS)	110	
55	Secure access system using RFID	111	
56	AgriSense: Real-time Monitoring Solutions for Optimizing Traditional Agriculture	112	

TE Mini Project List 2024 – 25

Sr. No.	Title	Sr. No.	Title
1	Air Quality Monitoring System	60	Image text to Speech Conversion
2	BlueLink E-Noticeboard	61	Sign Language to Text Conversion
3	Energy Consumption meter IOT device	62	Password based door locking system
4	Social Distancing Cap	63	AI Mock Interviewer
5	Road Sign Detection for vehicles	64	Microcontroller - based test automation
6	Smart parking system	65	Wireless Mobile Charger
7	Counter with Overload Alarm	66	SmartTrack: Efficient Attendance System (RFID)
8	IOT Blockchain Trading Simulator	67	Library Management System
9	Enhancing retail with real time demographics detection	68	Speed Checker
10	Tag Pay : Your RFID canteen wallet	69	Pet Food Dispenser
11	Automatic Door Lock using Face recognition	70	Soil Parameter detector
12	Drowsiness-Detection: Anti sleep alertness system	71	Remote Environmental Data Logger
13	FPGA based ChaCha20 Encryption for Real-Time Data Protection	72	Live Bus Tracking System
14	IOT Based Smart Washroom Security System	73	Smart Basket
15	Gesture Recognition to Speech conversion	74	Automatic Plant Watering System
16	Electric Fence Energizer	75	Bird Deterrent System
17	Hybrid Active Roll Stabilization (HARS) for Naval Ships	76	Biometric Attendance Monitoring System
18	Design and Implementation of 4-point FFT	77	Contactless Infrared Thermometer
19	Design of Microstrip Patch Antenna	78	Electricity meter and bill management
20	DC Motor speed control	79	PolyHouse Monitoring & Automation
21	Design and Implementation of Digital Bandpass Filter	80	Reaction time game (reactus)
22	Conventional VS reversible logic Full Adder	81	Taser gun

	implementation		
23	Smart cart	82	Intelligent Energy Management System
24	Wireless oscilloscope using MQTT	83	Smart Industrial Monitoring and Safety System
25	Door lock system using face recognition	84	Automated Trolley Billing System
26	Wearable- Textile Patch Antenna Using Jeans as substrate at 2.4 GHz and 5.8 GHz	85	Smart Door Lock System
27	IoT Based Speed Control of AC Motor Using TRIAC Circuit	86	Automatic Fire Extinguisher
28	Automated Plant Irrigation System	87	Ultrasonic levitation device
29	Driver Drowsiness detection system	88	Face recognition based attendance management system
30	Power Factor Measurment	89	Generative Music Therapy
31	Dynamic Wireless Charging for EVs on Road	90	Home Automation using Voice commands
32	Intrusion Detection System in network	91	GPS-GSM based human safety device
33	River Cleaning Robot	92	Air quality monitoring system
34	IOT based Air quality monitor and Purifier	93	Multifunction Robotic Device (AGV)
35	Honeypot	94	Two way authentication door lock system
36	Power Supply	95	Plant Care Robot
37	ElevateX:Precision in Motion	96	OTP based Door Lock System
38	Short Circuit Detection For EV	97	LoRa based forest fire detection
39	Real-Time Multilingual Voice Transcription System	98	Vehicle Theft Detection
40	Classroom Management and Scheduling	99	Air Quality Monitoring System
41	OTP Based Wireless Smart Lock System	100	Biometric attendance system
42	Medicine reminder System	101	Intelligence shelter protection system
43	overheat protection system for motors	102	Attendance Monitoring system using CCTV
44	Active race aero flap	103	Selective Voice separation
45	AI Powered Object Recognition	104	Hardened OS for the Raspberry Pi in Rust
46	Patch Antenna Design For Wireless Applications	105	Active Noise Cancellation using Artificial Neural Networks
47	Object Detection and classification on edge impulse	106	Smart Glasses
48	Speech to text and text to speech Converter	107	Smart fabric ironing
49	Smart memory game	108	Edge AI solution for wildlife detection
50	UART transmitter and receiver using FPGA	109	Solar MPPT based BLDC Fan System
51	DAC using Microwind	110	Health Monitoring system
52	Reconfigurable MIMO Antenna for M2M Communication System	111	Implementation of SHA-256 on FPGA
53	FPGA Implementation of Vedic ALU	112	Implementation of UART using FPGA
54	Child rescue system from open borewell	113	IOT based smart aquarium
55	Portable Bilingual Translator	114	IOT based event management
56	The Floor cleaning Robot	115	A Portable Distance and Angle Measurement Device
57	Design and Fabrication of Wearable Antenna for IOT Applications	116	Smart Bicycle Helmet
58	Vedic multiplier using Verilog	117	Arduino Based automated pen plotter
59	ICU Patient Monitor with ECG	118	IOT based smart aquarium