

VISHWAKARMA INSTITUTE OF TECHNOLOGY

DEPARTMENT OF ENGINEERING SCIENCES AND HUMANITIES

EDI 1 PROJECT BATCH No:-2	EDI1 PROJECT GROUP No:-I6	ACADMIC YEAR 2022-23	SEMESTER-1
TITLE OF PROJECT	1.Train Top Windmill		
DOMAIN	Renewable Energy		
TOOLS	Motor, Batteries, Soldering Gun, TinkerCad		
TECHNOLOGY	Electromagnetic induction		
NAME OF GUIDE	Prof. Patwardhan Milind Manohar	Roll Numbers:-30,31,32,33,34,35	

SYNOPSIS

IMPORTANCE OF THE DECIDED PROJECT (2/3 LINES):-

According to Wikipedia," An energy crisis is any significant bottleneck in the supply of resources to an economy. In literature, it often refers to one of the energy sources used at a certain time and place in particular those that supply national electricity grids or those used as fuel in industrial development and population growth has led to a surge in the global demand for energy in recent years."

The train to windmill will work to create electricity from wind energy. The windmill will be attached on both the sides on top front of the train. The same will be replicated on each of the carriages. As the train starts moving due to air resistance the blades of the fan will start rotating. The fan is connected to a generator. The generator produces electricity which is then stored in the batteries in the last carriage. The last carriage of the train will only be used for storing the electricity. At the last station the last carriage will be detached and a similar carriage will be attached to the train. Then the process will repeat.

STEPS TO DO THE PROJECT/ METHODOLOGY (7/8 LINES):-

1. Understanding and acquiring knowledge of the required tools and technology will be done to utilize them to their maximum potential.
2. All the ideas will first be put together and a brainstorming will be done on them.
3. Then the designs will be made of the windmill according to the ideas.
4. Then the designs will be uploaded on the TinkerCad software which is used to view the 3d model of the windmill and its working.
5. The adjustments will be made if required.
6. Then the raw materials for the windmill will then be collected as per requirement.
7. We will then learn different ways to build the most optimised form of circuit for the windmill setup.
8. Then the parts will be put together in the manner decided by the team.
9. Then final testing on the prototype will be done.

TENTATIVE EXPECTED RESULTS FROM THE PROJECT (2/3 LINES):-

The detached carriage will then be discharged and this electricity can be used for different purposes like-

1. Charging Electric vehicles,
2. Home Appliances, etc.

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EDI 1 PROJECT BATCH No:-	EDI1 PROJECT GROUP No:-	ACADMIC YEAR 2022-23	SEMESTER-1
TITLE OF PROJECT	Smart Medical Box		
DOMAIN	Medical Healthcare		
TOOLS	Motion sensors, Qr code, Server		
TECHNOLOGY	Motion sensing, App Development, Programming		
NAME OF GUIDE	Prof. Patwardhan Milind Manohar	Roll Numbers:-30,31,32,33,34,35	

SYNOPSIS

IMPORTANCE OF THE DECIDED PROJECT (2/3 LINES):-

Forgetting to take medicine at the appropriate time is a common problem. Around 49.6% patients have mentioned that they forget to take their medicines on time. This is where our digital medical box will come into work.

Our box will be linked to our app. The app will contain all the information about the medicines kept in each compartment. Each compartment will have a QR code which will redirect you to the app where the information about the medicine need to be filled example :- Name , Quantity, Expiry date, etc.

STEPS TO DO THE PROJECT/ METHODOLOGY (7/8 LINES):-

1. Understanding and acquiring knowledge of the required tools and technology will be done to utilize them to their maximum potential.
2. Planning will be done and the sketches will be made for developing the model of the medical box.
3. Then the flowchart and the circuit diagram will be made to connect all the sensors and the other electronic parts.
4. At the same time the app will be developed simultaneously.
5. Then the model will be made and the circuits will be connected.
6. Then the testing of the sensors will be done.
7. Then the box will be connected to the app.
8. Then the final testing of the prototype will be done.

TENTATIVE EXPECTED RESULTS FROM THE PROJECT (2/3 LINES):-

The app and the box will give daily reminder to take the medicines.

A reminder to buy new stripes will be given well in advance and will be repeated every day for the next few days. If required the medicine will directly be ordered from the nearest medical store after the consent of the customer. The payment will be done after the delivery of medicine. If the medicine expires then the app will notify the customer.

When there are several different medicines prescribed people tend to forget which medicine to be taken when this won't happen now.

