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Automation Renewable Energy Conservation System

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Abstract:-

Nowadays the fossil fuel reserves in the world are diminishing rapidly. So that, energy generation from fossil fuel may cause so many environmental problems. Renewable Conservation System is used for the elimination of fossil fuels. It also prevents those problems which effect on environmental atmosphere.In our project when the air will flow the turbine blades will rotate and then this mechanical energy is converted into electric energy. Then the software will show battery percentage on our mobilewith help of Bluetooth module.

Keywords —Renewable Energy Conservation System-Turbine

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I. INTRODUCTION

Renewable energy is the most important topic in the world at present. It was identified that the fossil fuel reserves in the world are diminishing rapidly and no reserves were identified. Hence we decided to make this project which will make use of Renewable energy in day-to-day life. We placed the turbine on the highway divider as the air flows on the highway very speedily while vehicles are moving. When the air strokes the turbine blades the blades will rotate speedily and by assembling the gears, the rotation of turbines get increase. And rpm of turbines gets increase multiple times. Then the alternator converts mechanical energy into electrical and it stores all this energy in battery. Then after this with help of Bluetooth module and Arduino, the percentage of battery is shown on mobile.

II. LITERATURE SURVEY

By our aim to elimination of fossil fuels, we did survey. we got that there is only windmill source is available to eco-friendly renewable energy. Some projects are working in phase but it is less.

The reason why we need to know the battery percentage

• As our aim is calculate battery percentage from the battery, where the battery is being used for any of the Renewable Energy Conservation System.

- We can also avoid the overflow of current after the battery is charged.
- After any battery is charged then we may use that battery for our use. And then another battery will be inputted to charging.

- As there are many different types of Renewable Energy Conservation System for power generation but after generation of electricity, we can't know that how much percentage is generated or how much percentage does the battery have, so overcoming this disadvantage we planned to make an application which give the exact output i.e. battery percentage which will be used for different types of Renewable Energy Conservation System

III. System Architecture

The below fig shows the Architecture or the block diagram of system.
In this Architecture we use the gears, turbines, battery(5v), Alternator, Arduino, Bluetooth module, handset etc.

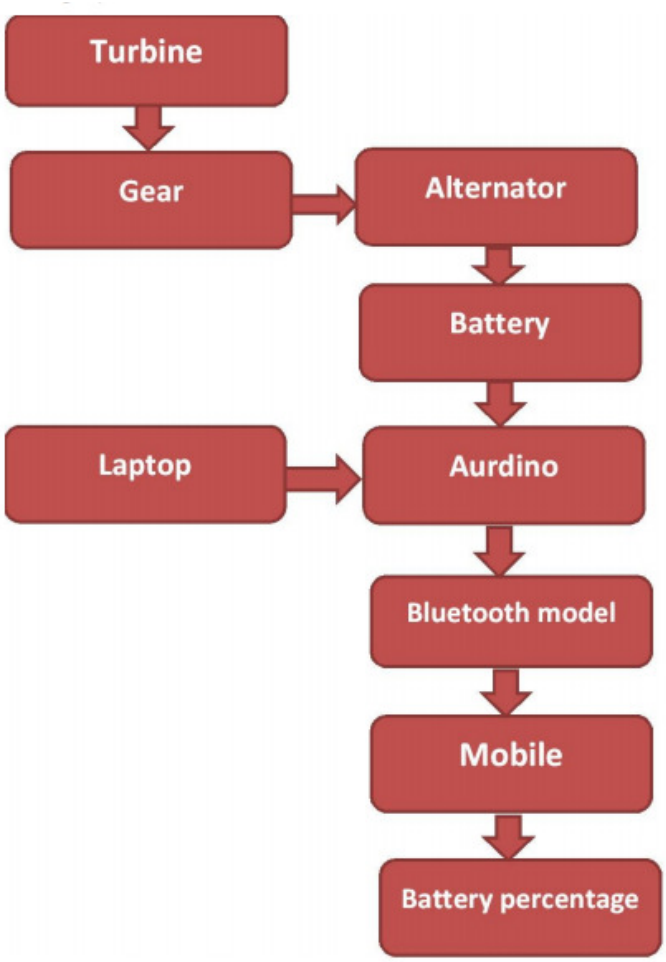

FIG: Automation Renewable Energy Conservation System

IV. COMPONENT DESCRIPTION

HARDWARE REQUIREMENTS:

- Arduino Uno
- Processor: Intel Pentium 4 and above
- RAM: 512 MB
- HDD: 500 GB
- Speed: 1.2 GHz
- Bluetooth module
- Battery

Software Requirements:

- MIT App Inventor
- Operating System: Windows XP and above
- Programming Language: Java

V. Conclusion

With the help of this system we generate eco-friendly Renewable Energy. Use of power which going to waste. We can reserve fossil fuels.

VI. Future scope

It is built at very low cost. Instead of plastic, if Fiber is used it will gives to more output.

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