A Review Paper on Application Based Calculator With Cost Estimation

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Abstract- *The idea represents the method for calculating the capacity of an solar panel installation and its components. This method allows considering a load variation during the day as well as specifying the required capacity of the battery. Excluding an unjustified overestimation of the panel component capacities along with the increase in efficiency of the solar panels So we will make an app to help people know the benefits of solar power and help transition them to a life powered by solar panels and other renewable sources. This calculator may have a rather high visibility, ease of use and low memory requirements along with less computing time spent on calculations. The calculator may allow recalculating capacities of loads on the power plant main supply bus as well as determining the energy consumption of loads per day. Another motive is to provide info about types of solar batteries and inverters which are available in the market, for energy storage to avoid power outage. It's all about figuring out what upfront cost we can comfortably incur*

Keywords- Energy Consumption, Solar Calculations, inverters, load, Memory, Recalculating Capacities,

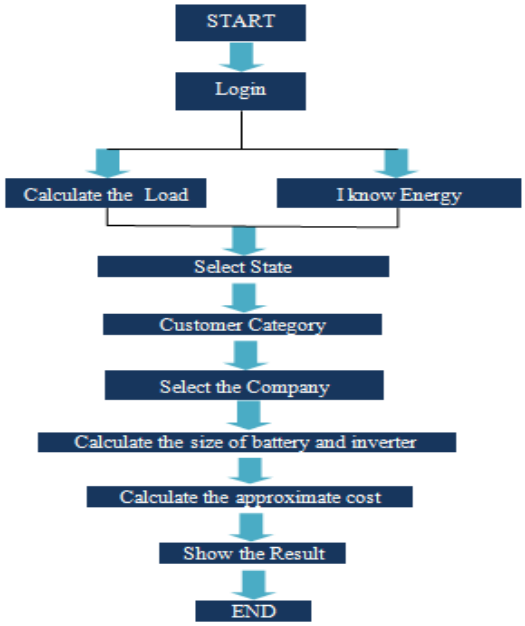
I. INTRODUCTION

Solar Calculation is a mobile application. Based on monthly bills for electricity consumption, solar energy system (solar system) calculations could be easily done by the Solar calculation application. the solar energy potential could manually be entered and hence solar energy system (solar system) calculations could be easily done. Easy Solar is a fully functional online platform compatible with advanced Easy Solar mobile apps for Android, easy to use in the office or in the field. Solar energy is one of the youngest types of the energy industry and has not yet acquired a huge number of specialists and consultants. That's why people who would like to install solar panels at home have to figure it out on their own.

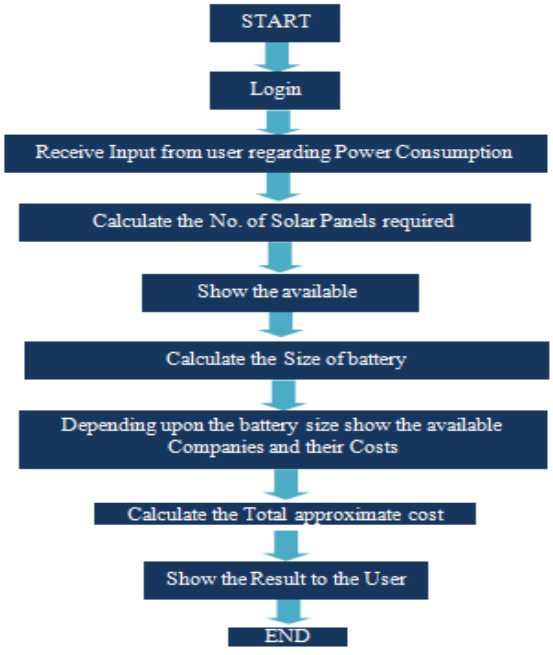
Since the future is depending upon the renewable energy sources, we should be able to share our knowledge, make people aware of the renewable energy sources and costing of the renewable sources of energy

II. FLOWCHART

1) Flowchart of User



2) Flowchart of Admin



III. PROPOSED METHODOLOGY

To determine your home's average energy requirements, look at past utility bills. You can calculate how many solar panels you need by multiplying your household's hourly energy requirement by the peak sunlight hours for your area and dividing that by a panel's wattage. So we explain in below that how many solar panels, battery and inverter, etc in detail

How to Calculate Size of Solar Panels, Battery and Solar Inverter

- Step 1: Calculate your Load that you want to run
- Step 2: Size your solar inverter based on electrical load
- Step 3 : Calculate the total current of your load
- Step 4: Decide how many hours of battery backup you required for the Plant.
- Step 5: Calculate size of Solar panels based on battery size and current of electric load

To avoid all these steps simply calculate your Home energy consumption in watts and put in the app you will get same as above steps. In this app you will get all the information about Solar panels, batteries, inverter etc. Also you will get all company rates to which you buy. To find the Actual electrical energy consumption of the system, will take the average through electricity bills in wattage. To manage the future electrical costs also makes financial planning simple and accurate outage. Eventually, owner will own their energy instead of renting it. They may be able to pay for the initial system investment.

IV. CONCLUSION

An android app which is user friendly will determine the precise cost of solar panel installation for personal homes, small town, farmhouse, etc. Management of the future electrical costs also makes financial planning simple and accurate outage. This application will provide guidance about designing/installing the solar power plant. A consumer will get to know about the no. of solar panels required, size of those panels no. of batteries and inverters required, capacity of plant and calculation of power consumption.

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