PROJECT PROPOSAL SEMINAR

DESIGN AND CONSTRUCTION OF A SOLAR-ENABLED RECHARGEABLE FAN WITH INTEGRATED PERIPHERAL FUNCTIONS

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PRESENTATION OUTLINE

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OUTLINE

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INTRODUCTION

The increasing emphasis on renewable energy sources, solar power has emerged as a sustainable solution for powering various devices:

Homes, Schools, Hospitals, Business Center etc.

This is feasible because our regions has considerable solar insolation, the

INTRODUCTION (Cont’d)

- The world's shift towards renewable energy and sustainable living makes renewable a timely innovation

- As the world’s focus intensifies on reducing carbon footprints and promoting eco-friendly practices, this project is perfectly positioned

- Utilization of the power of solar the reliance on fossil fuels and future

Figure 2: Solar Powered Standing Fan

STATEMENT OF THE PROBLEM

Millions of people worldwide, especially in developing communities, face significant challenges in accessing:

- Reliable and Sustainable Cooling System.
- Affordable, Eco-Friendly, and Energy-Efficient Cooling System

In response to these challenges, the Solar-Enabled Rechargeable Fan (SERF) project will be developed to provide a sustainable, accessible, and innovative solution to address these pressing needs.

AIM OF THE PROJECT

This project aim to design and construct a solar-enabled rechargeable fan with integrated peripheral functions such as USB charging ports, LED lighting, and a battery status indicator.

OBJECTIVESOF THE PROJECT

The specific objectives of the project work are to:

- design a solar powered and rechargeable fan system
- integrate peripheral functions such as USB charging ports, LED lighting, and a battery status indicator into the fan system
- construct the solar powered fan with attention to durability, functionality, and ease of use
- test the fan's performance under various environmental conditions and evaluate the efficiency of its solar charging system

METHODOLOGY

Objective 1: Design a Solar Powered and Rechargeable Fan

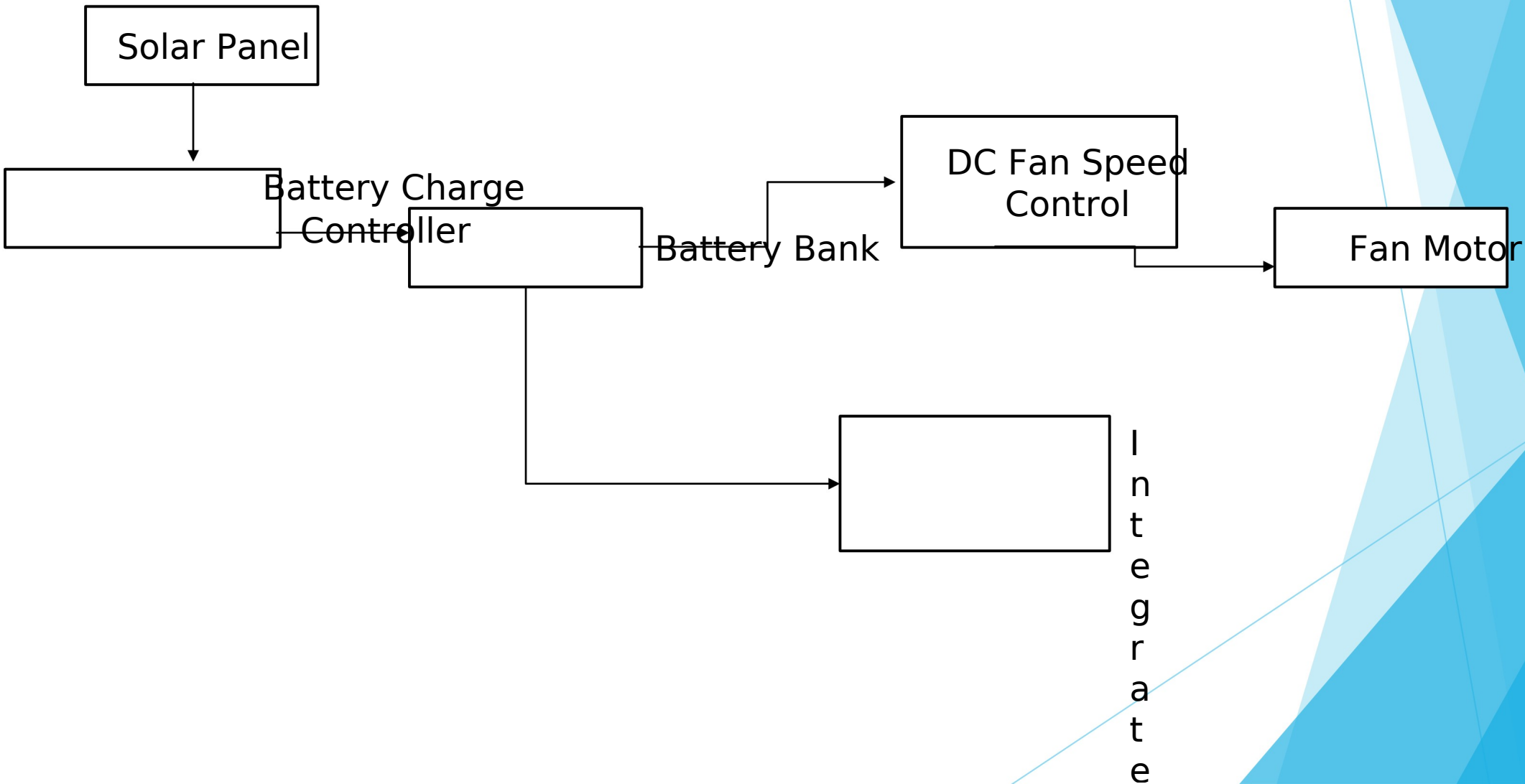
1. Literature Review: Research existing solar-powered fan systems, identifying strengths and weaknesses

2. 2. Component Selection: - Charging controller

3. 3. System Design: - We Consider power

pro-version to test the circuit functionalities before soldering

METHODOLOGY (Cont'd)



METHODOLOGY (Cont’d)

Objective 2: Integrate Peripheral FunctionsMethodology1

1. USB Charging Ports:

2. LED Lighting:

3. Battery Status Indicator

These integrate peripheral functions will be don into the main system design to ensure seamless interaction between components.

METHODOLOGY (Cont’d)

Objective 3: Construct the Solar Powered FanMethodology

1. Electrical Circuit Design

2. Material Purchase

3. Fabrication of Casing

4. We will ensure accurate assembly and soldering of components

METHODOLOGY (Cont'd)

Objective 4: Test and Evaluate Performance Methodology

1. Environmental Testing:- We will test the fan performance under various temperature.
2. Performance Metrics:- We will measure fan airflow, speed, and power consumption.
3. Evaluation of solar charging efficiency and battery lifespan:- Record system reliability and durability.
4. Data Analysis:- We will analyze the test data to identify trends and areas for improvement by comparing

Thank You For

Listening

References

- Kindly add your references