

## Republic of the Philippines CAMARINES SUR POLYTECHNIC COLLEGES

Nabua, Camarines Sur



### COLLEGE of COMPUTER STUDIES

NAME : JUDAH PAULO LL. VIÑAS COURSE : SCIENCE, TECHNOLOGY AND SOCIETY

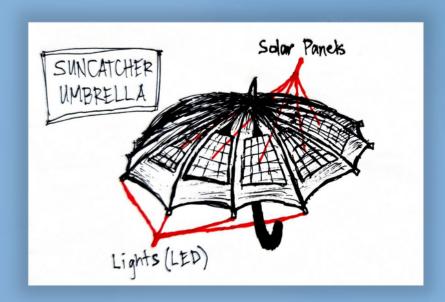
**PROGRAM & SECTION:** BSIT-2F

INSTRUCTOR: MRS. MA. LUDILYN BERANGO-AGAPITO, MAED



#### **Instructions:**

If you were an inventor, what would you invent? In thinking about an invention, make sure that you come up with one that has not been invented yet but is possible to be invented in the near future. On the space below, sketch a draft of your invention then answer the questions that follow.



### 1. What is your invention? What does it do?

The "SunCatcher Umbrella" is a unique solar-powered umbrella designed to provide shade during the day and light up at night. It's a practical and sustainable solution for outdoor spaces like gardens, patios, and parks.

# 2. How is your invention similar to or different from existing tools or technologies in terms of function?

- Similarities to Existing Tools or Technologies:
- 1. <u>Umbrella</u>: Like traditional umbrellas, the SunCatcher Umbrella provides shade from the sun during the day. This function is similar to standard outdoor umbrellas commonly used in outdoor settings.
- 2.<u>Solar Panels</u>: The use of solar panels to capture sunlight and convert it into electricity is a feature shared with existing solar technologies, such as solar chargers and solar-powered lights.



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3. <u>LED Lights</u>: The integration of LED lights for illumination at night is similar to other outdoor lighting solutions powered by LEDs, including garden lights and patio lanterns.

#### Differences to Existing Tools or Technologies:

- 1.The SunCatcher Umbrella uniquely combines shade provision during the day with energy-efficient LED lighting at night.
- 2.The built-in light sensor in the SunCatcher Umbrella sets it apart from traditional umbrellas and most outdoor lighting solutions. It automatically switches the LED lights on or off based on ambient light conditions, enhancing user convenience and energy efficiency.
- 3.The primary distinction lies in the sustainability aspect of the SunCatcher Umbrella. By harnessing solar power for both shade and lighting, it promotes renewable energy use and reduces reliance on grid electricity, making it an environmentally friendly and cost-effective solution.

# 3. Why is there a need for this invention? How will this invention make the world a better place to live in?

The need for the "SunCatcher Umbrella" arises from several pressing challenges and the potential it has to address them effectively: Energy Efficiency and Sustainability, Comfort and Enjoyment, Convenience and Innovation, Sustainability Awareness, and Adaptation to Changing Lifestyles.

The "SunCatcher Umbrella" addresses the need for sustainable, convenient, and enjoyable outdoor living. By reducing energy consumption, enhancing outdoor comfort, and promoting eco-friendly practices, this invention has the potential to make the world a better place to live in by contributing to a more sustainable and fulfilling lifestyle for individuals and communities.