User Story:-

Title: Efficient and Eco-Friendly Water Heating Solution for a Residential Homeowner

As a residential homeowner,

I want to install an energy-efficient solar water heating system in my home,

So that I can reduce my monthly utility bills, lower my carbon footprint, and take advantage of government incentives for renewable energy solutions.

Acceptance Criteria:

1. Product Selection:

- The homeowner can choose between two types of solar collectors: evacuated tube or flat plate.
- The homeowner can select from three water storage options: only solar, conventional water heater, or instant water heater.

2. Installation Process:

- The installation service includes a professional installer who ensures the system is set up correctly and efficiently.
- The installation is completed within a reasonable time frame, with minimal disruption to the homeowner's daily routine.

3. System Performance:

- The solar water heating system provides consistent hot water as per the homeowner's needs.
- The system performs efficiently, with a significant reduction in energy consumption compared to traditional water heaters.

4. User Experience:

- The homeowner can easily manage the system using an intuitive application that allows them to monitor flow, storage, temperature, and energy use.
- The system has a user-friendly interface and requires minimal maintenance.

5. Financial Impact:

- The homeowner experiences a reduction in their monthly utility bills by 50-80%, as predicted.
- The system qualifies for available government incentives, including tax credits or low-interest loans, making the initial investment more affordable.

6. Sustainability:

• The system contributes to reducing the homeowner's carbon footprint, with an estimated annual reduction equivalent to planting 100 trees.

7. Customer Support:

- The homeowner has access to responsive customer support for any questions or issues that arise during the use of the system.
- Any issues reported are addressed promptly, ensuring ongoing satisfaction with the product.

Additional Notes:

- The system should be compatible with varying local climate conditions to ensure optimal performance.
- The homeowner should receive clear instructions and support throughout the installation and setup process.