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Sustainable Transportation (Solar EV)

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Abstract: This project aims to develop a solar-powered electric vehicle that utilizes solar energy to generate electricity for propulsion. As fossil fuel resources become increasingly scarce, solar energy presents a clean and sustainable alternative. The system uses solar panels to charge batteries via power trackers, which regulate the voltage for optimal performance. The stored energy powers a motor directly connected to the wheels, eliminating the need for traditional mechanical components like gearboxes and differentials. An auxiliary battery supports additional electrical functions. This solar plug-in electric vehicle offers low maintenance and improved driving range by enabling battery charging while in motion

Keywords: Solar Energy, EV, ATmega328, L298, Bluetooth, Battery

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