

Safety Bike

Prepared by: Ooi Jia Yuan

ABSTRACT

A cycling bike is an outdoor sporting device which has variable gears, pedals, adjustable seat and wheels. The rotations at which the wheels turn are the rate at which the cyclist applied on the pedal. The muscle energy of cyclist is transferred to move the wheels of the bicycle. The project is aimed at designing a cycling safety bike by obtaining the electrical energy from the bottle dynamo to light up the LED lights of a safety vest and providing turning signal lights that was powered by a set of batteries. The designing process involves the necessary theory and calculation for the electricity generated, selection of generator and fabrication of the prototype. Finally, test should and will be conducted to verify the function of the system. The final outcome is to fabricate a cycling bike with ability to convert the kinetic energy to electrical energy which can be powered up the LED lights for the safety vest and a set of batteries for the turning signals.