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Design and Development of Economical E-Bicycle

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Abstract: *People around the globe using fuel powered bikes for city riding and short distance mobility. Which is one of the reason for increasing CO2 emission parallelly counts for increasing global warming. Because of this, electric bicycle come into the picture as an alternative. The need for an affordable and efficient transportation system has created a growing demand for Electric Bicycles in India and this project is seen as an opportunity, rather a challenge to design and develop a leading electric bicycle class for commute to quotidian. The electric bicycle has wheels that are specially powered by an electric hub motor, powered by a battery pack,that provides the required power. The electric bicycle has an electric motor with an intelligent controller and a battery pack connected to efficient cable systems and monitoring tools. Also, the use of electric bicycles will create less pollution and keep the environment alive. These project research mainly highlights into the design and development of a smart, Economical, and secure electric bicycle achieved through market research, studying the available options to determine the customers need and there requirement.*

Keywords: E-bicycle, Battery, Controller, Lithium ion Battery, BLDC Hub Motor, EV.

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