

# How does our design fit in with the design challenge



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Design and Technology The design challenge for this was to empower and motivate mobility. Our design is of an electric bicycle that helps the elderly people in the society to experience movement in their old age with relative ease. As people age, they have less energy and balance during cycling, especially as they cycle uphill because of reduced functional abilities. Our design responds to the need to empower and motivate mobility from the features of the product.

First, the electric bicycle's pedal has been designed in such a way that the user gets assistance depending on the amount of power used during cycling. The design allows the pedals to adjust their force accordingly, such that when the user's strength decided the degree of assistance coming from the pedals. As the user exerts more power, the pedals provide less assistance in response to the additional energy. In that sequence, the user can use less force as they cycle uphill and downhill, thus ensuring constant and less tedious movement.

Another innovation in the design of the electric bicycle is the flywheel. The flywheel on the bicycle operates on electric power generated from a battery pack. As noted earlier, people have less power to cycle in old age. The electronically powered wheel can spin continuously, enabling the bicycle to keep moving even when the bicycle moves at considerably low speeds. The wheel's design may assist people in their old age to maintain mobility in instances where they would otherwise use more energy to keep the bicycle mobile. These two features give due empowerment and motivation to the elderly, enabling them to use less energy as they cycle during old age, thus satisfying the requirements of the design challenge.

#### Works Cited

<https://assignbuster.com/how-does-our-design-fit-in-with-the-design-challenge/>

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