UNIVERSITI TEKNOLOGI MARA

DEVELOPMENT OF NEW DESIGN AND ANALYSIS OF PEDAL SCOOTER

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Dissertation submitted in partial fulfillment
of the requirements for the degree of
Diploma
(Mechanical Engineering)

College of Engineering

Feb 2024

ABSTRACT

As students, the journey of going to classes by walking is one of the reasons of skipping class. That's why some of them will try to find a way to make it easy. Besides that, students especially in universities love to have some fresh air in the evening after class to ease their minds. Therefore, the invention of pedal scooter is a good transportation for these kinds of situations. Even though with the creations that are already invented such as electric scooters, pedal scooter can be a better option by looking in the green lifestyle perspective. Besides that, some people might say that pedal scooter is already been invented but this invention is slightly different.

The good of this pedal scooter is more stable compared to other scooters. This is because the pedal scooter has two wheels at the back rather than one just like the other scooters previously. Besides, its use pedal to move rather than pushing using our leg. So, it will consume less energy to move, and students will not be tired when arriving at class. Furthermore, this pedal scooter offer cheaper price so that most of the student can have their scooter and make them easier to go to classes.

ACKNOWLEDGEMENT

Firstly, I wish to thank Allah for giving me the opportunity to take my diploma and giving me the strength to complete all the challenges that I have faced from the beginning until now. Even though there are a lot of things that happened, I managed to go through them with the strength that have been given to me.

Next, I want to thank my supervisor, TS. Dr. Nurul Saidatulsyida binti Sulong for the guidance to complete my final year project (FYP) in sem 4 and sem 5. All of the help that has been given to me is very helpful to me. Not just for the guidance about the project, but also for the support that giving me strength are also helping to keep going.

I also want to show my gratitude to my father and mother for always being there for me and helping me to go through up and down in diploma. This piece of victory is dedicated to both of you. For all the hard work that both you have given to me to make me happy, this is me trying to repay for all of it even though I know it will never be comparable to what you guys have did for me.

Besides family, I want to thank my friends and partner for always accompanying me from the beginning of diploma until the end. For all the group work, studying together and giving support to each other are always in my mind. Even if we are not family as in blood but you guys always be family and someone important to me.

Last but not least, I want to thank me. I want to thank me for believing in me, I want to thank me for doing all this hard work, I want to thank me for having no days off, I want to thank me for never quitting, I want to thank me for always being a giver and trying to give more than I receive, I want to thank me for trying to do more right than wrong, I want to thank me for just being me at all times. Alhamdulillah.

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INTRODUCTION

1.1 Background of Study

Kick scooters have been handmade in industrial urban areas in Europe and the United States since the 1920s or earlier, often as play items made for children to roam the streets. One common home-made version is made by attaching roller skates wheelsets to a board with some kind of handle, usually an old box. To turn, riders can lean or use a second board connected by a crude pivot. The construction was all wood, with 3–4-inch (75–100 mm) wheels containing steel ball bearings. An additional advantage of this construction was a loud noise, like from a "real" vehicle. An alternative construction consists of one steel clamp on a roller skate divided into front and rear parts and attached to a wood beam.

The term "rental" has come to be associated with the electric scooter. As people get on and off these disposable vehicles, rental scooters leave a mess on the pavement in cities all around the world. The best electric scooter to acquire is one that is portable and designed for riding safely. While that might seem revolutionary, history demonstrates that there has always been a demand for accessible, reliable scooters with power assistance. Although it appeared like scooters were always around in the 1990s, that was actually only a comeback. Three years after the Titanic sank, in 1915, New York saw the introduction of the first electric scooter, known as the Autoped.

The Autopeds, which essentially looked like an expanded kid's kick scooter, had a sturdy structure made of a standing platform, two 10-inch wheels, and a curved Art Deco base that mirrored the popular 1930s automobile designs. The Autoped's handlebars and steering column could be completely folded, just like modern portable electric scooters. The slanted steering column, which had to be dragged back and forth to accelerate, served as both the clutch and brakes for the front-wheel air-cooled engine.