

UNIVERSITI TEKNOLOGI MARA

LUGGAGE SCOOTER

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ABSTRACT

The Luggage Scooter is a travel tool designed to ease mobility for travelers. By combining a suitcase and a scooter, it offers a faster, more efficient way to navigate airports, train stations, and cities. The Luggage Scooter eliminates the need for separate luggage carts, simplifying luggage transportation. Traditional luggage is often energy- and time-consuming to maneuver, especially in large transit hubs, where a luggage cart is typically required. This project aims to design and analyze a Luggage Scooter prototype using SolidWorks and fabricate it as a proof of concept. The process begins with identifying problems and designing a suitable prototype. Fabrication follows, requiring detailed work to ensure the design meets its objectives. Upon completion, the prototype will undergo testing to confirm its functionality. After Final Year Project 2, a fully operational prototype will demonstrate the feasibility and success of the Luggage Scooter concept.

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CHAPTER ONE

INTRODUCTION

1.1 Background of Study

Traveling is an adventure which provide us with various of benefits. For example, traveling can give us to experience diverse cultures in every place we go. However, majority travellers face a same problem which is managing luggage. Whether it's packing smartly issue, navigating in busy stations except airports carrying heavy bags on our own. Dealing with luggage may take away the joy of traveling. Fortunately, today's world offers a lot of advancement for this problem so travellers can have an enjoyable adventure.

A solution for our luggage problem can be solved with luggage scooter. A futuristic invention combining the purpose of a suitcase or luggage with the convenience of a scooter. This innovation will allow traveller to move effortlessly through the train or bus stations while carrying their luggage. The luggage scooter has a retractable handle to move like a traditional suitcase. The design is not only for navigating through crowded station but also provides an efficient way to travel with imagination as a limit.

Smart Airwheel Ride is among the leading brands in developing luggage scooter. Their products are known for their sleeks design, high durability construction mixing control systems technology. However, such futuristic innovation which perform at its highest level often come more expensive than traditional luggage. Although the price, people who prioritize such convenience, style, and performance may find the investment on such product as worthwhile for their travel experience.

The aim of the study is to fabricate the design of rideable luggage. The aim is to make the rideable luggage accessible and to ensure that it provides value for the investment made following its cost. The design procedure will involve a 1:1 accuracy in materials and parts selection and will be modelled using SolidWorks software. Upon completion of Final Year Project 2, a working prototype will be manufactured to demonstrate whether the objective can be achieved.