UNIVERSITI TEKNOLOGI MARA

SECURED BICYCLE PARKING RACK FOR UITM PASIR GUDANG

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ABSTRACT

This project is about designing and fabricating bicycle parking rack for UiTM Pasir Gudang. There are a few problems when the students bring their bicycle to the campus. There is no specific parking for the bicycles and so many cases of bicycle theft reported in a year because of the lacking of security for bicycle. In order to overcome these problems, this project will be designing a parking rack that can ease the bikers. In addition, the project also will fabricating a parking rack that secured with locking system in order to prevent bicycle theft.

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CHAPTER ONE
INTRODUCTION

1.1   Background of Study

People nowadays love to do cycling in daily life to go to class, market and park but there is no specific parking provided for the bicycles and if provided, it may not have any safety creatures such as password locking, and padlock provided. In Malaysia, bicycle user has been increased especially during pandemic Covid-19 [1].

Moreover, bicycle usually used by the students in universities or college to go for class early because walking will take time unlike cycling and driving. In the universities, there are no specific parking provided for bicycle so the students need to bring padlock and chain to secure the bicycle.

The idea of making secured bicycle parking rack is good for the students especially in UiTM Pasir Gudang to make a bicycle friendly environment and ease the students at the same time in parking the bicycles in safe place.

1.2   Problem Statement

In general, every university do have bicycle club and also students that brought their bicycle to the campus as transportation inside the campus to go to class and for exercising in the evening.

The problem occurs when there is no specific parking rack to put the bicycle unlike cars and motorcycles. This situation leads to random parking such as under the stairs, inside the dorm and also at the pavement. In order to make a nice and neat environment, this bicycle parking rack is the solution.

Bicycle theft is going wild out there as more than 3000 case recorded in Toronto because of lack of security of the bicycle parking [2]. It is not because not important, it just does not cause big loss compared to other vehicles. Therefore, the bicycle more secured and it will be decrease the bicycle theft cases.

To summarize, the initial problem of having bicycle is that there is no specific bicycle parking rack available in the universities and not available on secured bicycle parking rack. Therefore, this project will directly focused on solving the problem by introducing