CHAPTER 1

INTRODUCTION

1.1 PROJECT SYNOPSIS

1.1.1 General Project Synopsis

This project about a design and fabricate a shoes rack for Masjid UMP. As the diploma final year project allocates the duration of 1 semester, this large man-hour project therefore requires significant number of students to participate. Basically the entire shoes rack could be divided into three stages, which are concept review and development, design and fabrication. The shoes rack is equipped by using mild steel material. This project manufactured by using MIG welding to joint the part and etc.

The process of development is initiated from designing the shape of the shoes rack by considering the function as well. In order to produce more safety product that is suitable to the consumer, consideration to the ergonomic factor is taken into account for example easy to use. It involves the measurement process before the materials are cut into pieces before joined together.
1.1.2 Specific Project Synopsis

My project title is Design and Fabricate of Shoes Rack for Masjid UMP. The project involves small analysis of the Shoes Rack frame body and fabrication of the Shoes rack itself with concerns regarding strength, durability, and convenience. Test need to be done to verify the strength of the Shoes Rack right before the fabrication process to avoid material and fund wasting. The projects prerequisites are Static, Dynamic and Strength of Material. Overall, the project will meet acquire skills of design, analysis, and fabrication.

1.2 PROBLEM STATEMENT

At mosque, there should be a proper shoes rack for the Muslim to keep their shoes from the rain. Beside that, the shoes at Masjid UMP not well arrange. The improvisation of their shoes rack should be started and this project aim to initiate the ideas of suitable shoes rack for Masjid.

1.3 PROJECT SCOPE

This project will be limited within the following scopes, which are:

1.3.1 Sketch the new design of shoes rack for Masjid UMP.
1.3.2 Sketching and designing using Solid Work or Auto Cad software in creating the design of shoes rack.
1.3.3 Fabricate and produce the shoes rack by using all necessary manufacturing process such as cutting, welding, grinding and etc.
1.3.4 Use the light weight material.
1.4 PROJECT OBJECTIVE

1.4.1 General Objective

Diploma final year project objective is to practice the knowledge and skill of the student that have been gathered before in solving problem using academic research, to born an engineer that have enough knowledge and skill.

This project also important to train and increase the student capability to get know, research, data gathering, analysis making and then solve a problem by research or scientific research.

The project also will educate the student in communication like in a presentation and educate them to defend their research in presentation. The project also will generate students that have capability to make a good research report in thesis form or technical writing.

This project also can produce and train student to capable of doing work with minimal supervisory and more independent in searching, detailing and expanding the knowledge and experiences.

1.4.2 Specific Project Objective

Basically this project is base on this objective:

- Design a good, suitable and user friendly shoes rack.
- Fabricate the structure which can be suitable use in Masjid.