

CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

This chapter provides detailed explanation on the project background, project problem, project objective, project scope and the project flow that had been conducted. Moreover, this chapter contains Gantt chart of the project which explains the overall procedure and how time is being distributed for this project.

1.2 PROJECT BACKGROUND

In the current world today, every single device available requires electricity, cell power, solar or etc. to make it work. In terms of physics, energy must be continuous supplied to a machine so that it will only produce work. A machine would stop working immediately when the energy source is no longer provided.

Despite all the needs of human, problem occurs where a lot of energy and resources are required for every machines or devices. What has been the “holy grail” concerning this is for human to design a machine which can work forever with energy supplied only once. This ideal machine is called the perpetual motion machine. This problem is a major setback for the mankind as it violates the law of physics and the nature.

This final year project will be focusing on fabricating a toy drinking bird which is practicing perpetual motion and to investigate the mechanism behind the drinking bird.

1.3 PROBLEM STATEMENT

Theoretically, a toy drinking bird should be able to practice the art of perpetual motion due to the recycling of chemical inside the body. Unfortunately, it is not able to do so. Therefore, this project is done to discover the reason behind it.

1.4 OBJECTIVE

1. To fabricate a perpetual motion drinking bird
2. To investigate the mechanical phenomena behind the system

1.5 SCOPE

1. Fabricating a working drinking bird
2. Understanding the concept behind the mechanism of drinking bird

1.6 PROJECT PLANNING

As attached, the Figure 1.1 shows the flow chart of the whole Final Year Project. To kick start, an appointment with the supervisor was made to understand about the project given and preparing for weekly meeting.

First of all, problems are being identified and the object and scope will be set. Research will then be conducted regarding the title of the project. This is where literature review started by reviewing the literature studies of past papers.

Then, rough idea about the title is constructed and the designing and drawing phase is then started. Designing phase is commenced by sketching the available product in the market and editing it to become achievable. Then, the design is then drawn into a three dimensional drawing by using the SolidWorks software.

After that, the lists of materials are being listed out one by one. Market surveying is then commenced. Materials listed are being searched by using all the available media. Once all the materials are available, the fabrication process of the drinking bird is started.

Once the fabrication is done, the product is then tested. If the gotten result is not satisfied, redo the fabrication process until satisfactory result is achieved.

Finally, the final report writing and presentation slides were prepared. Presentation slides are then reviewed by the supervisor so that errors can be corrected. Everything regarding the project is then presented to the panels and draft report is submitted to the supervisor. Mistakes are corrected and the final product is then submitted to complete the final year project.