



اَوْنَبُوْكَرْسِيَّتِيْ تَتِيْكَوْلُوْكَى مَارَا  
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**UNIVERSITI TEKNOLOGI MARA CAWANGAN TERENGGANU**  
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**MEC 299**

**DESIGN AND FABRICATION  
OF TENNIS BALL PICKER**

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## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 BACKGROUND OF PROJECT**

People who often face this problem are usually tennis ball pickers or tennis players especially when they are training alone. People will usually have trouble picking up tennis balls in large numbers and scattered everywhere and they will take a long time to pick up a tennis ball and get tired easily. People may also suffer from back pain due to always being bent over to pick up tennis balls.

Those customers that use this “Tennis Ball Picker (T.B.P)”, do not need to bend over to pick the balls because this product will pick up the balls. This can avoid them from suffering back pain again. Moreover, this product can save time and energy as it can work just by pushing like a trolley at the supermarket. It is easier because it is related to peoples’ daily basis which is shopping.

That tennis fans are very widespread in this country. However, after the problems faced by tennis players have raised the idea to solve the problems faced by fans of the sport. This product is created or designed to reduce the player’s burden to practice. After the existence of this product, players no longer have to collect tennis balls in the old and burdensome way every time they play tennis. The design of this product is simple and very easy for players to maintain. The product is also very easy to use or operate as the product has wheels to move it and allows the player to push it anywhere. This project is also closely related to the government's efforts in creating a community that is active in the field of sports as well as able to produce athletes who can represent the country.

The specific scope that market to customers is divided into three parts, namely individuals, small industries, and large companies. Among the examples of individuals who can get this product such as tennis ball boys, personal tennis coaches, and professional players who practice alone. Small industries such as sports schools, Sports Clubs, Sports Communities, and many more will be the main target to promote this product. These products can also be obtained at large well-known companies such as sports clothing and equipment companies such as Al-ikhsan, Decathlon, etc. Tennis balls can bounce in the long-distance causes players to be tired to collect tennis balls in large numbers and scattered. Due to that, this project to make it easier for tennis players to collect tennis balls in large numbers and save time. In conclusion, this product is very needed, especially for tennis enthusiasts

## **1.2 PROBLEM STATEMENT**

Tennis players will struggle to pick up the ball. It can cause them back pain because of bending a few times, for example, if there are 100 tennis balls scattered everywhere people have to bend over 100 times just to pick up the ball. Customers need something that can give them the convenience of picking up a tennis ball without bending the body. It also can make insufficient resting time for tennis players. More energy exhaustion in collecting tennis balls for tennis players. Unsatisfactory performances of tennis players in coaching session

### **SIGNIFICANCE:**

The project provides convenience to the people by saving their time and avoiding fatigue. The old product had the same method of picking up a tennis ball but it had a different size so that it could pick up more tennis balls at one time. Tennis training sessions will be more effective and successful as a result of this effort. Tennis students will receive ample relaxation by utilizing the time after each round of instruction to gather tennis balls for relaxing. Tennis players may save twenty minutes every day for each two-hour coaching/training session using this approach. As a result, the twenty minutes saved may be spent rest or doing further coaching or training. This has a direct impact on their training session result.