

**UNIVERSITI TEKNOLOGI MARA**

**DESIGN AND DEVELOPMENT OF  
THE CATAPULT BASED ON  
COTTON BALL LAUNCHER**

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## **ABSTRACT**

This project is about design and development of the catapult based on cotton ball launcher. To design and fabricate this projectile launcher, it must have all the characteristic that is needed for it to have enough power to launch an object. There are a lot of research need to do before start designing or fabricating the projectile motion. Research is very important because it can help in terms of designing, material to use, or fabricating process. It can make projectile launcher became more efficient. From research also, initial time taken can also be determine. When finish designing, next is fabricating process. Fabricating processes involve with many manufacturing processes using various type of machine, hand tool and different type of material. After finishing the fabricating process, projectile launcher will be tested to gather a lot of information such as flight time, the angle, and measure the distance. Then the projectile motion analysis equation is solved from the time data. From the result it shows that projectile launcher had successfully achieved the objective of the project. Overall, this project can bring motivation and experience to conduct various type of machine, work under a big pressure, and increase the soft skill.

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