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FINAL REPORT OF DIPLOMA PROJECT

ROPE CLIMBING ROBOT

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"I declare that this report entitled "*ROPE CLIMBING ROBOT*" is the result of my own group research except as cited in the references. The report has not been accepted for any degree and is not concurrently submitted in candidature of any other degree."

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ABSTRACT

The achievement of technology that we had nowadays had triggered the invention of robotics technology for humankind. Based on the focus of replacing humans from doing the dangerous work, the usage of robot has grown bigger. Because of that, we created a robot that can have multi-functions when climbing a rope. However, our research is only on the function of robot that climbs the rope only.

Rope Climbing Robot is a game based on an imaginary of the military physical training. The Rope Climbing Robot will climb the 4.5 meters (177") rope in three minutes. The robot is considered completing the task when the robot touches the circular plate (bottom area) at the end of rope (CLIMB).

The design for its interior, which is design of the circuit and the type of the motor used, is to be the precise, lightest, and fastest as possible. This is due to the requirement to win the competition which is the fastest wins.

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