

THE APPLICATION OF MOBILE APPLICATION AS RESISTOR CALCULATOR FOR BASIC ELECTRICAL CONCEPT

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Abstract

Mobile learning applications are widely used nowadays. This learning method is broadly accepted to students and educators because of ease of use and relatively adaptable. Then, the emergence of Covid-19 pandemic in 2020 boosted the usage of mobile learning applications and made adjustment to the landscape in teaching and learning delivery. This change is no exception to Electrical Technology course for Diploma in Electrical Engineering students in Politeknik Malaysia. Adhering to this issue, an innovation utilizing an online learning application is necessary. This study describes the block-based programming language used in MIT App Inventor to develop the MyReSist smartphone app, which aids electrical engineering students at Politeknik the fundamentals of electricity. This mobile app is used to perform Star-Delta conversions, convert resistance colour codes to resistance values, and determine the overall resistance in the circuit. Results indicated that this mobile application could help students understand fundamental electrical concepts, such as total resistance in series and parallel circuits.

Keywords: Mobile Apps, Block-based Program, Mobile Learning