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PROGRAMME ABSTRACT

"Bridging Gaps with Creativity for Future Sustainability"

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ROBOTIC PROGRAMMING LANGUAGE EDUCATIONAL KIT

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POLITEKNIK SULTAN IDRIS SHAH

Abstract

An object of the present invention is to provide a robotic programming language educational kit consists of a computer software interface and an electronic robotic device for educational purposes. In further details, the electronic robotic device comprising 4 essential parts, namely, head, thorax, abdomen and four legged. The head and the thorax parts consist of various important electronic components. In details, the head comprising infrared (IR) sensor and the thorax comprising Ardunio Uno Board, USB port, resistor, capacitor and pulse-width modulation (PWM) module. Each of the components plays a different role in providing maximum efficacy to the electronic robotic device. The present invention provides a simple, yet effective way of learning programming language via the computer software interface aided by a simple electronic robotic device. As the fabrication of the present invention is simple, it is easier to be used by any user even though the user does not have any exposure or background in electronics and programming. Besides, the present invention only involves components with low cost. In another embodiment, the present invention provides an interactive teaching aid which is able to trigger interest among the students to know in depth about fundamental programming studies. Students may also improve their skills as the present invention gives opportunities to the students to actively engage with hands-on activities while handling or fabricating the robotic programming language educational kit.