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'E-GEOPEG' DEVELOPMENT OF LAND SURVEY REFERENCE
POINT AT UiTM PERLIS

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SCHOOL OF GEOMATICS SCIENCE AND NATURAL RESOURCES
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REFERENCE POINT AT UTM PERLIS**

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**Thesis submitted to the Universiti Teknologi MARA Malaysia
in partial fulfilment for the award of the degree of the
Bachelor of Surveying Science and Geomatics (Honours)**

JULY 2024

DECLARATION

I declare that the work on this project/dissertation was carried out in accordance with the regulations of Universiti Teknologi MARA (UiTM). This project/dissertation is original and it is the result of my work, unless otherwise indicated or acknowledged as referenced work.

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I certify that I have examined the student's work and found that they are in accordance with the rules and regulations of the School and University and fulfills the requirements for the award of the degree of Bachelor of Surveying Science and Geomatics (Honours).

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ABSTRACT

Mobile technology is currently in demand due to rapid advances in hardware, software, and mobile communication. Students often spend significant time during fieldwork searching for lost and buried reference points. This research integrates a land surveying database information system for students in the College of Built Environment at UiTM Perlis. The project aimed to propose a land survey reference point application specifically for these students. The objectives included identifying student issues, developing an accessible application, and assessing user acceptance of E-GeoPeg. A survey was conducted with 40 CFAP students to understand their needs and challenges with land surveying. As a result, the E-GeoPeg mobile application was developed, integrating interactive maps, survey reference points, and a user-friendly interface using Flutter. In addition, feedback from the 40 respondents, 80% of whom were degree holders, highlighted the time-consuming nature of locating reference point. E-GeoPeg was designed to address this issue, with 100% of users finding the application easy to use. Survey results showed high satisfaction, with 45% "Strongly Agreeing" and 50% "Very Satisfied" with the application's performance. The effectiveness of E-GeoPeg was assessed by evaluating improvements in fieldwork efficiency and user satisfaction using the Statistical Package for the Social Sciences (SPSS), which allowed for a detailed and precise evaluation of the survey data collected. The majority of users approved of E-GeoPeg, finding its features comfortable and user-friendly on-site. The research highlights E-GeoPeg value as an essential tool for students, enhancing their survey processes and boosting overall productivity.

Keywords: Cadastral Reference Mark, mobile application, Cadastral Reference Mark application, Flutter.

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