UNIVERSITI TEKNOLOGI MARA

Development of a Mobile Application for Levelling Survey Calculation (Levelingdroid)

NOR AMIRA BINTI MOHAMAD SHUKRI

Thesis submitted in fulfilment of requirements for the degree of

Bachelor of Surveying Science and Geomatics (Hons)

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AUTHOR'S DECLARATION

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Name of Student : Nor Amira Binti Mohamad Shukri

Student I.D. No. : 2015162223

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Signature of Student

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ABSTRACT

Levelling survey is some of survey to help surveyor for determine the relative height or elevation of point or objects on or below the surface of the earths and determine the undulation of the ground surface. However, there were a number of issues related to the onsite levelling survey booking. One of the problem is there has been no suitable application of onsite levelling survey. The researcher is creating a mobile application called Levelingdroid to support the student surveyor at the field to solve this problem. The aim of this project is to develop a mobile application of levelling survey for surveying students, while the objective of this project is to design mobile application in levelling survey calculation application for surveyor purpose and to provide a user-friendly graphical user interface for onsite use. The survey was carried out by 30 respondents among surveyor students. Apart from that, the System Development Life Cycle (SDLC) model is adopted to develop Levelingdroid. In addition, the user acceptance test is used as a test technique to obtain feedback and comments from user about this application.. Overall, most of the respondents accepted that use of Levelingdroid is a good idea, and the use of the elements in Levelingdroid allows them to be comfortable and easy to use onsite.

Keywords: Levelling application, mobile application, SDLC Model, Sketchware.

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