UNIVERSITI TEKNOLOGI MARA

WEB-BASED PARAMETRIC EFFORT ESTIMATION FOR MOBILE APPLICATION DEVELOPMENT

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ABSTRACT

Estimation methods are continuously adapted alongside this growth to obtain better and clearer estimations needed to achieve development goals. Some estimation methods were invented before the modern mobile application technology that is available now. Most probably these methods cannot cater for estimating modern mobile applications features. This study's objectives are to identify parametric effort estimation techniques based on 25 mobile application development cost drivers and construct a web-based system to estimate the effort in developing mobile application. This study is adapted a mobile app estimation model and a systematic literature review from the previous research. The price range of the cost drivers are acquired from researching the available cots drivers from seven similar systems and calculated the mean value of the costs. The mean values are inserted into the new estimation metric using PHP and Javascript programming languages to produce the total estimation cost. The system is validated by comparing the results obtained with six similar systems according to basic user needs requirements in an application. This system is more enhanced cost estimation software that contains more cost driver options, which can be utilised by users to estimate mobile application development cost.

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CHAPTER 1

INTRODUCTION

This section gives the foundation and basis of the study. It additionally gives subtleties of the noteworthiness of parametric effort estimation in mobile application development, the issues and problems that led to this study.

1.1 Background of Study

Mobile applications have made a great impact in the digital age especially on mobile devices such as cell phones, personal computers and tablets. There is a worldwide positive effect of mobile applications. Utilizing mobile applications, countries are starting to facilitate with individuals, a society of creating a nation that is upgrading themselves and making another kind of IT infrastructure (Islam, Islam, & Mazumder, 2010). All the major application stores, for example, the Google Android Market, the Nokia Ovi Store, the Apple App Store, RIM's App World have officially made a large sum of money as far as return, in the course of the most recent several years.

Mobile applications recently risen to be very convenient and most ideal approaches to publicize and offer items and utility, encourage social sharing of information and by large energize clients towards creating and keeping up brand dependability. The mobile application development market is immense and offers incredible breadth for application designers and organizations to prevail past their expectation, by making very small initial investment (Sarwar & Soomro, 2013).

Modern day software houses require a certain amount of effort to create mobile applications. This goes along with fulfilling the current needs and demands of clients. The development branches down to cost, manpower and schedule. Competition between software houses demands for fast and rapid development. Estimation becomes vital as it affects project management and planning.