A METHODOLOGY FOR DEVELOPING SECOND LIFE ENVIRONMENTS USING CASE-BASED REASONING TECHNIQUES

By

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CERTIFICATE OF ORIGINALITY

This is to certify that I am responsible for the work submitted in this thesis, that the original work is my own except as specified in acknowledgments or in footnotes, and that neither the thesis nor the original work contained therein has been submitted to this or any other institution for a degree.

Ahmad Shubati..... (Signed)

October 4, 2010..... (Date)

Abstract

Launched in 2003, Second Life is a computer-based pseudo-environment accessed via the Internet. Although a number of individuals and companies have developed a presence (lands) in Second Life, no appropriate methodology has been put into place for undertaking such developments. Although users have adapted existing methods to their individual needs, this research project explores the development of a methodology for developing lands specifically within Second Life.

After researching and examining a variety of different software methods and techniques, it was decided to base this research project methodology on Case-Based Reasoning (CBR) techniques, which shares a number of synergies with Second Life itself. With some modifications, a web-based system was designed based on CBR to work in accordance with Second Life.

Collecting and analyzing the feedback for the first version of the web-based system identified the adjustments and improvements needed. Therefore, from tracking its progress against previous specifications and future activity, an updated version of the CBR web-based system covering the latest changes and improvements of the tool was introduced. In addition to this, new functionalities have been added in the improved version in order to refine and develop the original prototype to become a highly effective SL development tool.

New feedback platforms have been provided to facilitate the use of the system and to obtain results which are more closely related to the users' recommendations. Through the feedback process, the tool is becoming ever more useful to developers of Second Life systems. This research project discusses the use of Case-based reasoning techniques and evaluates their application to the development of space within Second Life.

This thesis is dedicated to

Fawzi and Zuhria Shubati, My Parents.

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LIST OF CONTENTS