ENTERPRISE RESOURCE PLANNING SYSTEM FOR CHICOI SOLUTIONS COMPUTER SERVICES

Undergraduate Thesis
Submitted to the Faculty of the
College of Information Technology and Engineering
Cavite State University
Indang, Cavite

In partial fulfillment
of the requirements for the degree
Bachelor of Science in Information Technology

BRIAN A. APOLINARIO
KEITH G. VARIAS
May 2017

ABSTRACT

APOLINARIO, BRIAN A. and VARIAS, KEITH G. Enterprise Resource Planning System for Chicoi Solutions Computer Services. Undergraduate Thesis. Bachelor of Science in Information Technology. Cavite State University, Indang, Cavite. May 2017. Adviser: Ms. Gladys G. Perey.

The study was conducted from January 2016 to May 2017 at Alfonso, Cavite to create an enterprise resource planning system for Chicoi Solutions Computer Services. Specifically, it aimed to: 1. analyse the decentralization problem encountered through interviews and observation; 2. design an enterprise resource planning (ERP) system that is tailored to provide timely and accurate information for better decision making; 3. create an effective enterprise resource planning (ERP) system that will improve the quality of operations of Chicoi Solutions Computer Services by providing reliable and accurate reports to the management, timely business processing, and centralized data for all of the company processes; and 4. evaluate the system using integration test and to determine the acceptability level based on software quality attributes.

Agile scrum development model was the methodology used upon the development of the study. It has five phases, namely: initiate, plan and estimate, implement, review and retrospect, and release.

The system was developed using the following software tools: Sublime for text editor and coding. PHP: Hypertext Preprocessor (PHP) for its programming language. My Structured Query Language (MySQL) for database. Bootstrap for frontend framework. Adobe Photoshop for some designs of the system. Laravel for PHP framework of computer

rentals server. Also Electron JS framework for creating the desktop application of the computer rentals client.

The system was evaluated in accordance to functionality, reliability, usability, efficiency, maintainability, portability and user-friendliness. The participants were composed of the customers' and employees' of Chicoi Solutions Computer Services, instructors at Department of Information Technology of Cavite State University, Indang, Cavite and IT experts in Revlv Solutions, Inc. Evaluation results indicate that the system has passed and completed the needed requirements.

TABLE OF CONTENTS

Page

APPROVAL SHEET ii

BIOGRAPHICAL DATA iii

ACKNOWLEDGMENT v

ABSTRACT vii

LIST OF TABLES xi

LIST OF FIGURES xii

LIST OF APPENDIX TABLES xvi

LIST OF APPENDIX FIGURES xix

LIST OF APPENDICES xx

INTRODUCTION 1

Statement of the Problem 2

Objectives of the study 4

Significance of the Study 5

Time and Place of the study 6

Scope and Limitation of the study 6

Definition of Terms 9

Theoretical Framework 11

REVIEW OF RELATED LITERATURE 15

METHODOLOGY 27

Materials 27

Methods..... 28

RESULTS AND DISCUSSION..... 31

SUMMARY, CONCLUSION, AND RECOMMENDATIONS..... 102

Summary..... 102

Conclusion..... 103

Recommendation..... 104

REFERENCES..... 105

APPENDICES..... 107