

## **TABLE OF CONTENTS**

Title Page	i
Approval Sheet	ii
Acknowledgement	iii
Abstract	v
Table of Contents	vi
List of Tables	viii
List of Figures	ix
Chapter 1: Introduction	
1.1 Background of the Study	3
1.2 Objectives of the Study	4
1.3 Scope and Limitations	6
1.4 Significance of the Study	7
1.5 Definition of Terms	9
Chapter 2: Review of Related Literature/Studies	
2.1 Foreign Literature or Study	12
2.2 Local Literature or Study	16
2.3 Summary	20
2.4 Synthesis	22
Chapter 3: Design and Methodology	
3.1 Systems Development Method	24
3.2 Operational Framework	29
3.3 Context Diagram (Level 0)	30
3.4 Data Flow Diagram (Level 1)	3
3.5 Entity Relationship Diagram	32



## **IOT BASED RESTAURANT INFORMATION SYSTEM**

Table of Contents vii

3.6 Use Case Diagram	34
3.7 Data Dictionary	35
3.8 Hardware and Software Requirements	38
3.9 Ghantt Chart	40
3.10 System Usability and Reliability Testing	41
Chapter 4: Results and Discussion	
4.1 Profile of Respondents	44
4.2 Screen Prototype and Description	45
4.3 System Testing Result	53
4.4 Development of User Manual	61
Chapter V: Summary, Findings, and Conclusion	
5.1 Summary of Findings	62
5.2 Conclusion and Recommendation	63
References	66
Appendices	68



## **LIST OF TABLES**

Table 1. Menu	36
Table 2. Pending	36
Table 3. Table	36
Table 4. Orders	36
Table 5. Sales	36
Table 6. Sales History	36
Table 7. Sensor IR	36
Table 8. Cottage	36
Table 9. Reserve	37
Table 10. Address	37
Table 11. System Settings	37
Table 12. Transactions	38
Table 13. User	38
Table 14. Gantt Chart	40
Table 15. Profile of the Respondents	44
Table 16. Mean Scores in the ISO 25020 (SQuaRE) Evaluation	53
Table 17. Mean Scores in the Usability Level	54
Table 18. PSSUQ – 3 Norms	55
Table 19. Mean Scores in the Usability as a Whole	56
Table 20. Mean Scores in the System Usefulness	58
Table 21. Mean Scores in Information Quality	59
Table 22. Mean Scores in Interface Quality	60



State University

List of Figures ix

CARLOS HILADO MEMORIAL STATE UNIVERSITY • COLLEGE OF COMPUTER STUDIES • CARLOS HILADO MEMORIAL STATE UNIVERSITY • COLLEGE OF COMPUTER STUDIES • CARLOS HILADO MEMORIAL STATE

## **LIST OF FIGURES**

Figure 1. Prototyping Developmental Model	25
Figure 2. Operational Framework	29
Figure 3. Context Diagram	30
Figure 4. Level 1 Data Flow Diagram	31
Figure 5. Entity Relationship Diagram	32
Figure 6. Use Case Diagram	34
Figure 7. Website Homepage	46
Figure 8. Ordering Page for Customer	47
Figure 9. Cottage Reservation Page	48
Figure 10. Admin Dashboard	49
Figure 11. Staff Dashboard	50
Figure 12. Point of Sales	51
Figure 13. Kitchen Staff Virtual Queue Page	51
Figure 14 OR Code	52