**VIRTUALSHRINE: AN INTERACTIVE MUSEUM WEBSITE FOR CASA REAL SHRINE**

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In partial fulfillment of the requirements for the degree of Bachelor of Science in Information Technology, this capstone project entitled **“VIRTUALSHRINE: AN INTERACTIVE MUSEUM WEBSITE FOR CASA REAL SHRINE”** has been prepared and submitted by Sharvien Paul M. Claro, Carlo Elijah R. Gabutina, Jhan Mar D. Mergal, Angelo D. Mauricio, Kristine Joy S. Nacional, Rovi Keith Y. Navarro, and Jhel Ansel D. Tapang who are hereby recommended for oral examination.

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**DEDICATION**

This thesis is dedicated to my family, friend and my groupmates who have meant and still mean the world to me. Despite the fact that they are no longer among us, their memories still guide my life.

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*S.P.M Claro*

I dedicate this thesis to my family, with their unwavering support, and friends who have meant so much to me. groupmates who, through their dedication and commitment to this thesis, have made it available to all. Lastly, our professors and advisers, with their guidance to teaching. To all of our family, friends, classmates, groupmates, professors, and advisers, who offered their support, guidance, encouragement, and patience that helped us to complete our work.

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**ABSTRACT**

This study was developed in order to describe the daily operations and its encountered problems of NHCP Museo ng Kasaysayang pampulitika ng Pilipinas, Casa Real. These problems were addressed and analyzed in the developed Casa Real Shrine website and web-based admin information and content management system of cases. The project covers the creation of interactive website, managing of contents uploaded on the website, user management, and reports generation. This study also covered resolving common IT-related problems upon implementation of the web-based management information system. This study was evaluated using standard web evaluation criteria by its intended users and experts.

The proponents conducted observations, interviews, and surveys to acquire the objectives of this study. The research methodology utilized in this project was the quantitative approach. Quantitative approach was applicable to this study as it aims to collect and understand the behavior of Casa Real Shrine’s visitors and how the proponent will apply the results in the implementation of the VirtualShrine website. On developmental research, the proponents studied a process systematically, developed, and evaluated processes that met the set criteria for user’s acceptance to the developed system. The researcher used the Agile Software Development methodology to develop the web-based system. It was used to quickly produce the desired output while allowing the researcher to go back past phases without finishing the whole cycle.

For the acceptability of the developed Casa Real Shrine website, the researchers consulted with IT professionals from different fields, IT instructor from Bulacan State University, and the end-users or clients of the developed system such as the museum staff, students, local and foreign tourist. The evaluation form has the following criteria for software quality evaluation as follows: (1) functional suitability; (2) performance efficiency; (3) usability; (4) reliability; (5) security; and (6) portability. The researchers conclude that the developed website is usable and functional and also provides a user-friendly UI/UX design to end-users and also proves that the system is reliable and secured based on the data gathered. The researchers also believe that the system will be a catalyst in booking, storing and protecting the records of the Casa Real Museum. With this, the following recommendations were drawn that can be a basis for future researchers who would want to develop the same type of museum website. (1) An enhance VR control capabilities in virtual tours that could focus on improving the user experience and accessibility of VR technology; (2) A Museum maps that could focus on exploring the use of augmented reality (AR) technology to enhance the visitor experience**;** (3) QR codes for audio guides in museums could focus on studying the effectiveness of this technology as a tool for enhancing visitor engagement and understanding of museum exhibits; and (4) Calendar integration for museum closures could focus on studying the effectiveness of different notification systems and strategies for informing researchers and other stakeholders about unexpected closures.

**TABLE OF CONTENTS**

TITLE PAGEi

APPROVAL SHEETii

ACKNOWLEDGEMENTiii

DEDICATIONiv

ABSTRACTvi

TABLE OF CONTENTSvii

LIST OF TABLESx

LIST OF FIGURESxi

LIST OF APPENDICESxiv

**CHAPTER I. INTRODUCTION**

Project Context**1**

Purpose and Description**2**

General Objectives**3**

Specific Objectives**3**

Scope and Limitations of the Study**4**

**CHAPTER II. REVIEW OF RELATED LITERATURE/SYSTEM**

Related Literature**6**

The utilization of Interactive Website to Museums**6**

Online Booking Admission**8**

Virtual Gallery**8**

Virtual Tour Guide**9**

Digital Learning**9**

Related System**10**

**CHAPTER III. TECHNICAL BACKGROUND**

Project Methodology**12**

Conceptual Framework**13**

Conceptual Process of the System Development **14**

Initiation Phase**14**

Planning Phase**14**

Design Phase**15**

Development Phase**15**

Testing Phase**15**

Project Evaluation**16**

Implementation Phase**16**

Gantt Chart**16**

Requirements Analysis and Documentation**17**

Maintenance Phase**17**

System Specifications**17**

Hardware Requirements**18**

Software Requirements**18**

System Design and Processes**19**

System Flowchart**19**

Context Diagram**23**

Conceptual System Design**27**

System Architecture**27**

Security Matrix**28**

The Online Booking Reservation Process**29**

The Walk-in Admission Process**29**

Network Infrastructure**30**

The Developed System**31**

**CHAPTER IV. RESULTS AND DISCUSSION**

Part I. Development of VirtualShrine: An interactive

museum website for Casa Real Shrine**62**

1.1 Online Booking Reservation**62**

1.2 Virtual Museum Tour**64**

1.3 Gallery Collections**66**

1.4 User Assisting Features**69**

Part II. To design and develop a Management System**71**

2.1 Manage User Admins**71**

2.2 Accept and Reject Visitor Booking**73**

2.3 Upload Website Content**75**

2.3.1 Collections**75**

2.3.2 Exhibits**78**

2.4 Generate and Print Admin Activity Record**81**

2.5 Booking Confirmation through email

after reservation**82**

Part III. Software Quality Evaluation of the VirtualShrine:

An Interactive Museum Website for Casa Real Shrine**82**

**CHAPTER IV. RESULTS AND DISCUSSION**

Summary of Findings**93**

Conclusion**95**

Recommendations**96**

**REFERENCES93**

**APPENDICES98**

**CURRICULUM VITAE146**

**LIST OF TABLES**

Table Page

1Hardware Requirements for the System**18**

2Software Requirements for the System**18**

3Security Matrix**28**

4Total Number of Respondents **83**

75-Score Likert Scale **84**

6Frequency Distribution and Descriptive Measures in the

Evaluation of the Developed Website in terms of

Functional Suitability **84**

7Frequency Distribution and Descriptive Measures in the

Evaluation of the Developed Website in terms of

Performance Efficiency **85**

8Frequency Distribution and Descriptive Measures in the

Evaluation of the Developed Website in terms of

Compatibility **86**

9Frequency Distribution and Descriptive Measures in the

Evaluation of the Developed Website in terms of

Usability **87**

10Frequency Distribution and Descriptive Measures in the

Evaluation of the Developed Website in terms of

Reliability **88**

11Frequency Distribution and Descriptive Measures in the

Evaluation of the Developed Website in terms of

Security **89**

12Frequency Distribution and Descriptive Measures in the

Evaluation of the Developed Website in terms of

Maintainability **90**

13Frequency Distribution and Descriptive Measures in the

Evaluation of the Developed Website in terms of

Portability **91**

14Overall Mean **92**

**LIST OF FIGURES**

Figure Page

1 Conceptual Model of the System Development**13**

2 VirtualShrine: An Interactive Museum Website for

Casa Real Shrine of Malolos Gantt Chart **16**

3Booking Admission Flowchart**20**

4Content Management Flowchart **21**

5Admin View VTOC **22**

6Context Diagram (Level 0)**23**

7Data Flow Diagram (Level 1)**24**

8Use Case Diagram **25**

9Entity Relationship Diagram (ERD)**26**

10The Client’s Access to the Website **27**

11Online Booking Process **29**

12Walk-in Admission Process **29**

13The Network Infrastructure **30**

14VirtualShrine Homepage **31**

15Data Privacy Issue disclaimer **32**

16Data Privacy Issue disclaimer – Warning Message **32**

17 VirtualShrine Booking Form **33**

18Booking Confirmation page **33**

19Access to the Virtual Tour Page **34**

20Virtual 360° **35**

21Virtual Tour Lobby **35**

22Virtual Tour Infor Popup **36**

23Virtual Tour Controller **36**

24Gallery Page **37**

25Galleries Collection Page **38**

26Display Description page **38**

27Plan Your Visit page **39**

28Exhibitions Page **40**

29Exhibition Overview Page**41**

30Exhibition Objects Page **42**

31Exhibition Objects Description Page **43**

32Audio Guide Page **43**

33Audio Guide Player **44**

34About Page **45**

35VirtualShrine Admin Login Page **46**

36VirtualShrine Admin Dashboard **46**

37VirtualShrine Assistant Admin Management Panel **47**

38Add Assistant Admin form **47**

39Edit Assistant Admin Information form **48**

40Pending Booking Panel **48**

41Booking Details**49**

42Attached File preview **49**

43Reject Booking form **50**

44Approved Bookings Panel**50**

45Rejected Booking Panel **51**

46Cancel Booking Panel **51**

47CMS – Collection Panel **52**

48Add Content form **53**

49Edit Content form **54**

50CMS - Exhibit Display panel **55**

51Add Exhibit Display form 5**6**

52Edit Exhibit Display **57**

53Gallery Category panel **58**

54Add Gallery Category **58**

55Edit Gallery Category form**59**

56Exhibits Panel **59**

57Add Exhibits panel **60**

58Edit Exhibit form**60**

59User Report panel **61**

60Print User Report **61**

61Booking Consent Form**62**

62Booking Form **63**

63Booking Submitted Confirmation Page **63**

64Access to the Virtual Tour Page **64**

65Casa Real Shrine Virtual 360 **65**

66Casa Real Shrine Lobby Virtual 360 **65**

67Galleries Page **66**

68Galleries Collection **67**

69Display Description **68**

70Plan your visit Page **69**

71Audio Guide **70**

72User Management **71**

73Edit User Information **72**

74Add New User **72**

75View All Pending Bookings **73**

76View More Booking Details **74**

77Attached File Preview **74**

78Content Management System - Collections **75**

79Content Management System – Edit Collection Information **76**

80Content Management System – Add new Collection **77**

81Content Management System – Exhibit Display **78**

82Content Management System – Add new Exhibit Display **79**

83Content Management System – Edit Exhibit Display **80**

84Activity Report **81**

86Printing Report **81**

87Email from the Administration **82**

**LIST OF APPENDICES**

Appendix Page

ALetter of Request for Capstone Adviser**100**

BLetter of Request for Capstone Panel Member**102**

CLetter of Invitation for Proposal Presentation**106**

DLetter for Client**111**

ELetter of Invitation for Final Capstone Defense**116**

FPanel Report **121**

GEvaluation Criteria for Software **128**

HRelevant Source Code**132**

IPlagiarism Certification **149**

JPlagiarism Certification (IMRAD)**151**

KIMRAD Certification (Adviser) **153**

LIMRAD Paper **155**

MCurriculum Vita **162**