# "ASA TA KAON" A FOOD ESTABLISHMENT LOCATOR MOBILE APPLICATION

A Capstone Project

Presented to the Faculty of the

Department of Computer and Information Sciences

University of San Carlos

In Partial Fulfillment

of the Requirements for the Degree

BACHELOR OF SCIENCE IN INFORMATION AND COMMUNICATIONS
TECHNOLOGY

Ву

ALDA ZOE KENJI P. BARRAL

STEPHANIE B. PASIGNASIGNA

MARNEL M. ROSAL

FRANCHESCA DOMINIC E. VALDEZ

ARCHIVAL J. SEBIAL, DIT

**Faculty Adviser** 

July 2019

## **APPROVAL SHEET**

#### **ACKNOWLEDGEMENTS**

We would like to express our deepest gratitude to our Capstone Adviser, Mr. Archival B. Sebial, who has advised and guided us to create the system all throughout the semester. Secondly, we would like to commend ourselves for doing such a great job for we have not given up even though we faced many struggles. To our friends who have supported us who were also doing the Capstone Project namely Ruth Angga, Rachel Mabandos, Vhannie Tibalan, Russell Calungsod, Rj Villafranca and Elixir Cubelo. We would also like to thank Mr & Mrs Valdez for letting us stay in their humble home and Mr. Rosal for letting us use his dormitory. In addition, a very big thank you to our Capstone Coordinator, Ms. Angie Ceniza, and Panelists Mr. Godwin Monserate our chair panel, Mr. Rex Paña & Mr. Cris Militante. Without your unending support we would not have made it this far. We owe our success to you!

#### **ABSTRACT**

People of today live in a fast-paced lifestyle. Most of them are too busy to cook for themselves, while others do not know how to do it, so they prefer eating in food establishments. When it comes to lunch breaks or dinner, most of them face the dilemma of not knowing where to eat despite the numerous choices of food establishment around them. Having a food establishment locator mobile application will be a great help for these busy people. "Asa ta Kaon?" is a mobile application that will help users and food establishment owners alike. The application allows the customers to search for places to eat wherein the amount the user is willing to spend is within its price range, and is within the radius. The application has two parts, the mobile for the customers and owners, and web based for the administrators. The mobile part was made using react-native, while the web based was made using react. Both sides of the application use a single database which was implemented via firebase. If the proponents were to have more time, resources, and experience, the proponents would have made more improvements to the application. This would include designing the application itself, subscribing to APIs to make the existing functionalities better and more efficient, widened the scope of the area covered by the application.

### **TABLE OF CONTENTS**

ACKNOWLEDGEMENTS	iii
ABSTRACT	iv
TABLE OF CONTENTS	V
LIST OF FIGURES	vii
LIST OF TABLES	viii
CHAPTER 1 INTRODUCTION	1
1.1 Rationale of the Study	1
1.2 Statement of the Problem 1.2.1 General Objective	2 2
1.2.2 Specific Objectives	2
1.3 Significance of the Study	2
1.4 Scope and Limitations	3
CHAPTER 2 RELATED SYSTEMS	4
CHAPTER 3 TECHNICAL BACKGROUND	11
CHAPTER 4 DESIGN AND METHODOLOGY	13
4.1 Conceptual Framework	13
4.2 Analysis and Design	15
4.3 Development Model	17
4.4 Development Approach	18
4.5 Software Development Tools	19
4.6 Project Management	20
4.6.1 Schedule and Timeline	20
4.6.2 Responsibilities	21
4.6.3 Budget and Cost Management	22
4.7 Verification, Validating and Testing	23
CHAPTER 5 RESULT AND ANALYSIS	24
<b>CHAPTER 6 CONCLUSION AND RECOMMENDATIO</b>	N 37
GLOSSARY	40
BIBLIOGRAPHY	42
APPENDICES	
Appendix A Transmittal Letter	
Appendix B Interview Letter	
Appendix C Questionnaire	
Appendix D Software Requirements Specifications	
Appendix E Functional Requirements	
Appendix F Black Box Testing	
Appendix G User Acceptance Testing	

SYSTEM INSTALLATION MANUAL USER'S MANUAL CURRICULUM VITAE

## **LIST OF FIGURES**

Figure 1 Conceptual Framework –	
User's Side (Mobile)	13
Figure 2 Conceptual Framework –	
Admin's Side (Web)	14
Figure 3 Analysis and Design - ERD	15
Figure 4 Analysis and Design - Use Case	16
Figure 5 Agile Development Model	17
Figure 6 Development Approaches –	
Top Down Approach for User	18
Figure 7 Development Approaches –	
Top Down Approach for Admin	19
Figure 8 Black box Testing – Results	26
Figure 9 Result for Food Establishment	
Owners/ Managers	27
Figure 10 Result for the Customers of the	
Food Establishment	30
Figure 11 Average Results for the Establishment	
Owners/ Managers & Customers	32

## **LIST OF TABLES**

Table 1 Summaries of Related Systems	 9
Table 2 Software Development Tools	 19
Table 3 Gant Chart of Activities –	
1 <sup>st</sup> Semester 2018-2019	 20
Table 4 Gant Chart of Activities –	
2 <sup>nd</sup> Semester 2018-2019	 21
Table 5 Gant Chart of Activities –	
summer 2019	 21
Table 6 Responsibilities	 21
Table 7 Budget and Cost Management	 22