DESIGN AND IMPLEMENTATION OF FOOD SENSORY ANALYSIS INFORMATION SYSTEM

By

Stefanus Oliver
11302015

BACHELOR'S DEGREE
in

INFORMATION TECHNOLOGY
ENGINEERING AND INFORMATION TECHNOLOGY

SWISS GERMAN UNIVERSITY
The Prominence Tower
Jalan Jalur Sutera Barat No. 15, Alam Sutera
Tangerang, Banten 15143 – Indonesia

August 2017
Revision after the Thesis Defense on 19 July 2017

STATEMENT BY THE AUTHOR

I hereby declare that this submission is my own work and to the best of my knowledge, it contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgement is made in the thesis.

Stefanus Oliver

Student _____ Date _____

Approved by:

Dr. Maulahikmah Galinium, S.Kom, M.Sc.

Thesis Advisor _____ Date _____

Ir. Abdullah Muzi Marpaung, MP

Thesis Co-Advisor _____ Date _____

Dr. Ir. Gembong Baskoro, M.Sc.

Dean _____ Date _____

ABSTRACT

DESIGN AND IMPLEMENTATION OF FOOD SENSORY ANALYSIS INFORMATION SYSTEM

By

Stefanus Oliver
Dr. Maulahikmah Galinium, S.Kom, M.Sc.
Ir. Abdullah Muzi Marpaung, MP

SWISS GERMAN UNIVERSITY

Food sensory analysis is the terms from the field of Food Technology that has a meaning which means sensory evaluation of food that is conducted by the food sensory evaluators. Currently, food sensory analysis is conducted manually. It can cause human errors and consume much time. The objective of this thesis is to build a web based application that is specific for food sensory analysis using PHP programming language. This research follows four first steps of waterfall software engineering model which are user requirements analysis (user software and requirements analysis), system design (activity, use cases, architecture, and entity relationship diagram), implementation (software development), and testing (software unit, functionality, validity, and user acceptance testing). The software result is well-built. It is also acceptable for users and all functionality features can run well after going through those four software testing. The existence of the software brings easiness to deal with the manual food sensory analysis experiment. It is considered also for the future it has business value by having open-source and premium features.

Keywords: Food Sensory Analysis, System Analysis and Design, Software Engineering, Software Development, Software Testing, Web Based Application.

DEDICATION

I dedicate this thesis work for food sensory analyst in the sector of food and beverages companies and for the food technology students.

ACKNOWLEDGEMENTS

First of all, thanks to the Almighty God because without his wonderful blessings, this whole thesis work will not be finished. He has blessed me beyond measures.

Next, my deep gratitude to my lovely parents, Mr. Teguh Hartono and Mrs. Susyanti Tjondrolukito, that never stop encouraging me to finish this thesis work.

Also, I give also my thanks to my Advisor and Co-Advisor, Mr. Maulahikmah Galinium and Mr. Abdullah Muzi Marpaung who are never tired of guiding and supporting me during this thesis periods.

Finally, the thanks and gratitude extend to all of my friends in my life that never stop supporting me in form of lovely support. Moreover, billion thanks to my friends in Swiss German University in the department of Food Technology and Information Technology who have helped me in solving my obstacles during the working of my thesis.

TABLE OF CONTENTS

Page