## Universiti Teknologi MARA

# **Implementation of Health Checking Tools using Lean Method for Managing Final Year Project**

Siti Izniwafaa Binti Azizan

Thesis submitted in fulfilment of the requirements for Bachelor of Information Technology (Hons.) Information Systems Engineering Faculty of Computer and Mathematical Sciences

January 2017

#### STUDENT'S DECLARATION

I certify that this report and the project to which it refers is the product of my own work and that any idea or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

SITI IZNIWAFAA BINTI AZIZAN 2013814484

JANUARY, 2017

#### **ABSTRACT**

Good project management includes continuous attention to make sure a project is running well. Currently, most of students of Bachelor in Information Technology (Hons.) Information Systems Engineering had problems in managing their Final Year Project (FYP) as they find difficulty to take an objective view of current state of their FYP. This phenomenon results to ineffective FYP deliverables which lead to failure. This research study is about Project Health Check (PHC) approach to better enables the students to deliver a successful FYP outcome. The PHC templates provide students with early indications of looming problems during the life of a project by checking true status of running task and also encourage students to maintain good practices from start to finish through a simple scheduling approach. The research study focused on Lean method that help in aligning and redesign process workflow through removing waste in the project. Lean management methods helps in increasing the performance of PHC to deliver better FYP report for submission purposed. Both qualitative and quantitative method is used to identify problem, gaining knowledge and achieved result findings. The results show the application of PHC templates in visualization form of checking project health status and checking project compliance. These benefits to a certain extent contribute in managing students' FYP report compliance and monitoring health status of FYP and indirectly ease supervision task to supervisors.

### TABLE OF CONTENT

SUPERVISOR'S APPROVAL       ii         STUDENT'S DECLARATION       iii         ACKNOWLEDGEMENT       iv         ABSTRACT       v         TABLE OF CONTENT       vi         LIST OF FIGURES       x         LIST OF TABLES       xiii         CHAPTER ONE: INTRODUCTION       1         1.1 Background of Study       1         1.2 Problem Statement       7         1.3 Research Aim       8         1.4 Research Objectives       9         1.5 Research Limitations       9         1.6 Research Scope       9
ACKNOWLEDGEMENT       iv         ABSTRACT       v         TABLE OF CONTENT       vi         LIST OF FIGURES       x         LIST OF TABLES       xiii         CHAPTER ONE: INTRODUCTION       1         1.1       Background of Study       1         1.2       Problem Statement       7         1.3       Research Aim       8         1.4       Research Objectives       9         1.5       Research Limitations       9
ABSTRACT         v           TABLE OF CONTENT         vi           LIST OF FIGURES         x           LIST OF TABLES         xiii           CHAPTER ONE: INTRODUCTION         1           1.1         Background of Study         1           1.2         Problem Statement         7           1.3         Research Aim         8           1.4         Research Objectives         9           1.5         Research Limitations         9
TABLE OF CONTENT       vi         LIST OF FIGURES       x         LIST OF TABLES       xiii         CHAPTER ONE: INTRODUCTION       1         1.1 Background of Study       1         1.2 Problem Statement       7         1.3 Research Aim       8         1.4 Research Objectives       9         1.5 Research Limitations       9
LIST OF FIGURES
LIST OF TABLES xiii  CHAPTER ONE: INTRODUCTION 1  1.1 Background of Study 1  1.2 Problem Statement 7  1.3 Research Aim 8  1.4 Research Objectives 9  1.5 Research Limitations 9
CHAPTER ONE: INTRODUCTION 1  1.1 Background of Study 1  1.2 Problem Statement 7  1.3 Research Aim 8  1.4 Research Objectives 9  1.5 Research Limitations 9
1.1Background of Study11.2Problem Statement71.3Research Aim81.4Research Objectives91.5Research Limitations9
1.2Problem Statement.71.3Research Aim.81.4Research Objectives.91.5Research Limitations.9
1.3Research Aim81.4Research Objectives91.5Research Limitations9
1.4Research Objectives91.5Research Limitations9
1.5 Research Limitations
1.6 Research Scope
1.7 Research Significance
1.8 Research Outline
1.9 Summary11
CHAPTER TWO: LITERATURE REVIEW12
2.1 Project
2.2 Project Management
2.2.1 Important of Project Management
2.2.2 Dimension of project management

2.2.	4 Reason need a good Project management	16
2.2.	5 Discussion	16
2.3	Final Year Project	18
2.3.	Overview current process of managing FYP	18
2.3.	2 Problem with the current process	20
2.4	Tool for managing project	20
2.4.	1 Project Health Check	20
2.4.	2 Benefits of PHC	21
2.4.	3 PHC of Checking Project Health Status	23
2.4.	4 PHC for Checking Project Compliance	24
2.4.	.5 Case Study of PHC	26
2.4.	6 Discussion	27
2.5	Lean Method	28
2.5.	1 The History of Lean	28
2.5.	2 Lean principles	29
2.5.	3 Waste in Lean	32
2.5.	4 Reason of applying lean	34
2.5.	5 Benefits of Lean	36
2.5.	6 Lean Project Management	38
2.5.	7 Case Study	39
2.5.	8 Discussion	41
2.6	Visualization tools	41
2.6.	1 Benefits of visualization tools	42
2.6.	2 Discussion	44
2.7	Research Methodology Approach	44
2.7.	1 Quantitative	44
2.7.	2 Qualitative	45
2.7.	3 Method of interview	45
2.7.	4 Discussion	46
2.8	Summary	47
CHAPT	ER THREE: METHODOLOGY	50
3.1	Project Methodology	50
3.2	Problem Identification Phase	53