

TABLE OF CONTENTS

VALIDATION SHEET	i
ABSTRACT.....	ii
ORIGINALITY STATEMENT SHEET	iii
PREFACE.....	iv
TABLE OF CONTENTS.....	v
TABLE OF FIGURES	viii
LIST OF TABLES.....	ix
LIST OF APPENDIXES.....	xi
LIST OF KNOWLEDGE	xii
CHAPTER I PRELIMINARY.....	1
I.1 Research Background.....	1
I.2 Problem Statement	4
I.3 Research Objectives	4
I.4 Research Scopes	5
I.5 Research Benefits	5
I.6 Writing Systematics	6
CHAPTER II LITERATURE REVIEW.....	8
II.1 Digital Ecosystem	8
II.2 UI/UX.....	11
II.2.1 User Interface.....	13
II.2.2 User Experience	17
II.3 Persona	20
II.4 Usability Testing	22
II.5 User Centered Design.....	24
II.6 SUS (System Usability Scale).....	25

II.7	SEQ (Single Ease Questions).....	26
II.8	State of the Art	26
CHAPTER III RESEARCH METHODOLOGY		33
III.1	Conceptual Method.....	33
III.2	Research Systematic	33
III.3	Data Collection	36
III.4	Development Process of Product/Artifact	37
III.5	Evaluation Method	37
III.6	Justification of Methods	38
CHAPTER IV DESIGN AND ANALYSIS		40
IV.1	Plan the Human Centered Design.....	40
IV.1.1	Interview Analysis	40
IV.2	Specify the Context of Use.....	58
IV.2.1	Persona Identification	58
IV.3	Specify User Requirements	61
IV.3.1	Business Process Analysis	62
IV.3.2	Context Scenario	69
IV.3.3	Persona Needs Analysis	83
IV.4	Design Solution	84
IV.4.1	Wireframe Design.....	84
IV.4.2	User Interface Design	118
CHAPTER V IMPLEMENTATION AND TESTING		133
V.1	Evaluate Designs Against User Requirements.....	133
V.1.1	Testing Plan	133
V.2	Iteration 1	134
V.2.1	Single Ease Question (SEQ)	134
V.2.2	System Usability Scale (SUS)	137

V.2.3	1 st SEQ Iteration Result	138
V.2.4	1 st SUS Iteration Result.....	139
V.3	Iteration 1 Conclusion	140
V.4	Iteration 2	141
V.4.1	Single Ease Questions (SEQ).....	141
V.4.2	System Usability Scale (SUS)	144
V.4.3	2 nd SEQ Iteration Result.....	145
V.4.4	2 nd SUS Iteration Result.....	146
V.5	Iteration 2 Conclusion	148
CHAPTER VI	CONCLUSIONS AND SUGGESTIONS	149
VI.1	Conclusions	149
VI.2	Suggestions.....	149
BIBLIOGRAPHY	150
APPENDIX	152