



Faculty of Computer Science and Information Technology

Borneo TRIZ System for Indigenous People

NURFAZLINA BINTI YUSUF

**Bachelor of Computer Science with Honours
(Multimedia Computing)**

2023

UNIVERSITI MALAYSIA SARAWAK

THESIS STATUS ENDORSEMENT FORM

TITLE BORNEO TRIZ SYSTEM FOR INDIGENOUS PEOPLE

ACADEMIC SESSION: 2022/2023

NURFAZLINA BINTI YUSUF

(CAPITAL LETTERS)

hereby agree that this Thesis* shall be kept at the Centre for Academic Information Services, Universiti Malaysia Sarawak, subject to the following terms and conditions:

1. The Thesis is solely owned by Universiti Malaysia Sarawak
2. The Centre for Academic Information Services is given full rights to produce copies for educational purposes only
3. The Centre for Academic Information Services is given full rights to do digitization in order to develop local content database
4. The Centre for Academic Information Services is given full rights to produce copies of this Thesis as part of its exchange item program between Higher Learning Institutions [or for the purpose of interlibrary loan between HLI]
5. ** Please tick (✓)

CONFIDENTIAL (Contains classified information bounded by the OFFICIAL SECRETS ACT 1972)

RESTRICTED (Contains restricted information as dictated by the body or organization where the research was conducted)

UNRESTRICTED



(AUTHOR'S SIGNATURE)

Validated by



(SUPERVISOR'S SIGNATURE)

Permanent Address

**NO. 375 LORONG PUNAN 5,
TAMAN MUARA TUANG, KOTA
SAMARAHAN, SARAWAK**

Date: 24/7/2023

Date: 26/7/2023

Note * Thesis refers to PhD, Master, and Bachelor Degree

** For Confidential or Restricted materials, please attach relevant documents from relevant organizations / authorities

DECLARATION

I, Nurfazlina Binti Yusuf, hereby declare that the project "Borneo TRIZ System for Indigenous People" is based solely on my own original work, with the exception of any quotations or citations that are permissible. I also certify that it has never been submitted for another degree at Universiti Malaysia Sarawak (UNIMAS), either in the past or currently.

Signature,

A handwritten signature in black ink, appearing to read 'Nurfazlina Binti Yusuf', written in a cursive style.

(NURFAZINA BINTI YUSUF)

Faculty of Computer Science and Information Technology

Date: 25th January 2023

Universiti Malaysia Sarawak

ACKNOWLEDGEMENT

I would like to say thanks to everyone who had a contribution to making my project a success.

I would like to begin by expressing my gratitude to my parents, Yusuf Bin Suhaili and Kamisiah Binti Jair, as well as my siblings, Ikwannuddin Bin Yusuf, Siti Nuratikah Binti Othman, Izamuddin Binti Yusuf, and Nurul Amani Binti Roslan, who have been very supportive and understanding of my hectic schedule this past year.

Both Madam Azlina Binti Ahmadi Julaihi and Professor Dr. Narayanan A/L N. Kulathu Ramaiyer deserve my deepest gratitude for the countless hours they spent mentoring me and helping me see where I could improve. I owe them an enormous debt of gratitude because their help was immensely valuable.

Special thanks to my friends Ahmad Adli Bin Sahren, Fadhlhin Sakina Binti Zaidi, Mohd. Fikri Iszuan Bin Indra Gunawan, Dayang Afiqah Liyana Binti Abang Ehsan, Syahazwani Nurain Binti Shariman Faizul, Nur'azra Alia Nisa Binti Zulpakar, Siti Rubiah Binti Muslim and Nurin Alya Binti Haris.

ABSTRACT

The goal of the Borneo TRIZ System for Indigenous People is to provide indigenous people with spaces for expressing their creativity and exchanging ideas with other inventors. Everyone can contribute their own ideas and see what others have come up with thanks to this system. The term "innovation among indigenous people" now often refers to the creation and adoption of novel concepts, tools, and procedures by populations that have been traditionally disadvantaged and undervalued. As the 40 TRIZ Principles are considered to be one of the fundamentals of understanding TRIZ, this initiative would also help in presenting TRIZ to indigenous people. This aids in the formation of a thorough strategy for problem solving and the discovery of new approaches for creative expression. Waterfall method is the best approach to choose for this task since it can be adapted to the changing needs of the user community with least effort and time. Through the evaluations and comments of actual users, the system's creators are able to improve the system's quality. Next, the system will undergo testing and implementation to guarantee that it operates as expected. Extensive testing, including compliance with functional requirements, unit testing, and usability evaluations, confirms the system's functionality and achievement of its goals. The Borneo TRIZ System emerges as a robust and user-friendly platform that enables diverse users to investigate TRIZ principles in their environment. By encouraging collaboration and the expansion of knowledge, the system honours indigenous innovation and promotes equality. Although there are limitations, they present opportunities for future improvements, thereby reinforcing the system's role in fostering creativity and problem-solving skills among indigenous communities. Overall, the Borneo TRIZ System exemplifies indigenous innovation's ingenuity and contributes to a future enriched with culturally rooted innovations and solutions.

ABSTRAK

Matlamat Sistem TRIZ Borneo untuk Orang Asli adalah untuk menyediakan ruang kepada orang asli untuk menyatakan kreativiti mereka dan bertukar idea dengan pencipta lain. Semua orang boleh menyumbangkan idea mereka sendiri dan melihat apa yang orang lain dapat hasilkan terima kasih kepada sistem ini. Istilah "inovasi dalam kalangan orang asli" kini sering merujuk kepada penciptaan dan penggunaan konsep, alat dan prosedur baru oleh populasi yang secara tradisinya kurang bernasib baik dan tidak dinilai. Memandangkan 40 Prinsip TRIZ dianggap sebagai salah satu asas untuk memahami TRIZ, inisiatif ini juga akan membantu dalam menyampaikan TRIZ kepada orang asli. Ini membantu dalam pembentukan strategi menyeluruh untuk menyelesaikan masalah dan penemuan pendekatan baharu untuk ekspresi kreatif. Kaedah *Waterfall* adalah pendekatan terbaik untuk dipilih untuk tugas ini kerana ia boleh disesuaikan dengan perubahan keperluan komuniti pengguna dengan sedikit usaha dan masa. Melalui penilaian dan ulasan pengguna sebenar, pencipta sistem dapat meningkatkan kualiti sistem. Seterusnya, sistem akan menjalani ujian dan pelaksanaan bagi menjamin ia beroperasi seperti yang diharapkan. Ujian yang meluas, termasuk pematuhan dengan keperluan fungsian, ujian unit dan penilaian kebolehgunaan, mengesahkan kefungsi sistem dan pencapaian matlamatnya. Sistem TRIZ Borneo muncul sebagai platform yang teguh dan mesra pengguna yang membolehkan pengguna yang pelbagai untuk menyiasat prinsip TRIZ dalam persekitaran mereka. Dengan menggalakkan kerjasama dan pengembangan pengetahuan, sistem ini menghormati inovasi orang asli dan menggalakkan kesaksamaan. Walaupun terdapat batasan, ia memberikan peluang untuk penambahbaikan pada masa hadapan, dengan itu mengukuhkan peranan sistem dalam memupuk kreativiti dan kemahiran menyelesaikan masalah dalam kalangan masyarakat orang asli. Secara keseluruhannya, Sistem TRIZ Borneo menunjukkan kepintaran inovasi orang asli dan menyumbang kepada masa depan yang diperkaya dengan inovasi dan penyelesaian berakar budaya.

Table of Contents

ACKNOWLEDGEMENT.....	i
ABSTRACT.....	ii
ABSTRAK.....	iii
Chapter 1 Introduction.....	1
1.1 Project Title	1
1.2 Introduction	1
1.3 Problem Statement	3
1.4 Objectives	3
1.5 Methodology	4
1.6 Scope	5
1.7 Significance of Project	6
1.8 Project Schedule	7
1.9 Expected Outcome	9
1.10 Summary	9
Project Outline	10
Chapter 2 Literature Review.....	11
2.1 Overview	11
2.2 Review of Similar Existing System	11
2.2.1 iNaturalist	11
2.2.2 AskNature	12
2.2.3 SureSolv	14
2.3 Main Features of Proposed Systems	15
2.4 Comparison between Systems	17
2.5 Summary	23
Chapter 3 Methodology	24
3.1 Overview	24
3.2 System Development Methodology	24
3.2.1 Requirements Gathering and Analysis	25
3.2.2 System Design	25
3.2.3 Implementation (Coding)	25
3.2.4 Testing	25

3.2.5 Deployment	26
3.2.6 Maintenance	26
3.3 Requirement Analysis	26
3.3.1 User Requirements	26
3.3.2 System Requirements	27
3.3.3 Software and Hardware Requirements	31
3.4 Survey/Questionnaire	32
3.5 System Design	33
3.5.1 Context Diagram	34
3.5.2 DFD Level 0	35
3.5.3 DFD Level 1	36
3.5.4 ERD	39
3.5.5 Data Dictionary	40
3.7 Summary	48
Chapter 4 System Implementation	49
4.1 Overview	49
4.2 Details of Implementation	49
4.2.1 Software Required	49
4.2.2 Hardware Required	51
4.3 Features of Borneo TRIZ System for Indigenous People	51
4.3.1 Landing Page	52
4.3.2 Innovators Here (user)	54
4.3.3 Admin Here (Administrators)	66
4.4 Database Implementation	70
4.5 Summary	71
Chapter 5 Software Testing	72
5.1 Overview	72
5.2 Functional Testing	72
5.2.1 Test Cases	72
5.3 Non-functional Testing	122
5.3.1 Functionality	122
5.3.2 Usability Testing	126
5.4 Summary	129
Chapter 6 Conclusion and Future Work	130

6.1 Overview	130
6.2 Objectives and Achievements	130
6.3 Project Limitations	132
6.4 Future Work	132
6.5 Conclusion	133
Appendix A – Survey Result	134
Appendix B – Questionnaire	136
Appendix C – Questionnaire	139
References	140

List of Tables

<i>Table 2.1 Feature Comparison between Existing System and Proposed System</i>	17
<i>Table 3.1 Functional Requirements</i>	28
<i>Table 3.2 Non-functional Requirements</i>	30
<i>Table 3.3 Software Requirement Specifications</i>	31
<i>Table 3.4 Hardware Requirement Specifications</i>	32
<i>Table 3.5 User Data Dictionary</i>	40
<i>Table 3.6 Admin Data Dictionary</i>	41
<i>Table 3.7 Ideas Data Dictionary</i>	42
<i>Table 3.8 Comment Data Dictionary</i>	43
<i>Table 5.1 Functions to be Tested</i>	73
<i>Table 5.2 Test Case for Registration (User)</i>	75
<i>Table 5.3 Test Case for Login (User)</i>	81
<i>Table 5.4 Test Case for Upload Ideas (User)</i>	84
<i>Table 5.5 Test Case for Comment Ideas (User)</i>	87
<i>Table 5.6 Test Case for Search Ideas (User)</i>	89
<i>Table 5.7 Test Case for Location Ideas (User)</i>	93
<i>Table 5.8 Test Case for Filter Ideas (User)</i>	97
<i>Table 5.9 Test Case for Manage Ideas (User)</i>	98
<i>Table 5.10 Test Case for Update Password (User)</i>	99
<i>Table 5.11 Test Case for Login (Administrators)</i>	102
<i>Table 5.12 Test Case for Manage Ideas (Administrators)</i>	105
<i>Table 5.13 Test Case for Search Ideas (Administrators)</i>	106
<i>Table 5.14 Test Case for Add Admin (Superadmin)</i>	109
<i>Table 5.15 Test Case for Manage Admin (Superadmin)</i>	114

Table 5.16 Test Case for Search Admin..... 119

Table 6.1 Objectives and Achievements..... 130

List of Figures

Figure 1.1 Waterfall Model.....	4
Figure 1.2 Project Schedule FYP 1	7
Figure 1.3 Project Schedule FYP 2	8
Figure 2.1 Example of Uploading an Observation Record in iNaturalist	12
Figure 2.2 AskNature Homepage and Sections.....	13
Figure 2.3 Biomimicry Stories in Educational Resources Section	13
Figure 2.4 Sections under Problem Solving in SureSolv	14
Figure 2.5 Directed Page after Clicking on Subscribe Button	15
Figure 2.6 AskNature View Web Content Section (Innovations)	19
Figure 2.7 SureSolv View Web Content Section.....	19
Figure 2.8 iNaturalist Upload Feature (Upload).....	20
Figure 2.9 iNaturalist View Post Feature (Explore).....	20
Figure 2.10 Delete Feature in iNaturalist	21
Figure 2.11 iNaturalist Search Feature.....	21
Figure 2.12 AskNature Search Feature	21
Figure 2.13 SureSolv Search Feature	21
Figure 2.14 iNaturalist Filter Feature	22
Figure 2.15 AskNature Filter Feature	22
Figure 2.16 iNaturalist Comment Feature	23
Figure 3.1 Waterfall Model.....	24
Figure 3.2 Context Diagram.....	34
Figure 3.3 DFD Level 0	35
Figure 3.4 DFD Level 1 for Preces 1.....	36
Figure 3.5 DFD Level 1 for Preces 2.....	36
Figure 3.6 DFD Level 1 for Preces 3.....	37
Figure 3.7 DFD Level 1 for Preces 4.....	38
Figure 3.8 System ERD.....	39
Figure 3.9 Landing UI of Borneo TRIZ System.....	44
Figure 3.10 Registration UI	44
Figure 3.11 Login UI	45
Figure 3.12 40 TRIZ Principles UI	45
Figure 3.13 Upload UI	46
Figure 3.14 Innovations UI and Search Feature	46
Figure 3.15 Filter Feature	47
Figure 3.16 Innovation Details, Comment Section and Delete Feature.....	47
Figure 3.17 Profile UI	48
Figure 4.1 Landing Page.....	53
Figure 4.2 Registration Page	54
Figure 4.3 Login Page	55
Figure 4.4 Profile Page.....	55
Figure 4.5 User's Idea Page.....	56
Figure 4.6 Manage Ideas Page.....	57
Figure 4.7 Account Setting Page.....	58
Figure 4.8 Ideas Page	59
Figure 4.9 Ideas Detail Page	60

Figure 4.10 Categories Page	61
Figure 4.11 Innovators Page	62
Figure 4.12 Innovator's Profile Page	62
Figure 4.13 Upload Page	64
Figure 4.14 40 TRIZ Principles Page	65
Figure 4.15 Admin Login Page	66
Figure 4.16 Add Admin Page.....	67
Figure 4.17 Admin List Page	68
Figure 4.18 Manage Ideas Page (Admin).....	69
Figure 4.19 Data Structure in phpMyAdmin of Borneo TRIZ System.....	71
Figure 5.1 Result of Tester Type	122
Figure 5.2 Result of User Functionality Testing.....	123
Figure 5.3 Result of Superadmin Functionality Testing	124
Figure 5.4 Result of Admin Functionality Testing	125
Figure 5.5 Result of User Interface Testing.....	127
Figure 5.6 Result of Administrator Interface Testing.....	128
<i>Figure 6.1 Respondents' TRIZ Level</i>	<i>134</i>
<i>Figure 6.2 Respondents' View of Storing and Sharing Innovations.....</i>	<i>134</i>
<i>Figure 6.3 Respondents' View on Receiving Comments</i>	<i>135</i>
Figure 6.4 Functionality Testing - User Form.....	136
Figure 6.5 Functionality Testing - Superadmin Form	137
Figure 6.6 Functionality Testing - Admin Form.....	138
<i>Figure 6.7 Interface Testing - User Form</i>	<i>139</i>
<i>Figure 6.8 Interface Testing - Administrator Form</i>	<i>139</i>

Chapter 1 Introduction

1.1 Project Title

Borneo TRIZ System for Indigenous People

1.2 Introduction

In research from Creativity, The Soviet inventor Genrich Altshuller and his associates created **TRIZ**, which stands for The Theory of Inventive Problem Solving in English and **Teoriya Resheniya Izobretatelskikh Zadatch** in Russian (n.d.). It was created at the start of 1946 and is still evolving now. TRIZ assists in locating an ideal approach without the need for compromise by fostering clear thinking and the production of creative ideas. To avoid being side tracked by insignificant problems, distracted by unnecessary details, or misled by rushed solutions, TRIZ helps keep the focus on the big picture and away from the specifics. Additionally, it is particularly successful at inspiring teams to collaborate in order to solve problems effectively, come up with ideas as a group, and innovate. The advantage of TRIZ over the conventional approach, which relies on compromise or trade-offs, is that it eliminates conflicts in order to produce novel solutions to problems.

According to new research, the inventiveness of their answers to technological difficulties that were resolved without compromise was evaluated by Altshuller and his colleagues as they examined tens of thousands of patents from throughout the world that had been deliberately chosen from top industries (Altshuller et al., 1998). The 40 TRIZ Principles function as the alphabet for the innovators. This system is where they will learn the 40 TRIZ Principles and after they have reached their understanding towards the principles, they can upload and share their innovation in the system.

As introduced by the **Institute of Social Informatics and Technological Innovations (ISITI)** a research institute in University of Malaysia Sarawak (UNIMAS), a method such as **Function Behaviour and Structure** or also known as **FBS** are used to identify the 40 TRIZ Principles that are implemented on the objects. By identifying the function and behaviour of the object it will be easy to identify the structure that is implemented at the object where the structure implies the 40 TRIZ Principles. The term "Function Behaviour Structure" (FBS) is a concept used to analyse and understand the characteristics and components of a system or object. It provides a framework for describing how something functions, the behaviours it exhibits, and the physical or structural elements that enable its functionality.

Function: The function refers to the purpose or role that the system or object serves. It describes the intended goal or objective it is designed to achieve. The function defines the primary reason for the existence of the system or object.

Behaviour: The behaviour represents the actions, activities, or operations that the system or object performs. It encompasses the observable or measurable activities associated with the system or object. Behaviours describe how the system or object behaves or interacts with its environment.

Structure: The structure refers to the physical components, elements, or characteristics that make up the system or object. It encompasses the arrangement, composition, and design features that enable the system or object to function as intended. The structure includes the tangible aspects such as materials, parts, layout, or any other physical attributes.

By analysing the Function Behaviour Structure of a system or object, we gain insights into its purpose, how it operates, and the physical aspects that enable its functionality. This understanding helps in problem-solving, design improvements, and optimization of the system or object to better fulfil its intended function.

1.3 Problem Statement

According to TRIZ, the foundation of innovation is based on general laws of creativity. These concepts are recognised and codified by TRIZ, which then applies them to increase the predictability of the creative process. As TRIZ is not yet well known by Malaysian citizens, there are only a few interactive websites where innovators can introduce more people to the 40 TRIZ Principles. Moreover, these existing systems are mostly not aware by most of the citizens in Malaysia, as well as the awareness of the 40 TRIZ Principles itself among the citizens.

Next, it is complicated as most of the existing systems recommended to users are in the form of mobile application systems. It becomes more complicated if the existing system has a single type of system. For example, the existing system can only either be used in mobile applications and mobile only and vice versa. As indigenous people live in a remote community, this would make the system less accessible for those who have limited access to either one of the systems. In short, the availability of the system in many platforms has not yet been applied, thus making the exposure pertaining to the 40 TRIZ Principles kept minimal and limited among citizens in Malaysia.

1.4 Objectives

The main objective of this project is to promote TRIZ to natives by using websites that allow them to get to know TRIZ. Therefore, to aid this objective, here are the following objectives must be taken:

- To develop a web-based system which enables people to understand the implementation of 40 TRIZ principles that surround them.
- To design an interactive page for people to share and comment their ideas on how the 40 TRIZ principle applies on most objects or artifacts.

- To enable the administrator to control the content that registered users have posted.

1.5 Methodology

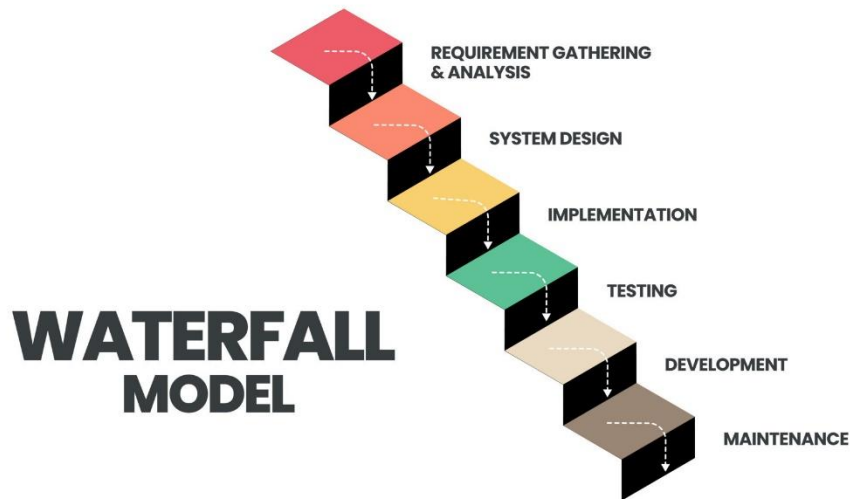


Figure 1.1 Waterfall Model

The Waterfall approach to software development resembles a step-by-step journey in which development proceeds smoothly through successive phases. Similar to the falling flow of a waterfall, each stage proceeds to the next.

It all begins with Requirement Gathering and Analysis, where we sit down with stakeholders and attentively listen to their software-related desires and needs. Once we have a clear picture of the situation, we establish a firm foundation for the project with well-documented and approved requirements.

Next is the System Design phase, where the software's blueprint based on the collected requirements are created. The development team is guided by technical specifications and data flow diagrams, as if they were constructing a house.

With the design in hand, progress to the Implementation phase, where the actual coding and programming occurs. Developers labour diligently to bring software to life, adhering closely to the design plan to ensure that everything fits perfectly.

Following the completion of the code, the software enters the Testing phase. Here, developers put it through a series of tests to identify any flaws and ensure that it functions flawlessly. Comparable to extensively inspecting a vehicle before allowing it on the road.

Proceeding to the Deployment phase once the software has passed all tests and demonstrated its dependability. As we release the software into the user environment and make it accessible to everyone, it is as if we are unveiling a masterpiece to the world.

Even the best software needs to be looked after and cared for. The Maintenance phase happens here at last. Developers will keep giving assistance, fixing any problems that come up, and keeping the software up to date.

The Waterfall method is ideal for initiatives with well-defined requirements and an initial stable vision. Similar to a well-planned journey, each phase must be concluded before proceeding to the next. While it may not be ideal for projects that must adapt to altering requirements, it excels at delivering a dependable and robust final product.

1.6 Scope

This system will have two types of users which are the administrator and registered users. An administrator will monitor and control the content that users who have registered on the website have posted while registered users start by creating an account and share their understanding of TRIZ using the FBS method.

This web-based system's main target is to help the indigenous people learn and understand the 40 TRIZ Principles. The main feature that is included in the system would be the 'Innovation' page where it acts as an interactive page for users to view and comment on each other's findings.

1.7 Significance of Project

People can view, share, and comment on one other's contents using the Borneo TRIZ System, which improves social interaction. They will benefit from seeing objects or artifacts through the viewpoint of innovators. Regardless if indigenous people are ordinary and challenged, they would not feel left behind in the age of innovation when using this system as they share their findings in the system. As for the innovative communities, there would finally be a place where they could upload their innovations or findings. Moreover, the younger generation will be capable and become more competent to be inventive. More than 5 years of experience in TRIZ, this project will also work closely with Prof. Dr Narayanan Kulathu Ramaiyer, one of the TRIZ experts in Sarawak and UNIMAS alongside one of ISITI research staff, Timothy George Mintu.

1.8 Project Schedule

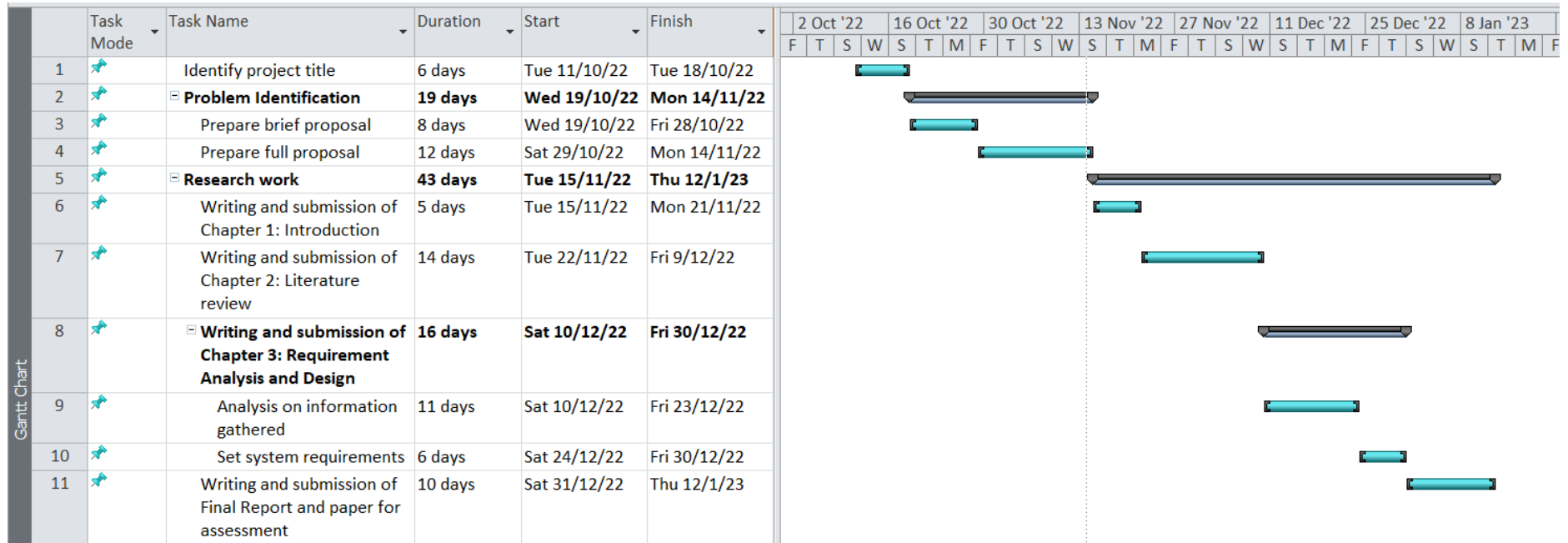


Figure 1.2 Project Schedule FYP 1

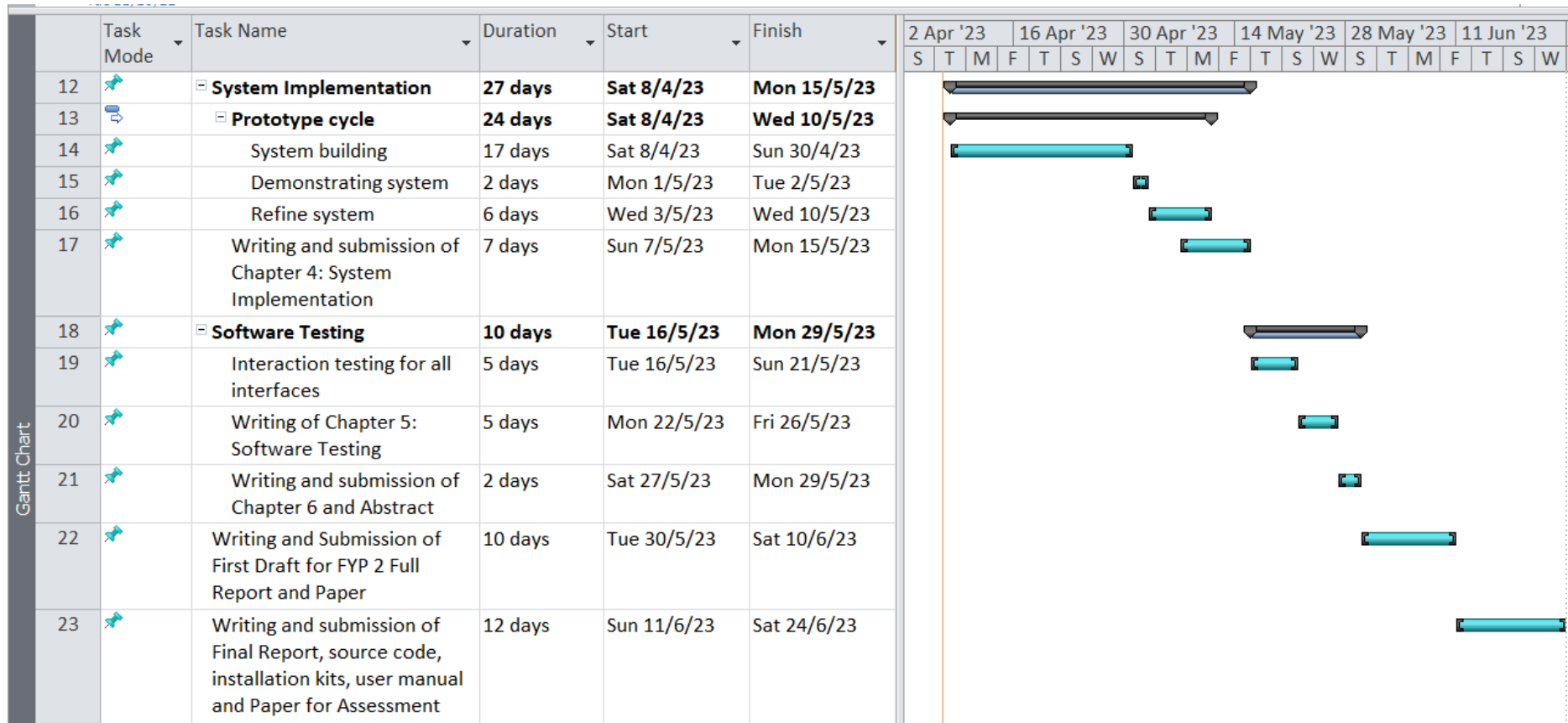


Figure 1.3 Project Schedule FYP 2

1.9 Expected Outcome

A web-based system that allows them to register an account to further them to share and comment on discoveries made by themselves or by other users in the systems. A database is used to record user profiles, discoveries, and comments. At the end of this project, it will teach users that by applying these principles separately and together, they can create hundreds of combinations of solving thinking to create an invention. At the end of this project, users will learn that by using these principles both individually and together, they can come up with countless combinations of problem-solving strategies to create an invention.

1.10 Summary

In conclusion, this chapter explains the goal of this project which is to empower indigenous people to invent and create without feeling insecure about their origins by providing them with the knowledge and expertise they need. By using the 40 TRIZ Principles detailed in the system, they can proudly and readily innovate ideas thanks to this web-based method.

Project Outline

Chapter 1: Introduction provides a description of Borneo TRIZ System for Indigenous System, including how this will benefit indigenous people who want to learn more about TRIZ. In addition, this chapter includes a problem statement, objectives, methods, scope, relevance of the project, project timetable, expected conclusion, and a summary.

Chapter 2: Literature Review describes the relevant research and the overall comparability of the current systems with the proposed system.

Chapter 3: Requirement Analysis and Design discover the proposed system's requirements analysis and design. All system requirements and user requirements are listed in this chapter. Context diagram, data flow diagram level 1, entity relationship diagram and data dictionary for the proposed system are included in the chapter.

Chapter 4: System Implementation focuses on the process of transforming the system design into a functional system and deployment aspects.

Chapter 5: Software Testing explores the testing approach used for the Borneo TRIZ System for Indigenous People, including different testing types.

Chapter 6: Project Review and Future Directions provides a comprehensive review of the project's achievements and outcomes, highlighting its limitations and offering recommendations for future enhancements and directions.

Chapter 2 Literature Review

2.1 Overview

In Chapter 2, the review of various similar current systems that are connected to the proposed system is discussed in order to support the proposed system's demands. An in-depth evaluation of the systems is conducted in order to determine the features, strengths, and limits of the existing systems. A comparison is made between the existing web-based system and the proposed web-based system based on the analysis of the systems' characteristics and functionalities.

2.2 Review of Similar Existing System

2.2.1 iNaturalist

The iNaturalist website is a system that serves as a platform for users to post, interact as well as discuss regarding nature. The workflow for this system is rather a lot simpler whereas the user can record their observations, share their observations between users, and discuss their findings. The system also gives out many benefits for the user such as keeping track of their records in cloud computing, connecting their finding with an expert on nature or organism of their finding, running an event where people can find organisms or species as many as possible etc. For example, when the user finds their findings regarding an organism, they can record their observation and post it to the system. Next, there will be shown on the website for other users to discuss their findings shown in Figure 2.1 below. The user can also put the details of their finding in locations, the pictures, the date submitted, the date of its finding, and the evidence of the organism itself.