DECLARATION

I, **ALLAN DAVID THOMAS** declare to the best of my knowledge that the project presented here, as a partial fulfillment of a Bachelor Degree of Computer Engineering is my work and has not been copied anywhere or presented elsewhere.

CANDIDATE NAME	**SIGNATURE**	**DATE**
ALLAN DAVID THOMAS	_____	_____
SUPERVISOR NAME	**SIGNATURE**	**DATE**
CANON NGIRWA	_____	_____

ABSTRACT

A higher level of education has become an integral and basic part of most people preparing for working life. However, placement of students into appropriate academic program is a paramount important for higher level of education in universities, institutes to perform its role.

Student course guidance admission system plays an important role to provide students with appropriate academic program suggestion before actual selection of the program. This helps to solve the dilemma of program selection to applicants. The aim of this project is to provide the awareness to applicants of how the admission process operates at a higher level of education. The improved program guidance system will provide suggestion of courses to applicants with respect to their interests, recommend a proper course order preference before selection and ease the automation of selection of applicants in the admission office.

ACKNOWLEDGMENT

First and foremost, I would carefully like to take this valuable opportunity to thank Almighty God, the creator of this world and all within it, for giving me health, strength and wisdom during the whole time of working on this project.

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I am grateful to the staff members of the Computer Studies Department at Dar es salaam Institute of Technology for supporting me during the whole period of my project work.

I, also express my special thanks to Ms. Happyness Munissi (project coordinator) for spending her time in guiding me to make this project successful.

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LIST OF SYMBOLS

DESCRIPTION	SYMBOL
Process/ subsystem	
Flow of information	

LIST OF ABBREVIATIONS

ABBREVIATION	LONG TERMS
DIT	Dar es Salaam Institute of Technology
NACTE	National Council for Technical Education
DTC	Dar es Salaam Technical College
TCU	Tanzania commission of universities
UML	Unified Modeling Language
DFD	Data Flow Diagram
NCES	National Center of Education Statistics
STEM	Science Technology Engineering and Math
SDLC	System development life cycle

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CHAPTER ONE

INTRODUCTION

A student course guidance admission system is a web application that provides applicants awareness of how the admission system operates with the help of program suggestion based on their personal interest related to program pass mark. The system will accept the applicant interest and relate to his/her pass mark and suggest various programs to select in an appropriate order.

Guidance admission system will provide more awareness to applicants on stages of admission system, such as: Qualified, Paid and finally Submit. As mostly applicants are through the qualification stage and have already paid the admission fee but have not submit their application. This has to be put in awareness to avoid data cleaning process at the admission office.

The selection and filtering of applicants will be modified in an automated way for each program course selection according to its program pass mark criteria. The system research and case study are to operate at DIT for the institute has its own admission system.

1.0 BACKGROUND INFORMATION

DIT is located in the Dar es Salaam city center, at the junction of Morogoro Road and Bibi Titi Mohamed Street. Dar es Salaam Technical Institute was established with the main task of providing vocational training in the country. The Institute later expanded its scope to offer technical secondary school courses and training for Technical Assistants before it was upgraded in 1962 to become DTC, the first formal technical training institution in the country.

DIT is a fully accredited institution NACTE. It offers a wide range of full-time, part-time and professional engineering qualifications and courses. The Institute has replaced the FTC and ADE programs with Ordinary Diploma and Bachelor of Engineering programs respectively (NTA Level 4-8) in line with the NACTE competence based modular training system.

In DIT, the admission process operates in a formal way by which applicants register themselves on the admission portal, pay the admission fee and select academic programs on a preference order. The applicant request is then sent to TCU for validation and sent back as response to DIT admission system ready for selection/ filtering process at the admission office.

Applicants are filtered with respect to their pass mark related to program selection, filtered based on number of program entry list, filtered according to program preference choice selection, and sometimes based on date of application.

1.1 PROBLEM STATEMENT

The major drawback is the dilemma of applicant program selection which leads to unsuitable program selection and end up perusing a higher level of education that was not intentionally your preference selection even with better pass mark.

The dilemma also leads to program exchange at the admission office, which is a problem for each department have an entry number, or worse situation is when the selected student does not find someone to exchange program with and end up studying undesired program.

The unawareness of how the admission system operates leads to problems that applicants tend to not finish the admission process since they lack the awareness of stages made to complete the admission process. This leads to data cleaning at the admission offices when applicants don't finish the admission process

Also, an assistance is needed at the program selection order before submission. Applicants tend to arrange program preference selection order in either random or descending order which leads to selection of programs that were not of higher priority.

The admission office explains the problem of applicant lack of awareness of program selection requirements as applicants tend to select programs based on friend's peer pressure, family influence or the poor arrangement order of program preference selection.

1.2 OBJECTIVES

This project has some objectives to be implemented. Those objectives are categorized into two: Main objectives and specific objectives.

1.2.1 MAIN OBJECTIVES

The main objective of this project is to develop a student course guidance admission system at Dar es salaam institute of technology.

1.2.2 SPECIFIC OBJECTIVES

i. To develop a student interest input model
ii. To develop a course suggestion subsystem
iii. To develop a preference selection/ filtering subsystem
iv. To develop a notification subsystem
v. To develop a web application as the main platform.

1.3 SIGNIFICANCE OF THE PROJECT

i. Provides awareness to applicants on how the admission system operate and be comfortable to program selection.
ii. Provides the suggestion of course preference order based on their interest and pass mark of a certain program before actual selection of the program.
iii. Improve the selection and filtering mechanism of current admission selection system to a more automated mechanism
iv. Provide appropriate notifications to students concerning the admission process from initial stage to final usage of the system.

1.4 SCOPE OF THE PROJECT

Student course guidance admission system provides an internet-based solution with awareness to applicants of the admission system and programs suggested per their interest. The system case study is to operate at DIT with the modification of the current system on the addition of features on the application applicant side of the system and at the selection/ filtering part of the admission selection part.

1.5 SUMMARY

This chapter has provided the background information of the admission system at DIT, problem statements from both applicants and admission officers, objective of the project, significance and scope of the project. Step by step procedures on how to accomplish the objectives of the project are covered in the next chapter.

CHAPTER TWO

LITERATURE REVIEW

2.0 RELATED WORKS

Today, higher education institutions face considerable difficulties, such as the absence of government funding, competitive job markets, admission processes, student strength, and selections of student specializations [1,2]. Student specialization selection is an area of educational research that has received little attention, although it is critical in recognizing students' interests and preparing them for a future career [3]. Student specialization is a worldwide educational problem that needs to be investigated. For example, in the USA, approximately 30% of year-one students do not return for their second year, and more than $9 billion is spent on these students [4]. Furthermore, the completion rates of 4-year degrees in the US are approximately 50% [5]. These alarming figures require every possible effort to support students and higher education institutions in this critical issue. According to a study conducted by the United States Departments of Education (NCES), of the 98% of students that declared a bachelor's degree major in 2011–2012, 33% changed their major by 2014 during their third year of study [6]. Moreover, approximately 35% of college students who declared their majors to be STEM programs and 29% of students who declared their majors to be STEM-related programs eventually changed their majors after 2 years of study [7].

Student specialization selection can indicate the choice of an appropriate specialization/major that leads to a high level of satisfaction, success in allotment, graduation within a time frame, or other more specific milestones [8]. In an educational institution, the selection of the right undergraduate major by students is a major challenge when progressing to an academic level because students do not know about the job market and the demand for the required skills.

Field specialization selection means selecting the right undergraduate major for students, for example, engineering, computer science, and management [9,10]. Universities are required to fulfill students' academic disciplines. One essential goal of universities is to aid student admission into their desired college specialization. What student admission means varies depending on the context of the university requirements, students' academic results, and

other related factors [11,12]. Universities provide student admission centers and student counselors or advisors to help students meet their educational needs.

Recommending suitable colleges and fields (suitable undergraduate majors) based on students' attributes and preferences is one service that could be provided by admission departments. However, due to the growing numbers of fields, students, and available skills, these advisors sometimes fail to help students with their selections [3,13,14]. Due to the substantial amount of work required by these advisors, who are not able to handle this situation, students have insufficient knowledge about how to select an appropriate field (major) in their undergraduate program that fits their preferences, personality, subjects of interest, and career type that he or she likes [3,13,14].

2.1 EXISTING SYSTEM

Currently, DIT has its own admission system, the system operates at two stages as namely:

i. Applicant Application
ii. Applicant Selection.

2.1.1 APPLICANT APPLICATION

For applicant application side, applicants register themselves on the admission portal for initial registration and payment of admission fee. Followed with education verification of the applicant and selects the courses preference order that will be verified before submitted to TCU for validation, approve and register the applicant before selection.

All verified applicants are sent back to DIT for selection and checked at course minimum entry and check pass priority before applicant selection.

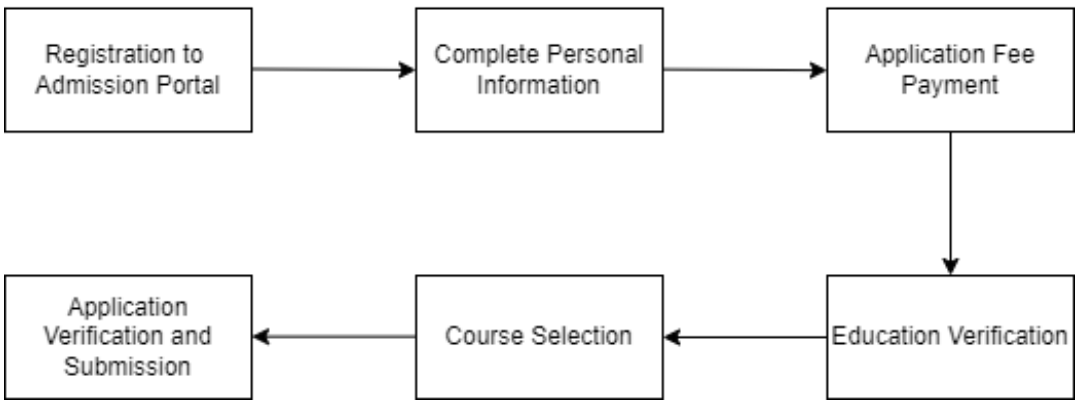


Figure 1: Block diagram of existing system on applicant application

2.1.2 APPLICANT SELECTION

A response list of verified applicants is received from TCU to DIT admission office for applicant selection process. The admission office team filters the selection of applicants by checking the course minimum entry of every program selection.

An applicant pass mark priority is also checked if it meets any of the program selection preference choice. This is checked for every program related to the selection order.

If the applicant meets the required program per pass mark, the applicant is selected and sent to TCU for verification that explains the applicant has meet a requirement of a particular program.

TCU validates application payments and approves the selection of the applicant. Finally, he/she is notified on the DIT admission portal.

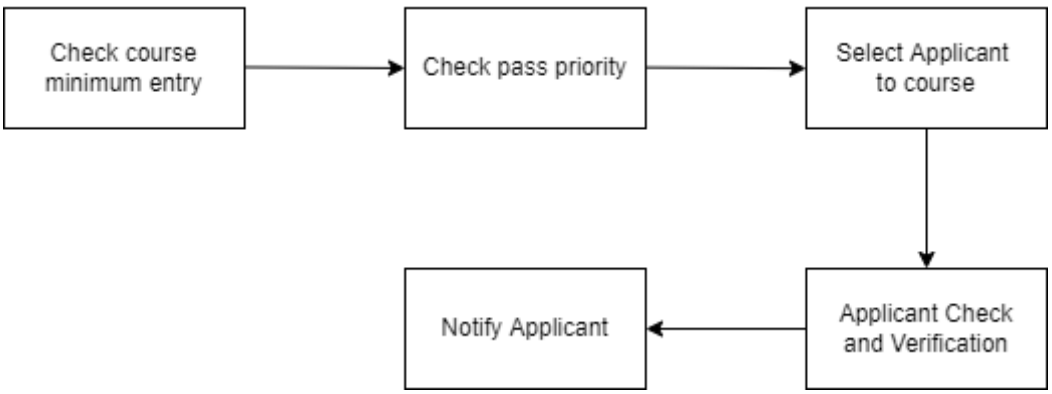


Figure 2: Block diagram of existing system on applicant selection

2.1.3 LIMITATION OF EXISTING SYSTEM

i. Lack of awareness on program selection for applicants which leads to course misguidance and therefore student course exchange.
ii. There is no mode of operation of how the admission system is operating and awareness once the applicants move from one admission stage to another.
iii. Presence of manual work on cross checking the selection and filtering of students with good pass marks but have unproper selection of program order.
iv. Data cleaning which involves the admission officers to call applicants who have not finished the last stage of admission process to remind them to submit their application.

2.2 PROPOSED SYSTEM

The proposed system is to provide the awareness of each admission process to the applicant, but initially taking students personal interests that will help to suggest course suitable for applicant with respect to course pass mark.

The proposed system also operates under two stages of admission system namely:

i. Applicant Application
ii. Applicant Selection.

2.2.1 PROPOSED APPLICANT APPLICATION

On the proposed side of the applicant application, the main objective is to provide awareness of every admission process to applicants once they start to integrate with the system.

Initially applicants are to registered and being verified with appropriate index numbers and AVN numbers if available. Then they are provided with information of how the admission stages are to occur in order for him/her to be finally selected.

Optionally, applicants are asked if they would relate their personal interest with program selection or not. If they are to be related applicants are to input personal interest and move on to the next stage of admission process.

Next stage is the education verification in terms of comparison of applicant pass mark and the current database of students that were selected to particular course if they have the same pass mark similarities before suggestion on the next stage.

After collection of both personal interest and applicant pass marks, different courses are suggested to the applicant based on the two parameters. With the help on a recommendation on how to arrange program preference order for efficient and accurate selection.

Then applicants are to pay for the admission fee in order to complete the important stage of course selection from which the system once it checks the applicant has paid, it will auto fill the suggested course. But also, applicants still the option to manually navigate the order of program selection.

Finally, applicants are to submit their application and wait for validation and verification process both form TCU and DIT respectively. The step-by-step procedures of how the proposed applicant application process will operate is show in Figure 3.

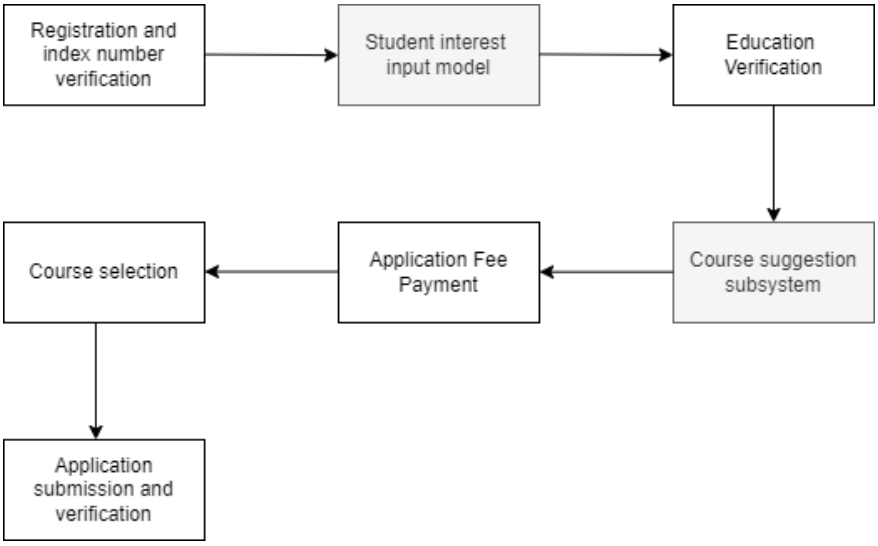


Figure 3: Block diagram of a proposed system on applicant application

2.2.2 PROPOSED APPLICANT SELECTION

For the applicant selection part, modification is concerned on the selection/ filtering and notification parts. The selection or filtering process is modified to avoid the cross check of applicants who have not finished the admission process and remind them to avoid data cleaning. On the notification side applicants will be notified of the program selection by using registered emails or SMS on improved version of the system. Figure 4 below will show the operation of how the proposed applicant selection side will operate

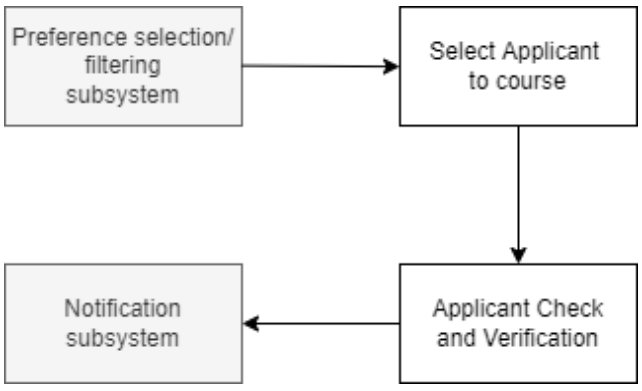


Figure 4: Block diagram of proposed system on applicant selection

2.3 SUMMARY

This chapter covers the related work, features and operation of existing system and the proposed system in detail. The next chapter explains methodologies used on proposed system.

CHAPTER THREE

METHODOLOGY

3.0 INTRODUCTION

This chapter involves the exploration of methods used to guide the development of the project. This involves the collection of data and data analysis from system end users, as to conduct research related to project specific objectives. There are many different systems development methodologies, and they vary in terms of the progression that is followed through the phases of the SDLC. For project objectives to be achieved, I will employ prototyping-based methodology. This type of methodology generally involves the following phases:

3.1 DEVELOPMENT METHODOLOGY

3.1.1 PROTOTYPE METHODOLOGY

Prototype methodology performs the analysis, design, and implementation phases concurrently in order to quickly develop a simplified version of the proposed system and give it to the users for evaluation and feedback. (See Figure 5). The system prototype is a “quick and dirty” version of the system and provides minimal features. Following reaction and comments from the users, the developers re-analyze, re-design, and re-implement a second prototype that corrects deficiencies and adds more features.

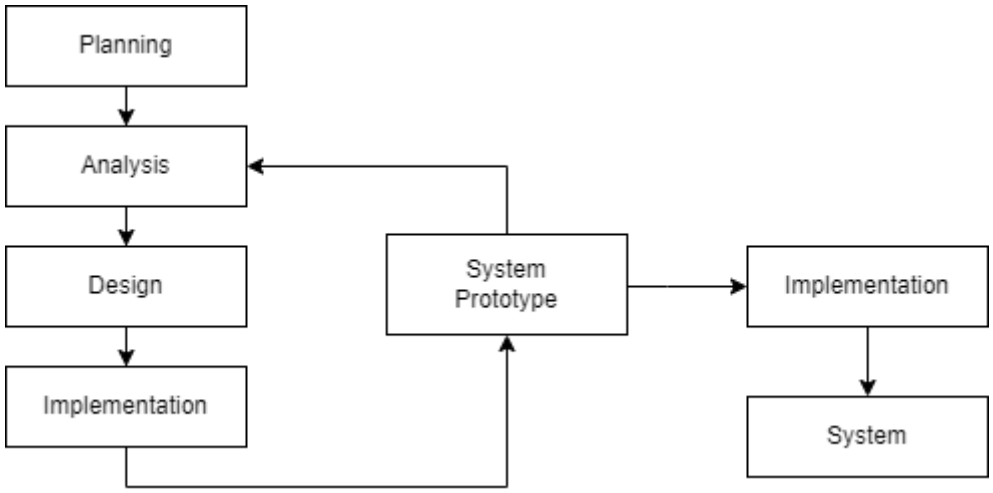


Figure 5: Diagram of prototype methodology

3.1.2 PHASES OF PROTOTYPE METHODOLOGY

i. Planning

The planning phase is the fundamental process of understanding why an information system should be built and determining how the project team will go about building it. This phase is done through identification of problems on the admission system and coming up with a proposed plan about how to improve and modify the existing one. Planning phase helps to anticipate costs and benefits of a new system.

ii. Analysis

The analysis phase answers the questions of who will use the system, what the system will do, and where and when it will be used. (See Figure 5) During this phase, the project is checked if it is of any significance by performing research of data collection process. This involves critical analysis and evaluation of information obtained through interview and Questionnaire. For I have used tables and Microsoft Excel to represent the analyzed data collected on this project as observed in chapter 3 on literature review.

iii. Design

The design phase decides how the system will operate in terms of the hardware, software, and network infrastructure that will be in place; the user interface, forms, and reports that will be used; and the specific programs, databases, and files that will be needed. In this project, the tool that is used to database design is Draw.io since it has much functionality and includes UML diagrams (use case, DFD Sequence Diagram, ER-Diagram).

iv. Implementation

This is the phase that usually gets the most attention, because for most systems it is the longest and most expensive single part of the development process. This required more learning and dedication of how to accomplish the implementation of the proposed system. For I have to learn all the algorithms that to ensure an automation on both program suggestion and selection.

v. Prototype Refining

A prototype can be refined to satisfy user needs, this may involves redesigning the system and present to the user again for evaluation. In this stage, the feedback from the user is worked upon so as obtain the complete final product. It’s the time to correct errors and make sure that the next product is improved. This acts as the skeleton of the system for which the user can check if all the requirements have meet before actual implementation.

vi. Final System

After making the prototype several times, and modifying it until the users are satisfied, then the final system is going to be implemented and make a final thoroughly test before handling it to the user/customer so that he/she can start using it.

3.1.3 INTENTIONS OF USING PROTOTYPE METHODOLOGY

i. Users are actively involved in the development.
ii. Missing functionality can be identified easily.
iii. Since in this methodology a working model of the system is provided, the customer gets a better understanding of the system being developed.
iv. Error can be detected much earlier.
v. Quicker customer feedback is available leading to better solutions.
vi. Confusing or difficult functions can be identified.

3.2 DATA COLLECTION

Data collection is the process of gathering and measuring information on variables of interest, in an established systematic fashion that enables one to answer stated research questions, test hypotheses, and evaluate outcomes. The following methods of data collection used in this project are through Questionnaire and Interview.

3.2.1 QUESTIONNAIRE

Questionnaire is a set of written questions for obtaining information from individuals. Questionnaires often are used when there is a large number of people from whom information and opinions are needed. Here, the questionnaire is sent to respondents who are expected to read and understand the questions and write down their opinions.

INTENTIONS OF USING QUESTIONNAIRE METHOD

i. Type of information: Questionnaires are used to gather information about the existing system, as well as general information about improvements.
ii. Depth of information: Questionnaires are used to gather information about the existing system, as well as general information about improvements.
iii. User Involvement: Questionnaires are used mostly since they consist a lot of user involvement on giving thoughts on listed options provided on the question paper.

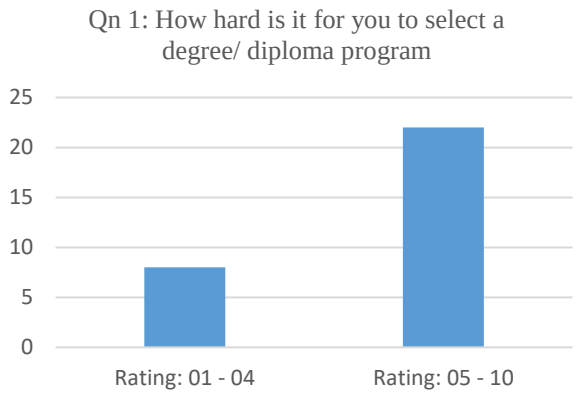
RESPONSE FROM QUESTIONNAIRE

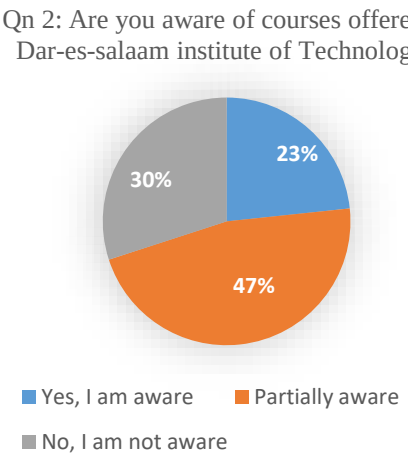
On the project scope, questionnaire method was used to applicants from Benjamin Mkapa High School and Zanaki Secondary School with a total number of 60 respondents. The following is overview tabular representation of both questions and answers from the respondents.

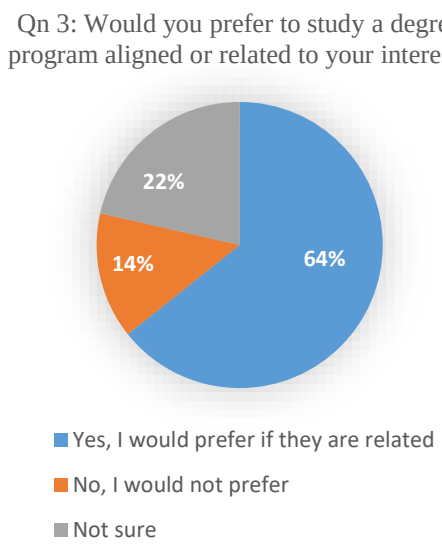
Table 1: Overview respondent of questionnaire

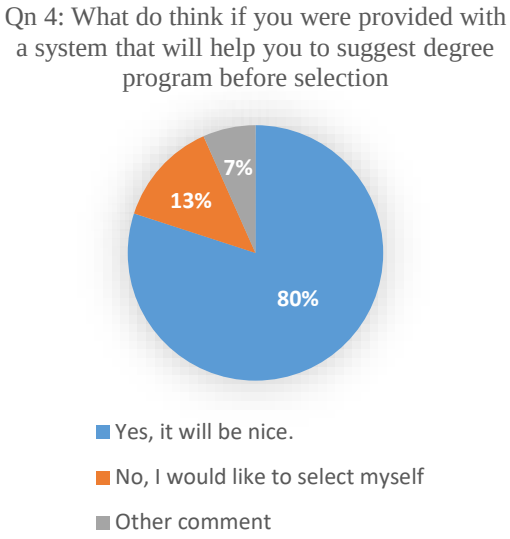
SN	Question	Answers
1	How hard is it for you to select a degree/ diploma program? Range: 1-Easy, 2, 3, 4, 5, 6, 7, 8, 9, 10-Hard.	Average rating: 8
2	Are you aware of courses offered at DIT? a) Yes, I am fully aware b) Partially aware c) No, I am not aware	a) 14 b) 28 c) 18
3	Would you prefer to study a degree/ diploma program aligned or related to your interest? a) Yes, if they are related b) No, I would not prefer c) Not sure	a) 36 b) 8 c) 4
4	What do you think if you were provided with a system that will help you to suggest a program before selection? a) Yes, it will be nice b) No, I would like to select myself c) Other (Comment)	a) 48 b) 8 c) 4
5	If you were to apply for a program at DIT, would you need any assistance? a) Yes, I would like to be assisted b) I could use partial assistance c) No, I will be aware of the program selection	a) 36 b) 16 c) 8

GRAPHICAL REPRESENTATION OF DATA









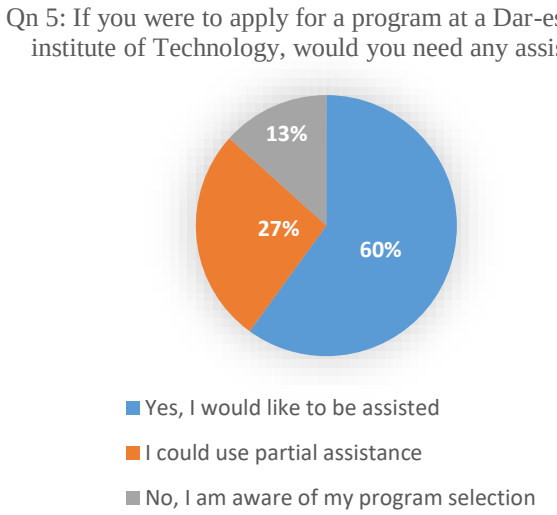


Figure 6: Graphical representation of data

3.2.2 INTERVIEW

The interview is the most commonly used requirements elicitation technique. After all, it is natural-usually, if you need to know something, you ask someone. In general, interviews are conducted one on one (one interviewer and one interviewee), but sometimes, due to time constraints, several people are interviewed at the same time.

An interview method was used to gathered from Admission officer of DIT and seek information concerning applicant selection part of the project. The following were the sample questions asked on a closed interview.

INTENTIONS OF USING INTERVIEW METHOD

i. It provides flexibility to the interviewers
ii. The interview has a better response rate than mailed questions, and the people who cannot read and write can also answer the questions.
iii. The interviewer can judge the non-verbal behavior of the respondent.
iv. The interviewer can decide the place for an interview in a private and silent place, unlike the ones conducted through emails which can have a completely different environment.
v. The interviewer can control over the order of the question, as in the questionnaire, and can judge the spontaneity of the respondent as well.

RESPONSE FROM INTERVIEW

Interview was conducted at DIT to admission officer for data collection concerning the opinions of the existing and proposed system. The following is a tabular shown in (Table 2) represents the interview conducted with admission officer.

Table 2: Overview respondent of Interview

SN	Question	Answers
1	How hard is it for you to select/ filter a qualified applicant? Range: 1-Easy, 2, 3, 4, 5, 6, 7, 8, 9, 10-Hard.	Average rating: 7

2	Are there challenges facing the current admission system at DIT? • Student course exchange, especially department cross-cut • Data cleaning of students who have not finished the admission stages
3	What can be improved on the current admission system? • Improvement on the application applicant side as students should be aware of course selection and how the admission process operates.
4	Would you prefer if applicants were to be provided with proper awareness in terms of how selection and filtering is done before program selection? a) Strongly agree b) Agree [✓] c) Disagree d) Strongly disagree
5	What do you think if students were to be provided with a system that will suggest them program preference order before selection? a) Strongly agree b) Agree [✓] c) Disagree d) Strongly disagree

3.2.3 CONCLUSION ON DATA COLLECTION

From the process of gathering and measuring information based on the project interest, research has shown that almost 75% of respondents are in need of the proposed system that will help to solve problem based on their personal interest.

3.3 SUMMARY

This chapter has provided the data collection tools to be used for requirement gathering and data collected for provision of proper research analysis of project requirement to the society.

CHAPTER FOUR

4.0 CONCLUSION

Through student course guidance admission system, students (applicants) will have the awareness of how the admission system operates at a higher level of education and solve the problem of dilemma on program selection.

The solution of dilemma on program selection can be foreseen to improve students career specialization on a specific program selection based on interest of selection. The applicant will be working and studying something that he/ she is interested for the purpose of the future.

Also, the proposed system will help the selection and filtering of applicant with large number of populations especially DIT that has almost 6000 students and receive 1000 applicants each year.

4.1 RECOMMENDATION

I would recommend that more awareness should be provided to lower level of education of how the high level of education operates. This will encourage and increase the performance of students while they are at a lower level and increase their pass marks according to what they are interested. If proper system of intelligence were to be suggested to applicants instead of providing them with papers filled with different program options without any explanation of how the admission system operate.

Lastly this modification of admission system to DIT should also be considered to other institutes and universities. This will be considered to all field of aspects and specializations such as engineering, medical, pilot and others.

4.2 PROJECT COST ESTIMATION

The following is the tabular representation of project cost estimation. Each item listed on the table will help me accomplish this project, for most important increase my skills on software development as a computer engineer student.

Table 3: Project cost estimation

ITEM	**Initial Cost**	**Total Cost**
Stationery	60,000	60,000/=
Communication and Internet	240,000	240,000/=
Transport	50,000	50,000/=
Contingency		70,000/=
TOTAL		350,000/=

4.3 ESTIMATION TIMELINE

This timeline explains the duration expected to accomplish this project. As every month explained with activities related to color coding.

Table 4: Project estimation timeline

SN	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL
1										
2										
3										
4										
5										
6										
7										
8										
9										

TIMELINE COLOR PRESENTAION

SN	COLOR CODING	ACTIVITY
1		Title search
2		Title defending
3		Literature review
4		Data collection
5		Data analysis
6		System design
7		Implementation
8		Verification
9		Report writing

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APPENDIX A

STUDENT COURSE GUIDANCE ADMISSION SYSTEM AT DIT

INTRODUCTION:

The purpose of this questionnaire is to collect data on a student course guidance admission system at Dar-es-salaam institute of technology. It is a part of a problem-solving project to fulfill the Bachelor Degree in Computer Engineering. I assure you that the data collected will be confidential, Thank you.

INSTRUCTION:

Circle the most correct answer for each question.

QUESTIONS:

1. How hard is it for you to select a degree program? 1 been the **easy** and 10 **hard**

   1 2 3 4 5 6 7 8 9 10

2. Are you aware of courses offered at Dar-es-salaam institute of Technology?

   a) Yes, I have full awareness. b) Partially aware c) No, I'm not aware

3. Would you prefer to study a degree program aligned or related to your interest?

   a) Yes, I would prefer if they are related. b) No, I would not prefer c) Not sure

4. What do think if you were provided with a system that will help you to suggest degree program before selection?

   a) Yes, it will be nice. b) No, I would like to select myself.

   c) Other

   _____

5. If you were to apply for a degree program at a Dar-es-salaam institute of Technology, would you need any assistance?

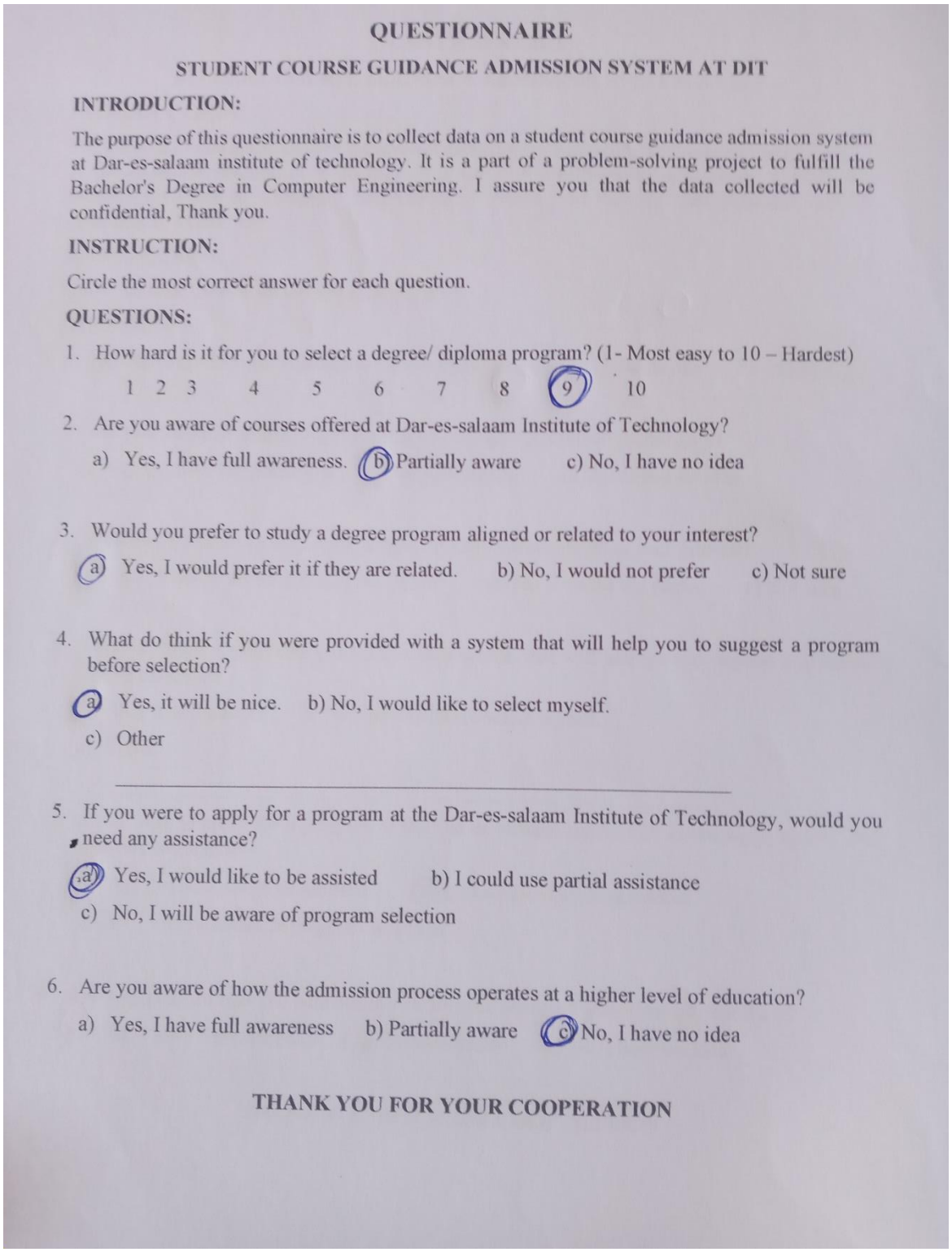
   a) Yes, I would like to be assisted b) I could use partial assistance

   c) No, I will be aware of program selection

THANK YOU FOR YOUR COOPERATION

APPENDIX B

SAMPLE ANSWERED QUESTIONNAIRE



QUESTIONNAIRE

STUDENT COURSE GUIDANCE ADMISSION SYSTEM AT DIT

INTRODUCTION:

The purpose of this questionnaire is to collect data on a student course guidance admission system at Dar-es-salaam institute of technology. It is a part of a problem-solving project to fulfill the Bachelor's Degree in Computer Engineering. I assure you that the data collected will be confidential, Thank you.

INSTRUCTION:

Circle the most correct answer for each question.

QUESTIONS:

1. How hard is it for you to select a degree/ diploma program? (1- Most easy to 10 – Hardest)

   1 2 3 4 5 6 7 8 (9) 10

2. Are you aware of courses offered at Dar-es-salaam Institute of Technology?

   a) Yes, I have full awareness. (b) Partially aware c) No, I have no idea

3. Would you prefer to study a degree program aligned or related to your interest?

   (a) Yes, I would prefer it if they are related. b) No, I would not prefer c) Not sure

4. What do think if you were provided with a system that will help you to suggest a program before selection?

   (a) Yes, it will be nice. b) No, I would like to select myself.

   c) Other

   _____

5. If you were to apply for a program at the Dar-es-salaam Institute of Technology, would you need any assistance?

   (a) Yes, I would like to be assisted b) I could use partial assistance

   c) No, I will be aware of program selection

6. Are you aware of how the admission process operates at a higher level of education?

   a) Yes, I have full awareness b) Partially aware (c) No, I have no idea

THANK YOU FOR YOUR COOPERATION

APPENDIX C

SAMPLE ANSWERED INTERVIEW

INTERVIEW

STUDENT COURSE GUIDANCE ADMISSION SYSTEM AT DIT

INTRODUCTION:

The purpose of this questionnaire is to collect data on a student course guidance admission system at Dar-es-salaam institute of technology. It is a part of a problem-solving project to fulfill the Bachelor Degree in Computer Engineering. I assure you that the data collected will be confidential, Thank you.

QUESTIONS:

1. How hard is it for you to select/filter a qualified applicant? (1- Easy 10 – Hardest)

   1 2 3 4 5 (6) 7 8 9 10

2. What are the current problems facing the current admission system?

   • Student course exchange, especially department cross-cut
   • Data cleaning of students who have not finished the admission stages.

3. What can be improved on the admission system?

   • Improvement on the application admission side as students should have more awareness of course selection and how the admission process operates

4. Would you prefer if applicants were to provided with proper awareness in terms of how selection and filtering is done before program selection?

   a) Strongly agree
   b) Agree ✓
   c) Disagree
   d) Strongly disagree

5. What do you think if students are provide with a system that will suggest them program order before selection?

   a) Strongly agree
   b) Agree ✓
   c) Disagree
   d) Strongly disagree

THANK YOU FOR THE COOPERATION