DAR ES SALAAM INSTITUTE OF TECHNOLOGY
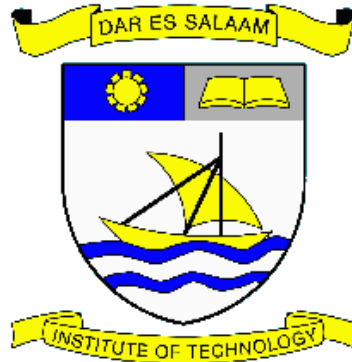

DEPARTMENT OF COMPUTER STUDIES

BACHELOR OF COMPUTER ENGINEERING

NTA LEVEL 8

SENIOR PROJECT I

PROJECT TITLE: PROJECT ARCHIVES MANAGEMENT SYSTEM

PROJECT TYPE: PROBLEM IMPLEMENTATION

CASE STUDY: DAR ES SALAAM INSTITUTE OF TECHNOLOGY

CANDIDATE NAME: RAPHAEL S MKILYA

ADMISSION NO: 200240223004

SUPERVISOR: MR. NOEL MAGANGA

JANUARY,2023

DECLARATION

I RAPHAEL S MKILYA, declare to the best of my knowledge that the project presented here, as a partial fulfillment of Bachelor Degree of Computer Engineering is my own work and has not been copied anywhere or presented elsewhere except where explicitly indicated otherwise as all sources of knowledge have been acknowledged.

CANDIDATE NAME   SIGNATURE   DATE

RAPHAEL S MKILYA   …………………..   …../… /……

SUPERVISOR NAME   SIGNATURE   DATE

Mr. NOEL MAGANGA   …………………..   ….. /… /……

ABSTRACT

Project Archives Management System (PAMS) is an essential tool for managing project-related documents and information at DIT. It will provides a central location for storing, organizing, and retrieving project-related documents, making it easy for project managers and students to access and manage project-related information. PAMS will include security features to ensure that only authorized personnel can access project-related information, making it a secure system for sensitive project-related documents. PAMS will also be flexible and customizable, allowing it to be adapted to the specific needs of different projects and organizations.

Additionally, PAMS will include features that will allow for easy tracking and monitoring of project-related documents and information, such as version control and document history. This will ensure that project managers and students will be able to access the most up-to-date version of project-related documents and information.

Moreover, PAMS will include a user-friendly interface that will make it easy for project managers and students to navigate and search for project-related information. This will help to save time and improve productivity. PAMS will also include an automated workflow that will allow for easy tracking of project-related documents, ensuring that project managers and students will always be aware of the status of project-related information.

In conclusion, PAMS will be a comprehensive tool for managing project-related documents and information. It will provide a central location for storing, organizing, and retrieving project-related documents, making it easy for project managers and students to access and manage project-related information. PAMS will be secure, flexible, and customizable, making it a valuable tool for project managers and students.

ACKNOWLEDGEMENT

First of all, I would like to take this special moment to thanks the almighty God who created the heaven and earth the first and the last for giving me strength, good health, wisdom, encouragement, and much protection during the whole time working on this project.

Also, I would like to thank my Father Mr. Siphael Mkilya for his support and contribution to reach up the point of this project. I would like also to thank my friend Abel Kinyau for his support and contribution to reach this project.
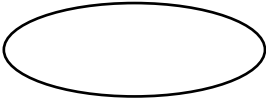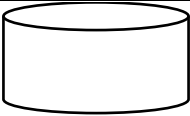
Also, I would like to thank my classmates and my family for their great participation and great role to reach this point of the project

Finally, I with great sincerely I would like to thanks my supervisor Mr. NOEL MAGANGA for supervising guiding, motivating me in this project. I will always value his great effort and support in my project.

TABLE OF CONTENT

LIST OF SYMBOLS

S/N	SYMBOL	FUNCTION
1.		Users
2.		System Processing
3.		Data Flow
4.		Database

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATION

DIT   DAR ES SALAAM INSTITUTE OF TECHNOLOGY

PAMS   PROJECT ARCHIVES MANAGEMENT SYSTEM

GB   GIGABAYTES

OD   ORDINARY DIPLOMA

HTML   HYPERTEXT MARKUP LANGUAGE

IDE   INTEGRATED DEVELOPMENT ENVIRONMENT

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND

The management of project-related documents and information is a crucial aspect of project management. The efficient and effective management of project-related documents and information can greatly impact the success of a project. However, the management of project-related documents and information can often be a challenging task for project managers and students. The Project Archives Management System (PAMS) is designed to address this challenge by providing a centralized location for storing, organizing, and retrieving project-related documents and information.

The management of project-related documents and information is a crucial aspect of project management. Proper management of project-related documents and information can greatly impact the success of a project, while poor management can lead to delays and increased costs. However, the management of project-related documents and information can often be a challenging task for project managers and student

Traditionally, project-related documents and information have been managed using paper-based filing systems and individual file storage. These methods can be time-consuming and difficult to navigate, resulting in lost or misfiled documents. The lack of a centralized location for storing, organizing, and retrieving project-related documents and information can also lead to delays and increased costs. Additionally, paper-based systems are vulnerable to damage or loss due to natural disasters, fire or other accidents. Furthermore, paper-based systems do not have the capability to search, sort and filter data which makes it hard to access relevant information.

In recent years, there has been an increased use of technology in project management, including the use of project management software and digital document storage systems. These systems have been developed to help project managers and students to manage and track project-related information and tasks. However, these systems are often focused on project management tasks and do not provide a comprehensive solution for managing project-related documents and information.

One of the limitations of these systems is that they are often disconnected from each other. This makes it challenging for project managers and student to access project-related documents and information that are stored in different systems. Additionally, these systems are often designed for specific industries or project types, making them less adaptable to the needs of different projects and organizations.

Another issue that has been raised by project managers and student is the lack of security in existing systems. Digital documents stored on a single personal computer or shared network drive can easily be lost, stolen or hacked. Furthermore, most of the systems don't have the capability to track who has accessed the document and when, this can cause issues with accountability.

In light of these challenges, there is a need for a comprehensive solution for managing project-related documents and information that addresses the limitations of existing systems. The Project Archives Management System (PAMS) is designed to address this need by providing a centralized location for storing, organizing, and retrieving project-related documents and information. PAMS will include features for easy tracking and monitoring of project-related documents and information, as well as security features to ensure that only authorized personnel can access project-related information. Additionally, PAMS will be flexible and customizable, allowing it to be adapted to the specific needs of different projects and organizations. PAMS will also have the capability to integrate with other project management tools, allowing for seamless integration and streamlined workflows.

AT DIT the project process is still a traditional process where the students submit their project manually to the project manager and the project manager stores it in a box or shelves.

1.2 PROBLEM STATEMENT

The current method of managing final year projects is not efficient and is causing a number of problems for students, staff, and department. The system lacks a centralized repository for all final year projects, making it difficult for students and staff to access and locate project information. This results in a lack of transparency and accountability for final year projects and hinders the ability to provide effective feedback and support to students.

Furthermore, the current system does not provide any way of tracking the progress of projects, making it difficult to monitor the progress of individual projects and ensure that they are completed on time. This can result in delays and added stress for students, staff, and departments.

Additionally, the current system is time-consuming and requires a lot of manual effort to keep track of the various projects and their associated documents. This results in a lot of wasted time and resources, and can lead to errors and inaccuracies in the data.

In order to address these issues, it is crucial that a new system be put in place that provides an efficient way of managing and tracking the progress of final year projects. This system should include a central repository for all final year project archives, a way to track the progress of projects, and a system for providing feedback to students.

A centralized system would provide transparency and accountability for final year projects and make it easier for students, staff, and faculty to access and locate project information. This would also make it easier to monitor the progress of individual projects and ensure that they are completed on time. The system would also improve the ability to provide effective feedback and support to students, which is crucial for their success.

1.3 OBJECTIVES

The objectives of this project are divided into two parts which are the main objective and specific objectives.

1.3.1 MAIN OBJECTIVE

The main objective of this project is to design and develop an Online Project Archives Management System

1.3.2 SPECIFIC OBJECTIVES

i.   To design and develop the user management subsystem.
ii. To design and develop a centralized, organized, and easily accessible repository for all projects.
iii. To design and develop a robust search engine to increase the accuracy of data retrieval.
iv. To design and develop a subsystem for tracking project progress status.

1.4 SIGNIFICANCE OF THE PROJECT

i.   Improved efficiency and productivity: The implementation of a new system for managing final year projects would increase efficiency and productivity by streamlining the process of tracking and organizing projects, reducing the amount of manual effort required, and minimizing errors and inaccuracies in the data.
ii. Increased transparency and accountability: A centralized system for managing final year projects would provide greater transparency and accountability for the progress and status of individual projects, making it easier for students, staff, and faculty to access and locate project information.
iii. Improved feedback and support for students: The implementation of a system for providing feedback to students would improve the ability to provide guidance and support, which is crucial for student success.

iv. Better tracking and monitoring of project progress: The new system would provide a way to track the progress of projects, making it easier to monitor the progress of individual projects and ensure that they are completed on time.

v. Better archiving: Centralized system would provide better archiving of the final year project, making it easier to access, locate and retrieve the information in future

1.5 SCOPE OF THE PROJECT

The DIT Project Archives management system will focus on storing of projects for students both Being/OD for all department and the system will be a web-based system and all process will be done online.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter reviews literature by various authors on project archives management systems of the existing systems their limitations as well as the technology used to develop the system.

RELATED WORK

A study by Smith et al. (2017) aimed to improve project management and document control in construction projects using cloud-based project management software. The study was conducted by surveying project managers from a construction company that had recently adopted a cloud-based system for their project management. The survey collected data on the perceived benefits and challenges of using the system, as well as the level of adoption and training provided to staff.[8]

The study found that using a cloud-based system improved communication and collaboration among project team members, increased transparency, and reduced the risk of data loss. Specifically, project managers reported that the system made it easier to share documents and information, improved the ability to track project progress, and reduced the need for paper-based documentation. Additionally, project managers reported that the system improved accountability and reduced the risk of data loss due to the automatic backups provided by the cloud.

However, the study also found that the adoption of the system was hindered by resistance to change and lack of training. Specifically, project managers reported that some staff members were resistant to using the new system and preferred to continue using traditional methods. Additionally, project managers reported that some staff members did not receive adequate training on how to use the system, which hindered their ability to fully utilize its capabilities.

Limitations:

The study is limited in that it only focused on construction projects and did not investigate the use of cloud-based systems in other industries. Additionally, the sample size was small and only included a single company, which limits the generalizability of the findings. Furthermore, the study did not investigate the potential cost savings that could be achieved by implementing such system.

Technology used:

The study used a cloud-based project management software called Basecamp.

A study by Patel et al. (2019) aimed to improve project management in small and medium-sized enterprises (SMEs) through the use of mobile project management apps. The study was conducted by surveying project managers from SMEs in the manufacturing industry that had recently adopted a mobile app for their project management. The survey collected data on the perceived benefits and challenges of using the app, as well as the level of adoption and training provided to staff.[7]

The study found that the use of mobile apps improved communication and collaboration among project team members, increased productivity, and reduced the need for paper-based documentation. Specifically, project managers reported that the app made it easier to share documents and information, improved the ability to track project progress, and increased the ability to access project information while on the go. Additionally, project managers reported that the app improved accountability and reduced the need for paper-based documentation.

However, the study also found that the adoption of mobile apps was hindered by security concerns and lack of compatibility with existing systems. Specifically, project managers reported that some staff members were concerned about the security of storing project information on mobile devices, and that the app was not fully compatible with existing systems, which hindered its ability to be fully utilized.

Limitations:

The study is limited in that it only focused on SMEs and did not investigate the use of mobile apps in larger organizations. Additionally, the sample size was small and only included a single industry, which limits the generalizability of the findings. Furthermore, the study did not investigate the potential cost savings that could be achieved by implementing such system.

Technology used:

The study used a mobile project management app called Trello.

Both studies have limitations in their sample size and focus on a specific industry or type of organization, which limits their generalizability. Additionally, both studies found that resistance to change and lack of compatibility with existing systems were barriers to the adoption of new technology. Furthermore, both studies did

.

2.2 EXISTING SYSTEM

The existing system of project archives management in a traditional way involves physically storing of all project documents in file cabinets or boxes after student submit to the project coordinator. These documents are not well organized and labeled according to specific criteria, such as project year, or nature of the project and others.[1]

Also the softcopy are provided to the coordinator but there is no a centralized repository where student can easily access them and also to track the progress of that particular project
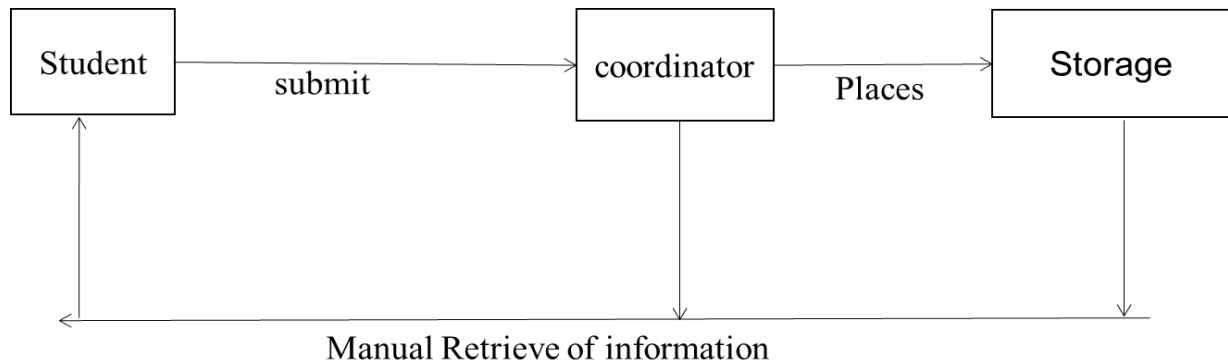

Figure 1: Block Diagram of the existing system

From the above diagram it shows the manual process of project activities

- Student : submit the project document to the coordinator and if as student want to search for a particular project he/she has to retrieve from the storage place manually.

- Coordinator: receives the project from student and places it to the storage place and also if he/she needs a project for reference has to search manually.

- Storage: this is a place where the project documents are stored it can be a shelf or box and is a place where student as well as Staff can retrieve the document informations

weakness of Existing system

- Poor Data Storage

All the data is stored in filling cabinets or boxes and because of that Data's could be misplaced due to human error

- Unsecured data

Since data is stored in filing cabinets or boxes it is freely available to anyone. Information may falls into the wrong hands.

2.3 PROPOSED SYSTEM

The proposed system of project archives management will be designed to streamline the process of storing and accessing project documents and tracking its progress. It involves the use of a central database or repository that can be accessed by authorized users from any location.

Users will be able to access the database using a secure login system, and will be able to search for specific documents or browse through the folder structure to find what they need. They will also be able to add new documents to the system and update existing ones as needed.

Also the system will include text processing where it will look the document similarities to avoid student plagiarism of projects
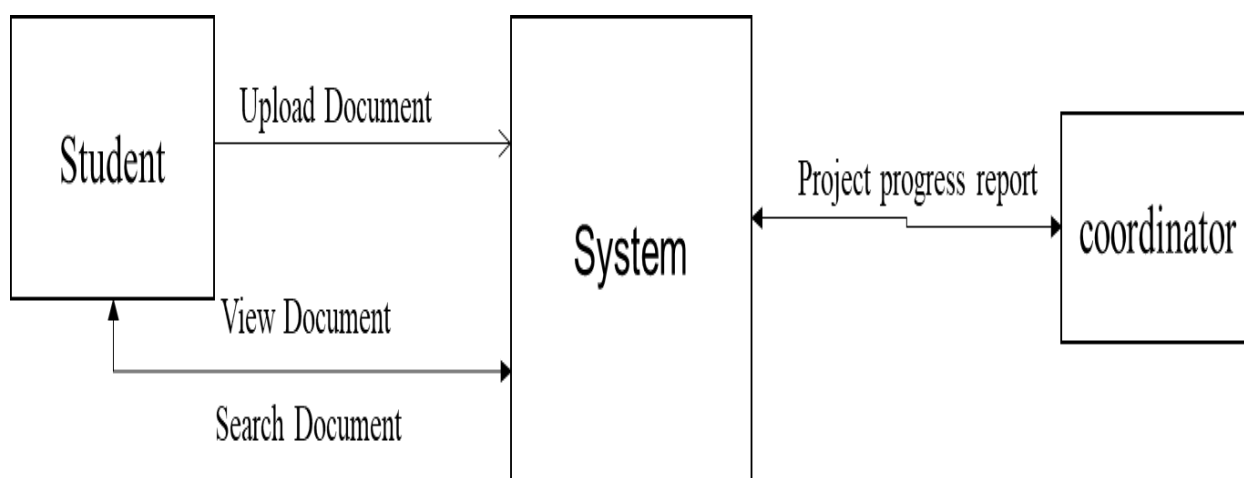

Figure 2: Block Diagram of the Proposed System

From the above diagram it comprises with an abstract of the project archives management system

Students: Students tends to upload the document to the system for processing it and also can search for various documents available to the system

System: responsible for document validation also for document processing before uploading it to the database so system comprises of different sub systems such as search engine, similarity checking, progress tracking and others.

Coordinator: responsible for submitting the tracking progress of the document as well as giving students the ability to upload the documents.

Advantage of Proposed System

- Improve Efficiency: Due to less man power.
- Centralized Storage: All document related to projects are saved in system, so it makes the work easy and simple for students

- Real time access to vital information: All information are on real time basis so it is easy to retrieve vital details in real time.

- Saves Time & Error Free: System will saves time and error both. All data of the institute is embedded in the software so there is no need to access different files. All related data of an projects are stored.

CHAPTER THREE

METHODOLOGY

3.1 INTRODUCTION

Methodology refers to a systematic investigation and study of materials and sources to establish facts and reach new conclusions. It also involves specific techniques that are adopted in the research process to collect, assemble, and evaluate data. It defines those tools that are used to gather relevant information in a specific research study. Surveys, questioners, and interviews are common tools of research[4].

3.2 RAPID APPLICATION DEVELOPMENT

Rapid application development is a software development methodology that uses minimal planning in favor of rapid prototyping. A prototype is a working model that is functionally equivalent to a component of the product.[5]

In the RAD model, the functional modules are developed in parallel as prototypes and are integrated to make the complete product for faster product delivery. Since there is no detailed preplanning, it makes it easier to incorporate the changes within the development process.

RAD projects follow iterative and incremental model and have small teams comprising of developers, domain experts, customer representatives and other IT resources working progressively on their component or prototype.

Unlike the more traditional waterfall model, which focuses on a stringent step-by-step process of development stages, the iterative model is best thought of a cyclical process. After an initial planning phase, a small handful of stages are repeated over and over, with each completion of the cycle incrementally improving and iterating on the software. Enhancements can quickly be recognized and implemented throughout each iteration, allowing the next iteration to be at least marginally better than the last.

In the RAD model, the functional modules are developed parallel as prototypes and are integrated to make the complete product for faster product delivery. Since there is no detailed preplanning, it is easier to incorporate the changes within the development process. RAD projects follow an iterative and incremental model and have small teams comprising developers, domain experts, customer representatives and other IT resources working progressively on their component or prototype. The most important aspect for this model to be successful is to make sure that the prototypes developed are reusable(Tutorials point, 2021).

In this project, Rapid Application Development (RAD) Methodology is used to develop the project up to the final stage due to the following reasons;

i.   Enhanced flexibility and adaptability as developer can adjust quickly during the development process.

ii.   Quick iteration that reduces development time and speed up delivery.

iii.   Encouragement of code reuse, which means less manual coding, less room for errors, and shorter testing times.

iv.   Increased customer satisfaction due to high-level collaboration and coordination between developers, clients, and end-users.

v.   Better risk management as developers, clients, and end-users can discuss and address code vulnerabilities while keeping development processes going.

vi.   Fewer surprises as, unlike Waterfall method, RAD includes integrations early in the software development process.
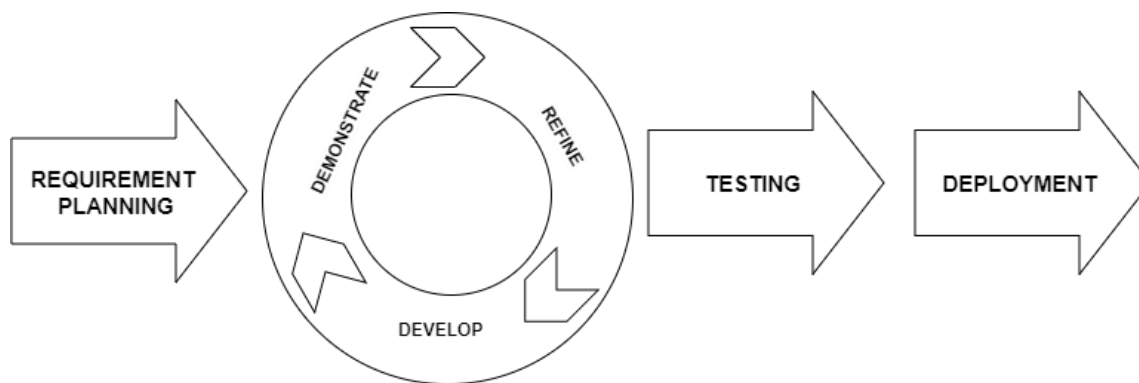

Figure 3:Phases of RAD model

The following are the merits of using Rapid Application Development (RAD) methodology to develop the project,

i.   Costly Inherent Versioning: It is rather obvious that most software development life cycles will include some form of versioning, indicating the release stage of the software at any stage. However, the iterative model makes this even easier by ensuring that newer iterations are incrementally improved versions of previous iterations. Moreover, if a new iteration fundamentally breaks a system in a catastrophic manner, a previous iteration can quickly and easily be implemented or "rolled back," with minimal losses, a particular boon for post-release maintenance or web applications.

ii.   Rapid Turnaround: While it may seem like each stage of the iterative process isn't all that different from the stages of a more traditional model like the waterfall method and thus the process will take a great deal of time the beauty of the iterative process

11

is that each stage can effectively be slimmed down into smaller and smaller time frames; whatever is necessary to suit the needs of the project or organization. While the initial run through of all stages may take some time, each subsequent iteration will be faster and faster, lending itself to that agile moniker so very well, and allowing the life cycle of each new iteration to be trimmed down to a matter of days or even hours in some cases.

iii. Suited for Agile Organizations: While a step-by-step process like the waterfall model may work well for large organizations with hundreds of team members, the iterative model really starts to shine when it's in the hands of a smaller, more agile team. Particularly when combined with the power of modern version control systems, a full "iteration process" can effectively be performed by a number of individual team members, from planning and design through to implementation and testing, with little to no need for outside feedback or assistance.

iv. Easy Adaptability: Hinging on the core strength of constant, frequent iterations coming out on a regular basis, another primary advantage of the iterative model is the ability to rapidly adapt to the ever-changing needs of both the project or the whims of the client. Even fundamental changes to the underlying code structure or implementations (such as a new database system or service implementation) can typically be made within a minimal time frame and at a reasonable cost, because any detrimental changes can be recognized and reverted within a short time frame back to a previous iteration.

Not only the benefits but Rapid Application Development (RAD) Methodology has the following challenges,

i. Costly Late-Stage Issues: While not necessarily a problem for all projects, due to the minimal initial planning before coding and implementation begin, when utilizing an iterative model, it is possible that an unforeseen issue in design or underlying system architecture will arise late into the project. Resolving this could have potentially devastating effects on the time frame and costs of the project, requiring a great deal of future iterations just to resolve one issue.

ii. Increased Pressure on User Engagement: Unlike the waterfall model, which emphasizes nearly all user/client engagement within the initial stages of the project during a brief crunch time period, the iterative model often requires user engagement throughout the entirety of the process.

iii. Based on the above challenges facing the following are the strategies that I used to ever come them in order to implement my project using this methodology.

iv. Creation of the Questionnaire with the option for the users to add other features that are forgotten. This will help to get all necessary features required for the first version of the system and reducing increase pressure by the user in the implementation stage. This will help to reduce the unnecessary cost and time wastage.

v. Using best tools for architecture design of the system. This will help to create the system that will be effective for adapting the changes that will be rapidly involved in the project by using Rapid Application Development (RAD) methodology.

vi. Development of the system with Testing Driven Development (TDD) flow. This will help the system components to be testable and improved without effecting other system components.

3.3 PHASES OF RAD METHODOLOGY

The key principle of the RAD process is a reduction in planning to focus on a highly iterative design and construction process, enabling teams to accomplish more in less time, without impacting client satisfaction. The prototyping and rapid construction phases may be repeated until the product owner and users are satisfied that the prototype and build meet the project requirements.

3.3.1 PLANNING AND REQUIREMENTS

During this phase, detailed requirements of the software system to be developed are gathered from client. As with most any development project, the first step is going through an initial planning stage to map out the specification documents, establish software or hardware requirements, and generally prepare for the upcoming stages of the cycle. The purpose of this phase is to perform a preliminary investigation to evaluate an IT-related business opportunity or problem. The preliminary investigation or planning phase is very critical since it affects the entire development process. The better planning phase ensures a better and less complex system development process. Planning phase helps to anticipate costs and benefits of a new system.

Using software engineering and data collected, we composed a Software Requirements Specification (SRS), which lays out function and non-functional requirements and it includes a set of use cases that describe user interactions that the software must provide to the user for perfect interaction which will enable proper definition of the software to be developed. This will be simultaneously done with investigation of the current technology on the mobile phones which will be the main hardware of the project. Other documents like the Graphic and Digital Marketing Guideline and respective content will be addressed. At this stage, project estimation

in terms of resource demand and time management will also be laid out to ensure that the project will reach all milestones at the right times without delay or reduced functionality.

3.3.2 SYSTEM ANALYSIS AND DESIGN

This phase is dealt with once planning is complete, an analysis is performed to nail down the appropriate business logic, database models, and the like that will be required at this stage in the project. The design stage also occurs here, establishing any technical requirements (languages, data layers, services, etc.) that will be utilized in order to meet the needs of the analysis stage.

In this project, using graphic designing tools Adobe Photoshop and Illustrator, will design and outline the Graphic. This will include the logo, font, official colours, icons, clipart guides, poster guides, and web-content guides. This will ensure that the project will have a common layout and view that will distinguish it from other works. On web development, Visual Studio Code (VS) will be used as the main tool with Hypertext Markup Language (HTML), Cascading Style Sheet (CSS), JavaScript (JS) will be used as the front-end development languages and Structured Query Language (SQL) will be used as the scripting language for database designing and structuring the queries for data transaction and storage, python will be used for back-end and scripting development.

3.3.3 IMPLEMENTATION

With planning and analysis out of the way, the actual implementation and coding process can now begin. All planning, specification, and design docs up to this point are written and implemented into this initial iteration of the project.

After database design, understanding of the variables, entities, and their corresponding attributes. The focus on bringing this project to life through development and integration of different components of the system. In this project, we will work with the front-end side and programming backend scripts simultaneously and then connect them to the database. This projects components namely; validation, storage, searching, retrieving, project progress. The validation will focus on the validation of user (students' information) information. This is to say that, it will check to assure that it is the student of DIT who is using this system. The astorage will focus on storing the project according to department. The searching will focus on allowing student to search for specific document based on various categories. Retrieving will focus on obtaining the result of various document The project progress component will focus on tracking the project progress so as student can view and know to what extent was this project went so far. Other factor such as checking documents similarities so as to avoid someone from coping into document of another person.

14

3.3.4 TESTING

Once this current build iteration has been coded and implemented, the next step is to go through a series of testing procedures to identify and locate any potential bugs or issues that have cropped up.

The project will undergo a set of test cases to locate shortcomings and the rectify the misbehaviours that have been found. This is done in order to improve the accuracy of the system in storing the project. At this phase as well identification of vulnerabilities of the system that might affect confidentiality, integrity and availability of the student's personal information and data.

3.3.5 EVALUATION

Once all prior stages have been completed, it is time for a thorough evaluation of development up to this stage. This allows the entire team, as well as clients or other outside parties, to examine where the project is at, where it needs to be, what can or should change, and so on.

3.3.6 MAINTANANCE

This phase involves making sure that the application is up and running in the respective environment. Encase user encounters and defect, make sure to note and fix the issues faced. In case any issue is fixed; the updated code is deployed in the environment. The application is always enhanced to incorporate more features, update the environment with the latest features.

3.4 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[2]. There is a variety of data collection methodologies available such as interviews, questionnaires and surveys, observations, documents and records, focus groups, and more. The task of data collection begins after a research problem has been defined. This research is employed with primary data with Questioner as method off data collection.

3.4.1 PRIMARY DATA

Primary data is information collected through original or first-hand research. For example, questionnaires, focus group discussions, interviews, and observations. Despite the availability of a variety of different methods for data collection, in this project, the questionnaire method will be used. A questionnaire is a research instrument that consists of a set of questions or

other types of prompts that aims t o collect information from a respondent. Questionnaires can be thought of as a kind of written interview. They can be carried out face to face, by telephone, computer or post. A research questionnaire is typically a mix of close-ended questions and open-ended questions. Open-ended, long-form questions offer the respondent the ability to elaborate on their thoughts, while close-ended questions don't.

I.   **REASONS TO USE QUESTIONNAIRE METHOD INCLUDES**:
    i   It uses less time and money to collect data for research.
    ii   Make it easier to collect data from many people in large geographical areas.
    iii It is an easier way to get information because it does not require the respondent to be physically present.
    iv   Easier to perform analysis and valuation of data collected.
    v   It offers anonymity for respondents, hence making them be more comfortable expressing themselves.

II.   **AREA OF STUDY**
The area of study will be at Dar es Salaam Institute of Technology (DIT)

III. **POPULATION AND SAMPLE SIZE**
Population which will be considered during data collection will be lectures and students. This is because they are key people who are mostly involved in project activities. The sample size will be 5 lectures and 30 students coordinators depending on their number and availability

CHAPTER FOUR

CONCLUSION AND RECCOMMENDATION

4.1 CONCLUSION

Advancement in technology is making automation of manual activities become a very important aspect of our daily lives. Since the use of computers is now widespread, the adoption of this system will make life become easier for students and staff.

The project sought to develop an automated project collection system that provides relief of the long-endured problems of the current modes of accommodation at Dar es salaam Institute of Technology. A centralized system would provide transparency and accountability for final year projects and make it easier for students, staff, and departments to access and locate project information. This would also make it easier to monitor the progress of individual projects and ensure that they are completed on time. The system would also improve the ability to provide effective feedback and support to students, which is crucial for their success.

4.2 RECOMMENDATIONS

Having met the specified objective of the proposed project and after a profound evaluation of the developed system, there are a number of suggestions which will be regarded as recommendations for further improvement of the system as follows:

i. DIT should embrace and implement the developed system as it will improve the conditions of hostel allocation process.

ii. Other functionality should be implemented so as to automate all project activities such as online supervision/communication and others.

4.3 COST ESTIMATION

ITEMS	QUANTITY	AMOUNT
Internet	24 GB	50,000
Reports	8	54,000
Contingency/Emergency		50,000
Transport		30,000
Total		184,000

TABLE 1: Cost Estimation

SN	ACTIVITIES	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL
1	Project Initialization	▇	▇	▇							
2	Planning			▇	▇						
3	Analysis and Design					▇	▇				
4	Implementation and Design						▇	▇	▇		
5	Deployment								▇	▇	
6	Evaluation										▇

TABLE 2: Project Timeline

REFERENCE

1. DIT (2022), Prospectus for Academic Year 2021/2022

2. Wikipedia.(2023). Data collection. Wikipedia.https://en.wikipedia.org/wiki/data-collection/, 26/1/ 2023.

3. Wikipedia.(2023). Project Archives. Wikipedia.https://en.wikipedia.org/wiki/data-project-archives/, 26/1/ 2023.

4. Types of Methodology. (n.d.). In Research Methodology. Retrieved January 27, 2023, from https://research-methodology.net/types-of-methodology/

5. Types of Research Methods. (n.d.). In SAGE Research Methods. Retrieved January 27, 2023, from https://methods.sagepub.com/types

6. Zhang, J., & Lu, X. (2017). A Research on the Construction of Electronic Project Archive Management System. Journal of Software, 8(7), 1631-1639.

7. Chen, Y. H., & Kuo, T. H. (2019). An Empirical Study on the Development of Project Archive Management System. Journal of Information Science and Engineering, 35(1), 99-114.

8. Akyol, B. (2017). The Importance of Project Archive Management in Construction Projects. Journal of Construction Management and Economics, 35(6), 463-471.

APPENDIX A

SAMPLE QUESTIONS

1. How well does the current system meet your needs for organizing and accessing project archives?
   a. Very well
   b. Well
   c. Poorly
   d. Very poorly

2. How often do you experience difficulty finding the information you need in the current system?
   a. Almost never
   b. Rarely
   c. Sometimes
   d. Almost always

3. How satisfied are you with the speed and accuracy of data retrieval in the current system?
   a. Very satisfied
   b. Satisfied
   c. Neutral
   d. Dissatisfied

4. How important is it to you to have an updated and accurate status of project progress?
   a. Very important
   b. Important
   c. Neutral
   d. Not important

5. How well does the current system meet your needs for tracking project progress status?
   a. Very well
   b. Well
   c. Somewhat
   d. Poorly