



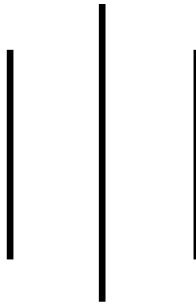
## **LA GRANDEE INTERNATIONAL COLLEGE**

**Simalchaur, Pokhara Nepal**

Mid Term Defense

On

**“Result Management System”**



**Submitted to:**

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## **ABSTRACT**

A Result Management System is an environment that manages all the data of the students who are studying in an educational institution. This data is computerized through an automated system. Here, computerization is more advantageous than the usual method. Thus, an RMS offers many benefits to an educational institution. This proposal outline for the development of an RMS using vb.net programming language to address the need in simpler form.

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# **1.INTRODUCTION**

The Result Management System (RMS) is a specialized digital platform designed to streamline the collection, storage, processing, and management of academic results and performance-related data for students. Its primary objective is to provide students with their results in the most efficient manner possible. The system comprehensively handles and tracks information related to subjects, grades, classes, semesters, and individual student results. Students can easily access their results by entering their roll number, while faculty members can analyse pass and failure statistics in specific subjects. Administrators are responsible for creating and maintaining current records.

RMS is a valuable tool for educational institutions, simplifying the process of managing and publishing examination results. It offers a systematic and structured approach to delivering results to students, enhancing security and efficiency. Moreover, the system enables quick and accurate assessment of student performance, streamlining the reporting process. It effectively manages all student result details and their corresponding grades, significantly reducing the time and effort required for manual processing or other data entry processes. This efficiency allows staff to concentrate on more strategic tasks while also saving on paper usage, printing costs, and manual labour, resulting in cost savings for educational institutions over time.

RMS is particularly convenient for accessing student results and provides a straightforward means for faculty to analyse subject-specific pass and failure rates. The system securely stores result data, minimizing the risk of data loss or misplacement. Overall, RMS offers an efficient and user-friendly solution that benefits both students and educational institutions, ensuring that academic results are managed and disseminated effectively.

## **2.PROBLEM STATEMENT**

Educational institutions face a multitude of challenges in managing student-related information, records, and activities. These challenges include:

- i. **Inefficient Data Management:** Existing paper-based systems make it difficult to store, retrieve, and update student records efficiently.
- ii. **Time-Consuming Administrative Tasks:** Administrative staff spend a significant amount of time on routine tasks such as enrollment, attendance tracking, and grade management.
- iii. **Lack of Data Security:** Traditional methods are susceptible to data loss, unauthorized access, and data breaches, putting students' personal and academic information at risk.
- iv. **Communication Gaps:** Difficulty in maintaining effective communication between students, teachers, and parents due to fragmented and outdated information.

### **3.OBJECTIVES**

The primary objective of a Result Management System is to enhance efficiency. The objective of the project on RMS is to manage the details on student, their result according to the subjects and their performance.

- To provide tools for analysing student performance, allowing educators to identify weak students and implement timely interventions.
- To ensure the system can adapt and scale as the educational institution grows, accommodating a larger student population and additional features as needed.
- To implement a centralized database system to securely store and manage student records.

## 4. REQUIREMENT ANALYSIS

We collected several requirements for project from our primitive research, website visits, and interview to the concerned personnel and their experiences regarding the concepts of its development. Here, we analysed, documented, validated, and managed software or system requirements.

### 4.1 Functional Requirements

The description of the services that the system should provide to the user. Some functional requirements are:

- **User Registration**

Users should be able to register with the system using a valid email address and password.

- **Result Entry**

Teacher or authorized personnel should be able to enter and update student result.

- **Result Publishing**

Notify students when results are published.

- **Admin Login**

Admin can enter the username and password to get access of the application.



## **4.2 Non-Functional Requirements**

Non-Functional requirements are set of specifications that describe the system's operation capabilities and constraints and attempt to improve its functionality. Some non-functional requirements are:

- **Usability**

The system should provide user friendly interface for students, teacher and administrators.

- **Portability**

The system should be able use on different platforms without change in its behaviour or performance.

- **Security**

Sensitive data, including student records and results should be encrypted during storage transmission.

## 5.METHODOLOGY

In this project, we used “**Iterative Model**” for developing “ **Result Management System**” .

A sequential of operation that can run multiple is called iteration. In software development, iterative model uses a sequential planning and development process where an application is developed in small sections or sequences called iteration. Each iteration is reviewed and analysed by the development team and the potential end user insight gain from it. The analysis is used to improve and determine the next step in the development.

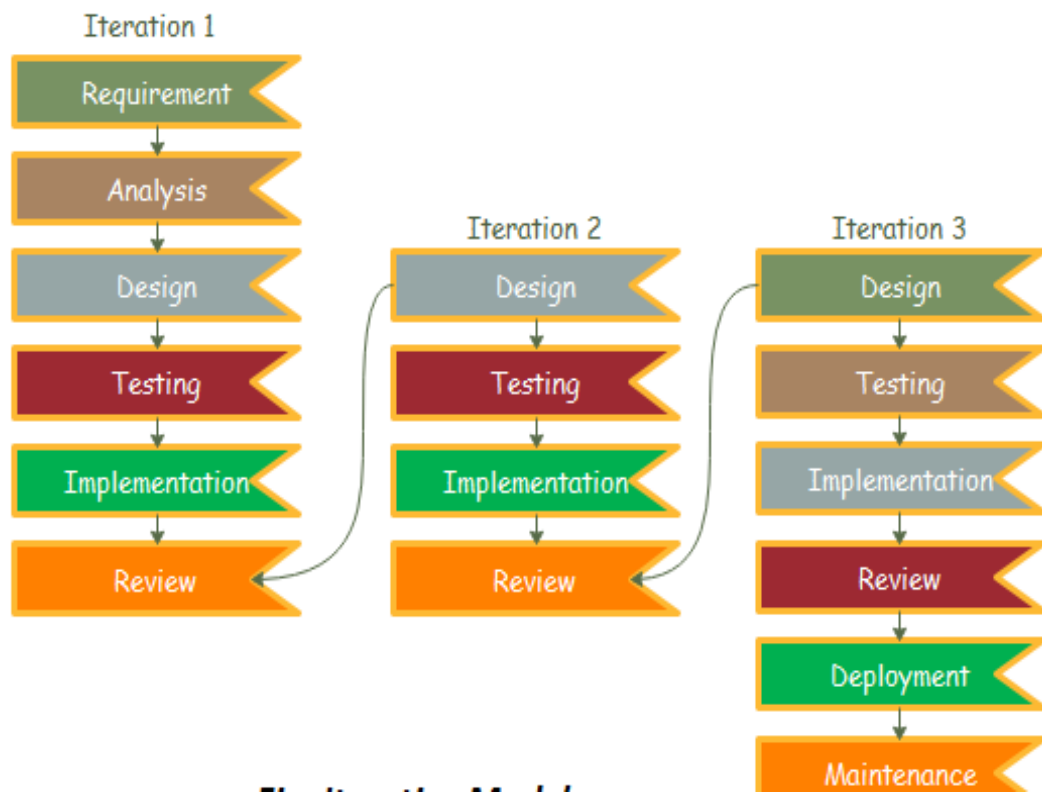


Figure 5-1 Iterative Model

**i. Requirement and planning stage**

During this phase, the business requirements are collected, and an analyst determines whether they will be met within the allocated budget. It is used to layout the business needs in detail and the System information (hardware or software) are gathered and evaluated for feasibility.

**ii. Design**

In this phase, the project team gets the complete set of requirements to begin their work in a particular direction. They use different figures like a data flow diagram, class diagram, activity diagram, state transition diagram, etc to get a clear understanding of the software design and help them proceed with the development.

**iii. Coding**

The actual construction of the system begins at this point in the project. This stage will be guided by the analysis and design resulted from the Design Stage. All the requirements, planning, and design plans are executed and coded. The developer will implement the chosen design using predetermined coding and metrics standards.

**iv. Testing**

This step involves testing the current build iteration to a set of standards and norms to see if it meets them. Performance testing, stress testing, security testing, requirements testing, usability testing, multi-site testing, disaster recovery testing, and so on are all examples of this type of testing.

**v. Evaluation**

This is the last stage of the iterative model. After all the processes are complete, the system constructed up to this point is thoroughly evaluated. The system is examined by the development team, stakeholders, and other teams responsible for developing the project to see if the outcomes satisfy their expectations.

## 6. DATA FLOW DIAGRAM

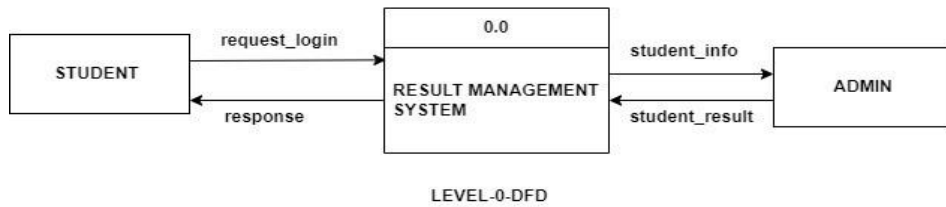


Figure 6-1 Level-0-DFD

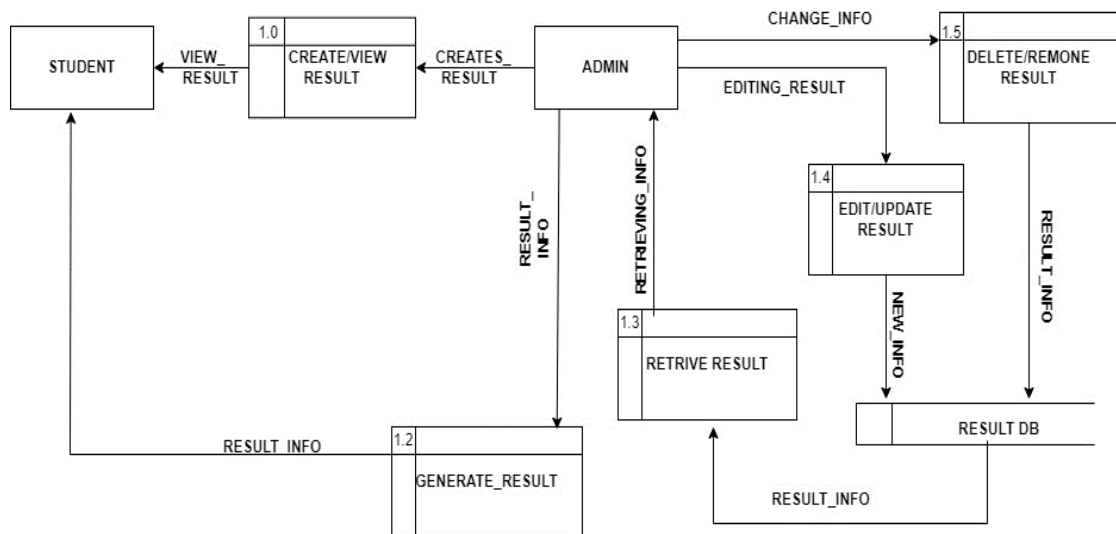
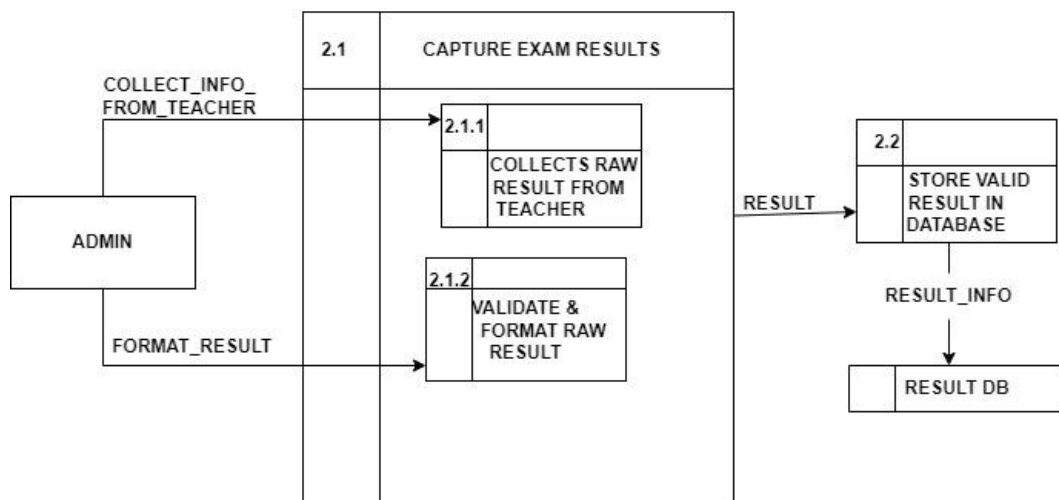
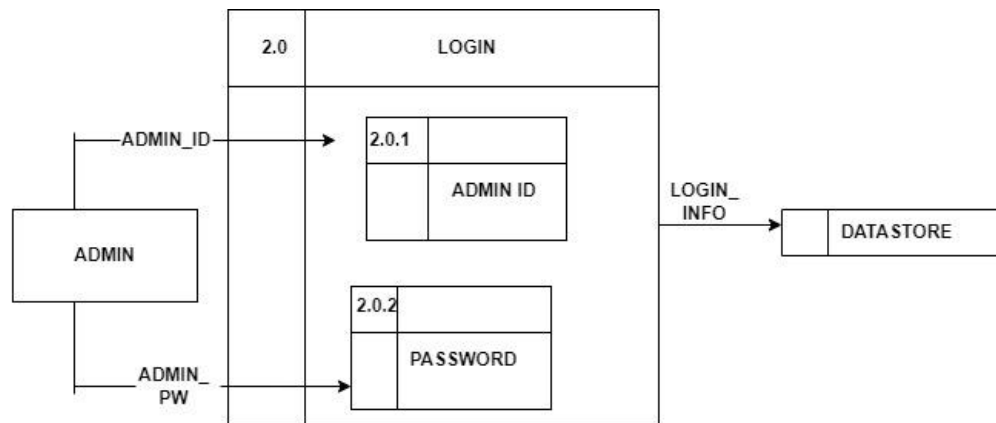


Figure 6-2 Level-1-DFD



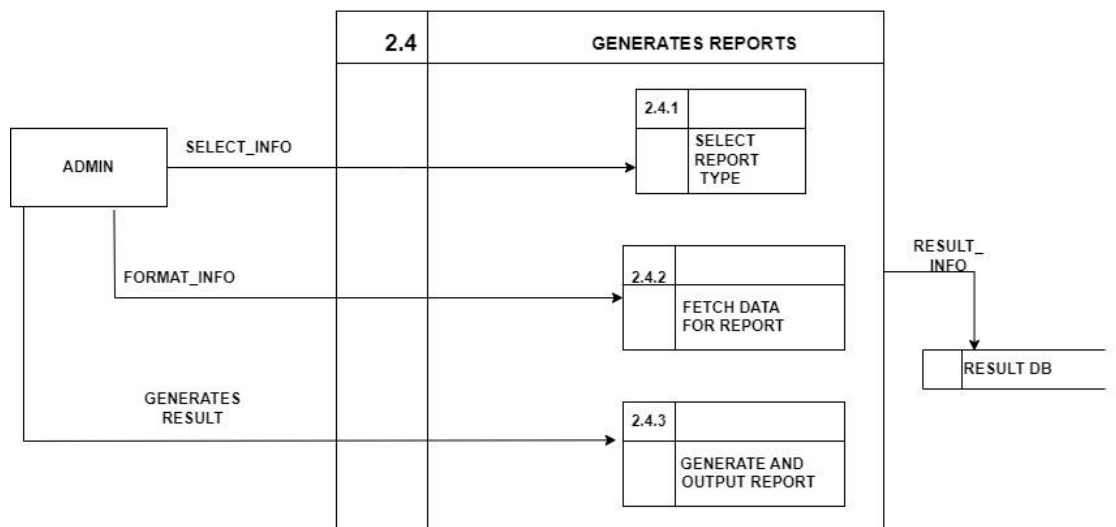
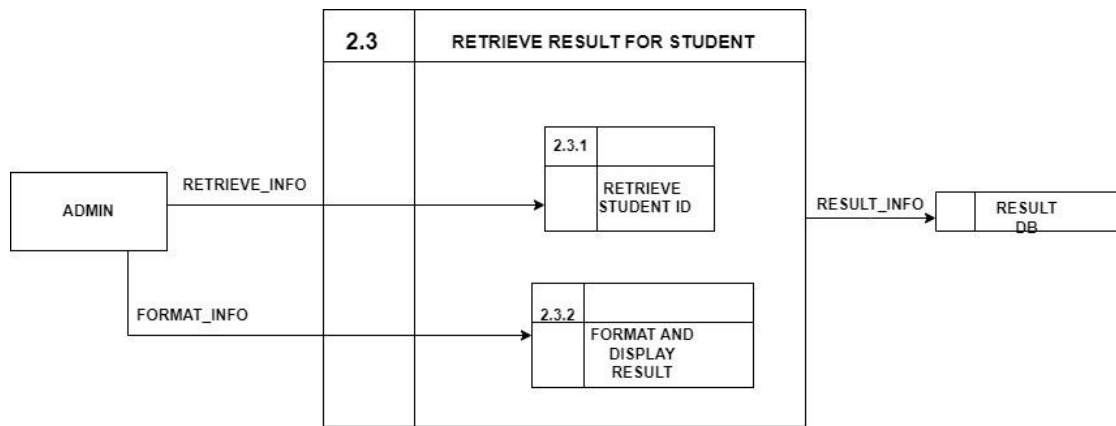


Figure 6-3Level-2-DFD

## 7.ER DIAGRAM

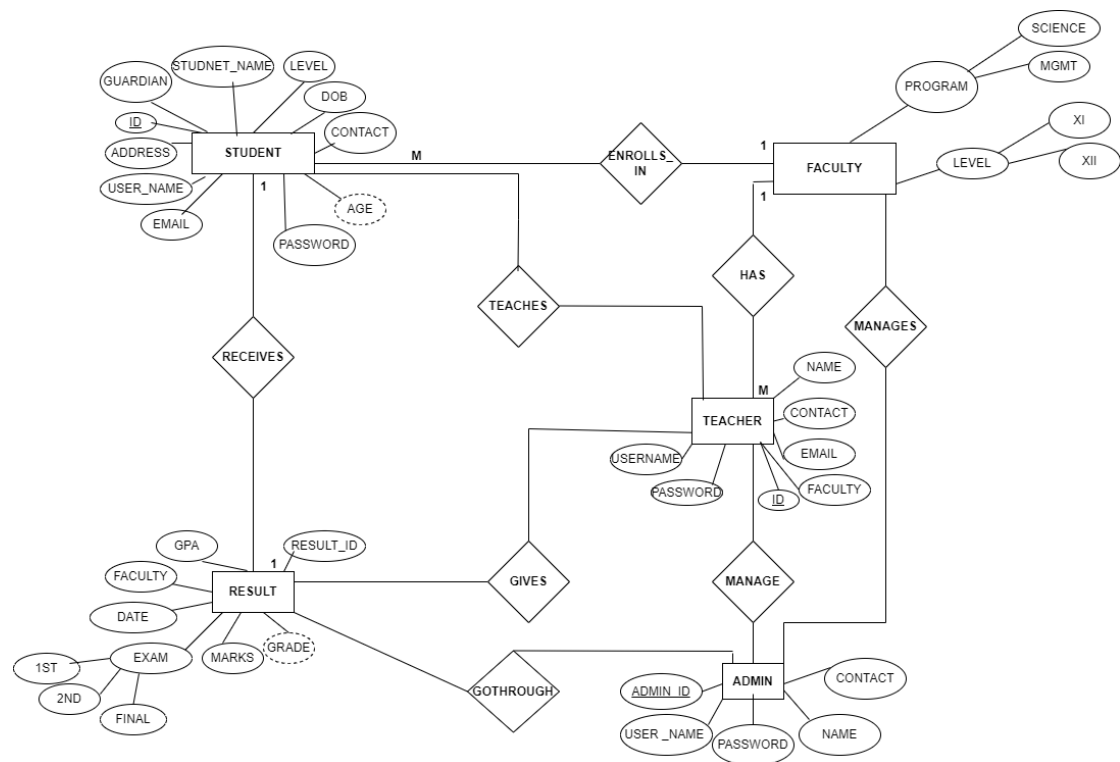


Figure 7-1ER-Diagram

## 8. DATABASE DIAGRAM

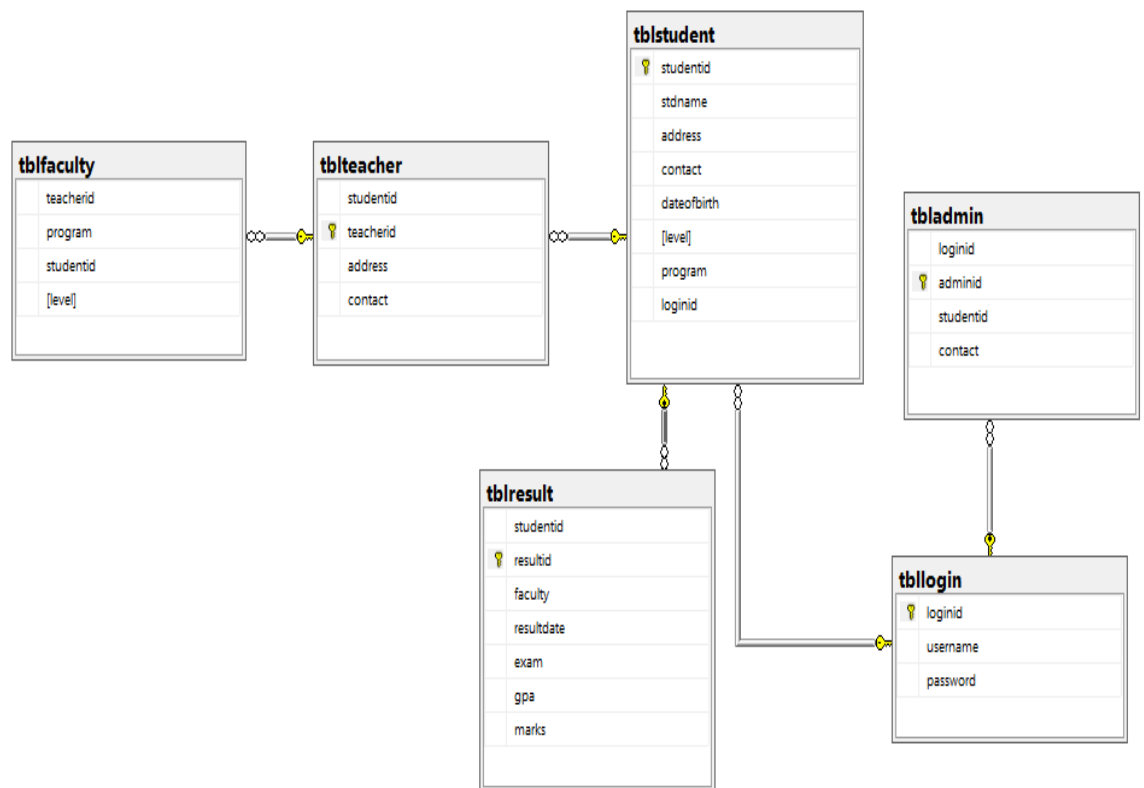


Figure 7-2 Database Diagram



## 9.PROJECT GANTT CHART/ TIMELINE CHART

The Gantt chart below shows the schedule planned for developing the “Result Management system”. This project would be carried out in steps with proper planning in each step, best effort would be applied to finish this project before deadline.

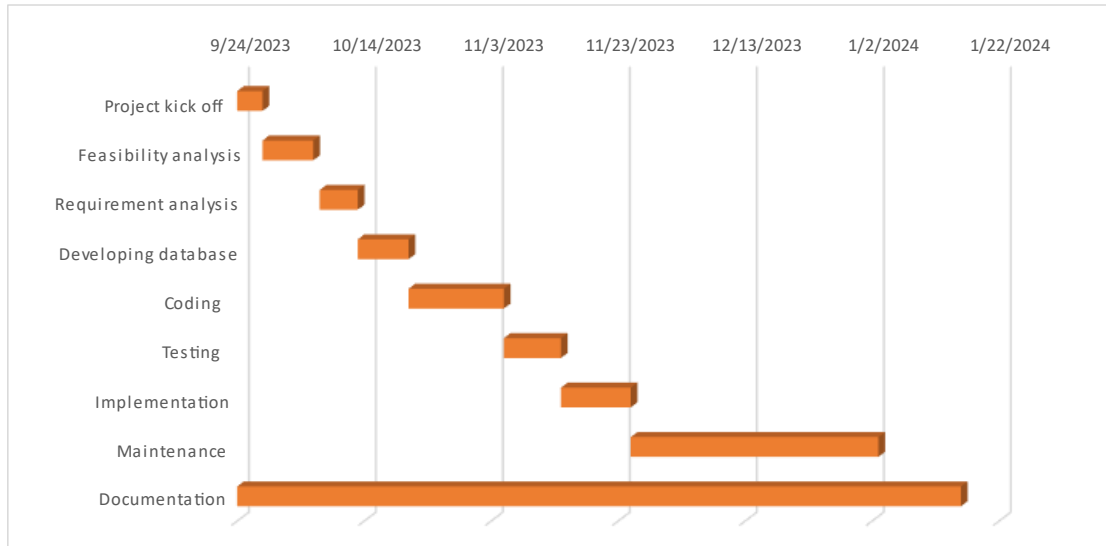


Figure 9-1Gantt Chart

## 10. DELIVERABLES

When we develop a software application, we face many problems by maintaining the features of it properly, but the system can't be perfect there may be some problems but after developing the software we always expect a better output. Similarly, by making this result management system we expect the output equal as the hard work put in it.

With the completion of the project, we will obtain a system where we can add, delete, edit, store and update car information.

- **Testing and Quality Assurance**

Test cases, test plans, and test reports to ensure the system functions correctly.

- **Deployment Plan**

A deployment plan outlining how the system will be rolled out to production.

- **Maintenance and Support Plan**

A plan for ongoing maintenance and support of the result management system, including updates and bug fixes.

- **Database**

Database schema and design to store information about students, teachers and staffs.

## **11. PROGRESS REPORT**

In this project, Result Management System, we have introduced what is project about, have is mentioned about its problems and objectives.

Requirements (functional and non-functional)for the system has been written. The iterative model is used in this project.

ER diagram has shown the relationship between the entities, it shows the simple overview of the system.

Database diagram has graphically shown the tabular structure of the system. The Gantt chart below shows the schedule planned for developing the “Result Management system”.

The login page has been created and dash board and create account page has been created.

## **12. CONCLUSION**

Result Management System keeps track of student's grades. This system will be extremely beneficial to students when they need to obtain results and courses information after the results have been posted.

In today's education field, managing and analysing results is an integral part of assessing performance and making informed decision. This proposal outline for the development of an RMS using vb.net programming language to address the need in simpler form. The main goal of this system is to improve and automate the management and declaration of student's outcome or the result.

While it provides examination result to the student in a simple way and accurate way and reduce the hardship of manual works saving time and effort. As the students enter their roll number the system shows the required outcome. The system also provides less pressure for corruption and hard work as it is more effective and better communication of result. The RMS enhances the efficiency and accuracy in result management.

### **13. REFERENCE**

- Dan Rahmel, “Database programming with-Visual Basic 6”, BPB Publication

#### **Web sites:**

- [www.vbhelper.com](http://www.vbhelper.com)