**Project Documentation**

**Student Record Management System**

**Programmed by:**

1. S.N Nkambule (22111120)
2. S. Maziya (22110612)
3. N.N GUMA (21834912)

**User Manual**

- Username: Admin

-Password: Admin1234

Overview

* This is a Java based application design to manage the student records. The system provides a graphical user interface known as GUI, and its developed using NetBeans. It allows users to add new students, remove existing students, and display all student records.

**GUI Design**

Main Window

* The main window serves as the entry point of the application. It includes a title and menu options for managing student records.

Add Student Form, Functionality and Event Handling

* The Add Student form is where you enter student details like ID, Name, Age, Grade, and Major. The form also has an Add Student button, which triggers the addition of a new student to the system.
* The system validates the input data and displays appropriate error messages if required, if the input data is valid, the system creates a new student object. Then the table displaying student records is updated to reflect the new addition

Remove Student Form, Functionality and Event Handling

* The Remove Student form allows users to enter a StudentID and remove the corresponding student from the system.
* The Remove Student button triggers the removal of the removal of the student with the entered ID from the system, then the system searches for the student with the given ID in the array of student records, if it found, it is removed from the records.
* The table displaying student records is updated to reflect the removal.

Display All students Panel, Functionality and Event Handling

* This displays a table (JTable) that presents all the student records, and it has a Display All Students button that triggers the display of all student records in the table.
* The system retrieves all student records from the array. The table is populated with the student records.