COLLEGE ADMISSION MANAGEMENT SYSTEM

INTRODUCTION

The College Admission Management System is built to manage student admissions to all available courses on a particular college based on their categorical cutoffs and their 12th grade marks.This system automates and simplifies the entire process ensuring transparency and value for merit.

ABSTRACT

This project implements a smart and interactive GUI-based admission management solution using Java Swing for the front end, and **MySQL** via JDBC for backend data storage and operations.The system requires students to fill in their academic and contact details to process their admission.A key feature of the system is automatic rejection of candidates with less than 75% marks in 12th grade and dynamic course allocation based on entrance exam rank.

TOOLS USED

The tools used to develop this project are:
- Java (JDK 17+)
- Java Swing
- Java Database Connectivity(JDBC)
- MySQL Server
- VS Code

STEPS INVLOVED IN BUILDING THE PROJECT

STEP-1:Create database to store and formulate data

Created tables students,courses and applications to store respective data.
Created necessary columns and filled in pre-required data.
Defined primary keys and relationships between tables.

STEP-2:Create GUI for home page

Created a window for home page with options to check cutoffs for all available courses,check total and available number of seats for each course,apply for a particular course,check the status of your application and export the admission list as a csv document.

STEP-3:Connect to MySQL using JDBC
Connected to the MySQL server using location,user and password to execute queries to store,manipulate and fetch data.

STEP-4:Create GUI for cutoff window
Fetch the course title and category wise cutoffs and display them on a window.

STEP-5:Create GUI for availability window
Fetch the total number of seats and available number of seats along with course title and display them on a window.

STEP-6:Create GUI for application form
Created GUI using swing components like text field,drop down menus and radio buttons to take inputs like name,category,contact details and marks from the student.

STEP-7:Update status and display output
If the student meets the merit condition and the number of available seats in the particular course is not 0,automatically update the status column of application table to be approved.Display this when the user clicks the check status button.

STEP-8:Exporting admission list
Created a new csv document and all applications where status is approved is written on to it which is exported.

CONCLUSION
The *College Admission Management System* successfully automates and streamlines the admission process. It ensures that only eligible candidates are considered based on predefined academic and entrance criteria, improving transparency and reducing human error. By using Java Swing and MySQL, the system remains lightweight, platform-independent, and easily customizable for real-world institutional deployment.