Project Report

Project Title: College Admission Management System

Developer Name: Ajay Vishwakarma

Tools Used: Java (Swing, AWT, JFrame), Eclipse, MySQL, JDBC

Package Name: collegeadmission.com

Database Name: college_admission_db

1. Introduction

The College Admission Management System is a Java-based desktop application designed to handle and automate the various tasks involved in college admissions. This system helps administrators manage student records, course details, admission approvals, document uploads, and fee payments in an efficient and centralized manner. It provides a GUI interface using Java Swing and AWT components, and connects to a MySQL database using JDBC for data storage and retrieval.

2. Abstract

The aim of this project is to build a user-friendly application that simplifies the college admission process and reduces manual paperwork. The application enables registration of students, allocation of courses, management of documents and fees, and the generation of a merit list based on academic performance. Admin users can log in securely and access different modules such as Student Form, Admission Form, Course Management, Document Upload, and Payment Details - all integrated into one system through a dashboard interface.

3. Tools and Technologies Used

- Programming Language: Java
- GUI Framework: Swing, AWT, JFrame
- IDE: Eclipse
- Database: MySQL
- Connectivity: JDBC
- Package Structure: collegeadmission.com

4. Steps Involved in Building the Project

1. Database Design: Created MySQL database college_admission_db with tables like Students, Admission_form, Course, Amount, Documents, Payment, and Admin.
2. GUI Design: Designed various Java Swing forms (StudentForm.java, AdmissionForm.java, DocumentForm.java, etc.) for user interaction.

3. Database Connectivity: Implemented JDBC-based connection using DBConnection.java to link forms with database operations (Insert, Update, Delete, Retrieve).

4. Form Functionalities: Developed input forms for student data, admissions, courses, payments, and documents. Added features like Submit, Show All, Update, Delete, Merit List, Search.

5. Dashboard & Navigation: Created a central Dashboard.java file to access all modules, including Export to PDF and Print options.

6. Testing and Debugging: Tested all modules for correctness, UI flow, and database integrity.

5. Conclusion

This project successfully digitizes the college admission process using Java and MySQL. It offers an easy-to-use interface for managing student records, documents, payments, and course allocations. The modular structure ensures scalability and maintainability. Overall, the project meets the objective of making college admissions efficient, accurate, and paperless.