Project Title

College Admission Management System

Guided By:

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Batch Code:- ANP-D2406

Course Code:- ITPR

➢ Introduction :

- The College Admission Management System is a simple and efficient digital solution designed to make the admission process faster, easier, and more organized. Traditional admission methods involve paper forms, manual entries, repeated verification, and difficulty in managing documents and fee details. These issues lead to errors, delays, and poor record-keeping.

- To overcome these problems, this project uses **Java (Console Application)** for front-end logic and **MySQL** for secure data storage. The system stores student details using **six structured tables** that cover personal information, address, academic qualifications, course details, fees, and submitted documents. This makes the entire admission process smooth, error-free, and reliable.

➢ Problem Statement :

- Paper forms are difficult to manage
- Records cannot be searched quickly
- High chances of human errors
- Document verification is slow
- Fees tracking becomes confusing
- No proper backup of student data
- Difficult to maintain long-term records

➢ Objectives :

- To make the admission process fast and user-friendly.
- To reduce manual paperwork.
- To store student details in a structured database.
- To maintain address, qualification, fees, and documents systematically.
- To provide quick search and retrieval of student data.
- To reduce chances of human error.
- To provide a secure and centralized database system.

➢ Project Category :

Application Development using Java & MySQL

➢ Modules Description :

1. Student Admission Module:-

Stores main details: name, father's name, DOB, gender, course, mobile.

2. Address Module:-

Stores student's residential details such as house number, street, city, state, and pincode.

3. Qualification Module:-

Stores student's 10th/12th examination details (board, year, percentage).

4. Fees Module:-

Stores total fee, paid amount, and remaining balance.

5. Documents Module:-

Stores Aadhaar number, 10th and 12th marksheet file names, and photo filename.

6. Course Module:-

Stores course name, duration, and fees offered by the institution.

➢ Database Design (6 Tables) :

1. ADMISSION TABLE :

Field Name	Data Type	Key	Description
student_id	INT PRIMARY KEY	PK	Unique student ID
name	VARCHAR(100)		Student full name
father_name	VARCHAR(100)		Father's name
dob	DATE		Date of birth
gender	VARCHAR(10)		Gender
course_id	INT	FK	References course(course_id)
mobile	VARCHAR(15)		Contact number

2. COURSE TABLE :

Field Name	Data Type	Key	Description
course_id	INT PRIMARY KEY	PK	Unique course ID

course_name	VARCHAR(100)		Name of the course
duration	INT		Duration in years
fees	INT		Total course fees

3. QUALIFICATION TABLE :

Field Name	Data Type	Key	Description
q_id	INT PRIMARY KEY	PK	Unique qualification ID
student_id	INT	FK	References admission(student_id)
exam_name	VARCHAR(50)		Exam passed
board	VARCHAR(100)		Board name
passing_year	INT		Year of passing
percentage	FLOAT		Marks percentage

4. FEES TABLE :

Field Name	Data Type	Key	Description
fee_id	INT PRIMARY KEY	PK	Unique fee ID
student_id	INT	FK	References admission(student_id)
total_fees	INT		Total course fees
paid	INT		Amount paid
balance	INT		Remaining balance

5. ADDRESS TABLE :

Field Name	Data Type	Key	Description
address_id	INT PRIMARY KEY	PK	Unique address ID
student_id	INT	FK	References admission(student_id)

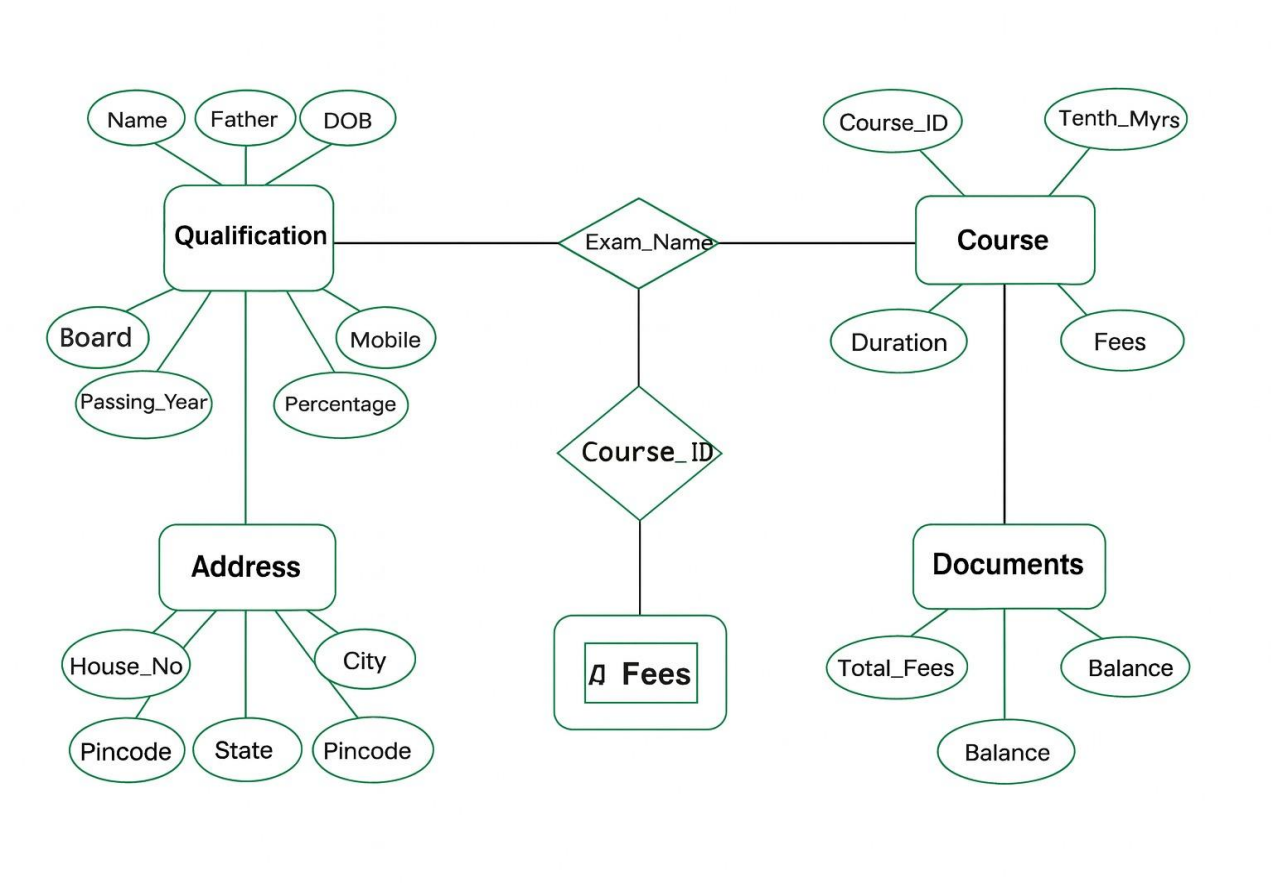
house_no	VARCHAR(50)		House number
street	VARCHAR(100)		Street/Locality
city	VARCHAR(50)		City name
state	VARCHAR(50)		State name
pincode	VARCHAR(10)		Postal code

6. DOCUMENTS TABLE :

Field Name	Data Type	Key	Description
doc_id	INT PRIMARY KEY	PK	Unique document ID
student_id	INT	FK	References admission(student_id)
aadhar_no	VARCHAR(20)		Aadhaar number
tenth_marksheet	VARCHAR(200)		10th marksheet document
twelfth_marksheet	VARCHAR(200)		12th marksheet document
photo	VARCHAR(200)		Student photo

➢ ER Diagram :

- The system contains six main entities linked through the central Student entity.
- Each module forms a relationship with Student using clear primary and foreign keys.
- Course connects to Student through a one-to-many relationship for course selection.
- The ER model ensures structured data flow and consistent record management.



➢ Data Flow Diagram (DFD):

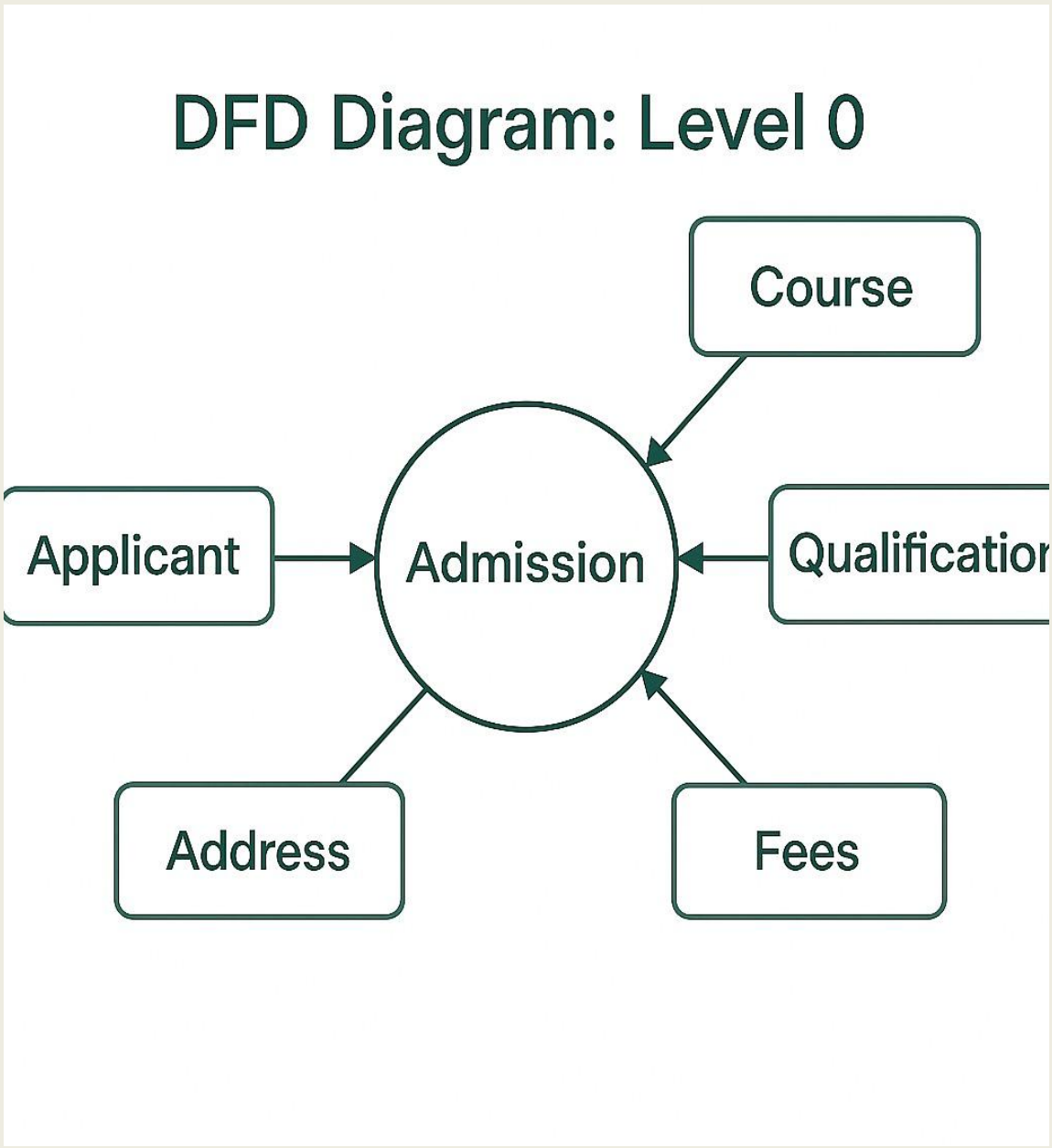
→ DFD Level 0 :

- The whole system is shown as one process called “Admission Management System.”

- Students and Admin act as external entities providing and receiving information.

- The process handles admission, fees, documents, and course-related data.

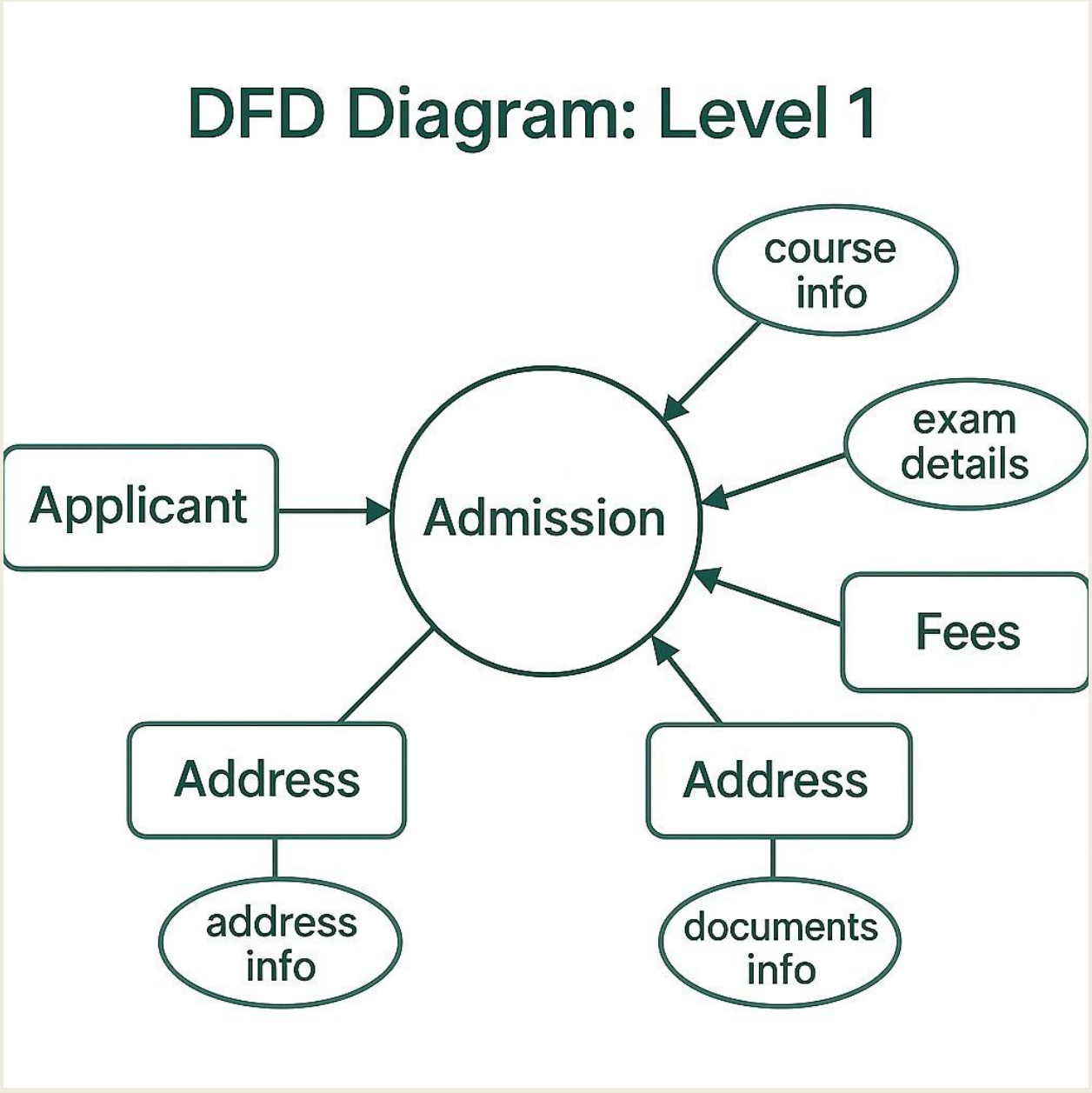
- All information flows into a centralized database for storage and output.



→ DFD Level 1 :

- The system is divided into six core processes for admission, address, qualification, fees, documents, and courses.
- Each process interacts with its own data store for reading and updating records.
- Student Admission acts as the main input point for all other module processes.

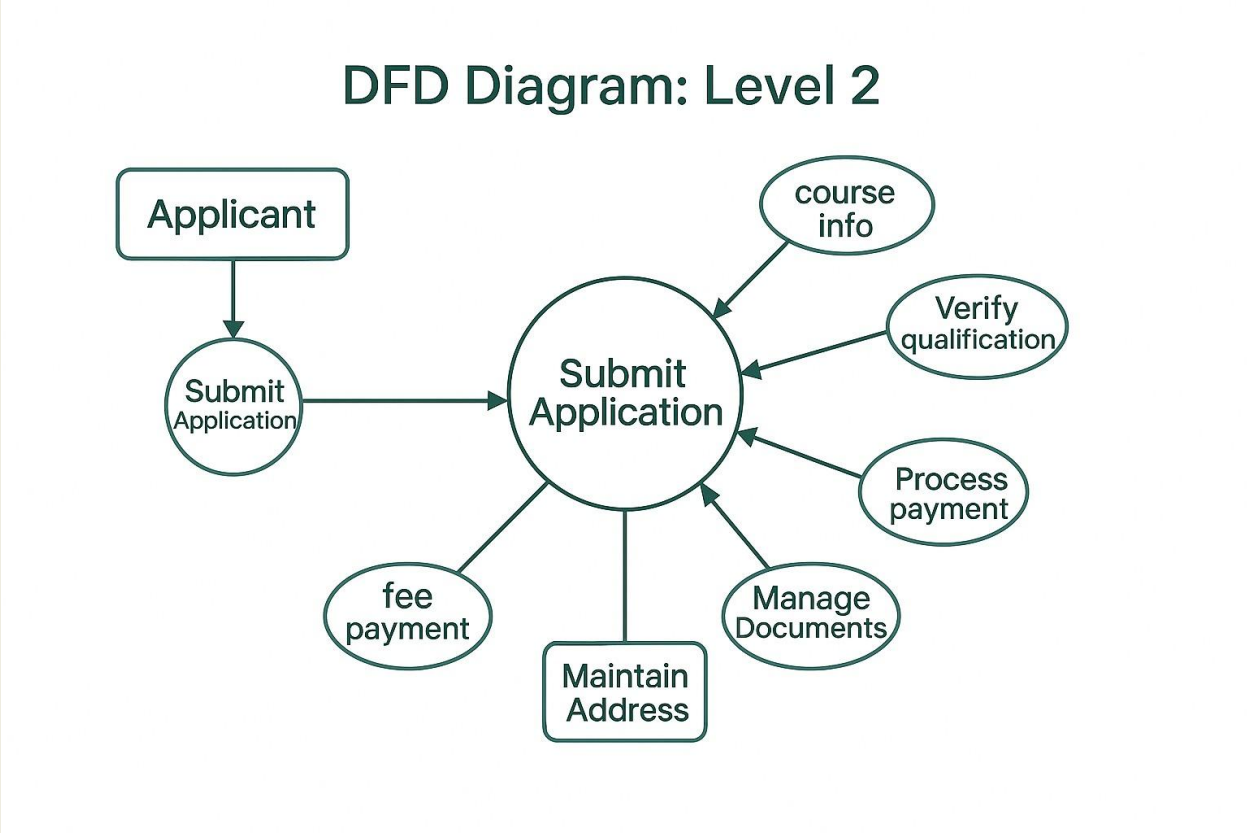
- Data flow clearly shows how each module processes inputs and returns outputs.



→DFD level 2:

- Each module is broken into detailed sub-processes for accurate internal workflow.

- Qualification includes sub-steps like adding exam details and verifying marks.
- Fees module covers calculating balance, updating payments, and generating receipts.
- Admission includes validation, course selection, and saving student records.



➢ Platform Used :

Hardware Requirements :

- Intel processor
- 4 GB RAM
- 200 MB free disk space

Software Requirements :

- Windows 10/11
- Java JDK (17 or above)
- Eclipse IDE
- MySQL Server & MySQL Workbench
- JDBC Connector JAR

➢ Admission Management System – Complete Structure

- Student enters the system.
- Admission form loads with basic student details.
- Student information is filled and validated.
- Address details are added and stored.
- Course is selected from available course list.
- Fees details are calculated and fee status is stored.
- Required documents are uploaded and verified.
- Admission record is saved in the system.
- x Student data is linked with all modules through student ID.
- Admin reviews and approves the admission.
- Student record becomes part of the institute database.

➢ Future Scope :

- Add graphical user interface (GUI)
- Online admission portal
- Admin login and authentication
- Automatic report generation (PDF/Excel)
- Multi-course enrollment
- Biometric or digital document verification

➢ Bibliography :

- Java Documentation
- MySQL Developer Guide
- JDBC Tutorials