

Project Proposal

On

Task Management (Freelancing Application)

Guided By:-

Trainer Name

Anuj Kumar

Created By:-

Student Name/(AFid) : Manish rauniyar/(AF04991769)

Rahul Singh/(AF04991768)

Akshay Singh/(AF04991792)

Batch Code : ANP-D2405

Course Code : ITPR

Table Of Contents

Index

- 1.** Title of the Project.....
- 2.** Introduction.....
- 3.** Objective
- 4.** Project Category
- 5.** Analysis
 - Modules and Description
 - Database Design
 - ER Diagram
 - Data Flow Diagram
- 6.** Complete Structure
 - Process Logical Diagram
- 7.** Platform Used
 - Hardware Requirement
 - Software Requirement
- 8.** Future Scope
- 9.** Bibliography

1.Title of the project.

Task Management System (Freelancing Application)

2.Introduction.

- A Task Management System (Freelancing Application) is a web-based platform designed to connect clients who post tasks with freelancers who complete them. Today, freelancing is one of the fastest-growing sectors because people want flexibility, remote work, and easy access to skilled individuals.
- This application provides a smooth workflow where clients can create tasks, freelancers can pick them, submit solutions, and earn money. It ensures transparency, real-time updates, secure login, and proper task tracking.
- Freelancing has become one of the most popular ways of working, where clients hire freelancers for different tasks online. To manage work, clients, payments, and project updates smoothly, a digital system is very helpful.

3.Objective.

- To provide a platform where users can post and complete tasks.
- To help freelancers earn money by completing tasks online.
- Manage all tasks in an organized and systematic way.
- To maintain transparency between client and freelancer.
- To allow secure login and user-specific dashboards.
- To increase productivity by automating task assignment and tracking.

4.Project Category.

Web-Based Application

- (Backend – Java, Frontend – HTML/CSS/JS, Database – MySQL)

5.Analysis

➤ Modules and Description

Modules	Description
1. User Management Module	This module handles everything related to the users of the system. It allows new users to register, log in, & manage their personal profile. It also includes Role-Based Access Control, which means each user gets different permissions based on their role.
2. Project Management Module	This module helps clients organize multiple tasks into a single project. It allows grouping related tasks under one project, adding project details like name, description, duration, and tracking overall progress. This makes it easier to manage large work items and maintain a clear structure for long-term projects.
3. Client Management Module	The Client Management Module helps freelancers store, update, and manage client information. It keeps track of clients, their contact details, project requirements, and communication history.

4. Admin Management Module	<p>The Admin Management Module allows the project Administrator to manage the entire freelancing system.</p> <ul style="list-style-type: none"> ➤ The admin controls: • User accounts • Clients • Projects • Tasks • Payments • System settings <p>It ensures secure access and smooth workflow.</p>
5. Comments & Attachment Management	<p>This module allows communication between clients and freelancers. Users can add comments under any task, ask questions, give clarifications, and share feedback. It also supports uploading attachments like images, files, or documents. This makes the workflow more transparent and improves collaboration.</p>
6. Payment Management Module	<p>This module is responsible for handling all earning-related operations for freelancers. It tracks how much a freelancer has earned, allows them to request payments, and stores payment history. Admins can approve payments and update their status. This ensures smooth financial management within the system.</p>

➤ Database Design

Table 1: User

Fields	Datatype	Properties
user_id	INT	Primary Key, Auto Increment
name	VARCHAR(50)	Not Null
email	VARCHAR(100)	Unique, Not Null
password	VARCHAR(20)	Hashed Password
role	ENUM('client', 'user')	Default 'user'
points	INT	Default 0
status	VARCHAR(10)	active/inactive/completed
phone	INT(12)	Not Null

Table 2: Admin

Fields	Datatype	Properties
admin_id	INT	Primary Key, Auto Increment
username	VARCHAR(100)	Unique
password	VARCHAR(20)	Hashed Password
email	VARCHAR(100)	Unique, Not Null
created_at	TIMESTAMP	Default Current_TIMESTAMP

Table 3: Client

Fields	Datatype	Properties
client_id	INT	Primary key
name	VARCHAR(50)	Not Null
email	VARCHAR(100)	Unique, Not Null
phone	INT(12)	Not Null
company	VARCHAR(100)	Null Allowed

address	VARCHAR(200)	Client address
project_details	TEXT	Requirement summary
status	VARCHAR(50)	active/inactive/completed
created_at	TIMESTAMP	Default Current_TIMESTAMP

Table 4: Project

Fields	Datatype	Properties
project_id	INT	Primary Key
client_id	INT	Foreign Key
title	VARCHAR(150)	Not Null (Project name)
description	TEXT	Optional
budget	DECIMAL(10,2)	Optional
assigned_to	INT	Foreign Key (Optional)
start_date	DATE	Not Null
end_date	DATE	Not Null
status	VARCHAR(50)	active/inactive/completed
created_at	TIMESTAMP	Default Current_TIMESTAMP

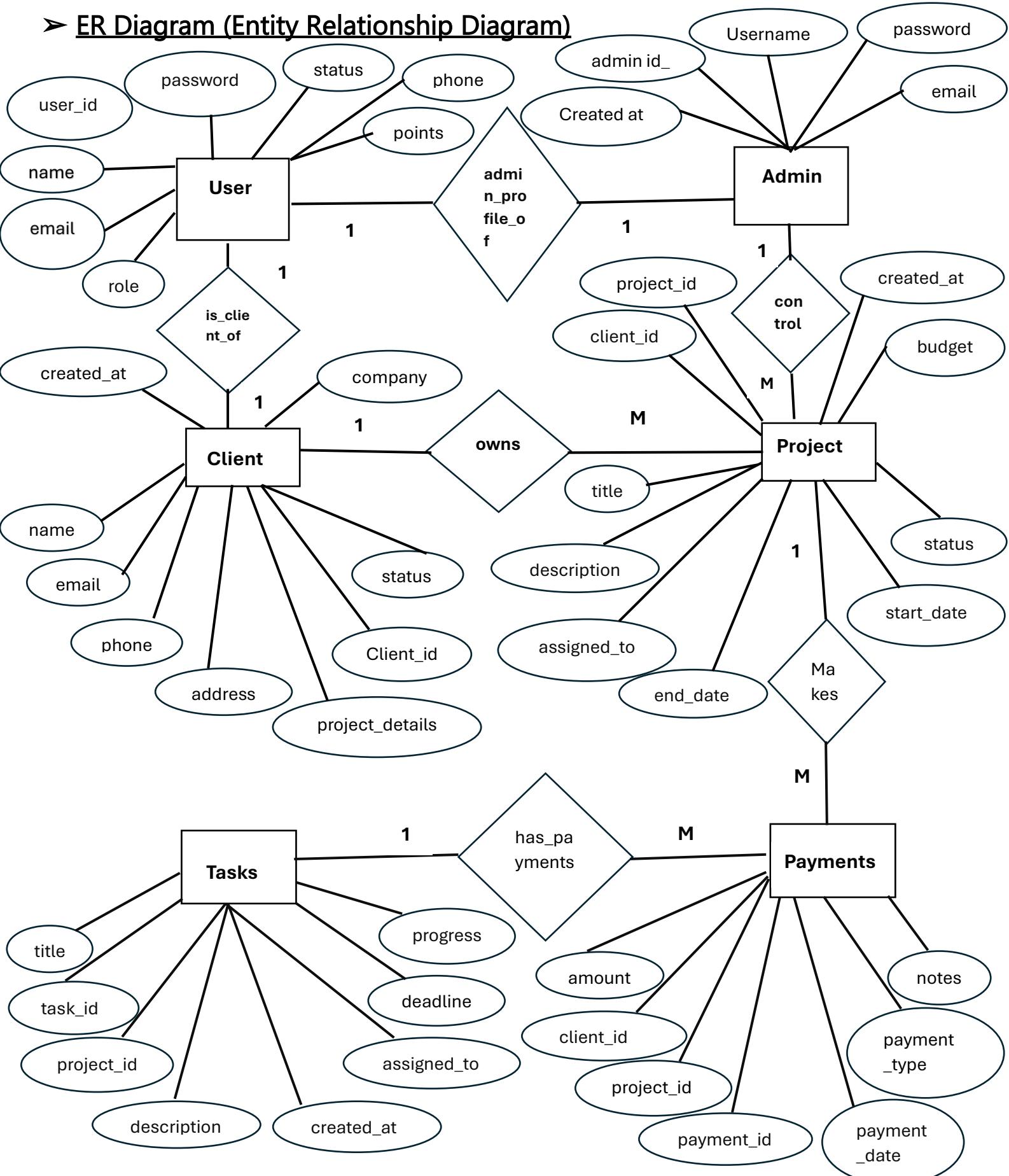
Table 5: Tasks

Fields	Datatype	Properties
task_id	INT	Primary Key
project_id	INT	Foreign Key
assigned_to	INT	Foreign Key
title	VARCHAR(150)	Not Null (Task name)
description	TEXT	Optional
deadline	DATE	Not Null
progress	VARCHAR(50)	Not started / in progress / done
created_at	TIMESTAMP	Default Current_TIMESTAMP

Table 6: Payment

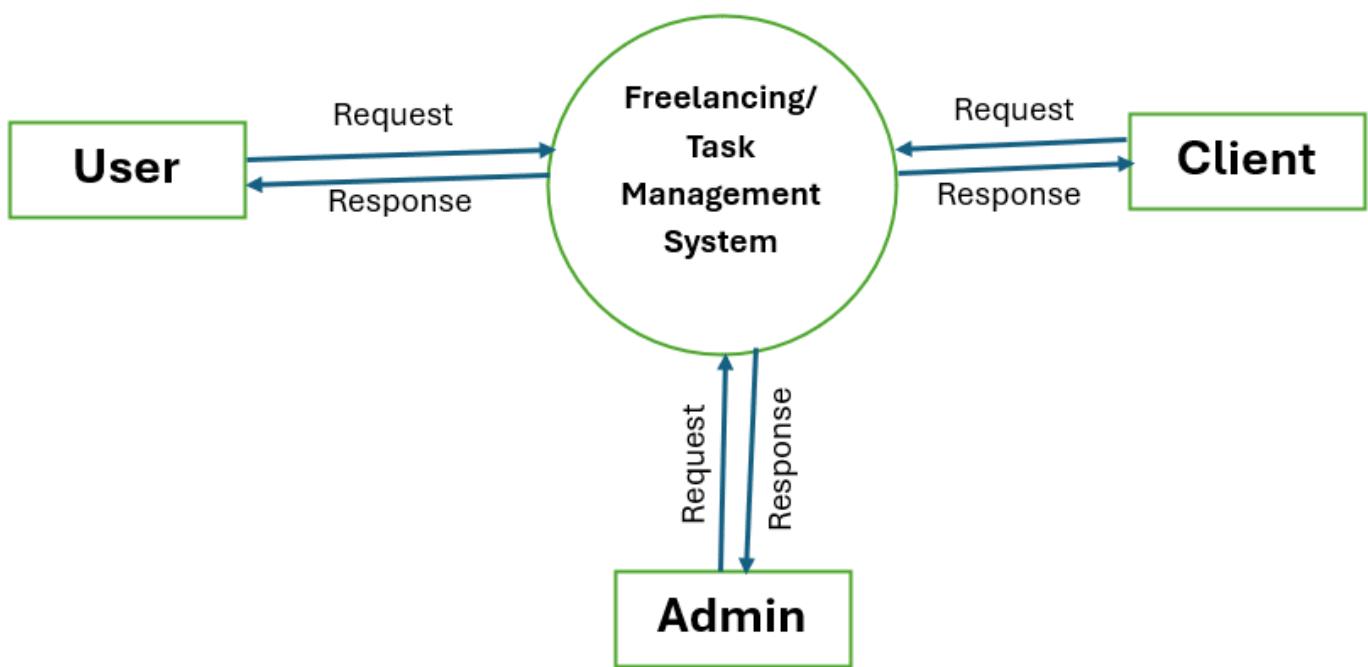
Fields	Datatype	Properties
payment_id	INT	Primary Key
client_id	INT	Foreign Key
project_id	INT	Foreign Key
amount	DECIMAL(10,2)	Not Null
payment_type	VARCHAR(50)	Not Null (Received /paid)
payment_date	DATE	Not Null
notes	TEXT	Optional

➤ ER Diagram (Entity Relationship Diagram)

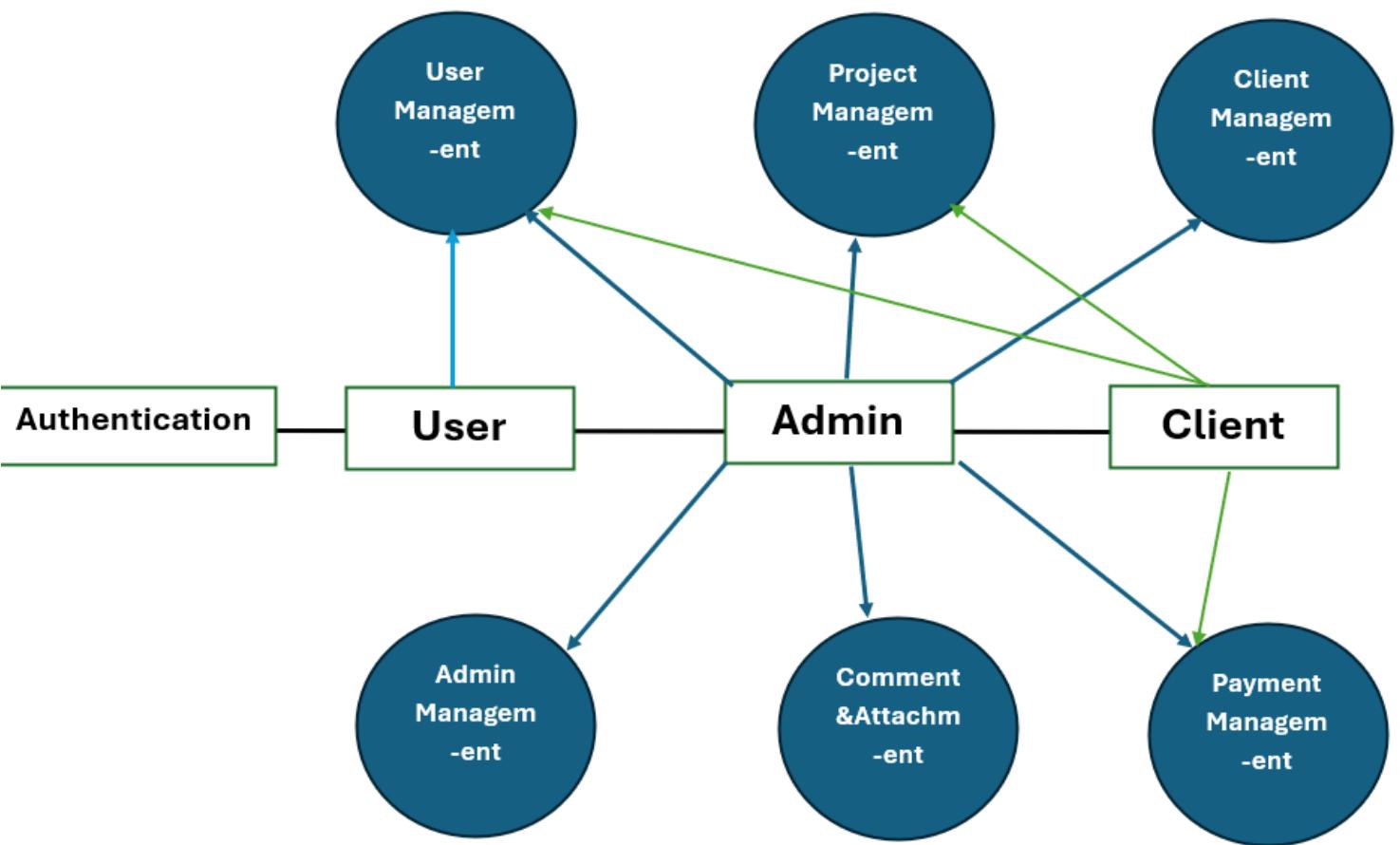


➤ Data Flow Diagram

➤ Zero Level DFD

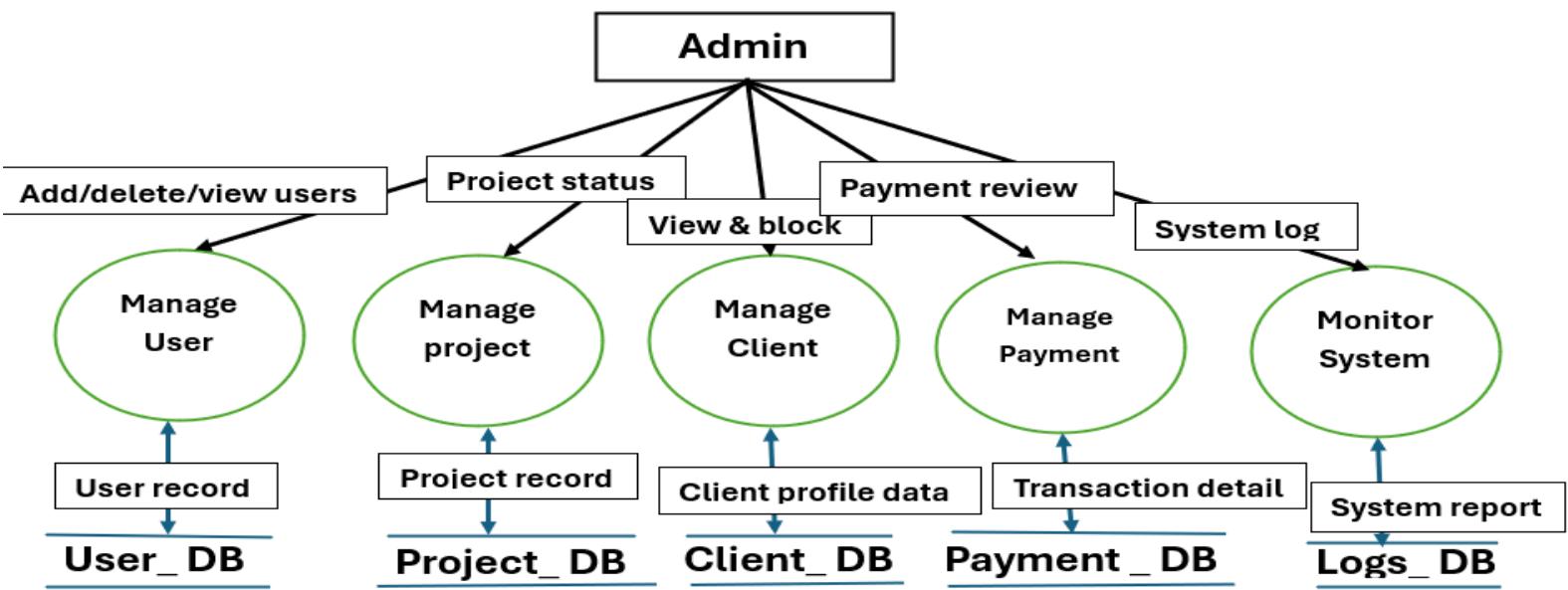


➤ One Level DFD

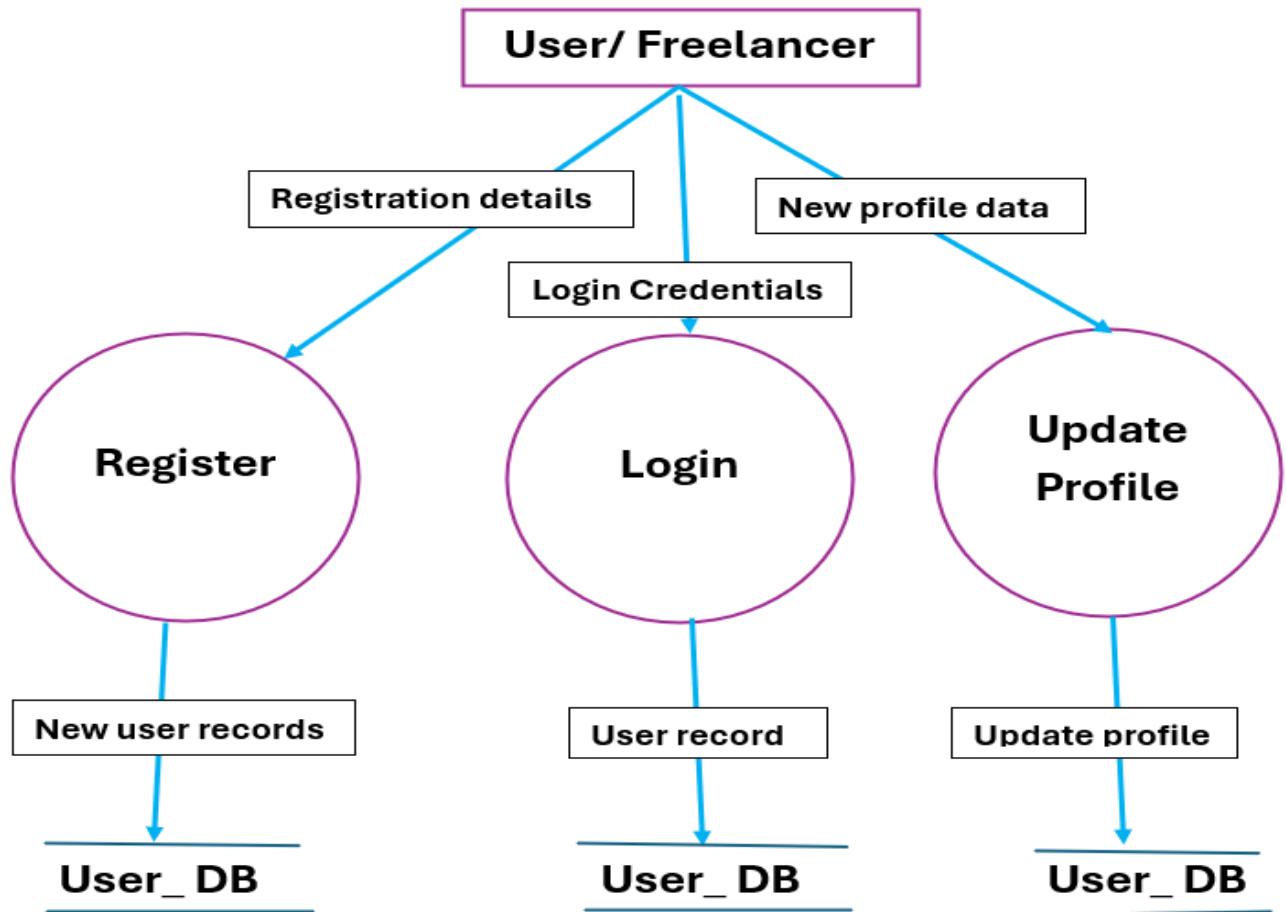


→ Two Level DFD

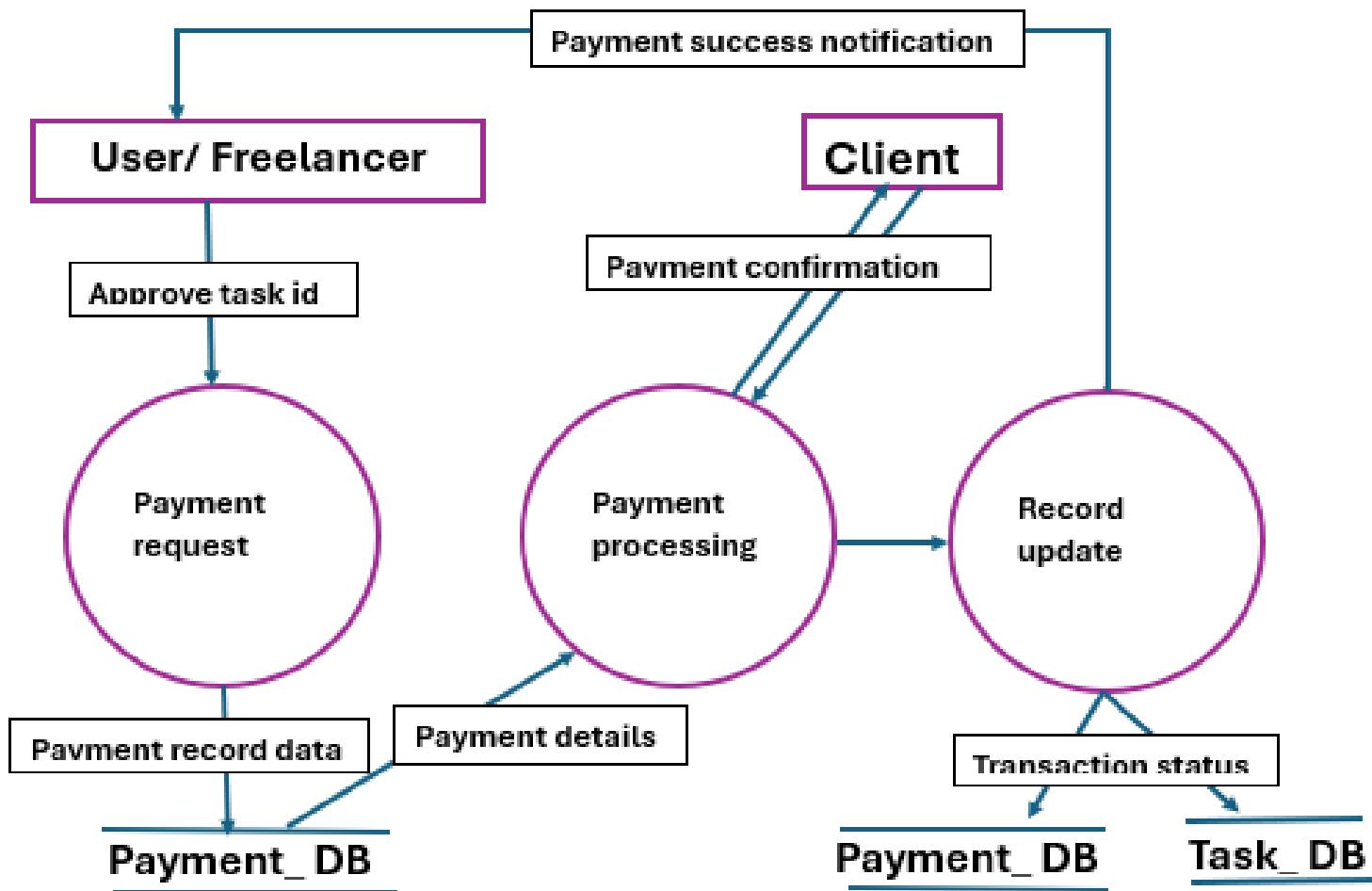
Admin management-



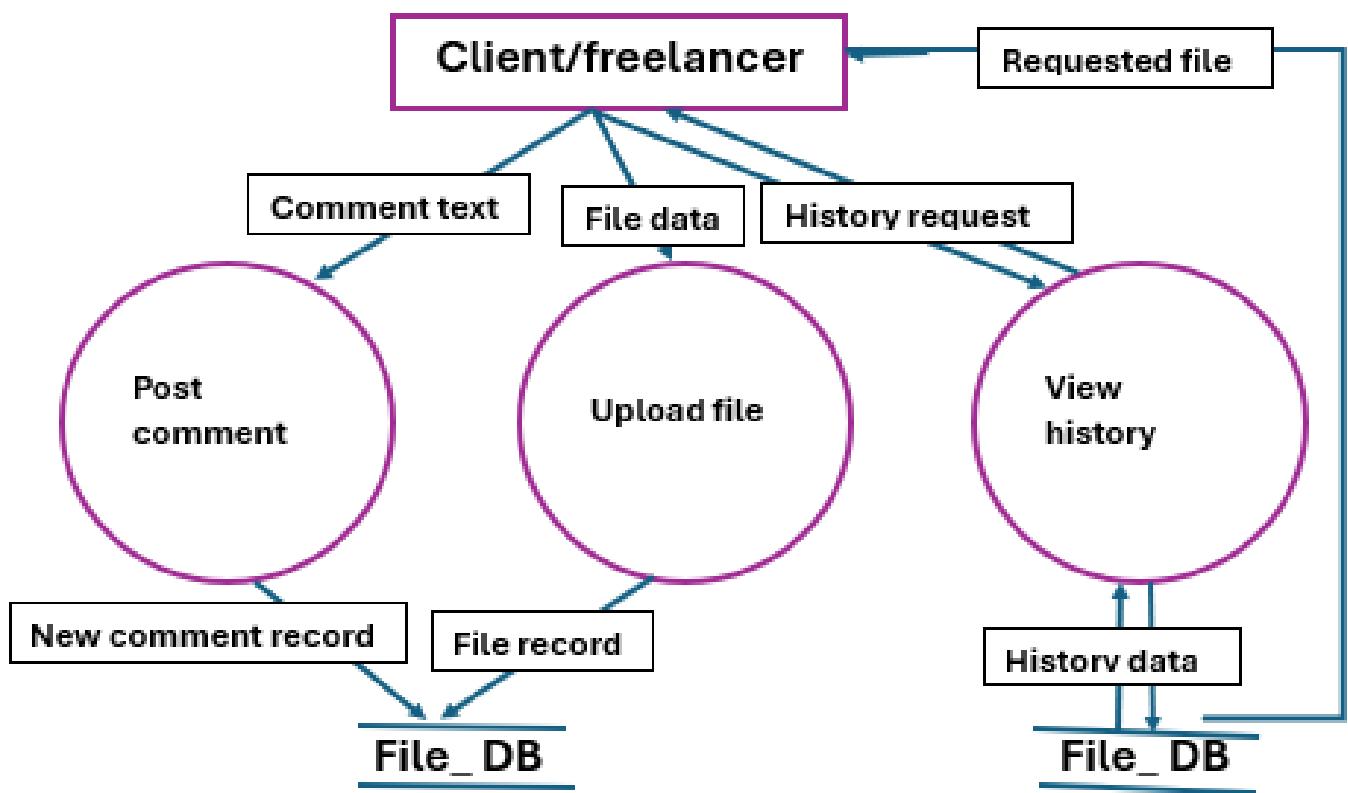
User/freelancing Management-



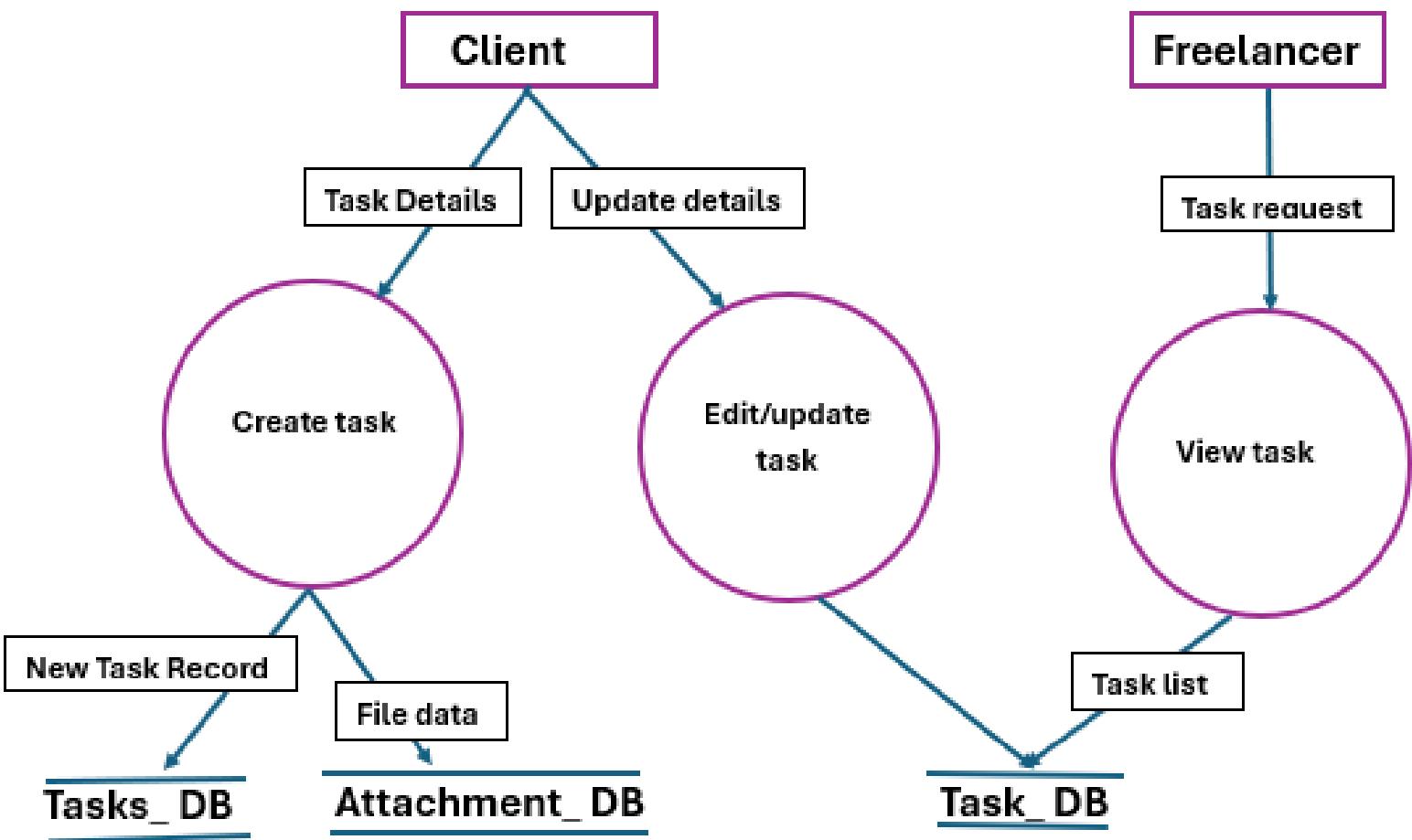
Payment management



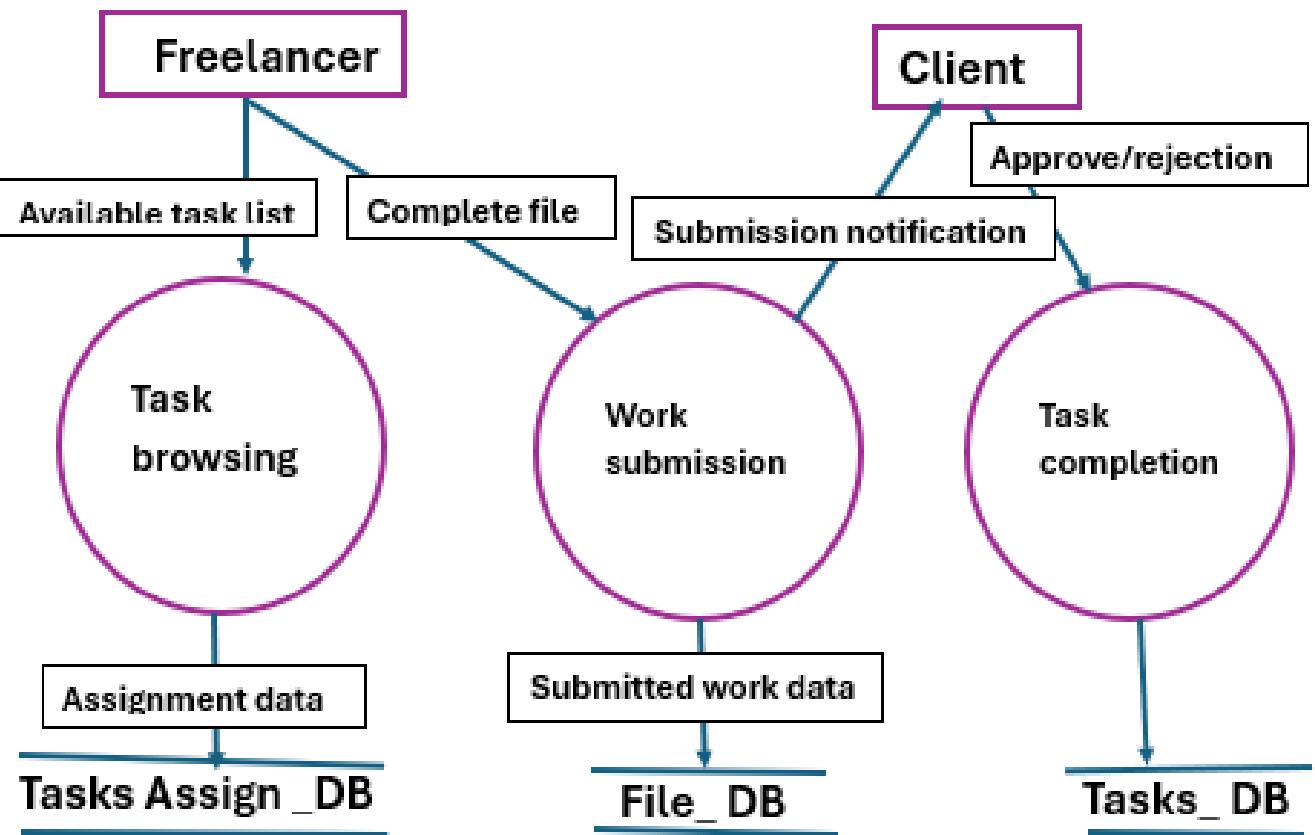
Comment and attachment management



Project Management-

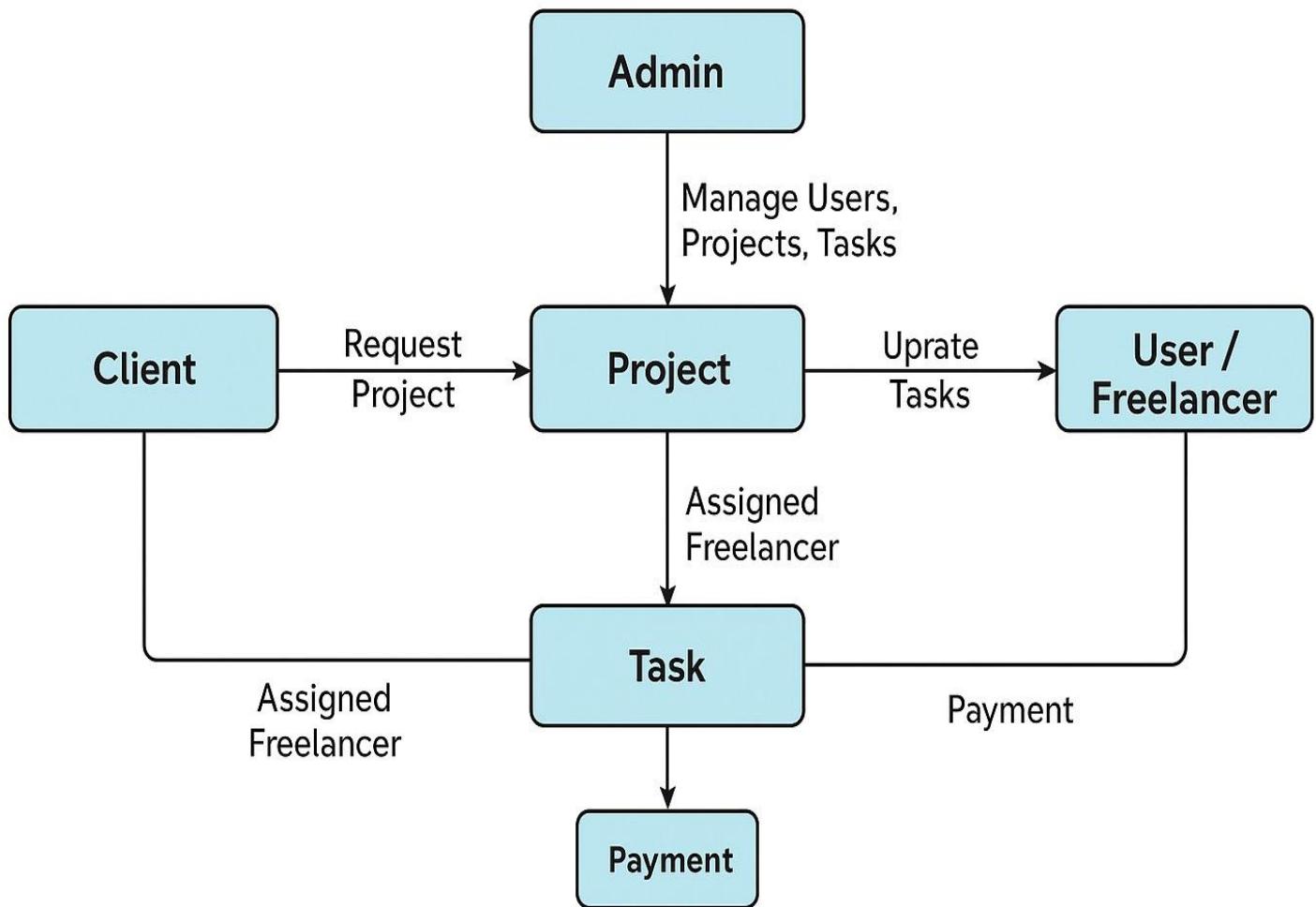


Client management-



6. Complete Structure

PROCESS LOGICAL DIAGRAM



7. Platform Used

➤ Hardware Requirement

- For Client Machine / Developer Machine
- Processor: Dual Core 2.0 GHz
- RAM: 4 GB
- Storage: 10–20 GB free space
- Monitor: 720p display
- Keyboard & Mouse: Standard
- Network: Basic internet (for downloading dependencies)

➤ Software Requirement

1 Operating System

- Windows 7 / 8 / 10 / 11

- OR Linux (Ubuntu)

- OR macOS

2 Development Software (For Coding)

- Java Development Kit (JDK)

- Version: JDK 8 or above

- IDE (Any one):

- IntelliJ IDEA

- Eclipse

- NetBeans

3 Database Software

- MySQL Server

- Version: MySQL 5.7 / 8.0

- MySQL Workbench (optional, for GUI)

- phpMyAdmin (optional if using XAMPP)

4 Connectivity (JDBC)

- JDBC Driver for MySQL

- mysql-connector-java.jar

- Version: 5.x or 8.x

6 Build Tools (Optional)

- Maven

- OR Gradle

(Used to manage libraries like MySQL JDBC driver)

7 Browser (For Web Application)

- Chrome / Firefox / Edge

(Only needed if your system is web-based)

8. Future Scope

1 Cloud Integration

In the future, the system can be connected to:

- Google Cloud

- AWS

- Azure

- This will allow:

- Storing tasks online

- Access from anywhere

- Easy backups

2 Mobile Application

A mobile app can be developed using:

- Android
- Flutter
- React Native
- Users can manage tasks directly from their phones.

3 Real-Time Notifications

Add:

- Email notifications
- SMS alerts
- Push notifications

Example:

When a deadline is near → user gets an alert.

4 AI-Based Task Suggestions

Using AI/ML, the system can:

- Predict task deadlines
- Suggest priority levels
- Suggest workload distribution

5 Team Collaboration Features

In the future, the system can include:

- Team chat
- File sharing
- Real-time updates

Role-based access (Admin, Manager, User)

6 Integration with Other Tools

The system can be connected with:

- Google Calendar
- Slack
- Trello
- GitHub

Helps in better collaboration.

9. Bibliography

1. Herbert Schildt, Java: The Complete Reference, McGraw-Hill Education, 2022.
2. Oracle Documentation, Java SE 17 Documentation.
3. MySQL Official Documentation, Oracle Corporation.
4. GeeksforGeeks, Articles on Java, JDBC, and MySQL (Accessed on: 28 November 2025).
5. TutorialsPoint, Java and Database Connectivity (Accessed on: 28 November 2025).
6. Stack Overflow Discussion Forums (Community Knowledge).
7. W3Schools, SQL Tutorial (Accessed on: 28 November 2025).
8. YouTube Tutorials for Java & JDBC (Various Creators).