# Database Project
# Freelance Management System

**<u>Objective</u>**:

Design and implement a Database for managing freelance projects, and connecting project owners to freelancers.

Project owners can upload project details visible to all freelancers, who then submit bids for consideration. Among them, project owners select the freelancer that best fits their requirements. Freelancers and project owners can communicate effectively. Projects are divided into milestones, with freelancers receiving payments upon completion of each stage. Upon project completion, project owners can provide feedback and ratings, reflecting the quality of work delivered.

**Application Users**:

- Project Owners/clients - Individuals or organizations looking to outsource tasks or projects to freelancers.
- Freelancers - Individuals offering their skills and services to complete tasks or projects for clients.
- Admin - Who owns the platform

## Use Cases - Admin :

- Payment Management
- Statistical Analysis ( e.g. revenue analysis, no. of successful projects, etc. )

### Payment Management

The admin can oversee and manage all payments within the system, including processing payments to freelancers upon milestone completion and handling client payments for project milestones.

### Statistical Analysis

The admin can conduct statistical analysis to gain insights into various aspects of the platform, including revenue analysis, the number of successful projects completed, the total number of projects, the number of project owners, etc.

## Use Cases - Project Owners:

- Create profile
- Upload Project Details
- Review received bids and profiles of interested freelancers
- Assign the Project to the appropriate freelancer
- Communicate regarding project details and progress
- Project tracking through milestones

- Give rating and feedback to freelancer upon project completion
- Rate the platform

### Upload Project Details:

Project owners can publish detailed descriptions of their projects, including requirements, deadlines, and maximum budget, to attract interested freelancers.

### Evaluate Bids and Profiles, and Assign Projects Accordingly

Review received bids and profiles of interested freelancers, and assign the project to the appropriate freelancer based on their suitability, skills, and experience as demonstrated in their bids and profiles.

### Project Tracking Through Milestones
Project owners can break down projects into milestones with predefined goals and timelines, allowing for easier tracking of progress and achievement.

### Give Rating and Feedback to Freelancer
After project completion, project owners can provide ratings and feedback to freelancers based on their performance and the quality of work delivered.

**Use Cases - Freelancers**:

- Create and update profiles to showcase their skills, experience, and past work.
- Browse available projects
- Bid on interested projects
- Share the progress of projects
- Give rating and feedback to the project owner upon project completion
- Rate the platform
- Track their earnings and payments

### Browse and bid on projects

Freelancers can browse available projects, filter them using tags, categories, and skills based on their expertise and interests, and submit bids for projects they are interested in, providing details of their proposed approach and pricing.

### Share the progress of projects

Freelancers can update project owners on the progress of their work, sharing milestones achieved and any challenges encountered.

### Rate the Platform

Project owners can rate the platform based on their overall experience, usability, and satisfaction with the services provided.

## Tentative lists of Queries:

### Freelancer

- Search Projects by Skills and Time Duration
- Sort by Project Type (Hourly Rate and Fixed Price)
- List Projects Sorted by the Highest Bidding Amount
- Calculate Earnings for a Freelancer Within a Specific Period
- List Feedback Provided by Project Owners for a Freelancer
- List Projects with the Highest Client Satisfaction Ratings
- Calculate the Total Earnings of a Freelancer per Project Category

### Project Owner/Client

- Display a list of all projects posted by the owner
- Retrieve detailed information about a specific project.
- Monitor the progress of ongoing projects to ensure they are on schedule.
- View and evaluate bids submitted by freelancers for a specific project.
- Exchange messages with freelancers to discuss project details, negotiate terms, and provide feedback.
- Provide ratings and feedback to freelancers upon project completion.

- Assign a project to a particular freelancer i.e. accept his/her bid.
- List feedback provided by a freelancer for a specific project.

## Common Queries

- List Projects Posted by a Specific Project Owner
- List Projects Applied by a Specific Freelancer
- Retrieve Details of Ongoing or Completed Projects for a Freelancer

## Admin Queries

- Count the total number of successful projects (category-wise)
- Identify the most active freelancers (by number of projects completed)
- Calculate the total number of projects in each category
- Revenue analysis by project category
- View all payments made in a specific time period
- Identify freelancers with the highest total earnings
- Calculate the average payment amount for each project category
- Identify freelancers/clients with the highest average rating
- Identify the most popular project category based on the number of applications