# Project Report

# On

# "Crowdsourcing Platform-PROCONNECT"

**SUBMITTED TO**

**ROURKELA INSTITUTE OF MANAGEMENT STUDIES**

**(As a Partial fulfilment of the requirement for the award of degree)**

**FOR**

**"MASTER IN COMPUTER APPLICATION "**

**(2023-25)**


**SUBMITTED BY**

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MCA 4th SEMESTER

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# CERTIFICATE OF EXAMINATON

This is to certify that this project report entitled "CROWDSOURCING PLATFORM-PROCONNECT" submitted by ANJANI SHAW of 4th semester, Rourkela Institute of Management Studies, Rourkela,is accepted as partial fulfillment of requirements for the degree in Master in Computer Applications, under Biju Patnaik University of Technology, Rourkela this has been verified by us and found be original up to our satisfaction.

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# CERTIFICATE

This is to certify that this project entitled **"CROWDSOURCING PLATFORM**" has been and submitted by **ANJANI SHAW, M.C.A 2023-2025**, Rourkela Institute of Management Studies, Rourkela, has been examined by us.He is found fit and approved for the award of "Master in Computer Application" Degree.To the best my knowledge this work has not been submitted for the award of any other degree.I wish all success in his life.

DEAN ACADEMICRIMS, ROURKELA

Prof. Bibhudendu Panda Head of The Department, MCA

Rourkela Institute of Management Studies Rourkela.

# CERTIFICATE

This is to certify that **ANJANI SHAW**, a dedicated and diligent student of **Master of Computer Applications (M.C.A.)** at **Rourkela Institute of Management Studies, Rourkela, Odisha**, from the **2023-2025 session**, has successfully completed the project with utmost sincerity, dedication, and excellence.

His commitment, hard work, and technical proficiency have been commendable throughout the project. I wholeheartedly appreciate his efforts and wish him great success in all his future endeavors, both professionally and personally. May he achieve remarkable milestones in his career and continue to excel in all aspects of life.

**(Prof. Bibhudendu Panda)**

# DECLARATION

I, ANJANI SHAW, hereby declare that the project report entitled "CROWDSOURCING PLATFORM-PROCONNECT" is of my work. The above work I submitted to "Biju Patnaik University of Technology, Rourkela" for the award of "Master in Computer Applications" Degree.

To the best of my knowledge, this work has not been submitted or published anywhere for the award of any degree.

**ANJANI SHAW**

# ACKNOWLGEMENT

I would like to express my gratitude to **Mr. RASHMI KANT DASH (JAVA TECHNOCRATE) AND MR. SMRUTI RANJAN NAYAK** for his guidance and support during the project work.

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I acknowledge the help and co-operation received from all my team members in making this project.

I consider myself fortunate that I have successfully completed this project; I acknowledge my sincere gratitude to all those works and ideas that had helped me in writing this project.

*ANJANI SHAW*

**University Roll No: 2305260004 MCA (2023-2025)**

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# ABSTRACT

The rise of the digital economy has significantly transformed the traditional job market, enabling professionals to work remotely and businesses to access global talent. This project aims to develop **ProConnect** , a feature-rich **crowdsourcing platform** designed to connect clients with skilled freelancers across various domains such as software development, graphic design, content writing, marketing, and more. The platform will provide an efficient, secure, and user-friendly environment for project collaboration, contract management, and payment processing.

**ProConnect** will offer a seamless experience for both clients and freelancers through **key features**, including **job posting, bidding mechanisms, project tracking, secure payments, rating & review systems**. An intelligent matching algorithm will recommend the most suitable freelancers for job postings based on their skills, expertise, and previous work history.

A **dedicated admin panel** will allow administrators to monitor platform activity, manage disputes, verify user identities, and oversee financial transactions. To further enhance communication, **ProConnect** will enable clients and freelancers to discuss project details efficiently within their dashboards.

Security and trust will be at the core of the platform, incorporating **identity verification and encrypted transactions** to prevent fraud and disputes. Additionally, the platform will leverage cloud-based infrastructure and modern web technologies to ensure scalability and high performance, even under heavy user traffic.

By providing a **reliable and transparent freelancing ecosystem**, **ProConnect** aims to bridge the gap between businesses seeking top talent and professionals looking for flexible, well-paid job opportunities. This platform aspires to redefine how freelancing is conducted in the digital age, fostering a collaborative and trustworthy work environment.

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# INTRODUCTION

**Preface**

In today's fast-evolving digital economy, freelancing and crowdsourcing have become essential components of the global workforce. Businesses seek skilled professionals to complete specialized tasks, while talented individuals look for flexible work opportunities. **ProConnect** is designed to bridge this gap by providing a seamless and efficient platform for both clients and freelancers.

**Background**

This project aims to revolutionize the way businesses and freelancers interact, creating an ecosystem that fosters productivity, trust, and success for all stakeholders.

**ProConnect** is an innovative **crowdsourcing and freelancing platform** designed to bridge the gap between businesses and skilled professionals. It provides a seamless and efficient environment where **clients** can post projects, **freelancers** can showcase their expertise, and **admins** can manage the overall platform operations.

Built with **Spring Boot (Java), HTML, and CSS**, ProConnect ensures a robust, secure, and scalable architecture, offering an intuitive user experience for all stakeholders. It streamlines job posting, bidding, payments, and communication, making the freelancing process more transparent and efficient.

The global workforce is undergoing a rapid transformation, with digital platforms playing a crucial role in redefining traditional employment models. The rise of freelancing has been fueled by technological advancements, increased internet accessibility, and the growing preference for flexible work arrangements. Businesses, ranging from startups to large enterprises, are increasingly leveraging **freelancing platforms** to access specialized talent on demand while reducing operational costs.

Freelancing platforms provide a **structured marketplace** where clients can post projects, and freelancers can bid based on their expertise and experience. These platforms help bridge the gap between talent supply and demand by offering a **transparent, efficient, and scalable** hiring process. However, many existing freelancing platforms face challenges such as **high commission fees, lack of trust, inefficient dispute resolution, and limited communication tools**.

To address these challenges, **ProConnect** aims to develop an **innovative and user-centric freelancing platform** that enhances collaboration, security, and efficiency. The platform will provide features such as **intelligent job matching, milestone-based payments, real-time messaging, and an escrow system**, ensuring a fair and seamless experience for both clients and freelancers.

Furthermore, with the increasing demand for **remote work and gig-based employment**, a well-structured freelancing platform like **ProConnect** can contribute to the **global digital economy**, offering opportunities for professionals to work from anywhere while helping businesses scale efficiently. By integrating modern web technologies and secure transaction methods, **ProConnect** aims to establish itself as a reliable and competitive freelancing marketplace, fostering professional growth and economic opportunities for users worldwide.

**Understanding the Problem Statement:**

The rise of freelancing platforms has created immense opportunities for businesses and independent professionals. However, several challenges exist that hinder the smooth operation of such platforms. ProConnect

is designed to address these key issues and provide an efficient solution for clients, freelancers, and administrators.

Key Problems in Freelancing Platforms:

1. Lack of Trust and Transparency:
    - Clients often struggle to find reliable freelancers, while freelancers face difficulties in securing genuine projects and timely payments.
    - Fake profiles and job scams create an unreliable environment.
2. Inefficient Job Matching:
    - Clients may find it difficult to identify the right talent due to poor filtering mechanisms.
    - Freelancers face competition from an overwhelming number of bidders, making it harder to secure projects.
3. Payment and Dispute Resolution Issues:
    - Unclear payment terms and lack of escrow systems lead to delayed or failed payments.
    - Disputes between clients and freelancers often lack proper resolution mechanisms.
4. Communication Barriers:
    - Many freelancing platforms lack an efficient communication system, leading to misunderstandings and project delays.
    - Clients and freelancers require a secure and structured way to discuss project details, share updates, and collaborate.
5. Platform Management and Security Concerns:
    - Managing user profiles, job postings, and financial transactions requires a strong admin panel for better control and fraud prevention.
    - Security risks such as data breaches, spam, and fake users need to be effectively managed.

**ProConnect as a Solution**

ProConnect is developed to overcome these challenges by providing:

- Secure user authentication and verification to build trust.
- Efficient job-matching algorithms for better project allocation.
- A robust admin panel for monitoring and managing platform activities.

By addressing these critical pain points, ProConnect aims to create a reliable, transparent, and efficient freelancing ecosystem that benefits all users.

The growing gig economy has transformed how businesses and professionals collaborate, with freelancing platforms playing a pivotal role in connecting skilled individuals with global opportunities. However, many existing platforms face challenges such as trust issues, inefficient job allocation, delayed payments, and poor communication systems. This motivated us to develop ProConnect, a freelancing and crowdsourcing platform that overcomes these limitations.

**Key Factors Behind the Motivation:**

1. **Bridging the Gap Between Clients and Freelancers**

- Many businesses struggle to find **reliable and skilled** freelancers, while professionals face difficulties securing legitimate projects.
- ProConnect aims to create a **trustworthy and efficient** environment where both parties can collaborate seamlessly.

2. **Enhancing Security and Transparency**
   - Fake profiles, job scams, and payment frauds are common issues in freelancing.
   - We aim to implement **secure authentication, profile verification, and escrow-based payments** to ensure transparency and reliability.
3. **Providing a Fair and Competitive Platform**
   - Freelancers often compete with thousands of bidders, making it harder for talented individuals to stand out.
   - ProConnect introduces **smart job-matching algorithms** to connect the right talent with the right projects efficiently.
4. **Improving Communication and Collaboration**
   - Many platforms lack a **structured communication system**, leading to misunderstandings and project delays.
   - We aim to integrate a **real-time chat system** to streamline discussions between clients and freelancers.
5. **Building an Efficient Admin Management System**
   - Effective platform management requires strong administrative controls for **user monitoring, dispute resolution, and security enforcement**.
   - Our **admin panel** will help in managing user activities, job postings, payments, and reviews efficiently.

**Our Vision**

With ProConnect, we envision a secure, efficient, and user-friendly freelancing ecosystem that empowers businesses to find top talent and enables freelancers to grow their careers without hurdles. This project is a step toward revolutionizing the freelancing industry by ensuring fairness, security, and transparency in online work collaborations.

**Project overview and purpose:**

ProConnect is a crowdsourcing and freelancing platform designed to connect clients with skilled freelancers, while allowing admins to manage platform operations efficiently. The platform provides a secure, transparent, and efficient environment for businesses to post projects, hire professionals, and manage work seamlessly.

**Key Users of ProConnect:**

- Admin: Oversees platform operations, manages users, jobs, payments, and ensures security.
- Client: Posts projects, reviews freelancer profiles, assigns tasks, and makes payments.
- Freelancer: Bids on projects, collaborates with clients, and delivers quality work.

**Technologies Used:**

ProConnect is developed using a **robust tech stack** to ensure scalability and security:

- **Backend:** Spring Boot (Java) for secure and efficient processing.
- **Frontend:** HTML and CSS for a user-friendly and responsive interface.
- **Database:** Structured data management for storing user profiles, job details, and transactions.

**Core Features of ProConnect:**

✅ **User Authentication & Role-Based Access:** Secure login system for admins, clients, and freelancers.
✅ **Job Posting & Bidding:** Clients post jobs, freelancers bid, and clients select the best match.
✅ **Admin Dashboard:** Comprehensive control panel for managing users, jobs, payments, and reports.

**Project Objectives**

- To develop a secure and efficient freelancing platform that connects clients and freelancers.
- To streamline the job-matching process through an intuitive project posting and bidding system.
- To ensure secure and timely payments using an escrow-based payment system.
- To enhance communication between clients and freelancers with a built-in messaging system.
- To empower admins with tools to manage users, monitor transactions, and resolve disputes.
- To provide a scalable and user-friendly solution that supports future enhancements and business growth.

By achieving these objectives, ProConnect aims to revolutionize the freelancing industry by making it transparent, reliable, and efficient for all users.

**Project Goals:**

- To create a trusted and efficient freelancing platform.
- To simplify the hiring process for businesses and enhance work opportunities for freelancers.
- To implement secure payments and efficient communication features.
- To develop an admin panel for smooth platform management.

With ProConnect, we aim to redefine freelancing by ensuring fairness, transparency, and efficiency, making it easier for businesses and professionals to collaborate successfully.

**Requirement Specification**

The requirement specification outlines the functional and non-functional requirements for **ProConnect**, ensuring a structured and efficient development process.

**A. Functional Requirements**

These define the key features and functionalities of the platform:

1. **User Authentication & Role Management**
    - Secure registration and login for **Admins, Clients, and Freelancers**.
    - Role-based access control with distinct permissions.
2. **Job Posting and Bidding System**
    - Clients can **post jobs** with detailed descriptions and budgets.

- Freelancers can **bid on projects** with proposals and expected timelines.
- Clients can review bids and **hire the most suitable freelancer**.

3. **Payment Processing**
   - Secure **based payment** to ensure fair transactions.
   - Automated release of payments upon project completion.
   - Payment history tracking for both clients and freelancers.

**4 . Admin Panel for Platform Management**

- Dashboard for monitoring users, jobs, payments, and reviews.
- User verification and fraud prevention measures.
- Dispute resolution system for handling conflicts.

**5 . Review & Rating System**

- Clients and freelancers can rate and review each other after project completion.
- A reputation system to enhance trust and credibility.

**6 . Reports and Analytics**

- Job success rates, freelancer earnings, and platform statistics.

**B. Non-Functional Requirements**

These define the system's performance, security, and usability:

1. **Scalability** – The platform should handle an increasing number of users and projects.
2. **Security** – Data encryption, secure login, and payment protection mechanisms.
3. **Performance** – Fast response times for job searches, messaging, and transactions.
4. **User-Friendly Interface** – Intuitive design for easy navigation.
5. **Reliability** – Ensure system availability with minimal downtime.

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**Project Specification:**

The project specification outlines the **technology stack** and **system architecture** used to develop ProConnect.

**A. Technology Stack**

| Component | Technology Used |
|---|---|
| **Backend** | Spring Boot (Java) |
| **Frontend** | HTML, CSS |
| **Database** | MySQL |

| Component | Technology Used |
|---|---|
| **Authentication** | Spring Security, JWT |
| **Payment Processing** | Stripe / PayPal API |
| **Version Control** | Git / GitHub |

**B. System Architecture**

1. **Client-Side (Frontend)**
    - Developed using **HTML and CSS** for a responsive interface.
    - Handles **user interactions, job postings, and messaging**.
2. **Server-Side (Backend)**
    - Built using **Spring Boot (Java)** for processing business logic.
    - Manages **user authentication, job matching, payments, and communication**.
3. **Database Layer**
    - **MySQL** to store **user profiles, job data, and transactions**.
    - Optimized queries for fast data retrieval.
4. **Third-Party Integrations**
    - **Payment Gateway** (Stripe/PayPal) for secure transactions.
    - **Cloud Storage** for storing user files and documents.

**C. Deployment Strategy**

- The platform will be deployed on a **cloud server (AWS/Digital Ocean)** for scalability.
- Continuous Integration and Deployment (**CI/CD**) using **GitHub Actions**.

**Software Specification**

The **Software Specification** defines the tools, technologies, and frameworks used to develop **ProConnect**, ensuring a structured and efficient development process.

**A. Software Requirements**

1. Development Environment

- Operating System: Windows 10/11, Linux (Ubuntu), macOS
- IDE: IntelliJ IDEA, VS Code
- Version Control: Git & GitHub
- Build Tool: Maven / Gradle
- Dependency Management: Spring Boot Starter Dependencies

**2. Backend Technologies**

- Programming Language: Java (Spring Boot Framework)
- Framework: Spring Boot (for MVC architecture and backend logic)
- Database: MySQL / PostgreSQL (for storing users, jobs, and payments)
- Security: Spring Security, JWT Authentication (for secure access control)
- REST API Development**:** Spring Boot REST Controller

**3. Frontend Technologies**

- Languages: HTML, CSS
- UI Frameworks: Bootstrap (for responsive design)
- JavaScript (Optional Enhancement): For dynamic UI interactions

**4. Database Management**

- DBMS: MySQL / PostgreSQL
- ORM Tool: Hibernate (for database interaction)
- Database Backup**:** Automated SQL dumps for data security

**5. Payment Integration**

- **Payment Gateway:** Stripe / PayPal API for secure transactions

**6. Hosting & Deployment**

- Cloud Hosting: AWS, Digital Ocean, or Firebase
- Web Server: Apache Tomcat (for hosting Spring Boot application)
- Containerization (Optional): Docker for scalable deployments

**B. System Requirements**

**1. Minimum Hardware Requirements**

| Component | Specification |
|---|---|
| **Processor** | Intel i7 / AMD Ryzen 5 or higher |
| **RAM** | 8GB (Recommended: 16GB) |
| **Storage** | 50GB free space (For database and application files) |
| **Internet** | Stable connection for hosting and API integration |

**2. Software Requirements**

| Component | Software |
|---|---|
| **OS** | Windows 10/11, Ubuntu 20.04+, macOS |

| Component | Software |
|---|---|
| **JDK** | Java Development Kit (JDK 11 or above) |
| **Database** | MySQL 8.0 / PostgreSQL |
| **Web Server** | Apache Tomcat 9+ |
| **Browser** | Chrome, Firefox, Edge |

The software specifications ensure that ProConnect is built using modern, scalable, and secure technologies. The combination of Spring Boot, MySQL, HTML, and CSS ensures a high-performance and user-friendly freelancing platform.

# CHAPTER-2

# LITRATURE REVIEW

The literature review provides an overview of existing freelancing platforms, their challenges, and how ProConnect aims to improve upon them. It explores previous research, industry trends, and technological advancements in the freelancing ecosystem.

1. Introduction to Freelancing Platforms

Freelancing platforms have revolutionized the global workforce by enabling professionals to work remotely and businesses to access a diverse talent pool. Popular platforms such as Upwork, Freelancer, Fiverr, and Toptal have established themselves as industry leaders. These platforms provide an online marketplace where clients post jobs, freelancers bid on projects, and transactions occur securely.

Despite their success, freelancing platforms face significant challenges, including payment security, job authenticity, unfair bidding, high commission rates, and communication gaps. Several studies have analyzed these issues and proposed improvements, which ProConnect aims to implement.

2. Existing Freelancing Platforms and Their Challenges

| Platform | Strengths | Challenges |
|---|---|---|
| Upwork | Large talent pool, secure contracts, job tracking tools | High service fees, competitive bidding makes it hard for new freelancers |
| Freelancer | Wide range of job categories, milestone-based payments | Spam job postings, delayed payments |
| Fiverr | Quick gig-based hiring, user-friendly interface | Limited flexibility in project scope, high commission |

| Platform | Strengths | Challenges |
|---|---|---|
| Toptal | Exclusive high-quality freelancers, strict screening process | Expensive for clients, limited opportunities for new freelancers |

Research indicates that these platforms lack personalized job matching, transparent fee structures, efficient dispute resolution, and real-time collaboration tools. These shortcomings serve as the foundation for ProConnect's development.

3. Research Studies on Freelancing Platforms

Several academic and industry studies highlight key trends in freelancing:

- Trust and Security Issues:
    - A study by Kittur et al. (2013) on online labor markets found that scams and fake job postings reduce freelancer trust in platforms.
    - ProConnect addresses this through strict user verification, escrow-based payments, and an admin-moderated environment.
- Job Matching and Bidding Challenges:
    - Research by Lehdonvirta et al. (2018) suggests that the bidding process often favors low-cost freelancers, making it difficult for skilled professionals to earn fair wages.
    - ProConnect introduces smart job-matching algorithms that connect clients with the most relevant freelancers based on skills, experience, and reviews.
- Payment Disputes and Commission Issues:
    - Studies by Malik & Wahaj (2020) emphasize that delayed payments and high service fees frustrate freelancers.
    - ProConnect mitigates this with escrow payments, fair commission policies, and automated dispute resolution mechanisms.
- Communication Gaps Between Clients and Freelancers:
    - A report by Singh et al. (2019) highlights that many platforms lack effective collaboration tools, leading to project delays and misunderstandings.
    - ProConnect integrates a real-time chat system, improving workflow transparency and project coordination.

4. Technological Advancements in Freelancing Platforms

Recent technological innovations have shaped freelancing platforms:

- Artificial Intelligence (AI) in Job Matching:
    - AI-powered algorithms improve job recommendations and automate candidate selection.
    - ProConnect employs AI-driven job-matching to enhance project allocation efficiency.
- Blockchain for Secure Payments:
    - Blockchain ensures transparent and tamper-proof transactions.

- While ProConnect starts with escrow-based payments, it has the potential to integrate blockchain-based contracts in future iterations.

- Cloud-Based Infrastructure for Scalability:
  - Cloud computing enables freelancing platforms to scale efficiently as user demand increases.
  - ProConnect leverages AWS/Digital Ocean for hosting and data storage.

5. ProConnect's Contribution and Innovations

Based on the review of existing platforms and research studies, ProConnect introduces several enhancements:

1. User Verification & Fraud Prevention – Ensuring legitimate users and genuine job postings through strict verification processes.
2. Smart Job Matching System – AI-based recommendations for better freelancer-client pairing
3. Fair & Transparent Commission Structure – Lower fees compared to competitors, promoting freelancer satisfaction.
4. Comprehensive Admin Panel – Efficient monitoring of user activities, payments, and dispute resolution.

# CHAPTER-3

# PROJECT PLANNING

**Project Planning**

Project planning is a crucial phase in the development of ProConnect, ensuring that tasks are organized, resources are allocated efficiently, and timelines are met. This section outlines the development methodology, phases, timeline, and risk management strategies for the project.

**Development Methodology**

ProConnect follows the Agile Software Development Methodology, specifically the Scrum framework, due to its iterative approach, flexibility, and focus on user feedback.

Key Agile Principles Applied in ProConnect:

1. Incremental Development: Features are developed in iterations (sprints).
2. Continuous Feedback: Regular updates and feedback ensure improvements.
3. Prioritized Backlog: Features are developed based on priority and feasibility.
4. Collaborative Approach: Regular team discussions, stand-up meetings, and sprint reviews.

**Project Development Phases**

The project is divided into **six major phases**, each with well-defined deliverables.

**Phase 1: Requirement Analysis & Planning (Week 1-2)**

**Objective:** Define the project's functional and non-functional requirements.
**Tasks:**

✅ Conduct market research on freelancing platforms.

✅ Define user roles (Admin, Client, Freelancer).
✅ Prepare Software Requirement Specification (SRS).

**Deliverables:**

✔ Requirement Specification Document
✔ Initial Project Plan

**Phase 2: System Design (Week 3-4)**

**Objective:** Create a blueprint of the system architecture.
**Tasks:**

✅ Design database schema for users, jobs, payments, and reviews.
✅ Develop wireframes and UI/UX designs for the website.
✅ Finalize system flow diagrams and APIs.

**Deliverables:**

✔ System Architecture Diagram
✔ Database Schema
✔ Wireframes & UI Designs

**Phase 3: Backend & Database Development (Week 5-7)**

**Objective:** Build the core logic, data handling, and APIs using **Spring Boot**.
**Tasks:**

✅ Develop user authentication and role-based access control.
✅ Implement database connections and ORM (Hibernate).
✅ Develop job posting, bidding, and messaging APIs.

**Deliverables:**

✔ Secure Authentication System
✔ REST APIs for User Management, Job Posting, and Bidding
✔ Database Setup

**Phase 4: Frontend Development (Week 8-10)**

**Objective:** Implement a **responsive UI** using HTML, CSS, and Bootstrap.
**Tasks:**

✅ Develop client and freelancer dashboards.
✅ Implement job posting and application interfaces.
✅ Integrate messaging system and notification panel.

**Deliverables:**

✔ Interactive UI with navigation
✔ Job Posting & Application Modules
✔ Integrated Chat & Notification System

**Phase 5: Integration & Testing (Week 11-12)**

**Objective:** Ensure smooth functionality, security, and performance of the platform.
**Tasks:**

- ✅ Integrate frontend with backend APIs.
- ✅ Conduct **unit testing, integration testing, and user acceptance testing (UAT)**.
- ✅ Optimize for security, performance, and scalability.

**Deliverables:**

- ✔ Fully Integrated System
- ✔ Test Reports and Bug Fixes

**Phase 6: Deployment & Maintenance (Week 13-14)**

**Objective:** Deploy the application and ensure continuous maintenance.
**Tasks:**

- ✅ Host the platform on **AWS/Digital Ocean**.
- ✅ Implement **SSL encryption and security patches**.
- ✅ Provide **post-deployment support** and performance monitoring.

**Deliverables:**

- ✔ Live Production Deployment
- ✔ Security & Performance Optimization
- ✔ Ongoing Maintenance Plan

**Project Timeline (Gantt Chart Representation)**

| Phase | Week 1-2 | Week 3-4 | Week 5-7 | Week 8-10 | Week 11-12 | Week 13-14 |
|---|---|---|---|---|---|---|
| Requirement Analysis | ✅ | | | | | |
| System Design | | ✅ | | | | |
| Backend Development | | | ✅ | | | |
| Frontend Development | | | | ✅ | | |
| Integration & Testing | | | | | ✅ | |
| Deployment & Maintenance | | | | | | ✅ |

**Risk Management**

To ensure smooth execution, potential risks are identified along with mitigation strategies:

| Risk Factor | Impact | Mitigation Strategy |
|---|---|---|
| **Scope Creep** | High | Define a clear scope and prioritize core features. |
| **Security Threats** | High | Implement **Spring Security, JWT authentication, and encrypted payments**. |

| Risk Factor | Impact | Mitigation Strategy |
|---|---|---|
| **Delayed Deliverables** | Medium | Follow Agile sprints and set clear deadlines. |
| **Database Overload** | Medium | Optimize queries and use caching techniques. |
| **Technical Integration Issues** | Medium | Perform frequent testing and integration reviews. |

**Resource Allocation**

| Resource | Role | Responsibilities |
|---|---|---|
| **Project Manager** | Oversees development | Planning, tracking progress, resolving roadblocks |
| **Backend Developer** | Develops server-side logic | Spring Boot development, API creation, database management |
| **Frontend Developer** | Designs UI/UX | HTML, CSS, Bootstrap development |
| **Database Administrator** | Manages database | Database design, optimization, and backups |
| **QA Engineer** | Tests software | Unit testing, integration testing, UAT |
| **DevOps Engineer** | Manages deployment | Cloud hosting, security, and monitoring |

**Tools & Technologies Used**

| Category | Tool/Technology |
|---|---|
| **Version Control** | Git, GitHub |
| **Development Frameworks** | Spring Boot (Java), HTML, CSS |
| **Database** | MySQL / PostgreSQL |
| **Testing** | JUnit, Postman (API Testing) |
| **Deployment** | AWS, Digital Ocean |
| **Security** | Spring Security, JWT Authentication |

# CHAPTER-4

# ENVIRONMENTAL SETUP

**Prerequisite**

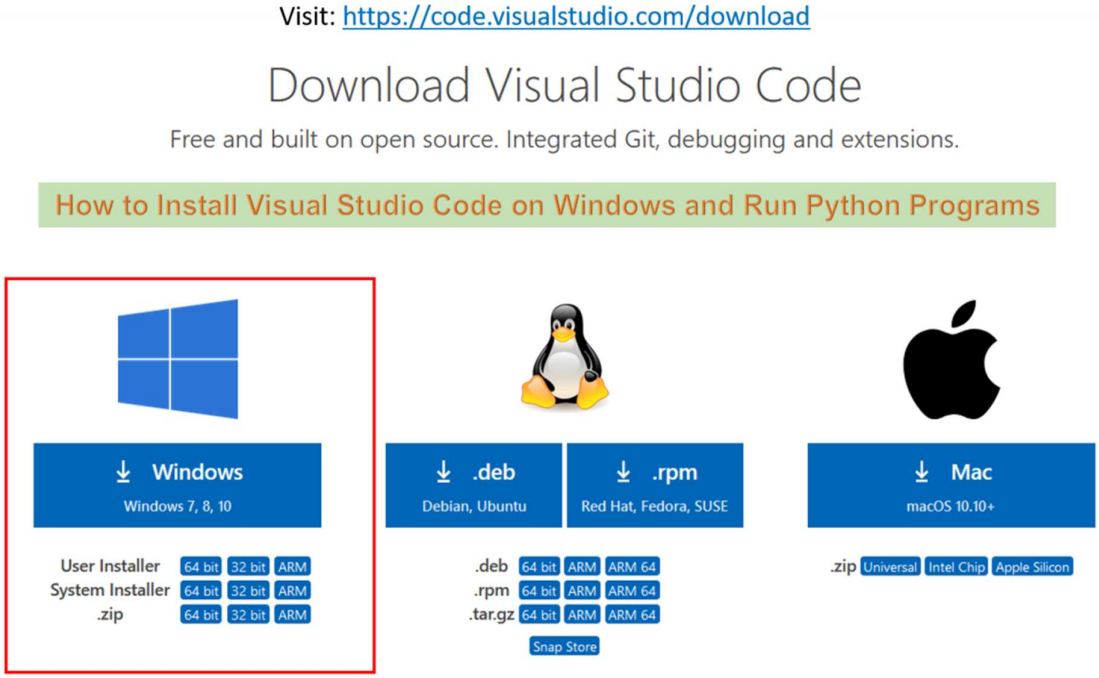
- Java(jdk.17)
- JavaScript(ecmaScript6)
- HTML,CSS,JS(es6)
- SpringBoot
- Thymeleaf
- MicrosoftVisualStudioCode
- GitandGitHub
- SpringBootDependencies:
  1.SpringWeb
  2.SpringJPA
  3.SpringSecurity
  4.SpringDevTool
  5.Validation
  6.Thymeleaf
  7.MysqlDriver
  8.Lombok

Developed any Project need a IDLE (Integrated Development Environment), so Developer can easily Create, Run, Compile and Execute Programs.

**1.How to Install Visual Studio Code on Windows?**

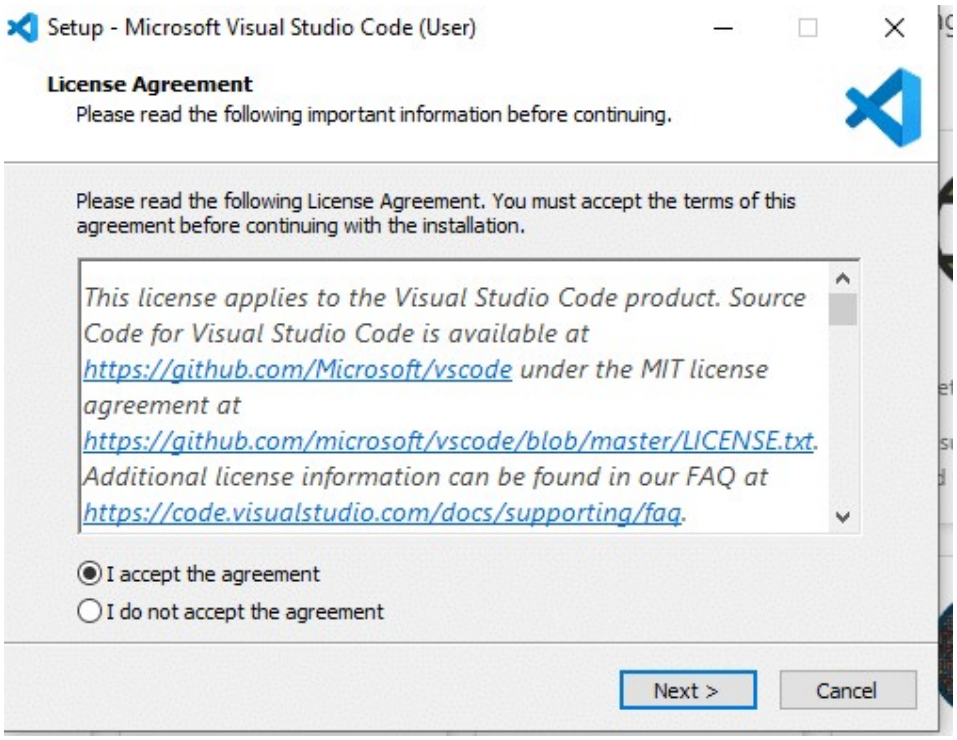
Firstly, download the Visual Studio Code installer for Windows. Once it is downloaded, run the installer (*VSCodeUserSetup-{version}.exe*). It will only take a minute.

Visit: https://code.visualstudio.com/download

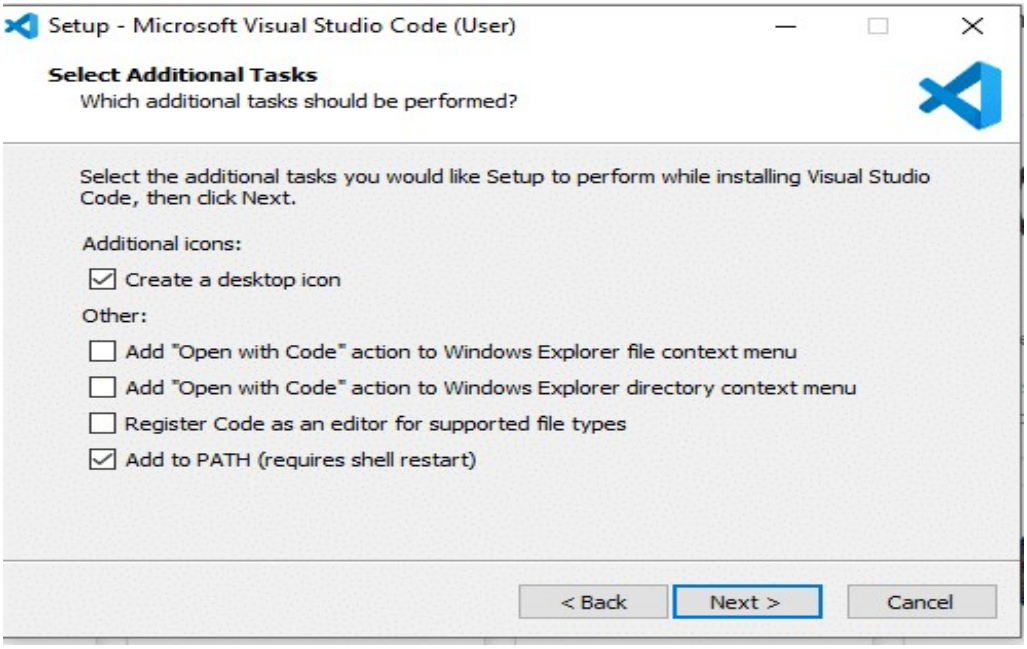



Then double Click on Download folder .exe file and Follow the step by step instruction Process .

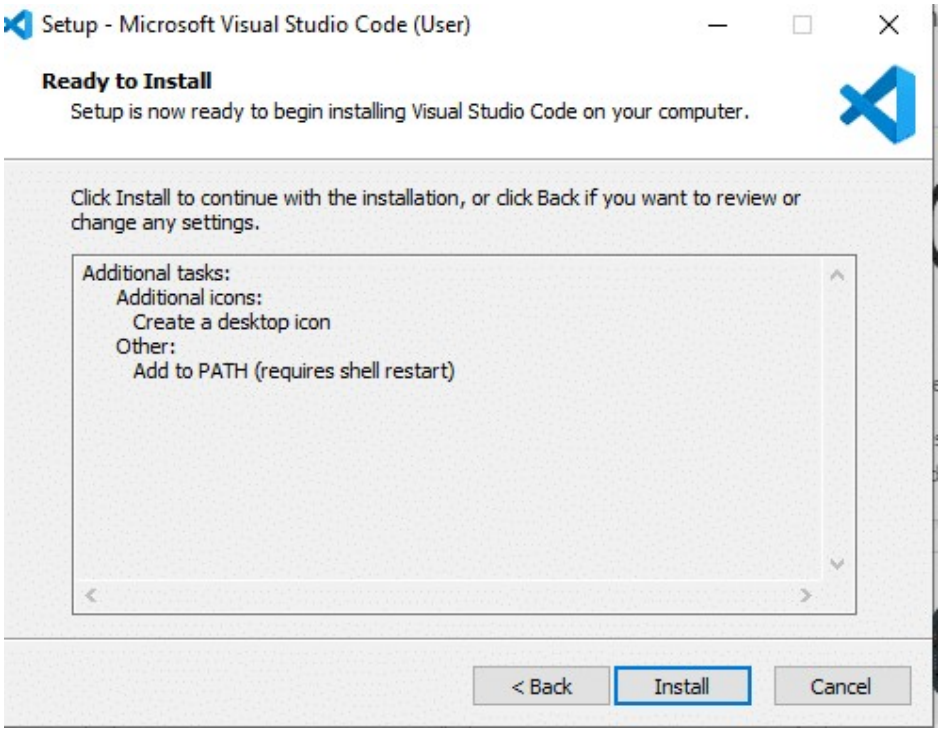
Secondly, accept the agreement and click on next.




Thirdly, click on "**create a desktop icon**" so that it can be accessed from desktop and click on Next.




After that, click on the install button.



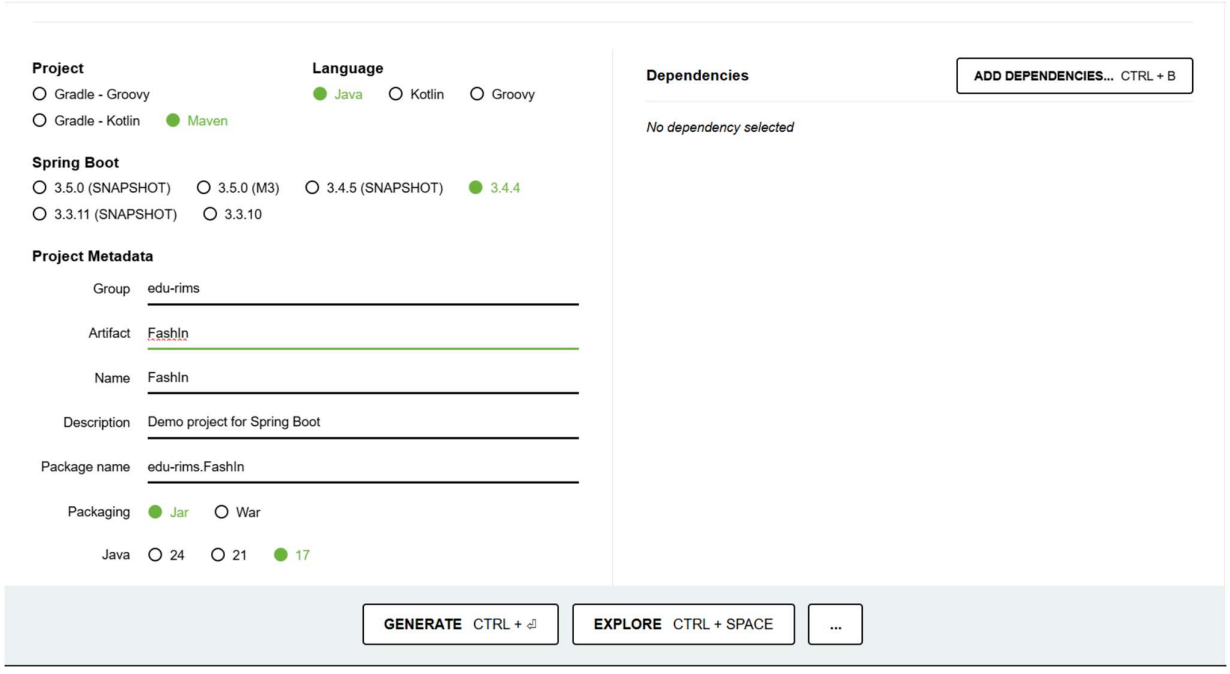

Finally, after installation completes, click on the finish button, and the visual studio code will get open.


## 2. How to initiate Spring Boot by adding Dependencies

Method1:UsingSpringInitializr(Recommended)

1. Go to Spring Initializr

Openhttps://start.spring.io/



**2.Select Project Type & Language**

Project: Maven (or Gradle if you prefer)

Language: Java

Spring Boot Version: Latest stable version (e.g., 3.x.x)

**3.Fill in Project Metadata**

Group: edu-rims(or your package name)

Artifact: Proconnect(name of your project)

Name: Proconnect

Package Name: Project for Spring Boot

Packaging: Zip

Java Version: 17 (or as per your system compatibility)

**4.Add Dependencies**

Click on **"Add Dependencies"** and search for each dependency:

✅ **Spring Web** (For building REST APIs and web applications)

✅ **Spring Data JPA** (For database interaction using JPA)

✅ **Spring Security** (For authentication & authorization)

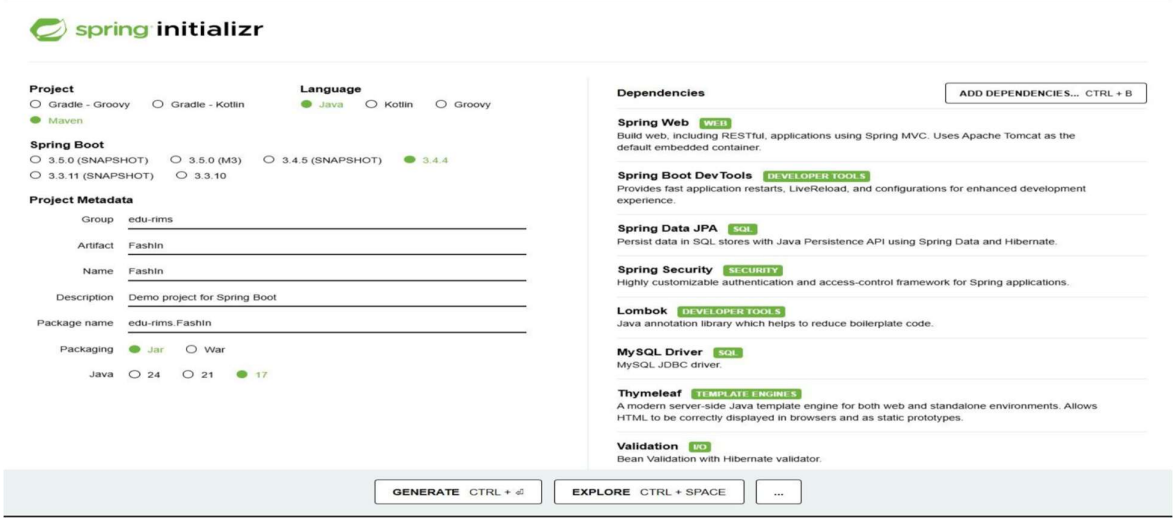
✅ **Spring Boot DevTools** (For live reload & development support)

✅ **Spring Boot Validation** (For data validation)

✅ **Thymeleaf** (For frontend templating)

✅ **MySQL Driver** (For database connectivity)

✅ **Lombok** (For reducing boilerplate code like getters & setters)



**5.GeneratetheProject**

- Click on **Generate**
- It will download a **zip file**
- Extract the zip and open the project in **IntelliJ IDEA, Eclipse, or VS Code.**

**6. Project Structure**

After creating the project, the structure will look like this:

mvc-demo

```
├── src
│   ├── main
│   │   ├── java/com/example/mvcdemo
│   │   │   ├── controller
│   │   │   │   ├── HomeController.java
│   │   │   ├── MvcDemoApplication.java
│   │   ├── resources
│   │   │   ├── templates (for Thymeleaf)
│   │   │   │   ├── index.html
│   │   │   ├── static (for CSS/JS)
│   │   │   ├── application.properties
├── pom.xml
```

**7. Create a Controller**

Inside src/main/java/com/example/mvcdemo/controller, create a new file:**AdminController.java**

**8.Create a View (HTML Page)**

1. Inside src/main/resources/templates/, create a file **index.html**.
2. Add the following Thymeleaf-based HTML code:

9.**Configure application.properties**

1. Open src/main/resources/application.properties and add:

   Properties

10. **Run the Spring Boot MVC Application**

1. Open **Terminal** in VS Code (Ctrl + ~).
2. Navigate to the project folder:

   cd mvc-demo

3. Run the application:

   mvn spring-boot:run

4. Open a browser and go to:

   http://localhost:1211/

   You should see the **Welcome Message** from index.html!

**3 . Git and GitHub download steps:**

**Steps to Download and Install Git & GitHub on Windows**

**Step 1: Download Git**

1. Open your browser and go to the **official Git website**: https://git-scm.com/downloads.
2. Click on **Windows** (Git will automatically detect your OS).
3. The **Git setup file (.exe)** will start downloading.

**Step 2: Install Git**

1. Locate the downloaded .exe file and **double-click** to open it.
2. Click **Next** to continue the installation.
3. Choose the installation folder (default is recommended) and click **Next**.
4. Select **components** (keep the default selection) and click **Next**.
5. Select the **default editor for Git** (choose Notepad++ or VS Code if installed) and click **Next**.
6. Choose **Git from the command line and 3rd-party software** (default option) and click **Next**.
7. Select **Use the OpenSSL library** for HTTPS connections and click **Next**.
8. Keep the default settings for line endings and click **Next** until installation begins.
9. Once installed, click **Finish** to complete the process.

**Step 3: Verify Git Installation**

1. Open **Command Prompt** (Press Win + R, type cmd, and hit Enter).
2. Type the following command and press Enter:

git --version

3. If installed successfully, it will display the installed Git version.

- **Steps to Download and Install GitHub Desktop**

**Step 1: Download GitHub Desktop**

1. Go to the **official GitHub Desktop website**: https://desktop.github.com/.
2. Click on **Download for Windows** (or Mac, depending on your OS).

**Step 2: Install GitHub Desktop**

1. Locate the downloaded .exe file and **double-click** to install.
2. Follow the **on-screen instructions** and click **Finish**.

**Step 3: Sign In to GitHub**

1. Open **GitHub Desktop**.
2. Click **Sign in to GitHub.com** and enter your GitHub credentials.
3. Once signed in, you can start managing repositories.

**Next Steps**

- **Create a GitHub Repository**: Click **File > New Repository** to create a new repo.
- **Clone an Existing Repository**: Click **Clone a Repository** and paste the GitHub link.
- **Use Git Commands** in Command Prompt or Git Bash.

**4.How to Download and Set Up Java in VS Code**

Since you already have **VS Code installed**, follow these steps to download and configure Java for development.

**Step 1: Install Java (JDK)**

1. **Download Java JDK**
    - Visit: https://www.oracle.com/java/technologies/javase-downloads.html.
    - Click **Download** for the latest JDK version.
    - Select the appropriate installer for **Windows/Linux/Mac**.
2. **Install Java JDK**
    - Open the downloaded installer and follow the setup wizard.
    - Accept the **license agreement** and click **Next** until installation completes.
3. **Verify Java Installation**
    - Open **Command Prompt** (Win + R, type cmd, and press Enter). java -version
    - If installed successfully, it should show the Java version (e.g., java version "17.0.2").

**Step 2: Install Java Extension Pack in VS Code**

1. Open **VS Code**.
2. Click on **Extensions** (Ctrl + Shift + X).
3. Search for **"Java Extension Pack"**.
4. Click **Install** (This installs Java support, debugging, and Maven tools).
5. Restart VS Code after installation.

**Step 3: Configure Java in VS Code**

1. Open VS Code and go to **Settings** (Ctrl + ,).
2. Search for **Java: Home** and ensure the correct JDK path is set.
3. Open **Terminal** (Ctrl + ~) and type:

javac -version

- If it shows a Java compiler version, the setup is complete.

**Step 4: Create and Run a Java Program in VS Code**

1. **Create a New Java File**
    - Open VS Code.
    - Click **File > New File** and save it as HelloWorld.java.
2. **Write a Simple Java Program**
3. **Run the Program**

**Download and Install Maven (Build Tool)**

Spring Boot uses **Maven** or **Gradle** for project management.

1. **Download Maven**
    - Visit: https://maven.apache.org/download.cgi.
    - Download the latest **Binary zip** file.
2. **Install Maven**
    - Extract the zip file to C:\Program Files\Apache\Maven.
    - Add C:\Program Files\Apache\Maven\bin to **System Environment Variables** (Path).
3. **Verify Maven Installation**
    - Open **Command Prompt** and type:

mvn -version

    - If installed, it will display the Maven version.

**Step 3: Create a Spring Boot Project**

1. Open **VS Code**.
2. Press **Ctrl + Shift + P** to open the Command Palette.
3. Type **"Spring Initializr: Generate a Maven Project"** and select it.
4. Choose the following settings:
    - **Language:** Java
    - **Spring Boot Version:** Latest Stable Version
    - **Project Type:** Maven
    - **Group:** com.example
    - **Artifact:** proconnect
    - **Dependencies:** Spring Web, Spring Boot DevTools, Spring Data JPA, MySQL Driver
5. Click **Generate Project**, extract the ZIP file, and open it in **VS Code**.

**Step 4: Install Spring Boot Extension Pack**

1. In **VS Code**, click on **Extensions** (Ctrl + Shift + X).

2. Search for **"Spring Boot Extension Pack"**.
3. Click **Install**.
4. Restart VS Code after installation.

**Step 5: Run the Spring Boot Application**

1. Open **Terminal** (Ctrl + ~) in **VS Code**.
2. Navigate to the project folder:

   cd proconnect
3. Run the Spring Boot application using:

   mvn spring-boot:run
4. If successful, you will see:

Tomcat started on port 1211.

**5. MySQL Download and Database Management:**

**1. MySQL Download & Installation**

**Step 1: Download MySQL**

1. Visit the official MySQL website: https://dev.mysql.com/downloads/.
2. Click on **MySQL Community Server** (which is free).
3. Select your operating system (Windows, macOS, Linux).
4. Download the installer (either **MSI Installer** for Windows or **DMG** for macOS).

**Step 2: Install MySQL**

1. Run the installer and choose **Custom Installation** (recommended) or **Default Installation**.
2. Select **MySQL Server**, **MySQL Workbench**, and **MySQL Shell** for installation.
3. Set up a root password when prompted.
4. Complete the installation process.

**Step 3: Verify Installation**

- Open **Command Prompt (Windows) / Terminal (macOS/Linux)** and run:

  mysql --version

  If MySQL is installed correctly, it will display the version.

**2. Setting Up MySQL Database**

**Step 1: Open MySQL Server**

- If you installed **MySQL Workbench**, open it and connect using **root** credentials.
- If using the **command line**, run:

  mysql -u root -p

Enter your root password when prompted.

**Step 2: Create a New Database**

To create a database for the ProConnect project, run:

CREATE DATABASE proconnect;

To use this database:

USE proconnect;

**Step 3: Create Tables**

Example: Creating a **Users** table with id, name, and email

```
CREATE TABLE users (
  id INT PRIMARY KEY AUTO_INCREMENT,
  name VARCHAR(50) NOT NULL,
  email VARCHAR(100) UNIQUE NOT NULL);
```

# CHAPTER-5

# SELECTED SOFTWARE PLATFORMS

1. **VS Code (Visual Studio Code)**
   - **Overview**: A lightweight, cross-platform source code editor developed by Microsoft. It supports a wide range of programming languages, including Java, JavaScript, and HTML/CSS, and has excellent support for Spring Boot development through extensions.
   - **Key Features**:
     - Intelligent code completion (IntelliSense).
     - Built-in Git support for version control.
     - Debugging capabilities.
     - Extensions for Java, Spring Boot, and Thymeleaf.
     - Integrated terminal for running code and commands.
2. **Git & GitHub**
   - **Git**:
     - **Overview**: A distributed version control system (VCS) to manage source code history. Git helps track changes in your project, manage different versions of files, and collaborate on code with other developers.
     - **Key Features**:
       - Version control allows you to save code snapshots at various stages.

        - Branching to work on multiple features in parallel.
        - Merging changes made in different branches.
    - **Git Commands**:
        - git init: Initialize a new Git repository.
        - git commit: Record changes in the repository.
        - git push: Upload changes to a remote repository (e.g., GitHub).
        - git pull: Fetch changes from the remote repository.
- **GitHub**:
    - **Overview**: A cloud-based platform built on top of Git to host repositories and collaborate on code. It supports version control, issue tracking, and CI/CD pipelines.
    - **Key Features**:
        - Hosting repositories with version control.
        - Collaboration through pull requests and code reviews.
        - GitHub Actions for automating workflows (CI/CD).

3. **HTML (HyperText Markup Language)**
    - **Overview**: The standard markup language for creating web pages. HTML defines the structure of a web page using elements like headings, paragraphs, tables, forms, and links.
    - **Key Features**:
        - **Elements**: Tags like <h1>, <p>, <a>, <img> to define web page content.
        - **Attributes**: Provide additional information about elements (e.g., href for links).
        - **HTML5**: The latest version of HTML with new elements such as <article>, <section>, and <footer> for semantic structure.
4. **CSS (Cascading Style Sheets)**
    - **Overview**: A style sheet language used to describe the presentation of HTML documents. CSS controls the layout, colors, fonts, spacing, and overall visual design of a web page.
    - **Key Features**:
        - **Selectors**: Define which elements to style. E.g., h1, .header, #id.
        - **Properties**: Define what to change about the element. E.g., color, font-size, margin.
        - **Responsive Design**: Media queries allow styling for different screen sizes (e.g., mobile vs. desktop).
        - **CSS Frameworks**: Tools like Bootstrap and Tailwind CSS help create responsive and well-styled pages quickly.
5. **JavaScript (JS)**
    - **Overview**: A client-side scripting language that makes web pages interactive. It allows manipulation of HTML elements, handling events, and creating dynamic user interfaces.

- **Key Features**:
  - **DOM Manipulation**: JavaScript can modify the Document Object Model (DOM) to change the structure and content of web pages.
  - **Event Handling**: JavaScript listens for user interactions (clicks, form submissions, etc.) and responds accordingly.
  - **AJAX**: Asynchronous JavaScript allows for dynamic content updates without reloading the entire page.

6. **Java**
   - **Overview**: A high-level, object-oriented programming language used for backend development. It's platform-independent, thanks to the Java Virtual Machine (JVM), and widely used for web applications, Android apps, and enterprise-level applications.
   - **Key Features**:
     - **Object-Oriented**: Supports classes, objects, inheritance, polymorphism, and encapsulation.
     - **Cross-Platform**: Java programs run on any system with the JVM installed.
     - **Robust**: Strong memory management, exception handling, and garbage collection make Java programs reliable.
7. **Spring Boot MVC (Model-View-Controller)**
   - **Overview**: A framework within the Spring ecosystem that simplifies Java web development by providing built-in configurations and reducing boilerplate code. Spring Boot makes it easy to set up a Spring application with embedded servers (like Tomcat) and minimal configuration.
   - **Key Features**:
     - **MVC Pattern**: Separates the application into three components—Model (data), View (UI), and Controller (business logic).
     - **Auto-Configuration**: Spring Boot automatically configures components based on the project's dependencies.
     - **Embedded Server**: Spring Boot uses embedded servers like Tomcat, so you don't need to deploy the app on an external server.
8. **Thymeleaf**
   - **Overview**: A modern templating engine for Java-based applications, especially integrated with Spring Boot. It is used to create dynamic web pages by rendering HTML templates.
   - **Key Features**:
     - **Server-Side Rendering**: Thymeleaf allows dynamic generation of HTML by embedding Java expressions inside the template.
     - **HTML5 Compliant**: Thymeleaf templates are well-formed HTML files, which can be opened directly in a browser for testing.
     - **Conditional Logic**: Supports loops, conditions, and variables to manipulate the HTML view.

9. **Hibernate & Entity Classes**
    - **Overview**: Hibernate is an Object-Relational Mapping (ORM) framework that simplifies database interactions by mapping Java objects to database tables.
    - **Entity Classes**: These are Java classes marked with @Entity, representing a table in the database. Hibernate automatically handles the mapping between Java objects and database records.
    - **Key Features**:
        - **CRUD Operations**: Automatically generates SQL queries for Create, Read, Update, and Delete operations.
        - **Lazy Loading**: Hibernate loads data only when it is needed, improving performance.
        - **Transaction Management**: Hibernate provides built-in support for transactions.
10. **Application Properties (application.properties)**

- **Overview**: This is a configuration file used by Spring Boot to store application-level settings, such as database configurations, server settings, and custom properties.
- **Key Features**:
    - **Database Configuration**: Define the datasource, URL, username, and password for database connections.
    - **Server Configuration**: Set server port, context path, and other server-related properties.
    - **Custom Properties**: You can define custom application-specific settings here.

11. **Security Config & Authentication**

- **Overview**: **Spring Security** is a framework for securing Java web applications by implementing authentication (verifying identity) and authorization (defining user roles).
- **Key Features**:
    - **Authentication**: Verifies the identity of a user via login, OAuth, or LDAP.
    - **Authorization**: Grants or denies access to resources based on roles (e.g., Admin, User).
    - **JWT (JSON Web Tokens)**: Used for token-based authentication in Spring Boot apps.
    - **CSRF Protection**: Prevents cross-site request forgery attacks.

These tools and frameworks provide a comprehensive environment for full-stack Java web development. With **Spring Boot MVC** handling the backend, **Thymeleaf** rendering views, and **Hibernate** managing database operations, you're well-equipped to build secure, dynamic, and scalable web applications.

# CHAPTER-6

# SYSTEM DESIGN

**System Design for ProConnect Freelancing Platform**

The **system design** phase outlines how different components of the ProConnect platform interact, ensuring smooth communication between **Admins, Clients, and Freelancers**. System requirement definitions specify what the system should do, its functionality and its essential and desirable system properties. The techniques applied to elicit and collect information in order to create system specifications and requirement definitions involve consultations, interviews, requirements workshop with customers and end users. The objective of the requirements definition phase is to derive the two types of requirement This section includes:

1. **Use Case Diagram** – showing user interactions with the system.
2. **ER Diagram** – depicting the database structure and relationships between entities.

**1. Use Case Diagram**

A **Use Case Diagram** illustrates how users (Admin, Client, and Freelancer) interact with various features of the freelancing platform. It helps in understanding system functionalities from a user perspective. A use case diagram at its simplest is a representation of a user's interaction with the system that shows the relationship between the user and the different use cases in which the user is involved. In our system User will interact with use cases like Capture Image, Audio Input, Save text, Retrieve Text, Audio output.

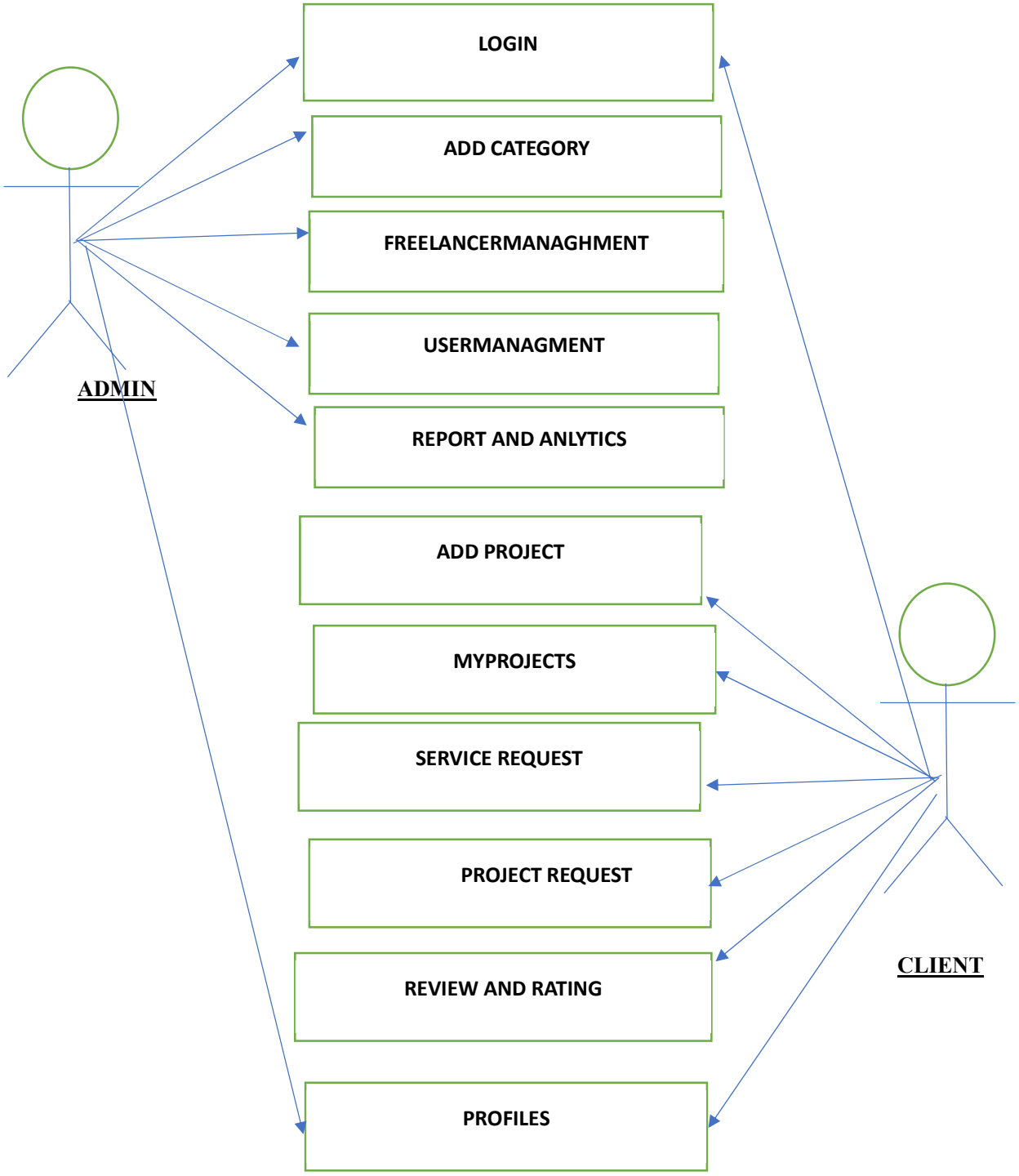
**Actors in the System:**

1. **Admin**
    - Manages users, jobs, payments, and disputes.
    - Generates reports and oversees system activities.
2. **Client**
    - Posts job requirements.
    - Reviews freelancer profiles and selects a candidate.
    - Makes payments after job completion.
3. **Freelancer**
    - Browses available jobs and submits proposals.
    - Communicates with clients via chat.
    - Completes assigned jobs and receives payments.

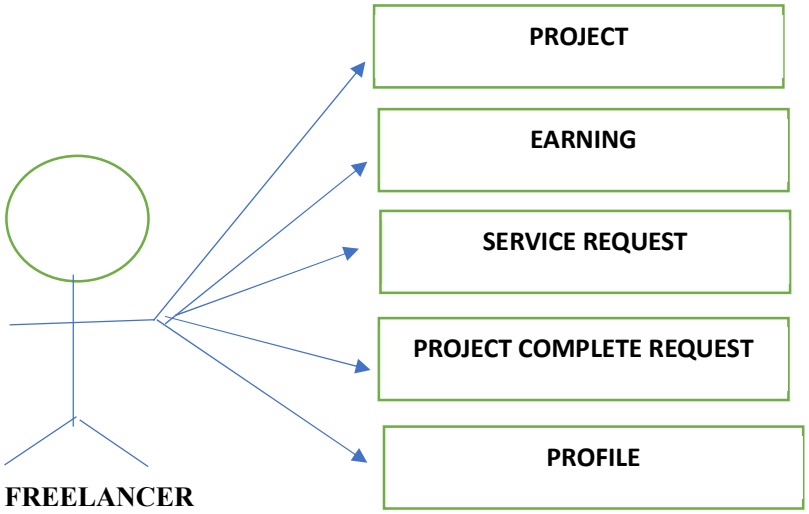
**Main Use Cases:**

- **User Authentication** (Register, Login, Logout)
- **Job Management** (Post, Apply, Approve, Track Status)
- **Payment Processing** (Escrow, Transaction, Withdrawal)
- **Chat System** (Real-time Messaging)

- **Review & Rating** (Feedback System)




**(USE CASE DIAGRAM)**




**2.ER Diagram (Entity-Relationship Diagram)**

Purpose of ER Diagram

The ER Diagram defines the database structure of the platform by representing entities, attributes, and relationships. It ensures data integrity, relationships, and constraints.

**1. User Table**

| Column Name | Data Type | Description |
|---|---|---|
| Id | INT (PK) | Unique identifier for users |
| Name | VARCHAR(255) | Full name of the user |
| Email | VARCHAR(255) | Email address (unique) |
| password | VARCHAR(255) | Encrypted password |
| Role | ENUM | User role (Admin, Client, Freelancer) |
| createdAt | TIMESTAMP | Account creation timestamp |
| updatedAt | TIMESTAMP | Last update timestamp |

**2. Client Table**

| Column Name | Data Type | Description |
|---|---|---|
| Id | INT (PK) | Unique identifier for client |
| userId | INT (FK) | Foreign key from User table |
| companyName | VARCHAR(255) | Name of the client's company |

| Column Name | Data Type | Description |
|---|---|---|
| contactNumber | VARCHAR(20) | Contact number |
| Location | VARCHAR(255) | Client’s location |
| createdAt | TIMESTAMP | Account creation timestamp |
| updatedAt | TIMESTAMP | Last update timestamp |

**3.Freelancer Table**

| Column Name | Data Type | Description |
|---|---|---|
| Id | INT (PK) | Unique identifier for freelancer |
| userId | INT (FK) | Foreign key from User table |
| Skills | TEXT | List of skills |
| experience | INT | Years of experience |
| portfolioLink | VARCHAR(255) | Freelancer's portfolio URL |
| Rating | DECIMAL(3,2) | Average rating |
| createdAt | TIMESTAMP | Account creation timestamp |
| updatedAt | TIMESTAMP | Last update timestamp |

**4. Profile Table**

| Column Name | Data Type | Description |
|---|---|---|
| Id | INT (PK) | Unique identifier for profile |
| userId | INT (FK) | Foreign key from User table |
| Bio | TEXT | Short bio of the user |
| profilePicture | VARCHAR(255) | Profile image URL |
| resumeLink | VARCHAR(255) | Resume/CV link |
| socialLinks | TEXT | Social media links |
| createdAt | TIMESTAMP | Profile creation timestamp |

| Column Name | Data Type | Description |
|---|---|---|
| updatedAt | TIMESTAMP | Last update timestamp |

**5. Project Table**

| Column Name | Data Type | Description |
|---|---|---|
| Id | INT (PK) | Unique identifier for project |
| clientId | INT (FK) | Foreign key from Client table |
| Title | VARCHAR(255) | Title of the project |
| description | TEXT | Project description |
| Budget | DECIMAL(10,2) | Budget allocated for the project |
| deadline | DATE | Project deadline |
| Status | ENUM | Project status (Open, Completed) |
| createdAt | TIMESTAMP | Project creation timestamp |
| updatedAt | TIMESTAMP | Last update timestamp |

**6. ProjectRequest Table**

| Column Name | Data Type | Description |
|---|---|---|
| Id | INT (PK) | Unique identifier for request |
| projectId | INT (FK) | Foreign key from Project table |
| freelancerId | INT (FK) | Foreign key from Freelancer table |
| Status | ENUM | Request status (Pending, Approved) |
| message | TEXT | Message from freelancer to client |
| createdAt | TIMESTAMP | Request creation timestamp |
| updatedAt | TIMESTAMP | Last update timestamp |

**7. ServiceRequest Table**

| Column Name | Data Type | Description |
|---|---|---|
| Id | INT (PK) | Unique identifier for request |
| clientId | INT (FK) | Foreign key from Client table |
| freelancerId | INT (FK) | Foreign key from Freelancer table |

| Column Name | Data Type | Description |
|---|---|---|
| serviceDetails | TEXT | Description of service request |
| Status | ENUM | Status of request (Approved, Pending) |
| createdAt | TIMESTAMP | Request creation timestamp |
| updatedAt | TIMESTAMP | Last update timestamp |

**8. Category Table**

| Column Name | Data Type | Description |
|---|---|---|
| Id | INT (PK) | Unique identifier for category |
| Name | VARCHAR(255) | Category name (e.g., Web Development, Design) |
| description | TEXT | Category description |
| createdAt | TIMESTAMP | Category creation timestamp |
| updatedAt | TIMESTAMP | Last update timestamp |

**9. Payment Table**

| Column Name | Data Type | Description |
|---|---|---|
| Id | INT (PK) | Unique identifier for payment |
| clientId | INT (FK) | Foreign key from Client table |
| freelancerId | INT (FK) | Foreign key from Freelancer table |
| Amount | DECIMAL(10,2) | Payment amount |
| transactionDate | TIMESTAMP | Date and time of transaction |
| Status | ENUM | Payment status (Pending, Completed) |
| createdAt | TIMESTAMP | Payment creation timestamp |
| updatedAt | TIMESTAMP | Last update timestamp |

**10. ContactMessage Table**

| Column Name | Data Type | Description |
|---|---|---|
| Id | INT (PK) | Unique identifier for message |

| Column Name | Data Type | Description |
|---|---|---|
| senderId | INT (FK) | Foreign key from User table (Sender) |
| receiverId | INT (FK) | Foreign key from User table (Receiver) |
| message | TEXT | Message content |
| timestamp | TIMESTAMP | Time when the message was sent |

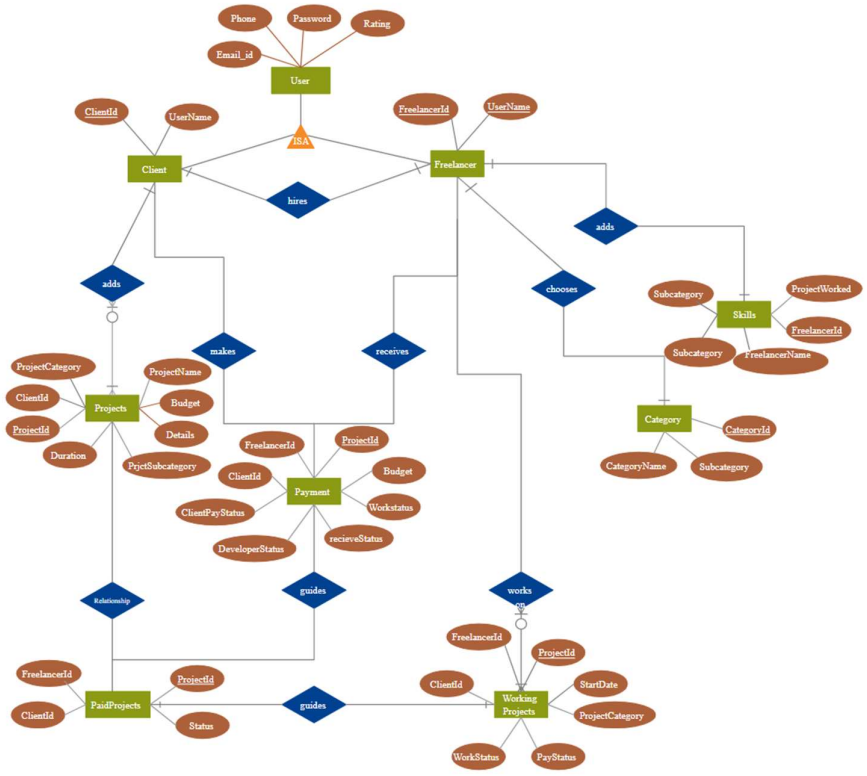
**11. Auditable Table**

This is a **base table** used for tracking timestamps across multiple entities.

| Column Name | Data Type | Description |
|---|---|---|
| createdAt | TIMESTAMP | Record creation timestamp |
| updatedAt | TIMESTAMP | Last update timestamp |

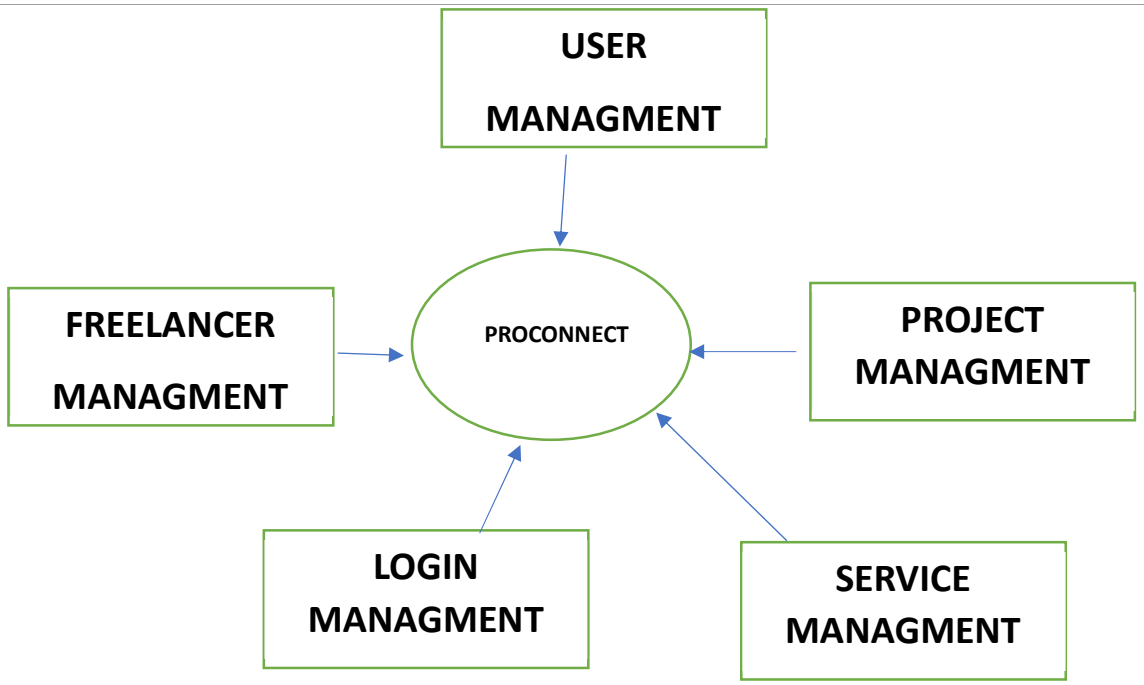
**Relationships Between Entities**

1. A Client can post multiple Jobs.
2. A Freelancer can submit multiple Proposals for different Jobs.
3. A Job can have multiple Proposals from different Freelancers.
4. A Payment is linked to a Job upon completion.
5. Clients and Freelancers can exchange Messages.
6. Clients can leave Reviews for Freelancers after job completion.

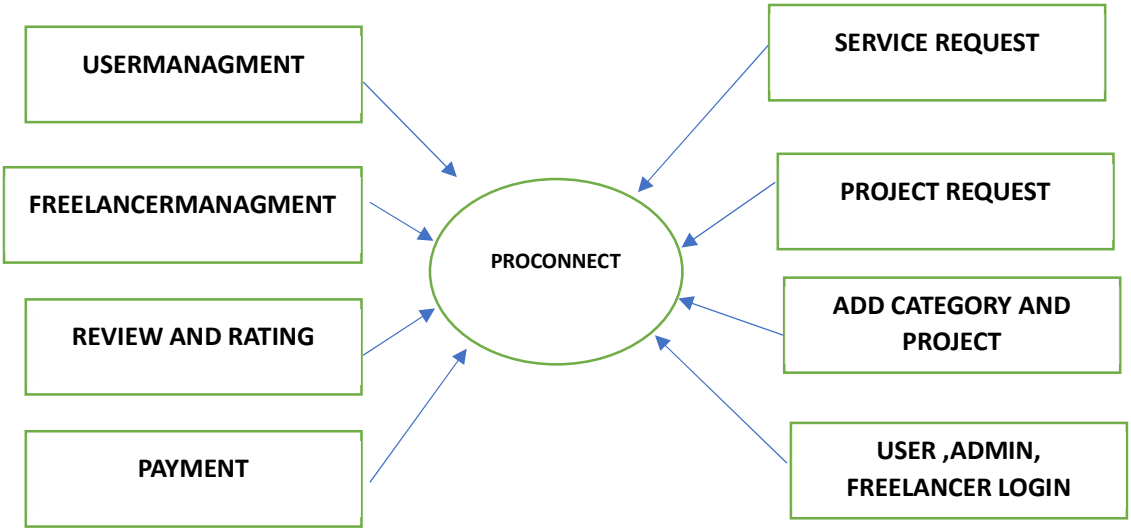



**3.Data-flow Diagram** : A data-flow diagram is a way of representing a flow of a data of a process or a system. The DFD also provides information about the outputs and inputs of each entity and the process itself. Given below is Level 0 Level 1 and Level 2 DFD of system.

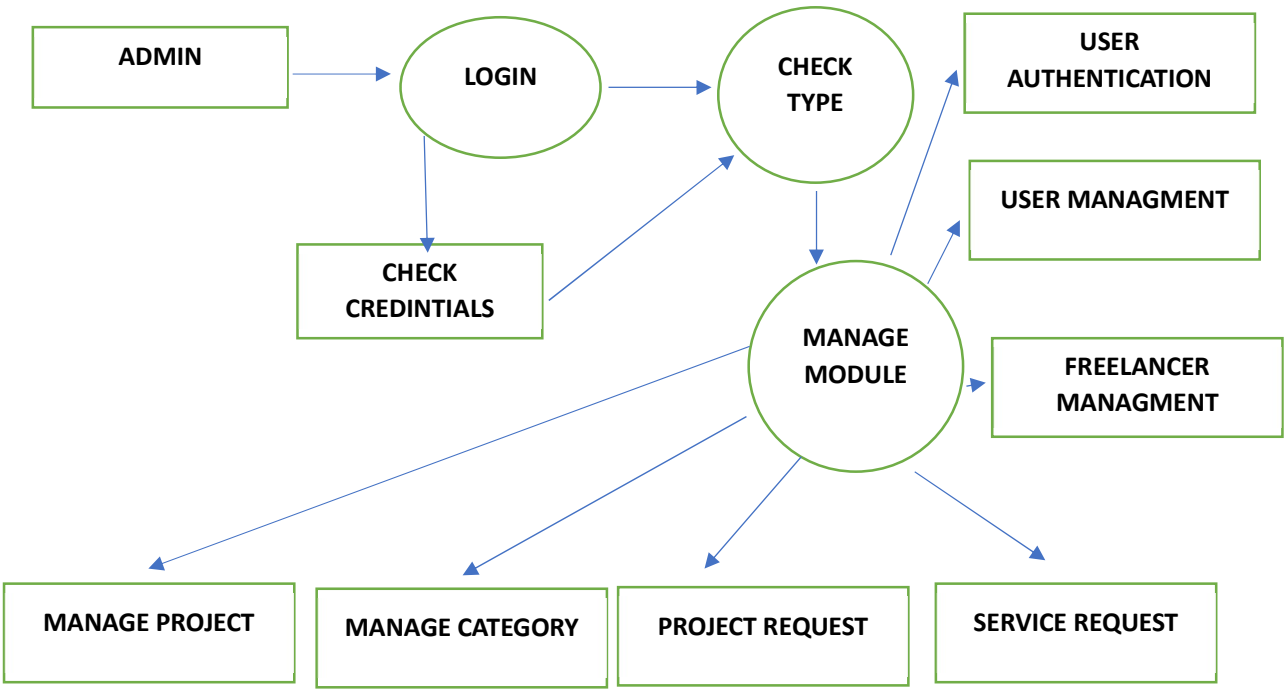
**LEVEL 0:-**




**LEVEL 1:-**


USERMANAGMENT
FREELANCERMANAGMENT
REVIEW AND RATING
PAYMENT
PROCONNECT
SERVICE REQUEST
PROJECT REQUEST
ADD CATEGORY AND PROJECT
USER ,ADMIN, FREELANCER LOGIN

**LEVEL 2:-**


ADMIN
LOGIN
CHECK TYPE
USER AUTHENTICATION
USER MANAGMENT
CHECK CREDINTIALS
MANAGE MODULE
FREELANCER MANAGMENT
MANAGE PROJECT
MANAGE CATEGORY
PROJECT REQUEST
SERVICE REQUEST

# CHAPTER-7

# METHODOLOGY

**Methodology for ProConnect Freelancing Website**

The methodology outlines the development approach, techniques, models, and tools used in creating ProConnect, a freelancing platform. This structured approach ensures efficient project execution, error handling, and iterative improvements.

**1. Development Methodology**

Agile Methodology (SCRUM)

The project follows the Agile SCRUM methodology due to its flexibility, incremental progress, and continuous feedback loop. Agile ensures that the platform is developed in small, manageable iterations called sprints, allowing regular updates and improvements.

Agile Process Flow:

1. Requirement Gathering → Identify system needs from clients, freelancers, and admin.
2. Sprint Planning → Divide the project into smaller tasks and assign priorities.
3. Design & Development → Implement each sprint with frontend, backend, and database integration.
4. Testing & Debugging → Each sprint undergoes rigorous testing to ensure error-free functionality.
5. Deployment & Review → Deploy functional modules and gather stakeholder feedback.
6. Repeat Iterations → Improve and refine the project in subsequent sprints.

**2. System Architecture**

MVC (Model-View-Controller) Architecture

The project follows the MVC (Model-View-Controller) architecture, ensuring structured, scalable, and maintainable development.

1. Model (Backend & Database)
    - Defines business logic and database operations.
    - Uses Spring Boot, Hibernate ORM, and MySQL.
2. View (Frontend**)**
    - Handles **UI and user interaction** using **HTML, CSS, JavaScript, and Thymeleaf**.
3. **Controller (Logic & Routing)**
    - Manages **request handling, authentication, and processing** using **Spring Boot MVC**.

**3. Software Development Life Cycle (SDLC)**

The SDLC model ensures a step-by-step approach to development. The project follows a 7-stage SDLC model:

SDLC Stages:

1. Planning

- Define project scope and feasibility.
- Identify user roles: Admin, Client, Freelancer.

2. Requirement Analysis
   - Functional requirements (user registration, job posting, bidding system).
   - Non-functional requirements (scalability, security, performance).
3. Design
   - Create Use Case Diagrams, ER Diagrams, Wireframes.
   - Define system architecture and data flow.
4. Implementation (Coding & Development)
   - Develop backend with Java Spring Boot MVC & Hibernate.
   - Design frontend with HTML, CSS, JavaScript, and Thymeleaf.
5. Testing
   - Conduct Unit Testing, Integration Testing, User Acceptance Testing (UAT).
6. Deployment
   - Deploy on a cloud server (AWS, DigitalOcean, Heroku).
   - Ensure production readiness.
7. Maintenance & Updates
   - Regular security updates and bug fixes.
   - Improve based on user feedback.

**4. Tools & Technologies Used**

| **Category** | **Tools Used** |
|---|---|
| **Code Editor** | Visual Studio Code |
| **Version Control** | Git, GitHub |
| **Frontend Development** | HTML, CSS, JavaScript, Thymeleaf |
| **Backend Development** | Java, Spring Boot MVC |
| **Database** | MySQL, Hibernate ORM |
| **Security** | Spring Security, Authentication & Authorization |
| **Testing** | JUnit, Postman (for API testing) |
| **Deployment** | AWS / Digital Ocean / Heroku |

**5. Testing Methodology**

Testing is **critical** to ensure the freelancing platform is **error-free and reliable**.

**Types of Testing Conducted:**

1. **Unit Testing**
    - Tests individual components (e.g., **login module, job posting system**).
2. **Integration Testing**
    - Tests interactions between **frontend, backend, and database**.
3. **System Testing**
    - Evaluates overall system performance.
4. **User Acceptance Testing (UAT)**
    - Clients and freelancers test the platform for **usability and functionality**.
5. **Security Testing**
    - Ensures **data encryption, authentication, and protection** against attacks.

**6. Project Workflow**

**Step-by-Step Project Execution Flow**

1. **User Authentication** (Signup/Login using Spring Security).
2. **Client Dashboard** (Post projects, hire freelancers).
3. **Freelancer Dashboard** (Search jobs, bid, get hired).
4. **Payment System** (Secure transactions and withdrawal options).
5. **Messaging System** (Chat feature for clients & freelancers).
6. **Admin Panel** (Manage users, jobs, transactions, reviews).

**7. Deployment Strategy**

The deployment process includes:

1. Code Management → Push updates to GitHub.
2. Build & Test → Ensure system passes all tests.
3. Deploy to Cloud → AWS / Digital Ocean / Heroku.
4. Monitor & Maintain → Performance tracking and updates.

The ProConnect Freelancing Platform follows an Agile methodology with a structured SDLC approach. Using MVC architecture, it integrates secure authentication, job posting, freelancer hiring, and payments efficiently. Testing ensures a robust and user-friendly experience, while cloud deployment makes the platform scalable.

# CHAPTER-8

## SYSTEM ANALYSIS

The **System Analysis** phase is crucial for understanding the **ProConnect Freelancing Platform**, ensuring efficient design, implementation, and performance. This chapter defines the **proposed system, web application structure, user requirements, admin functionalities, and inventory control**.

**1. Proposed System**

The **ProConnect Freelancing Platform** is an online system that connects **clients and freelancers**, enabling seamless project management and collaboration.

**Objectives of the Proposed System**

- **Provide a user-friendly freelancing platform** for **clients** to hire freelancers and **freelancers** to offer services.
- **Ensure secure authentication and authorization** using **Spring Security**.
- **Enable real-time project management** with functionalities like **job posting, bidding, and payments**.
- **Facilitate communication** between clients and freelancers through a **chat system**.
- **Ensure smooth financial transactions** using **secure payment gateways**.

**Core Features**

1. **Client Panel**
    - Dashboard for **managing projects**.
    - Ability to **post jobs, review freelancer proposals, and hire**.
    - Secure **payment and contract handling**.
2. **Freelancer Panel**
    - Dashboard for **browsing and bidding on projects**.
    - Profile creation to **showcase skills and past work**.
    - Secure **payment withdrawal options**.
3. **Admin Panel**
    - Manage **users, projects, and transactions**.
    - Monitor platform activity for **security and compliance**.

**2.Web Application**

The **ProConnect platform** is built as a **web-based application** using **Spring Boot MVC**, providing a robust and scalable architecture.

**Technology Stack**

| Component | Technology |
|---|---|
| **Frontend** | HTML, CSS, JavaScript, Thymeleaf |
| **Backend** | Java, Spring Boot MVC |
| **Database** | MySQL (with Hibernate ORM) |
| **Security** | Spring Security (Authentication & Authorization) |
| **Version Control** | Git & GitHub |
| **Hosting (Optional)** | AWS, DigitalOcean, Heroku |

**Architecture of the Web Application**

- **Client-Side:** Uses **HTML, CSS, and JavaScript** for UI.
- **Server-Side:** Uses **Spring Boot** for business logic and request handling.
- **Database Layer:** Uses **MySQL with Hibernate ORM** to store **user data, projects, and transactions**.

**3.User Requirement**

The system supports three user types: **Clients, Freelancers, and Admins**.

**Functional Requirements**

1. **Clients**
    - Register and log in securely.
    - Post projects and manage proposals.
    - Hire freelancers and track project progress.
    - Make secure payments and review freelancers.
2. **Freelancers**
    - Register and create a **professional profile**.
    - Browse available projects and submit proposals.
    - Manage ongoing projects and communicate with clients.
    - Receive payments after project completion.
3. **Admin**
    - Manage **user registrations, approvals, and bans**.
    - Monitor and regulate **project postings**.
    - Oversee **financial transactions**.
    - Generate reports on **platform performance**.

**Non-Functional Requirements**

- **Security:** Data protection and encrypted authentication.
- **Scalability:** Efficient handling of high user traffic.
- **Performance:** Fast response time for page loading and user actions.

**4. Admin Panel**

The Admin Panel enables ProConnect administrators to monitor, manage, and maintain the platform.

Key Features

1. User Management
    - Approve or disable client and freelancer accounts.
    - Verify identity and service quality.
2. Project Oversight
    - Review project postings and remove fraudulent listings.
3. Transaction Monitoring
    - Oversee payments and withdrawals.
    - Resolve payment disputes.
4. Security Management
    - Implement fraud detection and spam control.
    - Enforce terms and policies.
5. Reports & Analytics
    - Generate user activity, earnings, and engagement reports.

**5. Inventory Control (For Resource Management)**

Although ProConnect does not handle physical inventory, it manages digital resources, such as:

- Database Records: User profiles, project listings, payments.
- Digital Assets: Freelancer portfolios, attachments, and documents.

Inventory Control Strategies

1. Data Storage & Optimization
    - Efficient database queries for fast response time.
    - Regular data backups to prevent loss.
2. Server Resource Allocation
    - Dynamic load balancing for high-traffic handling.
    - Cloud hosting solutions for scalability.
3. Performance & Security Monitoring
    - Real-time tracking of server performance.

- Regular audits to maintain data integrity.

The System Analysis outlines the key functionalities of the ProConnect Freelancing Platform, ensuring secure project management, smooth financial transactions, and efficient user interaction. The web application's robust architecture and admin controls make it a reliable and scalable freelancing solution.

# CHAPTER-9

# SECURITY AND AUTHENTICATION

**Security Configuration and Authentication**

Security is a critical aspect of the ProConnect freelancing platform as it involves sensitive data such as user profiles, projects, and financial transactions. The platform uses Spring Security to ensure authentication, authorization, and data protection.

**1. Security Configuration in ProConnect**

**Spring Security** is used for handling **user authentication and role-based access control (RBAC)**. The configuration is defined in a **SecurityConfig.java** class, which includes:

**Key Security Features**

1. **User Authentication**
   - Uses **JWT (JSON Web Token) authentication** for secure login.
   - Passwords are **hashed using BCrypt** for security.
2. **Authorization and Role Management**
   - **Role-Based Access Control (RBAC):**
     - **Admin:** Full control over users, projects, and transactions.
     - **Client:** Can post projects, hire freelancers, and make payments.
     - **Freelancer:** Can bid on projects, complete tasks, and receive payments.
   - Routes are protected based on roles (e.g., only admins can access /admin/**).
3. **Session and Token Management**
   - Uses **JWT tokens** instead of traditional sessions.
   - Users receive a **token upon login**, which is used to access resources.
4. **CSRF (Cross-Site Request Forgery) Protection**
   - Enabled for all **non-API-based** requests to prevent unauthorized actions.
5. **CORS (Cross-Origin Resource Sharing) Handling**
   - Configured to allow requests from the frontend to the backend securely.

6. **Encryption & Data Protection**
    - **User credentials are hashed and stored securely**.
    - **Sensitive user data (e.g., payment details) is encrypted**.

**2. Authentication in ProConnect**

Authentication ensures that **only registered users** can access the system. It follows the **JWT-based authentication mechanism**.

**Authentication Process**

1. **User Login**
    - User submits **email and password**.
    - Credentials are validated against the database.
    - If valid, a **JWT token** is generated and sent to the user.
2. **Access Control**
    - JWT token is included in every request.
    - Backend validates the token before processing the request.
3. **Token Expiry & Logout**
    - JWT tokens have an expiration time.
    - Logout clears the stored token from the client side.

**3. Role-Based Access Control (RBAC)**

**User roles and access restrictions are defined as follows:**

| Role | Permissions |
|---|---|
| **Admin** | Manage users, approve/reject projects, oversee payments. |
| **Client** | Post projects, hire freelancers, make payments. |
| **Freelancer** | Bid on projects, complete work, receive payments. |

**Example URL Restrictions**

- /admin/** → Accessible only by Admin.
- /client/** → Accessible by Clients.
- /freelancer/** → Accessible by Freelancers.

**4. Security Best Practices Implemented**

✓ Strong Password Encryption (BCrypt)
✓ JWT Authentication for Secure API Calls
✓ Role-Based Access Control (RBAC)
✓ CSRF & CORS Protection
✓ Secure Payment Processing.

The ProConnect platform follows a secure authentication and authorization model using Spring Security with JWT. It ensures that users can access only what they are authorized for, protecting sensitive data from unauthorized access.

**Implementation – Primary Implementation and Exploring Database in ProConnect**

**1. Primary Implementation**

The **ProConnect freelancing platform** follows a structured implementation process that includes **database setup, backend development with Spring Boot, frontend integration, and security implementation**.

**Key Aspects of Implementation:**

1. **Frontend Development (HTML, CSS, JavaScript)**
    - Designed UI for **Admin, Client, and Freelancer** dashboards.
    - Implemented **Thymeleaf** for dynamic content rendering.
    - Created **responsive and user-friendly interfaces**.
2. **Backend Development (Spring Boot MVC)**
    - Built APIs for **user authentication, project management, and payments**.
    - Used **Spring Boot** for business logic implementation.
    - Integrated **JWT-based authentication for security**.
3. **Database Setup & ORM (Hibernate, MySQL)**
    - Defined **Entity Classes** for database tables.
    - Used **Hibernate ORM** for seamless interaction with MySQL.
    - Designed **ER diagram** for relationship mapping.
4. **Security Implementation (Spring Security)**
    - Configured **JWT authentication** for secure logins.
    - Implemented **role-based access control (RBAC)** for Admin, Client, and Freelancer.
5. **Testing & Deployment**
    - Performed **unit testing, integration testing, and security testing**.
    - Deployed application on a **local server** for testing before final deployment.

**2. Exploring Database in ProConnect**

Database Management in MySQL

The ProConnect database is structured to store and manage data efficiently for clients, freelancers, projects, payments, and reviews.

**Key Tables in the Database**

| Table Name | Description |
|---|---|
| User | Stores details of all users (Admin, Client, Freelancer). |

| Table Name | Description |
|---|---|
| Client | Stores client-specific details. |
| Freelancer | Stores freelancer details like skills and profile. |
| Project | Contains project details, budget, and deadlines. |
| ProjectRequest | Manages client project requests. |
| ServiceRequest | Handles freelancer service requests. |
| Payment | Records all transactions between clients and freelancers. |
| ReviewRating | Stores feedback and ratings given by clients and freelancers. |

**Database Relationships (ER Diagram)**

- One-to-Many: A client can post multiple projects.
- One-to-Many: A freelancer can work on multiple projects.
- One-to-One: A user has a profile.
- Many-to-One: Multiple reviews belong to a single project.

**Data Flow in Database**

1. User logs in → Authenticated via User table.
2. Client posts a project → Stored in Project table.
3. Freelancer bids on project → Tracked in ProjectRequest table.
4. Payment is made → Stored in Payment table.
5. Review & Rating submitted → Added to ReviewRating table.

The implementation of ProConnect follows a well-structured approach with secure database management, efficient backend development, and responsive frontend design. The database plays a crucial role in handling user interactions, project management, and financial transactions securely.

# CHAPTER-10

## CODING

As we know we have 3 section client ,admin, freelancer and each folder contain it's dashboard code along with its all functional codes in template folder.

**CLIENT FOLDER:-**

**COMMON.HTML**

```
<!DOCTYPE html>
<html lang="en">
```

```
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>PROCONNECT</title>
    <link rel="stylesheet" href="/style/fragment/common.css">
    <link rel="stylesheet" href="/style/client.home.css">
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.7.2/css/all.min.css"
                                                                                integrity="sha512-
Evv84Mr4kqVGRNSgIGL/F/aIDqQb7xQ2vcrdIwxfjThSH8CSR7PBEakCr51Ck+w+/U6swU2Im1vVX0SVk
9ABhg=="
        crossorigin="anonymous" referrerpolicy="no-referrer" />
</head>
<body>
    <header>
        <div class="logo">
            <a href="/client/home"><img src="/images/logo2.png" alt="Website Logo" class="logo"></a>
        </div>
        <form action="/category/category/search">
            <div class="search-container">
              <input type="text" class="search-input" name="search" placeholder="Search you are looking for ...">
               <button class="search-btn">
                  <span class="search-icon">&#128269;</span>
               </button>
            </div>
        </form>
        <div class="sign">
            <button class="sign-in"><span><i class="fa-solid fa-right-to-bracket"></i></span>
                <a href="/client/sign_in">Sign-In</a></button>
            <button class="call"><span><i class="fa-solid fa-phone"></i></span>
                <a href="/client/contact">Call-Us</a></button>
            <form method="post" action="/logout" data-sec-authorize="isAuthenticated()">
                <button class="logout" type="submit "><span><i class="fas fa-sign-out-alt"></i></span>
                    Logout
```

```
            </button>
            <input type="hidden" name="_csrf" data-th-value="${_csrf.token}">
        </form>
    </div>
</header>
<nav>
    <ul class="nav-links">
        <li onclick="toggleDropdown()">
            <div class="dashboard-container">
                <span id="dropdownText"><b>Dashboard</b></span>
                <i class="fas fa-chevron-down "></i>
                <div class="dropdown hidden">
                    <div class="dropdown-content" id="dashboardDropdown">
                        <ul>
                            <li>
                                <a href="/client/clientdashboard">Client Dashboard</a>
                            </li>
                            <li>
                                <a href="/admin/admindashboard">Admin Dashboard</a>
                            </li>
                            <li>
                                <a href="/freelancer/freelancerdashboard">Freelancer Dashboard</a>
                            </li>
                        </ul>
                    </div>
                </div>
            </div>
        </li>
        <li><a href="/client/solution"> <b>Our Solutions</b></a></li>
        <li><a href="#about"><b>About Us</b></a></li>
        <li><a href="/category/category"><b>Categories</b></a></li>
        <li><a href="/freelancer/freelancer"><b>Freelancer</b></a></li>
```

```
        <li><a href="/client/howitworks"><b>How it works</b></a></li>
    </ul>
</nav>
<footer class="footer">
    <div class="footer-container">
        <div class="footer-section about">
            <h2>ProConnect</h2>
            <p>Connecting freelancers with businesses worldwide. Grow your career with ProConnect.</p>
        </div>
        <div class="footer-section links">
            <h3>Quick Links</h3>
            <ul>
                <li><a href="/client/home">Home</a></li>
                <li><a href="#">Browse Jobs</a></li>
                <li><a href="/admindashboard/admindashboard">Post a Job</a></li>
                <li><a href="/client/howitworks">How It Works</a></li>
                <li><a href="/contact/contact">Contact Us</a></li>
            </ul>
        </div>
        <script>
            function toggleDropdown() {
                document.querySelector(".dropdown").classList.toggle('hidden');
            }
        </script>
        <div class="footer-section support">
            <h3>Support</h3>
            <ul>
                <li><a href="#">Help Center</a></li>
                <li><a href="#">Terms & Conditions</a></li>
                <li><a href="#">Privacy Policy</a></li>
                <li><a href="#">FAQs</a></li>
            </ul>
```

```
        </div>
        <div class="footer-section social">
          <h3>Follow Us</h3>
          <div class="social-icons">
            <a href="#"><i class="fab fa-facebook"></i></a>
            <a href="#"><i class="fab fa-twitter"></i></a>
            <a href="#"><i class="fab fa-linkedin"></i></a>
            <a href="#"><i class="fab fa-instagram"></i></a>
          </div>
        </div>
      </div>
      <div class="footer-bottom">
        <p>&copy; 2025 ProConnect. All Rights Reserved.</p>
      </div>
    </footer>
</body>
</html>
```

**HOME.HTML**

```
<!DOCTYPE html>
<html lang="en">
<head data-th-replace="~{fragment/common :: head}"></head>
<body>
    <header data-th-replace="~{fragment/common :: header}"></header>
    <nav data-th-replace="~{fragment/common :: nav}"></nav>
    <!-- Hero Section -->
    <section id="hero">
      <div class="hero-content">
        <h1>Welcome to PROCONNECT</h1>
        <p>Your gateway to top-notch freelance professionals.</p>
        <a href="#services" class="cta-btn">Get Started</a>
        <h1> Find &amp;amp; Hire <br>Expert Freelancers </h1>
        <h3>Work with the best freelance talent from around the world on our secure,
```

```
            <br class="u-blockLargeOnly">flexible and cost-effective platform.
          </h3>
        </div>
        <div>
        </div>
        <div class="button-container">
          <button class="btn" id="post-job"><a href="/client/clientdashboard">Post a project</a></button>
                    <button class="btn" id="get-job"><a href="/freelancer/freelancerdashboard">Get a project</a></button>
        </div>
    </section>
    <main>
        <div class="top_freelancer">
          <h1>PINPOINT LEADING SKILLS</h1>
        </div>
        <div class="container1">
          <div class="box">
            <i class="fas fa-code"></i>
            <p>Programming & Development</p>
          </div>
          <div class="box">
            <i class="fas fa-pen"></i>
            <p>Writing & Translation</p>
          </div>
          <div class="box">
            <i class="fas fa-paint-brush"></i>
            <p>Design & Art</p>
          </div>
          <div class="box">
            <i class="fas fa-user-tie"></i>
            <p>Administrative & Secretarial</p>
          </div>
```

```
        <div class="box">
            <i class="fas fa-chart-line"></i>
            <p>Sales & Marketing</p>
        </div>
        <div class="box">
            <i class="fas fa-drafting-compass"></i>
            <p>Engineering & Architecture</p>
        </div>
        <div class="box">
            <i class="fas fa-briefcase"></i>
            <p>Business & Finance</p>
        </div>
        <div class="box">
            <i class="fas fa-chalkboard-teacher"></i>
            <p>Education & Training</p>
        </div>
        <div class="box">
            <i class="fas fa-balance-scale"></i>
            <p>Legal</p>
        </div>
    </div>
</main>
<div class="add-content">
    <a href="/category/category">All Categories</a>
</div>
<video src="/video/v2.mp4" autoplay muted loop></video>

<!-- About Section -->
<section id="about">
    <div class="container">
        <h2>About Us</h2>
       <p>Learn more about our journey and how we connect talented freelancers with great opportunities!</p>
```

```
    </div>
  </section>

  <!-- Our Mission -->
  <section class="mission">
    <div class="container">
      <h2>Our Mission</h2>
       <p>Our mission is to empower freelancers across the globe by providing them with an easy-to-use platform
          that
          connects them with quality clients and projects. We strive to offer an environment that encourages
          growth,
          creativity, and professional development.</p>
    </div>
  </section>

  <!-- Our Story -->
  <section class="story">
    <div class="container">
      <h2>OUR STORY</h2>
       <p>We started as a small group of freelancers who shared a vision of creating a platform that would enable
          individuals to showcase their skills and find new opportunities. Over time, our platform has grown to
          serve
           thousands of freelancers and clients worldwide, creating a community built on trust, collaboration, and
          innovation.</p>
    </div>
  </section>
  <!-- Team Section -->
  <section class="team">
    <div class="container">
      <h2>MEET OUR TEAM</h2>
```

```
        <div class="team-members">
            <div class="team-member">
                <img src="/images/ceo.jpg" alt="Team Member 1">
                <h3>Anjani Shaw</h3>
                <p>Founder & CEO</p>
            </div>
            <div class="team-member">
                <img src="/images/devloper.jpg" alt="Team Member 2">
                <h3>Subhranjali Panda</h3>
                <p>Chief Operating Officer</p>
            </div>
            <div class="team-member">
                <img src="/images/dev2.jpg" alt="Team Member 3">
                <h3>Soumendra Behera</h3>
                <p>Lead Developer</p>
            </div>
            <div class="team-member">
                <img src="/images/designer.jpg" alt="Team Member 4">
                <h3>Smruti Ranjan Nayak</h3>
                <p>Marketing Director</p>
            </div>
        </div>
    </div>
</section>
<!-- Testimonials Section -->
<section class="testimonials">
    <div class="container">
        <h2>What Our Users Say</h2>
        <div class="testimonial">
            <blockquote>
                "This platform has been a game changer for my freelance career. It made it so easy to find
                high-quality clients and manage my projects efficiently."
```

```
        </blockquote>
        <p>- Sarah Lee, Freelancer</p>
    </div>
    <div class="testimonial">
        <blockquote>
            "As a client, I've been able to hire top talent for all my projects. I highly recommend this
            platform to anyone looking to find skilled freelancers."
        </blockquote>
        <p>- Mike Green, Client</p>
    </div>
</div>
<!-- Contact Section -->
<section class="contact-section">
    <div class="container">
        <h1>Get in Touch with ProConnect</h1>
        <p>Whether you're a freelancer or a business, we're here to help. Please contact us using any of the
            methods below.</p>
        <div class="contact-methods">
            <div class="contact-box">
                <h2>Email Us</h2>
                <p>For general inquiries, reach out to us at:</p>
                <a href="mailto:support@proconnect.com">support@proconnect.com</a>
                <p>If you're a business looking for freelancer solutions:</p>
                <a href="mailto:projects@proconnect.com">projects@proconnect.com</a>
            </div>
            <div class="contact-box">
                <h2>Message Form</h2>
                <form action="#" method="POST">
                    <input type="name" id="name" placeholder="Name"></input>
                    <textarea name="messageus" id="msg">message</textarea>
                    <button type="submit">Submit</button>
                </form>
```

```
</div>
<div class="contact-box">
   <h2>Phone Support</h2>
   <p>If you need immediate assistance, feel free to call us at:</p>
   <p><strong>+1 (800)-7735870981 </strong></p>
   <p>Our team is available Monday to Friday, from 9 AM to 6 PM.</p>
</div>
<div class="contact-box">
   <h2>Follow Us</h2>
   <p>Stay connected with us through social media:</p>
   <ul>
      <a href="https://facebook.com/proconnect" target="_blank">Facebook <span><i
            class="fa-brands fa-facebook"></i></span></a>
      <a href="https://twitter.com/proconnect" target="_blank">Twitter <span><i
            class="fa-brands fa-square-twitter"></i></span></a>
      <a href="https://linkedin.com/company/proconnect" target="_blank">LinkedIn <span>

         <i  class="fa-brands fa-linkedin"></i></span></a>
      <a href="https://instagram.com/company/proconnect" target="_blank">Instagram <span><i
            class="fa-brands fa-instagram"></i></span></a>
   </ul>
</div>
<div class="contact-box">
   <h2>Visit Our Office</h2>
   <p>If you'd like to meet us in person, our office is located at:</p>
   <p>123 Freelancer Lane,proconnect ,California- Suite 200, Tech City, USA</p>
</div>
<div>
   <div class="contact-box">
      <h2> Our website</h2>
         <p>our website not only give platform to everyone but also it provide essance to connect
through out the world. </p>
```

```
                <p><strong>ProConnect website our concern to connect people and grow.</strong></p>
                </div>
            </div>
        </div>
    </section>
    <!--designer -->
    <section class="designer-list">
        <h2>MEET OUR DEVELOPERS</h2>
        <div class="designer-cards">
            <div class="designer-card">
                <img src="/images/d1.jpg" alt="Designer" class="designer-img">
                <h3>Jane Doe</h3>
                <p>UI/UX Designer</p>
                <p>Expert in creating beautiful and functional user interfaces.</p>
                <button class="hire-btn">Hire Now</button>
            </div>
            <div class="designer-card">
                <img src="/images/d2.jpg" alt="Designer" class="designer-img">
                <h3>John Smith</h3>
                <p>Web Designer</p>
                <p>Specializes in modern and responsive websites.</p>
                <button class="hire-btn">Hire Now</button>
            </div>
<div class="designer-card">
                <img src="/images/d3.jpg" alt="Designer" class="designer-img">
                <h3>Emily Brown</h3>
                <p>Branding Expert</p>
                <p>Experienced in logo and brand identity design.</p>
                <button class="hire-btn">Hire Now</button>
            </div>
            <div class="designer-card">
```

```
            <img src="/images/d4.jpg" alt="Designer" class="designer-img">
            <h3>David Lee</h3>
            <p>Graphic Designer</p>
            <p>Creating stunning graphics for various digital platforms.</p>
            <button class="hire-btn">Hire Now</button>
        </div>
    </div>
</section>
<div class="add-content1">
    <a href="/freelancer/freelancer">See All</a>
</div>
<!--make it all happen with freelancer-->
<div class="makehappen">
    <h2>Make it all happen with freelancer</h2>
<div class="benefits">
        <div class="benefit">
            <div class="icon"><i class="fa-solid fa-people-group"></i></div>
            <p>Access a pool of top talent across 700 categories</p>
        </div>
        <div class="benefit">
            <div class="icon">✔</div>
            <p>Enjoy a simple, easy-to-use matching experience</p>
        </div>
        <div class="benefit">
            <div class="icon">⚡</div>
            <p>Get quality work done quickly and within budget</p>
        </div>
        <div class="benefit">
            <div class="icon">$</div>
            <p>Only pay when you're happy</p>
        </div>
    </div>
```

```
        <button class="cta-button">Join now</button>
    </div>
    <div class="q_a_section">
        <h2>Q & A</h2>
        <div class="faq">
            <div class="faq-item" onclick="toggleAnswer(this)">
                <h3>What can I sell?</h3>
                <p>You can sell digital services like design, writing, marketing, and more.</p>
            </div>
            <div class="faq-item" onclick="toggleAnswer(this)">
                <h3>How much time will I need to invest?</h3>
                <p>You decide your working hours based on your availability.</p>
            </div>
            <div class="faq-item" onclick="toggleAnswer(this)">
                <h3>How much money can I make?</h3>
                <p>Your earnings depend on your skills and the number of projects you complete.</p>
            </div>
            <div class="faq-item" onclick="toggleAnswer(this)">
                <h3>How do I price my service?</h3>
                <p>Research the market and set competitive pricing based on your skills.</p>
            </div>
            <div class="faq-item" onclick="toggleAnswer(this)">
                <h3>How much does it cost?</h3>
                <p>Signing up is free, but the platform takes a small commission from your earnings.</p>
            </div>
            <div class="faq-item" onclick="toggleAnswer(this)">
                <h3>How do I get paid?</h3>
                <p>Payments are processed securely through multiple withdrawal options.</p>
            </div>
        </div>
    </div>
<script src="/script/home.js"></script>
```

```
 <footer data-th-replace="~{fragment/common :: footer}"></footer>
</body>
</html>
```

**CATEGORY.HTML**

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Freelancing Categories</title>
    <link rel="stylesheet" href="/style/fragment/common.css">
    <link rel="stylesheet" href="/style/client.category.css">
        <link  rel="stylesheet"  href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.7.2/css/all.min.css
integrity="sha512-
Evv84Mr4kqVGRNSgIGL/F/aIDqQb7xQ2vcrdIwxfjThSH8CSR7PBEakCr51Ck+w+/U6swU2Im1vVX0SVk
9ABhg==”crossorigin="anonymous" referrerpolicy="no-referrer" />
</head>
<body>
    <header data-th-replace="~{fragment/common :: header}"></header>
    <nav data-th-replace="~{fragment/common :: nav}"></nav>
    <section class="heading">
        <div class="hero-section">
            <h1>Find the Best Freelancers for Every Project</h1>
            <p>Explore categories and connect with top experts in every field.</p>
            <a href="#categories" class="cta-button">Browse Categories</a>
        </div>
    </section>
    <form action="/project/project/search">
        <section id="search">
            <input  name="search" type="text" id="search-input" placeholder="Search projects...">
        </section>
    </form>
```

```
    <section id="categories">
        <h2>Browse Categories</h2>
        <div class="categories-container">
            <a data-th-href="|/category/freelancer?categoryId=${category.categoryId}|"
                data-th-each="category:${categories}">
                <div class="category-card" data-category="web-dev">
                    <img data-th-src="|/admin/category/image/${category.categoryId}|" alt="Web Development">
                    <h3 data-th-text="${category.categoryName}"></h3>
                    <p data-th-text="${category.categoryDescription}"></p>
                </div>
            </a>
        </div>
    </section>
    <!-- Modal for Category Details -->
    <div id="category-modal" class="modal">
        <div class="modal-content">
            <span class="close">&times;</span>
            <h3 id="modal-title">Category Details</h3>
            <p id="modal-description">Category description will appear here.</p>
        </div>
    </div>
    <footer data-th-replace="~{fragment/common :: footer}"></footer>
</body>
</html>
```

**FREELANCER.HTML**

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Hire  Developers</title>
    <link rel="stylesheet" href="/style/client.freelancer.css">
```

```
    <link rel="stylesheet" href="/style/fragment/common.css">
        <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.7.2/css/all.min.css"
integrity="sha512-
Evv84Mr4kqVGRNSgIGL/F/aIDqQb7xQ2vcrdIwxfjThSH8CSR7PBEakCr51Ck+w+/U6swU2Im1vVX0SVk
9ABhg==" crossorigin="anonymous" referrerpolicy="no-referrer" />
</head>
<body>
    <header data-th-replace="~{fragment/common :: header}"></header>
    <nav data-th-replace="~{fragment/common :: nav}"></nav>
    <h1>Hire the best <span> developers</span></h1>
    <form action="/freelancer/freelancer/search">
        <section id="search">
            <input name="search" type="text" id="search-input" placeholder="Search freelancers...">
        </section>
    </form>
    <div class="developers-container">
        <div class="developer-card" th:each="freelancer : ${freelancers}">
                <img data-th-src="|/freelancer/image/${freelancer.userId}|" alt="User Picture" class="profile-
picture">            <h3 th:text="${freelancer.userName}"></h3>
            <p class="rating" th:text="|${freelancer.rating}/5|"></p>
            <p class="rating" th:text="|Experience: ${freelancer.yearsExperience} years|"></p>
            <div class="skills-container">
                <div class="skills">
                    <span th:each="skill : ${#strings.arraySplit(freelancer.skills, ',')}"
                        class="bg-gray-200 text-gray-800 py-1 px-3 rounded" th:text="${skill}">
                    </span>
                </div>
            </div>
            <a data-th-href="|/freelancer/pdp?id=${freelancer.userId}|" class="see-more">See more</a>
        </div>
    </div>
  <footer data-th-replace="~{fragment/common :: footer}"></footer>
</body>
</html>
```

**CLIENTDASHBOARD.HTML**

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>ProConnect Client Dashboard</title>
    <link rel="stylesheet" href="/style/client.clientdashboard.css">
    <link rel="preconnect" href="https://fonts.googleapis.com">
        <link     href="https://fonts.googleapis.com/css2?family=Poppins:wght@300;400;600&display=swap"
rel="stylesheet">
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.7.2/css/all.min.css"
                                                                                integrity="sha512-
Evv84Mr4kqVGRNSgIGL/F/aIDqQb7xQ2vcrdIwxfjThSH8CSR7PBEakCr51Ck+w+/U6swU2Im1vVX0SVk
9ABhg=="
      crossorigin="anonymous" referrerpolicy="no-referrer" />
</head>

<body>
    <div class="dashboard-container">
        <aside class="sidebar">
            <h2><a href="/client/home">ProConnect</a></h2>
            <ul>
                <li><a href="#"><i class="fa-solid fa-house"></i> Dashboard</a></li>
                <li><a href="/client/myproject"><i class="fas fa-tasks"></i> My Projects</a></li>
                <li><a href="/client/request"><i class="fas fa-users"></i> Service Request</a></li>
                <li><a href="/client/projectRequest"><i class="fas fa-users"></i> Project Request</a></li>
                <li><a href="/client/profile"><i class="fas fa-money-bill"></i> Profile</a></li>
                <li><a href="/client/reviewrating"><i class="fa-solid fa-star"></i>Review and Rating</a></li>
                <li>
                    <form method="post" action="/logout" data-sec-authorize="isAuthenticated()">
                        <button>
                            <i class="fas fa-sign-out-alt"></i> Logout
```

```
                </button>
                <input type="hidden" name="_csrf" data-th-value="${_csrf.token}">
            </form>
        </li>
    </ul>
</aside>
<main class="content">
    <header>
        <h1>Client Dashboard</h1>
    </header>
    <div class="search-container">
        <input type="text" id="pageSearchBar" placeholder="Search categories..." class="search-bar">
    </div>
    <section class="stats">
        <div class="stat-box">
            <i class="fas fa-briefcase card-icon"></i>
            <h3>Active Projects</h3>
            <p>5</p>
        </div>
        <div class="stat-box">
            <i class="fas fa-dollar-sign card-icon"></i>
            <h3>Pending Payments</h3>
            <p>$2,300</p>
        </div>
        <div class="stat-box">
            <i class="fas fa-file-alt card-icon"></i>
            <h3>Freelancers Hired</h3>
            <p>12</p>
        </div>
    </section>

 <section class="projects">
```

```
    <h2>My Projects</h2>
    <table>
      <thead>
        <tr>
          <th>Project Name</th>
          <th>Freelancer</th>
          <th>Budget</th>
          <th>Status</th>
        </tr>
      </thead>
      <tbody>
        <tr>
          <td>Website Development</td>
          <td>John Doe</td>
          <td>$3,000</td>
          <td>Ongoing</td>
        </tr>
        <tr>
          <td>Logo Design</td>
          <td>Jane Smith</td>
          <td>$500</td>
          <td>Completed</td>
        </tr>
        <tr>
          <td>SEO Optimization</td>
          <td>Michael Brown</td>
          <td>$1,200</td>
          <td>Pending Approval</td>
        </tr>
      </tbody>
    </table>
  </section>
```

```
    </main>
  </div>
</body>
</html>
```

**MYPROJECT.HTML**

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Myproject</title>
  <link rel="stylesheet" href="/style/client.clientdashboard.css">
  <link rel="preconnect" href="https://fonts.googleapis.com">
      <link href="https://fonts.googleapis.com/css2?family=Poppins:wght@300;400;600&display=swap" rel="stylesheet">
                  <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.7.2/css/all.min.css"integrity="sha512-Evv84Mr4kqVGRNSgIGL/F/aIDqQb7xQ2vcrdIwxfjThSH8CSR7PBEakCr51Ck+w+/U6swU2Im1vVX0SVk9ABhg=="
    crossorigin="anonymous" referrerpolicy="no-referrer" />
</head>
<body>
  <aside data-th-replace="~{client/clientdashboard :: aside}"></aside>
  <link rel="stylesheet" href="/style/client.myproject.css">
  <!-- Main Content -->
  <main class="content">
    <header>
      <h1>Welcome, Client</h1>
    </header>
 <section class="projects">
      <h2>My Projects</h2>
      <button class="add-project-btn" onclick="openModal()">Add New Project</button>
      <table>
        <thead>
```

```
    <tr>
        <th>Project Title</th>
        <th>Description</th>
        <th>Listed Date</th>
        <th>Image</th>
        <th>Price</th>
        <th>Status</th>
        <th>Action</th>
    </tr>
</thead>
<tbody id="projectTable" th:if="${user != null and user.projects != null}">
    <tr data-th-each="project:${user.projects}">
        <td data-th-text="${project.projectTitle}"></td>
        <td data-th-text="${project.projectDescription}"></td>
        <td data-th-text="${project.createdDate}"></td>
        <td>
            <img data-th-src="|/client/myproject/${project.projectId}|" alt="" style="width: 50px;">
        </td>
        <td data-th-text="${project.projectPrice}"></td>
        <td data-th-text="${project.projectStatus}"></td>
        <td>
            <span
              data-th-if="${project.projectStatus == 'OPEN' or project.projectStatus == 'CANCELED'}">
                <button class="edit-btn"
                    data-th-onclick="openModal([[${project.projectId}]])">Edit</button>
                <a data-th-href="|/client/myproject/delete?project=${project.projectId}|"
                    class="delete-btn">Delete</a>
            </span>
            <span data-th-if="${project.projectStatus == 'IN_PROGRESS'}">
                <i class="fa-solid fa-ban"></i>
            </span>
            <span data-th-if="${project.projectStatus == 'COMPLETED'}">
```

```
                    <i class="fa-solid fa-check-double"></i>
                </span>
            </td>
        </tr>
    </tbody>
</table>
</section>
</main>
</div>
<!-- Add Project Modal -->
<div id="projectModal" class="modal">
    <div class="modal-content">
        <span class="close-btn" onclick="closeModal()">&times;</span>
        <h2>Add New Project</h2>
        <form id="projectForm" action="/client/myproject" method="post" enctype="multipart/form-data">
            <input type="hidden" id="projectId" name="projectId">
            <input type="hidden" id="projectImageName" name="projectImageName">
            <input type="text" id="projectTitle" name="projectTitle" placeholder="Project Name">
            <input type="text" id="projectPrice" name="projectPrice" placeholder="Project Price">
            <input type="file" id="projectImage" name="projectImage" placeholder="Project Image">
            <textarea name="projectDescription" id="projectDescription"
                placeholder="Describe the Project Details"></textarea>
            <select name="category" id="category">
                <option value="" disabled selected>Select Category</option>
                <option data-th-value="${category.categoryId}" data-th-each="category:${categories}"
                    data-th-text="${category.categoryName}"></option>
            </select>
            <input type="hidden" name="_csrf" data-th-value="${_csrf.token}">
            <button type="submit">Add Project</button>
        </form>
    </div>
</div>
```

```
    <script src="/script/myproject.js"></script>
</body>
</html>
```

**PROJECTPDP.HTML**

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Project Description - Freelancing Website</title>
</head>
<body>
    <main>
        <section class="project-description">
            <h2 data-th-text="|Project Title: ${project.projectTitle}|"></h2>
            <div>
                <img data-th-src="|/client/myproject/${project.projectId}|" alt=""
                    style="height: 200px;  width: 200px;">
            </div>
            <div class="project-details">
                <p><strong>Client:</strong> <span data-th-text="${project.client.userName}"></span></p>
                <p><strong>Budget:</strong> <span data-th-text="${project.projectPrice}"></span></p>
                <p><strong>Listed Date:</strong> <span data-th-text="${project.createdDate}"></span></p>
            </div>
            <div class="description">
                <h3>Project Description</h3>
                <p data-th-text="${project.projectDescription}"></p>
            </div>
            <div class="apply">
                <a data-th-href="|/serviceRequest/apply?id=${project.projectId}|">Apply for this Project</a>
            </div>
        </section>
```

```
    </main>
</body>
</html>
```

**PROJECTREQUEST.HTML**

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Service Request</title>
    <link rel="stylesheet" href="/style/admin/admindashboard.css">
    <link rel="stylesheet" href="/style/client.request.css">
    <link rel="preconnect" href="https://fonts.googleapis.com">
        <link     href="https://fonts.googleapis.com/css2?family=Poppins:wght@300;400;600&display=swap"
rel="stylesheet">
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.7.2/css/all.min.css"
                                                                                integrity="sha512-
Evv84Mr4kqVGRNSgIGL/F/aIDqQb7xQ2vcrdIwxfjThSH8CSR7PBEakCr51Ck+w+/U6swU2Im1vVX0SVk
9ABhg=="crossorigin="anonymous" referrerpolicy="no-referrer" />
</head>


<body>
    <aside data-th-replace="~{client/clientdashboard :: aside}"></aside>
    <main class="content">
        <header>
            <h1>Welcome, Client</h1>
        </header>
        <section class="projects">
            <h1>Your Project Requests</h1>
            <!-- <button class="add-project-btn" onclick="openModal()">Add New Project</button> -->
            <table>
                <thead>
                    <tr>
```

```
                <th>Freelancer Name</th>
                <th>Project Title</th>
                <th>Image</th>
                <th>Price</th>
                <th>Category</th>
                <th>Status</th>
                <th>Action</th>
            </tr>
        </thead>
        <tbody id="projectTable">
            <tr data-th-each="request : ${user.projectRequests}">
                <td data-th-text="${request.freelancer.userName}"></td>
                <td data-th-text="${request.project.projectTitle}"></td>
                <td>Image</td>
                <td data-th-text="${request.project.projectPrice}"></td>
                <td data-th-text="${request.project.category.categoryName}"></td>
                <td data-th-text="${request.projectRequestStatus}"></td>
                <td>
                    <span
data-th-if="${request.projectRequestStatus.name() == 'APPROVED' or  request.projectRequestStatus.name()
== 'REJECTED' or request.projectRequestStatus.name() == 'PENDING'}">
                        <a class="cancel-btn"
                                                                                    data-th
href="|/projectRequest/approve?id=${request.projectRequestId}&status=approve|">Approve</a>
                        <a class="cancel-btn"
                                                                                    data-th-
href="|/projectRequest/approve?id=${request.projectRequestId}&status=cancel|">Reject</a>
                    </span>
                    <span
                                        data-th-if="${request.projectRequestStatus.name()  !=  'APPROVED'
and  request.projectRequestStatus.name()  !=  'REJECTED'  and  request.projectRequestStatus.name()  !=
'PENDING'}">
                        <i class="fa-solid fa-ban"></i>
                    </span>
```

```
                </td>
              </tr>
            </tbody>
          </table>
        </section>
    </main>
</body>
</html>
```

**PAYMENT.HTML**

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Freelancer Payment</title>
    <link rel="stylesheet" href="/style/fragment/common.css">
    <link rel="stylesheet" href="/style/client.payment.css">
    <link rel="stylesheet" href="/script/payment.js">

    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.7.2/css/all.min.css"
                                                                    integrity="sha512-
Evv84Mr4kqVGRNSgIGL/F/aIDqQb7xQ2vcrdIwxfjThSH8CSR7PBEakCr51Ck+w+/U6swU2Im1vVX0SVk
9ABhg=="
        crossorigin="anonymous" referrerpolicy="no-referrer" />
</head>
<body>
    <header data-th-replace="~{fragment/common :: header}"></header>
    <nav data-th-replace="~{fragment/common :: nav}"></nav>

    <div class="payment-container">
        <h2> Secure Payment</h2>
        <!-- Order Summary -->
        <div class="order-summary">
```

```
        <h3>📜 Order Summary</h3>
                                                    <p><strong>Freelancer:</strong> <span data-th-
text="${serviceRequest.freelancer.userName}"></span></p>
                                                    <p><strong>Service:</strong> <span data-th-
text="${serviceRequest.project.projectTitle}"></span></p>
        <p class="total"><strong>Price:</strong><span
            data-th-text="|$${serviceRequest.project.projectPrice}|"></span>
        </p>
    </div>
    <form id="payment-form">
        <!-- Billing Info -->
        <h3>👤 Billing Details</h3>
        <!-- Payment Method -->
        <h3>💰 Payment Method</h3>
        <div class="input-group">
            <label for="payment-method">Select Payment Method</label>
            <select id="payment-method">
                <option value="credit-card">Credit Card</option>
                <option value="paypal">PayPal</option>
                <option value="crypto">Cryptocurrency</option>
            </select>
        </div>
        <!-- Credit Card Details -->
        <div id="card-details" class="hidden">
            <div class="credit-card-preview">
                <div class="card-number-display">**** **** **** ****</div>
                <div class="card-name-display">Cardholder Name</div>
            </div>
            <div class="input-group">
                <label for="card-number">Card Number</label>
                <input type="text" id="card-number" placeholder="1234 5678 9012 3456" required>
            </div>
            <div class="input-group">
```

```
                <label for="card-name">Name on Card</label>
            <input type="text" id="card-name" placeholder="John Doe" required>
             </div>
             <div class="input-row">
                <div class="input-group">
                    <label for="expiry">Expiry Date</label>
                    <input type="text" id="expiry" placeholder="MM/YY" required>
                </div>
                <div class="input-group">
                    <label for="cvv">CVV</label>
                    <input type="text" id="cvv" placeholder="123" required>
                </div>
             </div>
          </div>
          <div class="paynow">
             <a type="submit"
          data-th-href="|/serviceRequest/approve?id=${serviceRequest.serviceRequestId}&status=approve|"> 💰
                Pay Now</a>
          </div>
       </form>
    </div>
    <footer data-th-replace="~{fragment/common :: footer}"></footer>
</body>
</html>
```

**SIGHUP.HTML**

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.4.2/css/all.min.css">
    <title>Login Page</title>
```

```
</head>
<body>
  <div class="container" id="container">
    <div class="form-container sign-upper">
      <form action="/client/sign_up" method="post" enctype="multipart/form-data">
        <h1>Create Account as a Client</h1>
        <div class="social-icons">
          <a href="#" class="icon"><i class="fa-brands fa-google-plus-g"></i></a>
          <a href="#" class="icon"><i class="fa-brands fa-facebook-f"></i></a>
          <a href="#" class="icon"><i class="fa-brands fa-github"></i></a>
          <a href="#" class="icon"><i class="fa-brands fa-linkedin-in"></i></a>
        </div>
        <input type="text" placeholder="Name" name="userName">
        <input type="email" placeholder="Email" name="userEmail">
        <input type="password" placeholder="Password" name="userPassword">
        <input type="password" placeholder="Confirm Your Password">
        <input type="tel" id="phone" placeholder="Enter Contact Information" name="userPhone"
          pattern="[0-9]{10}" required>
        <input type="text" placeholder="Add Bio" name="userBio">
        <input type="file" name="userProfilePic" id="userProfilePic">
        <textarea name="location" id="location" placeholder="Enter your Location"></textarea>
        <input type="hidden" name="_csrf" id="" data-th-value="${_csrf.token}">
        <input type="submit" value="Sign Up" style="background-color: royalblue;">
      </form>
    </div>
    <div class="form-container sign-up">
      <form action="/freelancer/signup" method="post" enctype="multipart/form-data">
        <h1>Create Account as a Freelancer</h1>
        <div class="social-icons">
          <a href="#" class="icon"><i class="fa-brands fa-google-plus-g"></i></a>
          <a href="#" class="icon"><i class="fa-brands fa-facebook-f"></i></a>
          <a href="#" class="icon"><i class="fa-brands fa-github"></i></a>
```

```
            <a href="#" class="icon"><i class="fa-brands fa-linkedin-in"></i></a>
        </div>
        <input type="text" placeholder="Name" name="userName">
        <input type="email" placeholder="Email" name="userEmail">
        <input type="password" placeholder="Password" name="userPassword">
        <input type="password" placeholder="Confirm Your Password">
        <input type="tel" id="phone" placeholder="Enter Contact Information" name="userPhone"
            pattern="[0-9]{10}" required>
        <input type="text" placeholder="Add Bio" name="userBio">
        <input type="file" name="userProfilePic" id="userProfilePic">
        <textarea name="language" id="language" placeholder="like english, hindi, etc...."></textarea>
        <input type="text" placeholder="Specialization like: Web Deveplopment" name="specialization">
        <input type="text" placeholder="Years of Experience (in number)" name="yearsExperience">
        <textarea name="skills" id="skills" placeholder="Skills: like java, python, etc...."></textarea>
        <textarea name="location" id="location" placeholder="Enter your Location"></textarea>
        <input type="hidden" name="_csrf" id="" data-th-value="${_csrf.token}">
        <input type="submit" value="Sign Up" style="background-color: royalblue;">
    </form>
</div>
<div class="toggle-container">
    <div class="toggle">
        <div class="toggle-panel toggle-left">
            <h1>Hello, Friend!</h1>
            <p>Enter your personal details to use all of site features for freelancers </p>
            <button class="hidden" id="login">Sign Up</button>
        </div>
        <div class="toggle-panel toggle-right">
            <h1>Hello, Friend!</h1>
            <p>Register with your personal details to use all features for clients</p>
            <button class="hidden" id="register">Sign Up</button>
        </div>
    </div>
```

```
    </div>
  </div>
  <script src="/script/sign_up.js"></script>
</body>
</html>
```

**ADMIN FOLDER:-**

**ADMINDASHBOARD.HTML**

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>ProConnect Admin Dashboard</title>
  <link rel="stylesheet" href="/style/admin/admindashboard.css">
  <link rel="preconnect" href="https://fonts.googleapis.com">
    <link href="https://fonts.googleapis.com/css2?family=Poppins:wght@300;400;600&display=swap" rel="stylesheet">
  <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.7.2/css/all.min.css"
                                                                    integrity="sha512-Evv84Mr4kqVGRNSgIGL/F/aIDqQb7xQ2vcrdIwxfjThSH8CSR7PBEakCr51Ck+w+/U6swU2Im1vVX0SVk9ABhg=="
    crossorigin="anonymous" referrerpolicy="no-referrer" />
</head>
<body>
  <div class="dashboard-container">
    <aside class="sidebar">
      <h2>ProConnect</h2>
      <ul>
        <li><a href="#"><i class="fa fa-home" aria-hidden="true"></i>Dashboard</a></li>
        <li><a href="/admin/category"><i class="fas fa-users"></i> Category</a></li>
        <li><a href="/admin/usermanagment"><i class="fas fa-briefcase"></i>User Managment</a></li>
          <li><a href="/admin/freelancermanagment"><i class="fas fa-briefcase"></i>Freelancer Managment</a></li>
        <li><a href="/admin/report"><i class="fa-solid fa-chart-simple"></i> Report and Analytics</a></li>
```

```
        <li><a href="#"><i class="fas fa-sign-out-alt"></i>Logout</a></li>
    </ul>
</aside>
<main class="content">
    <header>
        <h1>Admin Dashboard</h1>
    </header>
    <section class="stats">
        <div class="stat-box">
            <h3>Users</h3>
            <p>1,245</p>
        </div>
        <div class="stat-box">
            <h3>Active Jobs</h3>
            <p>320</p>
        </div>
        <div class="stat-box">
            <h3>Earnings</h3>
            <p>$45,210</p>
        </div>
        <div class="stat-box">
            <h3>Disputes</h3>
            <p>12</p>
        </div>
    </section>
    <section class="jobs">
        <h2>Recent Job Listings</h2>
        <table>
            <thead>
                <tr>
                    <th>Job Title</th>
                    <th>Client</th>
```

```
            <th>Budget</th>
            <th>Status</th>
          </tr>
        </thead>
        <tbody>
          <tr>
            <td>Web Developer Needed</td>
            <td>John Doe</td>
            <td>$1,500</td>
            <td>Active</td>
          </tr>
          <tr>
            <td>Graphic Designer</td>
            <td>Jane Smith</td>
            <td>$800</td>
            <td>Completed</td>
          </tr>
          <tr>
            <td>SEO Specialist</td>
            <td>Michael Brown</td>
            <td>$1,200</td>
            <td>Active</td>
          </tr>
          <tr>
            <td>Tester </td>
            <td>Mikal jaikson</td>
            <td>$1,000</td>
            <td>Active</td>
          </tr>
        </tbody>
      </table>
    </section>
```

```
    </main>
  </div>
</body>
</html>
```

**CATEGORY.HTML**

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <link rel="stylesheet" href="../style/admin/admindashboard.css">
  <link rel="stylesheet" href="../style/admin/category.css">
  <link rel="preconnect" href="https://fonts.googleapis.com">
      <link href="https://fonts.googleapis.com/css2?family=Poppins:wght@300;400;600&display=swap" rel="stylesheet">
  <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.7.2/css/all.min.css"
                                                                                integrity="sha512-Evv84Mr4kqVGRNSgIGL/F/aIDqQb7xQ2vcrdIwxfjThSH8CSR7PBEakCr51Ck+w+/U6swU2Im1vVX0SVk9ABhg=="
    crossorigin="anonymous" referrerpolicy="no-referrer" />
</head>
<body>
  <aside data-th-replace="~{admin/admindashboard :: aside}"></aside>
  <main class="content">
    <h1>Admin Dashboard</h1>
    <div class="search-container">
      <input type="text" id="pageSearchBar" placeholder="Search categories..." class="searchbar">
    </div>
    <button onclick="openModal()">Add Category</button>
    <div id="categoryModal" class="modal" style="display: none;">
      <h2>Add Category</h2>
       <form id="categoryForm" method="post" action="/admin/admin/category" enctype="multipart/form-data">
```

```
            <input type="hidden" id="categoryId" name="categoryId">
            <input type="hidden" id="categoryImages" name="categoryImages">
            <label for="categoryName">Category Name:</label>
            <input type="text" name="categoryName" id="categoryName">
            <label for="categoryDescription">Category Description:</label>
            <input type="text" name="categoryDescription" id="categoryDescription">
            <label for="categoryImage">Category Image:</label>
            <input type="file" name="categoryImageFile" id="categoryImage" accept="image/png, image/jpeg, image/jpg">
            <label for="categoryStatus">Category Status:</label>
            <select id="categoryStatus" name="categoryStatus">
                <option value="AVAILABLE">Available</option>
                <option value="UNAVAILABLE">Unavailable</option>
            </select>
            <input type="hidden" name="_csrf" id="" data-th-value="${_csrf.token}">
            <input type="submit" value="Add">
        </form>
        <button onclick="closeModal()">Cancel</button>
    </div>
    <table border="1">
        <thead>
            <tr>
                <th>Category Name</th>
                <th>Category Description</th>
                <th>Image</th>
                <th>Status</th>
                <th>Action</th>
            </tr>
        </thead>
        <tbody id="categoryTableBody">
            <tr data-th-each="category:${categories}">
                <td data-th-text="${category.categoryName}"></td>
```

```
            <td data-th-text="${category.categoryDescription}"></td>
            <td><img data-th-src="|category/image/${category.categoryId}|" alt="" height="40"></td>
            <td data-th-text="${category.categoryStatus}"></td>
            <td>
                                                                    <button class="edit-btn" data-th-
onclick="openModal([[${category.categoryId}]])">Edit</button>
                    <a data-th-href="|/admin/category/delete?category=${category.categoryId}|" class="delete-
btn">Delete</a>
            </td>
          </tr>
        </tbody>
      </table>
  </main>
  <script src="/script/admin_category.js"></script>
</body>
</html>
```

**FREELANCERMANAGMENT.HTML**

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Freelancer Managment</title>
  <link rel="stylesheet" href="/style/admin/admindashboard.css">
  <link rel="preconnect" href="https://fonts.googleapis.com">
      <link href="https://fonts.googleapis.com/css2?family=Poppins:wght@300;400;600&display=swap"
rel="stylesheet">
  <link rel="stylesheet" href="  /../style/admin/usermanagment.css">
  <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.7.2/css/all.min.css"
                                                                    integrity="sha512-
Evv84Mr4kqVGRNSgIGL/F/aIDqQb7xQ2vcrdIwxfjThSH8CSR7PBEakCr51Ck+w+/U6swU2Im1vVX0SVk
9ABhg=="
    crossorigin="anonymous" referrerpolicy="no-referrer" />
</head>
```

```
<body>
    <aside data-th-replace="~{admin/admindashboard :: aside}"></aside>
    <main class="content">
        <h1>Freelancer Management</h1>
        <p>Manage platform users, edit details, or remove accounts.</p>
        <table class="user-table">
            <tr>
                <th>Name</th>
                <th>Email</th>
                <th>Completed project</th>
                <th>Total client</th>
                <th>Language</th>
                <th>Year of experience</th>
                <th>Specialization</th>
                <th>Skill</th>
                <th>Location</th>
            </tr>
            <tr data-th-each="freelancer:${freelancers}">
                <td data-th-text="${freelancer.userName}"></td>
                <td data-th-text="${freelancer.userEmail}"></td>
                <td>10</td>
                <td>12</td>
                <td data-th-text="${freelancer.language}"></td>
                <td data-th-text="${freelancer.yearsExperience}"></td>
                <td data-th-text="${freelancer.specialization}"></td>
                <td data-th-text="${freelancer.skills}"></td>
                <td data-th-text="${freelancer.location}"></td>
            </tr>
        </table>
    </main>
</body>
</html>
```

**USERMANAGMENT.HTML**

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>User Managment</title>
    <link rel="stylesheet" href="/style/admin/admindashboard.css">
    <link rel="preconnect" href="https://fonts.googleapis.com">
        <link     href="https://fonts.googleapis.com/css2?family=Poppins:wght@300;400;600&display=swap"
rel="stylesheet">
    <link rel="stylesheet" href="  /../style/admin/usermanagment.css">
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.7.2/css/all.min.css"
                                                                                integrity="sha512-
Evv84Mr4kqVGRNSgIGL/F/aIDqQb7xQ2vcrdIwxfjThSH8CSR7PBEakCr51Ck+w+/U6swU2Im1vVX0SVk
9ABhg=="
      crossorigin="anonymous" referrerpolicy="no-referrer" />
</head>
<body>
    <aside data-th-replace="~{admin/admindashboard :: aside}"></aside>
    <main class="content">
      <h1>User Management</h1>
      <p>Manage platform users, edit details, or remove accounts.</p>
      <table class="user-table">
        <tr>
          <th>Name</th>
          <th>Email</th>
          <th>Role</th>
          <th>Bio</th>
          <th>Phone</th>
          <th>Image</th>
          <th>Location</th>
        </tr>
```

```
        <tr data-th-each="user: ${users}">
          <td data-th-text="${user.userName}"></td>
          <td data-th-text="${user.userEmail}"></td>
          <td data-th-text="${user.userType}"></td>
          <td data-th-text="${user.userBio}"></td>
          <td data-th-text="${user.userPhone}"></td>
          <td><img data-th-src="|/client/image/${user.userId}|" alt="" width="50"></td>
          <td data-th-text="${user.location}"></td>
        </tr>
      </table>
    </main>
</body>
</html>
```

**FREELANCER FOLDER:-**

**FREELANCERDASHBOARD.HTML**

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>ProConnect Admin Dashboard</title>
    <link rel="stylesheet" href="../style/admin/admindashboard.css">
    <link rel="stylesheet" href="../style/admin/category.css">
    <link rel="stylesheet" href="../style/freelancer/freelancerdashboard.css">
    <link rel="preconnect" href="https://fonts.googleapis.com">
        <link     href="https://fonts.googleapis.com/css2?family=Poppins:wght@300;400;600&display=swap"
rel="stylesheet">
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.7.2/css/all.min.css"
                                                                                integrity="sha512-
Evv84Mr4kqVGRNSgIGL/F/aIDqQb7xQ2vcrdIwxfjThSH8CSR7PBEakCr51Ck+w+/U6swU2Im1vVX0SVk
9ABhg=="
      crossorigin="anonymous" referrerpolicy="no-referrer" />
</head>
```

```
<body>
  <div class="dashboard-container">
    <aside class="sidebar">
      <h2>ProConnect</h2>
      <ul>
        <li><a href="#"><i class="fa fa-home" aria-hidden="true"></i>Dashboard</a></li>
        <li><a href="/freelancer/project"><i class="fas fa-project-diagram"></i> Projects</a></li>
        <li><a href="/freelancer/earning"><i class="fas fa-dollar-sign"></i> Earnings</a></li>
        <li><a href="/freelancer/servicerequest"><i class="fas fa-users"></i>Service Request</a></li>
            <li><a href="/freelancer/projectRequest"><i class="fas fa-briefcase"></i>Project Complete Req.</a></li>
        <li><a href="/freelancer/profile"><i class="fas fa-money-bill"></i> Profile</a></li>
        <li><a href="#"><i class="fas fa-sign-out-alt"></i>Logout</a></li>
      </ul>
    </aside>
  </div>
  <main class="content">
    <header>
      <h1>Freelancer Dashboard</h1>
    </header>
    <section class="stats">
      <div class="stat-box">
        <i class="fas fa-briefcase card-icon"></i>
        <h3>Ongoing Projects</h3>
        <p>5</p>
      </div>
      <div class="stat-box">
        <i class="fas fa-dollar-sign card-icon"></i>
        <h3>Pending Payments</h3>
        <p>$2,300</p>
      </div>
      <div class="stat-box">
```

```
            <i class="fas fa-file-alt card-icon"></i>
            <h3>Completed project</h3>
            <p>12</p>
          </div>
      </section>
</body>
</html>
```

**PROJECT.HTML**

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Freelancer Dashboard</title>
   <link rel="stylesheet" href="/style/admin/admindashboard.css">
   <link rel="stylesheet" href="../style/admin/category.css">
   <link rel="preconnect" href="https://fonts.googleapis.com">
        <link     href="https://fonts.googleapis.com/css2?family=Poppins:wght@300;400;600&display=swap"
rel="stylesheet">
   <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.7.2/css/all.min.css"
                                                                                integrity="sha512-
Evv84Mr4kqVGRNSgIGL/F/aIDqQb7xQ2vcrdIwxfjThSH8CSR7PBEakCr51Ck+w+/U6swU2Im1vVX0SVk
9ABhg=="  crossorigin="anonymous" referrerpolicy="no-referrer" />
</head>
<body>
   <aside data-th-replace="~{freelancer/freelancerdashboard :: aside}"></aside>
   <main class="content">
      <h1>Freelancer Dashboard</h1>
      <div class="search-container">
         <input type="text" id="pageSearchBar" placeholder="Search categories..." class="search-bar">
      </div>
      </div>
      <table border="1">
```

```
        <thead>
          <tr>
            <th>Project Name</th>
            <th>Project Description</th>
            <th>Image</th>
            <th>Status</th>
            <th>Action</th>
          </tr>
        </thead>
        <tbody id="projectTableBody">
                        <tr data-th-if="${freelancer != null and freelancer.projects != null and
#lists.isEmpty(freelancer.projects)}"
            style="color: red;">
            No Project Yet!!
          </tr>
          <tr
             data-th-each="project : ${freelancer != null and freelancer.projects != null ? freelancer.projects :
{}}">
            <td data-th-text="${project.projectTitle}"></td>
            <td data-th-text="${project.projectDescription}"></td>
            <td><img data-th-src="|/client/myproject/${project.projectId}|" alt="" width="50"></td>
            <td data-th-text=" ${project.projectStatus}"></td>
            <td>
              <span data-th-if="${project.projectStatus != 'COMPLETED'}">
                <a data-th-href="|/projectRequest/apply?id=${project.projectId}|">Completion Request</a>
              </span>
              <span data-th-if="${project.projectStatus == 'COMPLETED'}">
                <i class="fa-solid fa-check-double"></i>
              </span>
            </td>
          </tr>
        </tbody>
      </table>
```

```
    </main>
    <script src="/script/project.js"></script>
</body>
</html>
```

**PROJECTREQUST.HTML**

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Service Request</title>
    <link rel="stylesheet" href="../style/admin/admindashboard.css">
    <link rel="stylesheet" href="/style/client.request.css">
    <link rel="preconnect" href="https://fonts.googleapis.com">
        <link     href="https://fonts.googleapis.com/css2?family=Poppins:wght@300;400;600&display=swap"
rel="stylesheet">
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.7.2/css/all.min.css"
                                                                                integrity="sha512-
Evv84Mr4kqVGRNSgIGL/F/aIDqQb7xQ2vcrdIwxfjThSH8CSR7PBEakCr51Ck+w+/U6swU2Im1vVX0SVk
9ABhg==” crossorigin="anonymous" referrerpolicy="no-referrer" />
</head>
<body>
    <aside data-th-replace="~{freelancer/freelancerdashboard :: aside}"></aside>
    <main class="content">
        <header>
            <h1>Welcome, Freelancer</h1>
        </header>
        <section class="projects">
            <h1>Your Project Requests</h1>
            <!-- <button class="add-project-btn" onclick="openModal()">Add New Project</button> -->
            <table>
                <thead>
                    <tr>
```

```
                <th>Client Name</th>
                <th>Project Title</th>
                <th>Image</th>
                <th>Price</th>
                <th>Category</th>
                <th>Status</th>
                <th>Action</th>
            </tr>
        </thead>
        <tbody id="projectTable">
            <tr data-th-each="request : ${freelancer.projectRequests}">
                <td data-th-text="${request.client.userName}"></td>
                <td data-th-text="${request.project.projectTitle}"></td>
                <td>Image</td>
                <td data-th-text="${request.project.projectPrice}"></td>
                <td data-th-text="${request.project.category.categoryName}"></td>
                <td data-th-text="${request.projectRequestStatus}"></td>
                <td>
                    <!-- <span data-th-if="${request.projectRequestStatus.name() != 'CANCELED'}"></span>
-->
                    <span data-th-if="${request.projectRequestStatus.name() == 'PENDING'}">
                        <a class="cancel-btn"
                                                                                    data-th-
href="|/projectRequest/approve?id=${request.projectRequestId}&status=canceled|">Cancel</a>
                    </span>
                    <span
                                        data-th-if="${request.projectRequestStatus.name() == 'CANCELED' or
request.projectRequestStatus.name() == 'REJECTED'}">
                        <i class="fa-solid fa-ban"></i>
                    </span>
                    <span data-th-if="${request.projectRequestStatus.name() == 'APPROVED'}">
                        <i class="fa-solid fa-circle-check"></i>
                    </span>
```

```
                </td>
            </tr>
        </tbody>
    </table>
</section>
</main>
</body>
</html>
```

**SERVICEREQUEST.HTML**

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Service Request</title>
    <link rel="stylesheet" href="../style/admin/admindashboard.css">
    <link rel="stylesheet" href="/style/client.request.css">
    <link rel="preconnect" href="https://fonts.googleapis.com">
        <link href="https://fonts.googleapis.com/css2?family=Poppins:wght@300;400;600&display=swap"
rel="stylesheet">
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.7.2/css/all.min.css"
                                                                    integrity="sha512-
Evv84Mr4kqVGRNSgIGL/F/aIDqQb7xQ2vcrdIwxfjThSH8CSR7PBEakCr51Ck+w+/U6swU2Im1vVX0SVk
9ABhg=="
    crossorigin="anonymous" referrerpolicy="no-referrer" />
</head>
<body>
    <aside data-th-replace="~{freelancer/freelancerdashboard :: aside}"></aside>
    <main class="content">
        <header>
            <h1>Welcome, Freelancer</h1>
        </header>
        <section class="projects">
```

```
<h1>Your Service Requests</h1>
<!-- <button class="add-project-btn" onclick="openModal()">Add New Project</button> -->
<table>
  <thead>
    <tr>
      <th>Client Name</th>
      <th>Project Title</th>
      <th>Image</th>
      <th>Price</th>
      <th>Category</th>
      <th>Status</th>
      <th>Action</th>
    </tr>
  </thead>
  <tbody id="projectTable">
    <tr data-th-each="request : ${freelancer.serviceRequests}">
      <td data-th-text="${request.client.userName}"></td>
      <td data-th-text="${request.project.projectTitle}"></td>
      <td>Image</td>
      <td data-th-text="${request.project.projectPrice}"></td>
      <td data-th-text="${request.project.category.categoryName}"></td>
      <td data-th-text="${request.serviceRequestStatus}"></td>
      <td>
        <span data-th-if="${request.serviceRequestStatus.name() == 'PENDING'}">
          <a class="cancel-btn"
                                                                    data-th-
href="|/serviceRequest/approve?id=${request.serviceRequestId}&status=canceled|">Cancel</a>
        </span>
        <span
                                data-th-if="${request.serviceRequestStatus.name() == 'CANCELED' or
request.serviceRequestStatus.name() == 'REJECTED'}">
          <i class="fa-solid fa-ban"></i>
        </span>
```

```
                    <span data-th-if="${request.serviceRequestStatus.name() == 'APPROVED'}">
                        <i class="fa-solid fa-circle-check"></i>
                    </span>
                </td>
            </tr>
        </tbody>
    </table>
</section>
</main>
</body>
</html>
```

**CONTROLLERS :-**

**ADMINDASHBOARDCONTROLLER .JAVA**

```
package edu.rims.pro_connect.controller;
import java.io.FileInputStream;
// import java.io.FileNotFoundException;
import java.io.FileOutputStream;
import java.io.IOException;
import java.util.List;
import java.util.UUID;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Controller;
import org.springframework.ui.Model;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RequestParam;
import org.springframework.web.bind.annotation.ResponseBody;
import edu.rims.pro_connect.constant.CategoryStatus;
import edu.rims.pro_connect.constant.UserType;
import edu.rims.pro_connect.dto.CategoryResponseDTO;
import edu.rims.pro_connect.entity.Category;
import edu.rims.pro_connect.entity.Freelancer;
import edu.rims.pro_connect.entity.User;
```

```
import edu.rims.pro_connect.repository.CategoryRepository;
import edu.rims.pro_connect.repository.FreelancerRepository;
import edu.rims.pro_connect.repository.UserRepository;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.ModelAttribute;
import org.springframework.web.bind.annotation.PathVariable;
import org.springframework.web.bind.annotation.PostMapping;
//import org.springframework.web.bind.annotation.RequestBody;
import org.springframework.web.multipart.MultipartFile;
@Controller
@RequestMapping("/admin")
public class AdmindashboardController {
private final FreelancerRepository freelancerRepository;
 @Autowired
 private CategoryRepository categoryRepository;
 @Autowired
 private UserRepository userRepository
 AdmindashboardController(FreelancerRepository freelancerRepository) {
  this.freelancerRepository = freelancerRepository;
 }
 @GetMapping("/admindashboard")
 String admindashboard() {
  return "admin/admindashboard";
 }
 @GetMapping("/category")
 String admincategory(Model model) {
  List<Category> categories = categoryRepository.findAll();
  model.addAttribute("categories", categories);
  return "admin/category";
 }
 @PostMapping("/admin/category")
```

```
  public String categoryAdd(@ModelAttribute Category category, @RequestParam("categoryImageFile")
MultipartFile file, @RequestParam(required = false) String categoryImages)
    throws IOException {


   String categoryId = category.getCategoryId();
   category.setCategoryId(categoryId == null || categoryId.isEmpty()? null : categoryId);
   if (!file.isEmpty()) {
    String originalFilename = file.getOriginalFilename();
    String extName = originalFilename.substring(originalFilename.lastIndexOf("."));
    String fileName = "upload_images/" + UUID.randomUUID().toString() + extName;
    FileOutputStream fileOutputStream = new FileOutputStream(fileName);
    fileOutputStream.write(file.getBytes());
    fileOutputStream.close();
    category.setCategoryImageUrl(fileName);
   }else if (categoryImages != null) {
    category.setCategoryImageUrl(categoryImages);
   }
   categoryRepository.save(category);
   return "redirect:/admin/category";
  }
  @GetMapping(value = "/category/image/{categoryId}", produces = { "image/jpg", "image/jpeg", "image/png"
})
  @ResponseBody
  public byte[] getImage(@PathVariable String categoryId) throws IOException {
   Category category = categoryRepository.findById(categoryId).orElseThrow();
   String categoryImageUrl = category.getCategoryImageUrl();
   if (categoryImageUrl == null || categoryImageUrl.startsWith("http")) {
    return null;
   }
   FileInputStream fis = new FileInputStream(categoryImageUrl);
   byte[] image = fis.readAllBytes();
   fis.close();
   return image;
```

```
}
@GetMapping("/category/delete")
public String deleteCategory(@RequestParam("category") String categoryId) {
    Category category = categoryRepository.findById(categoryId).orElseThrow();
    category.setCategoryStatus(CategoryStatus.UNAVAILABLE.toString());
    categoryRepository.save(category);
    return "redirect:/admin/category";
}
@GetMapping("/usermanagment")
String adminusermanagment(Model model) {
  List<User> users = userRepository.findByUserType(UserType.CLIENT);
  model.addAttribute("users", users);
  return "admin/usermanagment";
}
@GetMapping("/freelancermanagment")
String adminFreelancermanagment(Model model) {
  List<Freelancer> freelancers = freelancerRepository.findByUserType(UserType.FREELANCER);
  model.addAttribute("freelancers", freelancers);
  return "admin/freelancermanagment";
}
@GetMapping("/report")
String adminreport() {
  return "admin/report";
}
@GetMapping("/category/{categoryId}")
@ResponseBody
public CategoryResponseDTO getcategory(@PathVariable String categoryId){
Category category=categoryRepository.findById(categoryId).orElseThrow();
CategoryResponseDTO dto = new CategoryResponseDTO();
dto.setCategoryId(categoryId);
dto.setCategoryName(category.getCategoryName());
dto.setCategoryDescription(category.getCategoryDescription());
```

```
  dto.setCategoryImageUrl(category.getCategoryImageUrl());
  dto.setCategoryStatus(category.getCategoryStatus());
    return dto;
  }
}
```

**CLIENTDASHBOARDCONTOLLER.JAVA**

```
package edu.rims.pro_connect.controller;
import java.io.FileInputStream;
import java.io.FileOutputStream;
import java.io.IOException;
import java.security.Principal;
import java.time.LocalDate;
import java.util.List;
import java.util.UUID;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Controller;
import org.springframework.ui.Model;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.ModelAttribute;
import org.springframework.web.bind.annotation.PathVariable;
import org.springframework.web.bind.annotation.PostMapping;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RequestParam;
import org.springframework.web.bind.annotation.ResponseBody;
import org.springframework.web.multipart.MultipartFile;
import edu.rims.pro_connect.constant.CategoryStatus;
import edu.rims.pro_connect.constant.ProjectStatus;
import edu.rims.pro_connect.dto.ProjectResponseDTO;
import edu.rims.pro_connect.dto.ProjectResponseDTO.CategoryResponse;
import edu.rims.pro_connect.entity.Category;
import edu.rims.pro_connect.entity.Client;
import edu.rims.pro_connect.entity.Project;
```

```
import edu.rims.pro_connect.entity.User;
import edu.rims.pro_connect.repository.CategoryRepository;
import edu.rims.pro_connect.repository.ClientRepository;
import edu.rims.pro_connect.repository.ProjectRepository;
import edu.rims.pro_connect.repository.UserRepository;
import edu.rims.pro_connect.service.UserService;
@Controller
@RequestMapping("/client")
public class ClientdashboardController {
    @Autowired
    private CategoryRepository categoryRepository;
    @Autowired
    private ProjectRepository projectRepository;
    @Autowired
    private ClientRepository clientRepository;
    @Autowired
    private UserService userService;
    @GetMapping("/clientdashboard")
    String clientdashboard() {
        return "client/clientdashboard";
    }
    @GetMapping("/profile")
    String clientprofile(Principal principal, Model model) {
        Client client = clientRepository.findByUserEmail(principal.getName());
        model.addAttribute("user", client);
        return "client/profile";
    }
    @GetMapping("/request")
    String clientrequest(Model model) {
        User user = clientRepository.findById(1).orElseThrow();
        model.addAttribute("user", user);
        return "client/request";
```

```
    }
    @GetMapping("/myproject")
    String clientmyproject(Model model, Principal principal) {
        // User user = userService.getUser(principal.getName());
        Client user1 = clientRepository.findByUserEmail(principal.getName());
        List<Category> categories = categoryRepository.findAll();
        model.addAttribute("user", user1);
        model.addAttribute("categories", categories);
        return "client/myproject";
    }
    @PostMapping("/myproject")
     String clientmyproject(@ModelAttribute Project project, @RequestParam("projectImage") MultipartFile file,
            @RequestParam("projectImageName") String imageName, Principal principal)
            throws IOException {
        String projectId = project.getProjectId();
        project.setProjectId(projectId == null || projectId.isEmpty() ? null : projectId);
        if (!file.isEmpty()) {
            String originalFilename = file.getOriginalFilename();
            String extName = originalFilename.substring(originalFilename.lastIndexOf("."));
            String fileName = "upload_images/" + UUID.randomUUID().toString() + extName;
            FileOutputStream fileOutputStream = new FileOutputStream(fileName);
            fileOutputStream.write(file.getBytes());
            fileOutputStream.close();
            project.setProjectImageUrl(fileName);
        } else if (imageName != null) {
            project.setProjectImageUrl(imageName);
        }
        int userId = userService.getuserId(principal.getName());
        Client client2 = clientRepository.findById(userId).orElseThrow();
        project.setClient(client2);
        project.setCreatedDate(LocalDate.now());
```

```
    project.setProjectStatus(ProjectStatus.OPEN.toString());
    projectRepository.save(project);
    return "redirect:/client/myproject";
}
@GetMapping("/myproject/{projectId}")
@ResponseBody
byte[] getImage(@PathVariable String projectId)
        throws IOException {
    Project project = projectRepository.findById(projectId).orElseThrow();
    String imageUrl = project.getProjectImageUrl();
    if (imageUrl == null) {
        return null;
    }
    FileInputStream fis = new FileInputStream(imageUrl);
    return fis.readAllBytes();
}
@GetMapping("/myproject/delete")
public String deletemyproject(@RequestParam("project") String projectId) {
    Project project = projectRepository.findById(projectId).orElseThrow();
    project.setProjectStatus(ProjectStatus.CANCELED.toString());
    projectRepository.save(project);
    return "redirect:/client/myproject";
}
@GetMapping("/reviewrating")
String clientreviewrating() {
    return "client/reviewrating";
}
@GetMapping("/projectRequest")
String clientProjectRequest(Model model) {
    User user = clientRepository.findById(1).orElseThrow();
    model.addAttribute("user", user);
    return "client/projectRequest";
```

```
    }
    @GetMapping("/myprojectedit/{id}")
    @ResponseBody
    ProjectResponseDTO myProjectEdit(@PathVariable String id) {
        Project project = projectRepository.findById(id).orElseThrow();

        ProjectResponseDTO dto = new ProjectResponseDTO();
        dto.setProjectId(project.getProjectId());
        dto.setProjectTitle(project.getProjectTitle());
        dto.setProjectPrice(project.getProjectPrice());
        dto.setProjectDescription(project.getProjectDescription());
        dto.setProjectImageUrl(project.getProjectImageUrl());
        dto.setProjectStatus(project.getProjectStatus());
        CategoryResponse categoryResponse = dto.new CategoryResponse();
        categoryResponse.setCategoryId(project.getCategory().getCategoryId());
        categoryResponse.setCategoryName(project.getCategory().getCategoryName());
        dto.setCategory(categoryResponse);
        return dto;
    }
}
```

**FREELANCERBOARDCONTROLLER.JAVA**

```
package edu.rims.pro_connect.controller;
import java.security.Principal;
import java.util.List;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Controller;
import org.springframework.ui.Model;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.RequestMapping;
import edu.rims.pro_connect.entity.Freelancer;
import edu.rims.pro_connect.entity.ServiceRequest;
```

```
import edu.rims.pro_connect.entity.User;
import edu.rims.pro_connect.repository.FreelancerRepository;
import edu.rims.pro_connect.repository.ProjectRepository;
import edu.rims.pro_connect.repository.ServiceRequestRepository;
import jakarta.transaction.Transactional;
@Controller
@RequestMapping("/freelancer")
public class FreelancerdashboardController {
  @Autowired
  private ProjectRepository projectRepository;
  @Autowired
  private FreelancerRepository freelancerRepository;
  @Autowired
  private ServiceRequestRepository serviceRequestRepository;
  @GetMapping("/freelancerdashboard")
  String freelancerdashboard() {
    return "freelancer/freelancerdashboard";
  }
  @Transactional
  @GetMapping("/project")
  String freelancerproject(Principal principal, Model model) {
    Freelancer freelancer = freelancerRepository.findByUserEmail(principal.getName());
    System.out.println(freelancer.getProjects().size());
    model.addAttribute("freelancer", freelancer);
    return "freelancer/project";
  }
  @GetMapping("/earning")
  String freelancerearning(Principal principal, Model model) {
    Freelancer freelancer = freelancerRepository.findByUserEmail(principal.getName());
    model.addAttribute("projects", freelancer.getProjects());
    return "freelancer/earning";
  }
```

```
  @Transactional
  @GetMapping("/servicerequest")
  String freelancerServiceRequest(Principal principal, Model model) {
    Freelancer freelancer = freelancerRepository.findByUserEmail(principal.getName());
    model.addAttribute("freelancer", freelancer);
    System.out.println(freelancer.getServiceRequests().size());
    return "freelancer/servicerequest";
  }
  @Transactional
  @GetMapping("/projectRequest")
  String freelancerProjectRequest(Principal principal, Model model) {
    Freelancer freelancer = freelancerRepository.findByUserEmail(principal.getName());
    model.addAttribute("freelancer", freelancer);
    System.out.println(freelancer.getServiceRequests().size());
    return "freelancer/projectRequest";
  }
  @GetMapping("/profile")
  String freelancerprofile(Principal principal, Model model) {
    Freelancer freelancer = freelancerRepository.findByUserEmail(principal.getName());
    model.addAttribute("freelancer", freelancer);
    return "freelancer/profile";
  }
}
```

**CLIENTCONTROLLER.JAVA**

```
package edu.rims.pro_connect.controller;
import java.io.FileInputStream;
import java.io.FileOutputStream;
import java.io.IOException;
import java.time.LocalDate;
import java.util.UUID;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Controller;
```

```
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RequestParam;
import org.springframework.web.bind.annotation.ResponseBody;
import org.springframework.web.multipart.MultipartFile;
import edu.rims.pro_connect.constant.UserType;
import edu.rims.pro_connect.entity.Client;
import edu.rims.pro_connect.entity.User;
import edu.rims.pro_connect.repository.ClientRepository;
import edu.rims.pro_connect.repository.UserRepository
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.ModelAttribute;
import org.springframework.web.bind.annotation.PathVariable;
import org.springframework.web.bind.annotation.PostMapping;
@Controller
@RequestMapping("/client")
public class ClientController {
  @Autowired
  private ClientRepository clientRepository;
  @GetMapping("/home")
  String clienthome() {
    return "client/home";
  }
  @GetMapping("/solution")
  public String solution() {
    return "client/solution";
  }
  @GetMapping("/howitworks")
  public String howitworks() {
    return "client/howitworks";
  }
  @GetMapping("/contact")
  public String contact() {
```

```
    return "client/contact";
  }
  @PostMapping("/signup")
  String signUpClient(@ModelAttribute Client client, @RequestParam("userProfilePic") MultipartFile file)
      throws IOException {
    if (!file.isEmpty()) {
      String originalFilename = file.getOriginalFilename();
      String extName = originalFilename.substring(originalFilename.lastIndexOf("."));
      String fileName = "upload_images/" + UUID.randomUUID().toString() + extName;
      FileOutputStream fileOutputStream = new FileOutputStream(fileName);
      fileOutputStream.write(file.getBytes());
      fileOutputStream.close();
    client.setUserProfilePicture(fileName);
    }
    client.setCreatedDate(LocalDate.now());
    client.setUserType(UserType.CLIENT);
    clientRepository.save(client);
    return "redirect:/login/login";
  }
  @GetMapping("/image/{id}")
  @ResponseBody
  byte[] clientGetImage(@PathVariable int id) throws IOException {
    User user = clientRepository.findById(id).orElseThrow();
    String image = user.getUserProfilePicture();
    FileInputStream fileInputStream = new FileInputStream(image);
    return fileInputStream.readAllBytes();
  }
}
```

**CATEGORY.JAVA**

```
package edu.rims.pro_connect.controller;
import java.util.List;
import org.springframework.beans.factory.annotation.Autowired;
```

```
import org.springframework.stereotype.Controller;
import org.springframework.ui.Model;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RequestParam;
import edu.rims.pro_connect.constant.CategoryStatus;
import edu.rims.pro_connect.constant.ProjectStatus;
import edu.rims.pro_connect.entity.Category;
import edu.rims.pro_connect.entity.Project;
//import edu.rims.pro_connect.entity.Freelancer;
import edu.rims.pro_connect.repository.CategoryRepository;
import edu.rims.pro_connect.repository.ProjectRepository;
@Controller
@RequestMapping("/category")
public class CategoryController {
    @Autowired
    private CategoryRepository categoryRepository;

    @Autowired
    private ProjectRepository projectRepository;

    @GetMapping("/category")
    public String category(Model model) {
        List<Category> categories = categoryRepository.findAll();
        model.addAttribute("categories", categories);
        return "client/category";
    }
    @GetMapping("/category/search")
    public String searchCategory(@RequestParam("search") String categoryName,Model model) {
        List<Category> categories = categoryRepository.
                                    findByCategoryNameContainingIgnoreCaseAndCategoryStatus(categoryName,
CategoryStatus.AVAILABLE.toString());
```

```
    model.addAttribute("categories", categories);
    return "client/category";
  }
  @GetMapping("/freelancer")
  public String categoryProjectList(Model model, @RequestParam String categoryId) {
    List<Project> projects = projectRepository.findByCategoryCategoryIdAndProjectStatus(categoryId,
        ProjectStatus.OPEN.toString());
    model.addAttribute("projects", projects);
    return "client/project";
  }
```

**SECURITY CONFIGURATION FOR AUTHENTICATION**

**SECURITYCONFIG.JAVA**

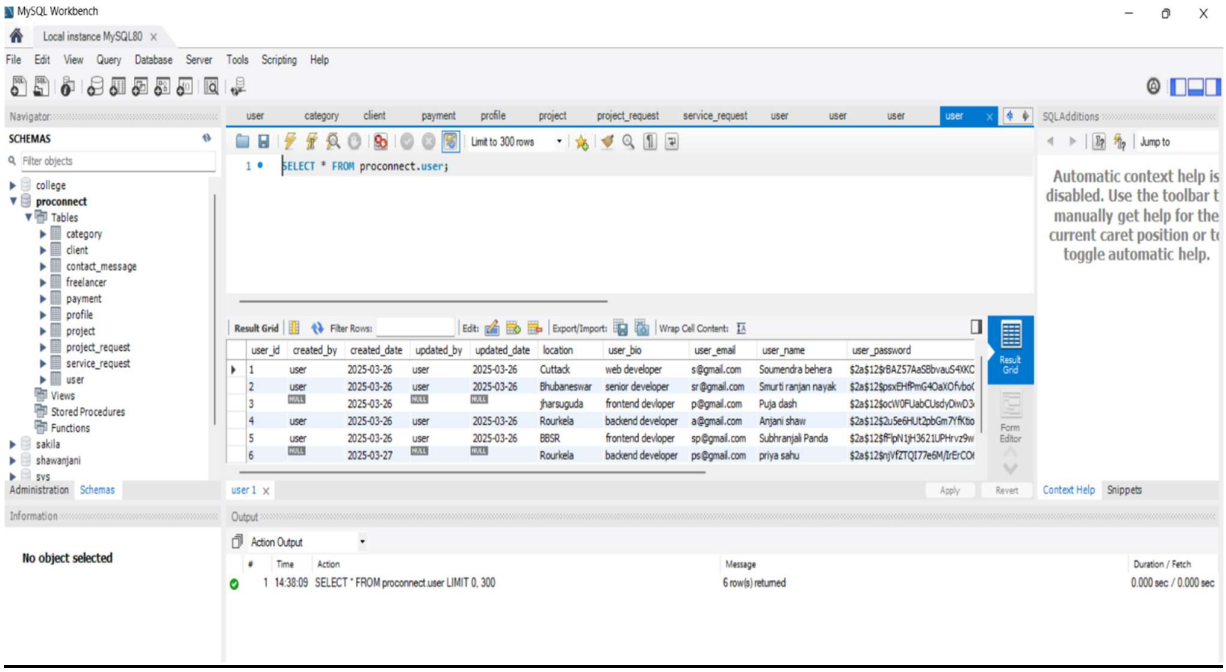
```
package edu.rims.pro_connect.config;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.context.annotation.Bean;
import org.springframework.context.annotation.Configuration;
import org.springframework.security.config.Customizer;
// import org.springframework.security.config.Customizer;
import org.springframework.security.config.annotation.web.builders.HttpSecurity;
import org.springframework.security.core.userdetails.UserDetailsService;
import org.springframework.security.core.userdetails.UsernameNotFoundException;
import org.springframework.security.crypto.bcrypt.BCryptPasswordEncoder;
import org.springframework.security.crypto.password.PasswordEncoder;
import org.springframework.security.web.SecurityFilterChain;
import edu.rims.pro_connect.constant.UserType;
import edu.rims.pro_connect.entity.User;
import edu.rims.pro_connect.repository.UserRepository;
@Configuration
public class SecurityConfig {
  @Autowired
  private UserRepository userRepository;
```

```
@Bean
SecurityFilterChain securityFilterChain(HttpSecurity http) throws Exception {
   http.authorizeHttpRequests(
         request -> request
               .requestMatchers("/client/sign_in", "/style/**", "/images/*", "/script/**",
                     "/category/category", "/freelancer/freelancer", "/client/home",
                     "/category/category/search", "/freelancer/freelancer/search", "/admin/category/image",
                     "/client/howitworks", "/freelancer/pdp",
                     "/client/solution", "/client/project",
                     "/client/contact", "/client/category/project", "/client/sign_up", "/freelancer/signup")
               .permitAll()
               .requestMatchers("/admin/*").hasRole(UserType.ADMIN.toString())
               .requestMatchers("/freelancer/*").hasRole(UserType.FREELANCER.toString())
               .requestMatchers("/client/**").hasRole(UserType.CLIENT.toString())
               .anyRequest().authenticated());
   http.formLogin(form -> form.loginPage("/client/sign_in").defaultSuccessUrl("/client/home"));
   http.logout(Customizer.withDefaults());
   return http.build();
}
@Bean
PasswordEncoder encoder() {
   return new BCryptPasswordEncoder(12);
}
@Bean
UserDetailsService detailsService() {
   return (username) -> {
      User user = userRepository.findByUserEmail(username)
            .orElseThrow(() -> new UsernameNotFoundException("userNotFound"));
      return org.springframework.security.core.userdetails.User.builder()
            .username(username)
            .password(user.getUserPassword())
            .roles(user.getUserType().toString())
```

```
            .build();
    };
}
```

## JAVA ENTITY TABLES SNOPSHORTS:-

## USER TABLE

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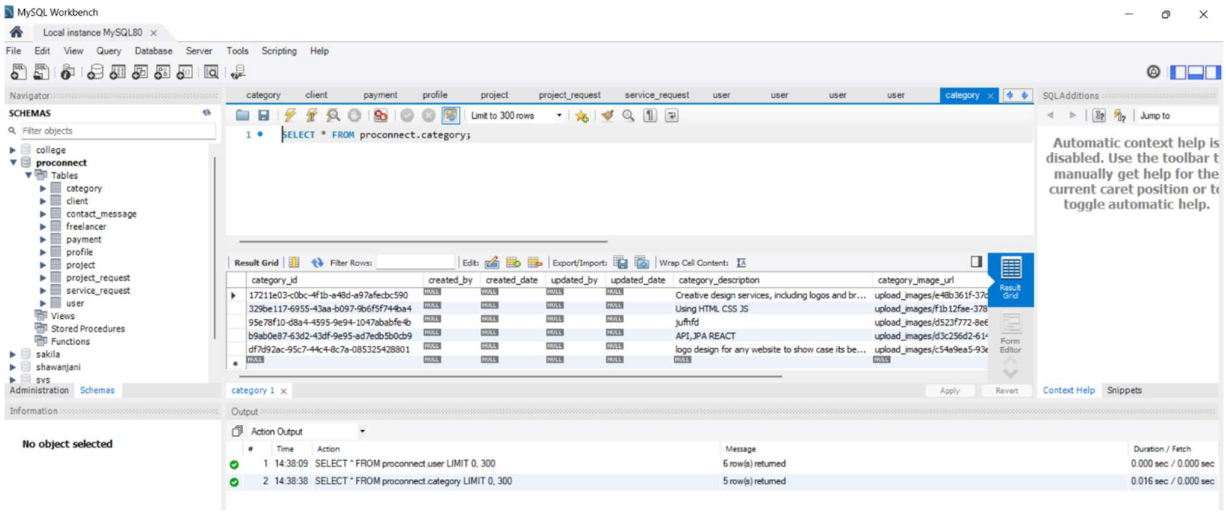

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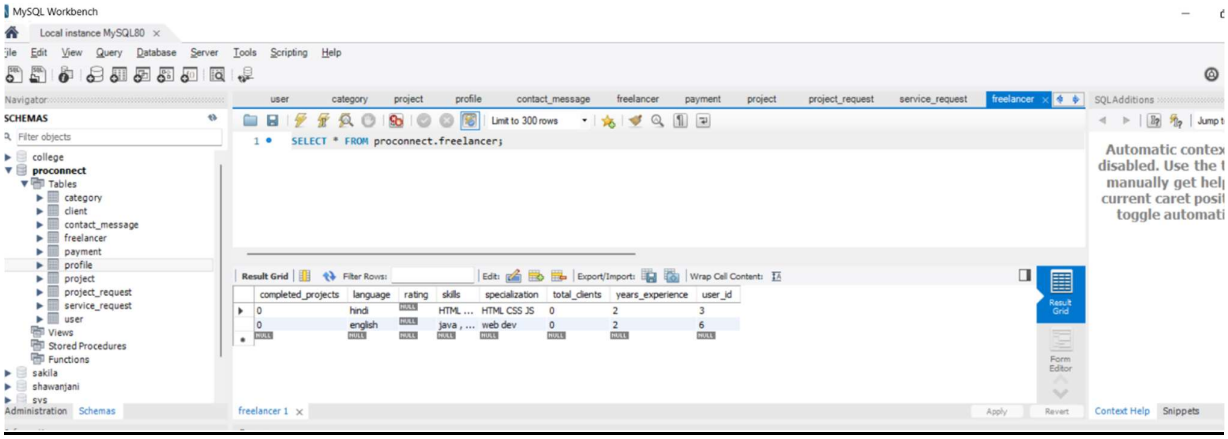


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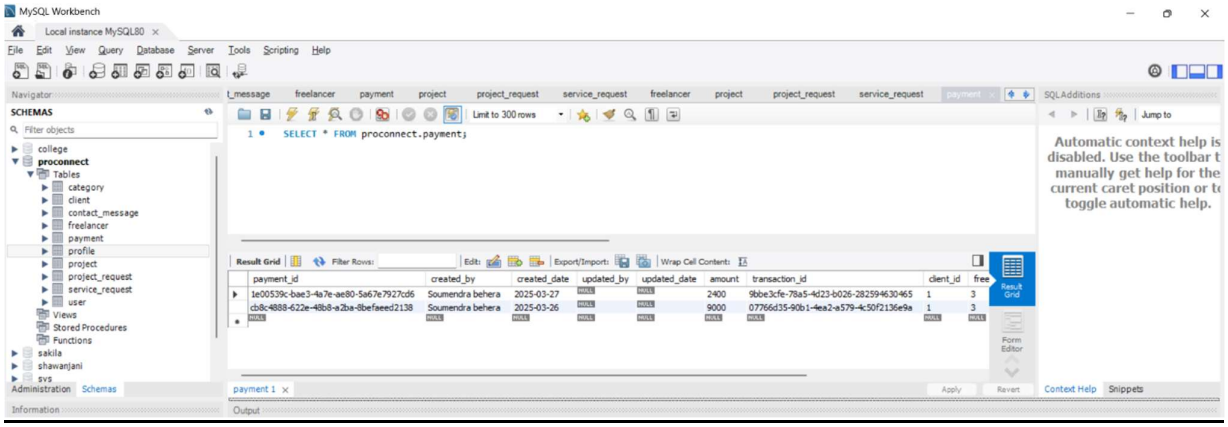


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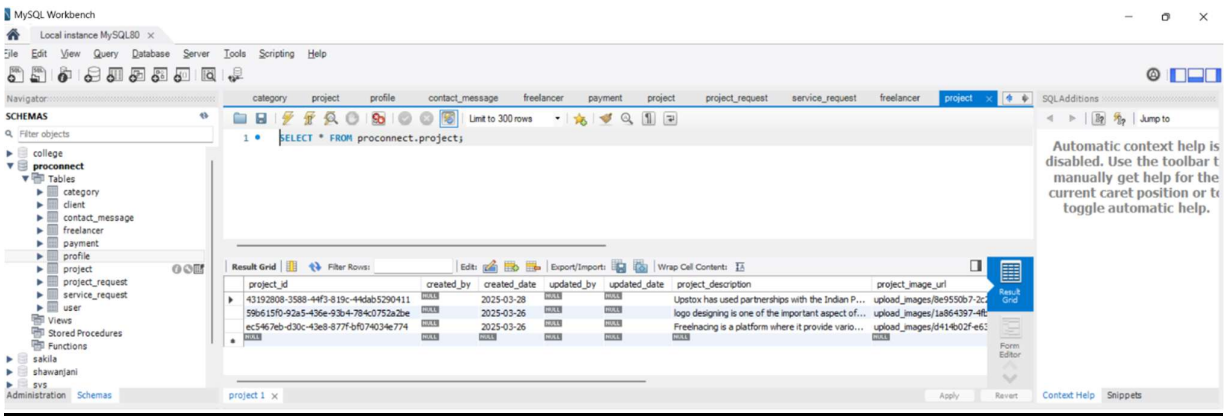

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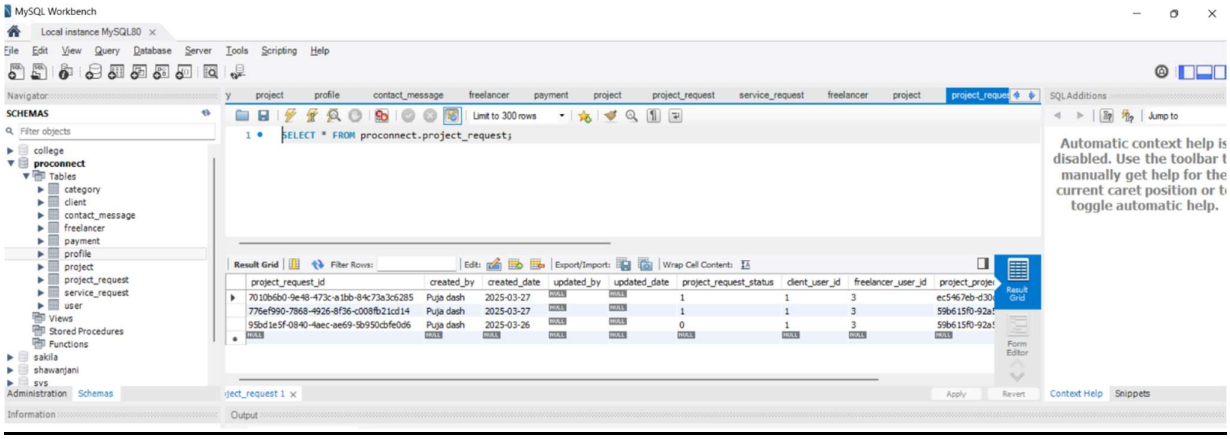


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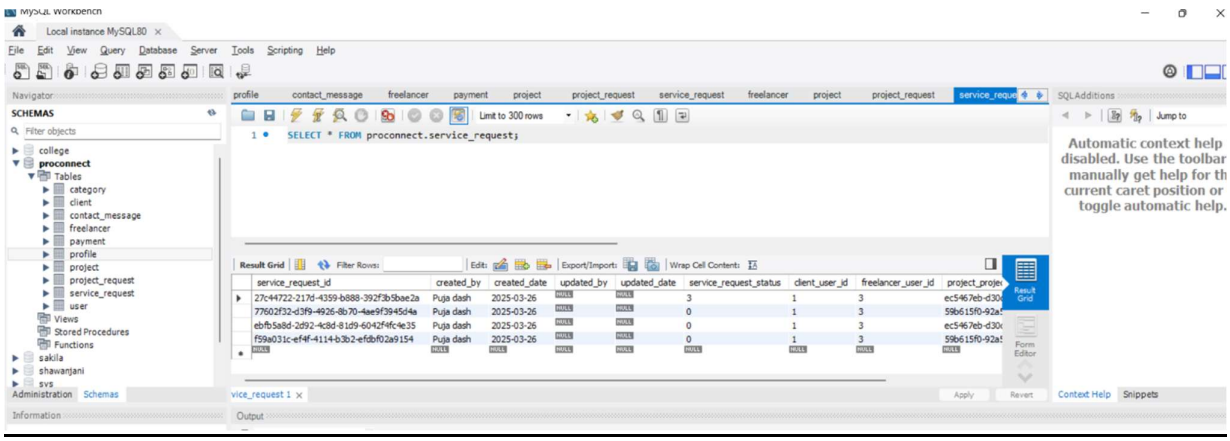
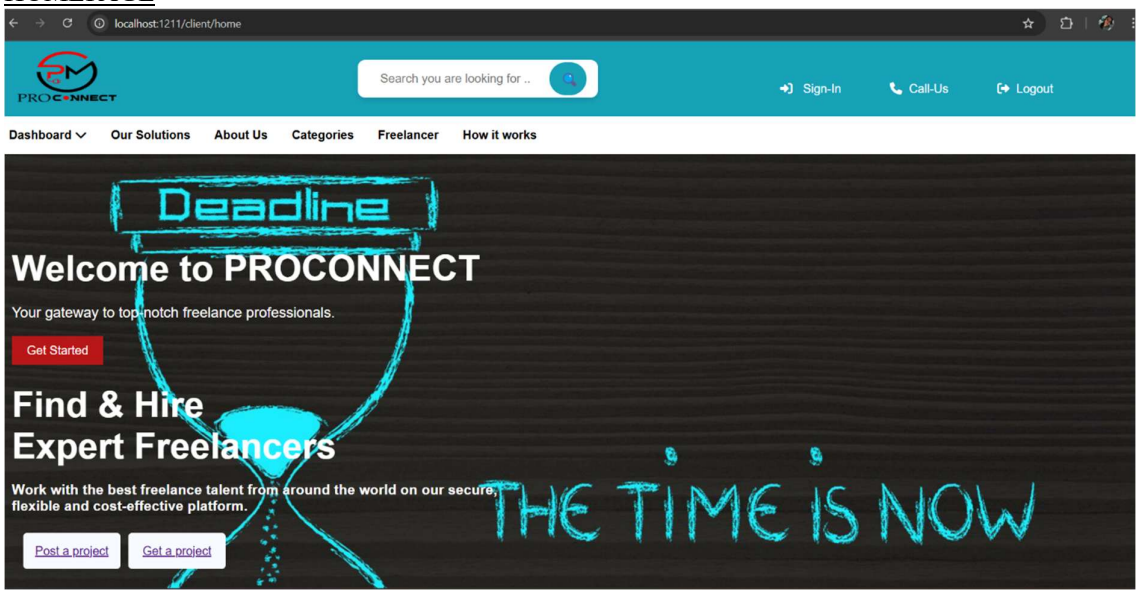
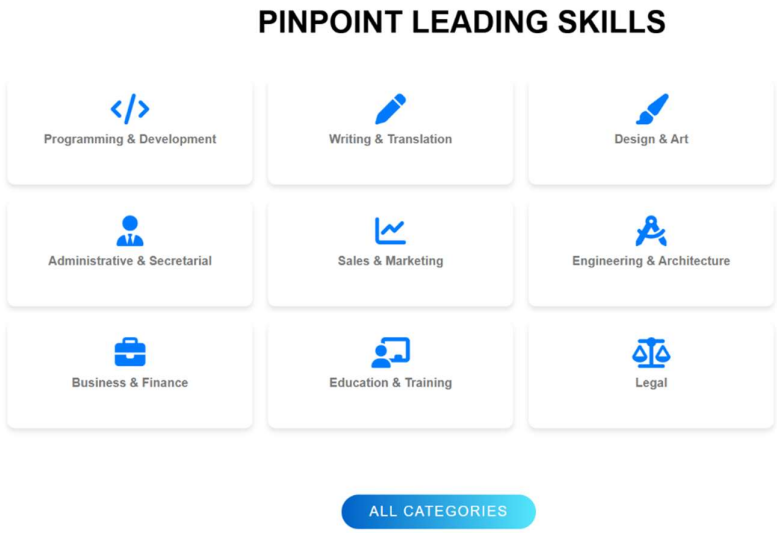


# CHAPTER-13

## SNOPTSHORT

HOMEPAGE



## Get in Touch with ProConnect

Whether you're a freelancer or a business, we're here to help. Please contact us using any of the methods below.

### Email Us

For general inquiries, reach out to us at:

support@proconnect.com
If you're a business looking for freelancer solutions:

projects@proconnect.com

### Message Form

Name

message

### Phone Support

If you need immediate assistance, feel free to call us at:

**+1 (800)-7735870981**

Our team is available Monday to Friday, from 9 AM to 6 PM.

### Follow Us

Stay connected with us through social media:

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### Visit Our Office

If you'd like to meet us in person, our office is located at:

123 Freelancer Lane,proconnect ,California- Suite 200, Tech City, USA

### Our website

our website not only give platform to everyone but also it provide essance to connect through out the world.

**ProConnect website our concern to connect people and grow.**

## About Us

Learn more about our journey and how we connect talented freelancers with great opportunities!

## Our Mission

Our mission is to empower freelancers across the globe by providing them with an easy-to-use platform that connects them with quality clients and projects. We strive to offer an environment that encourages growth, creativity, and professional development.

## OUR STORY

We started as a small group of freelancers who shared a vision of creating a platform that would enable individuals to showcase their skills and find new opportunities. Over time, our platform has grown to serve thousands of freelancers and clients worldwide, creating a community built on trust, collaboration, and innovation.

## MEET OUR TEAM

**Anjani Shaw**
Founder & CEO

**Subhranjali Panda**
Chief Operating Officer

**Soumendra Behera**
Lead Developer

**Smruti Ranjan Nayak**
Marketing Director

## What Our Users Say

*"This platform has been a game changer for my freelance career. It made it so easy to find high-quality clients and manage my projects efficiently."*

*- Sarah Lee, Freelancer*

*"As a client, I've been able to hire top talent for all my projects. I highly recommend this platform to anyone looking to find skilled*

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If you're a business looking for freelancer solutions:

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### Message Form

Name

message

Send

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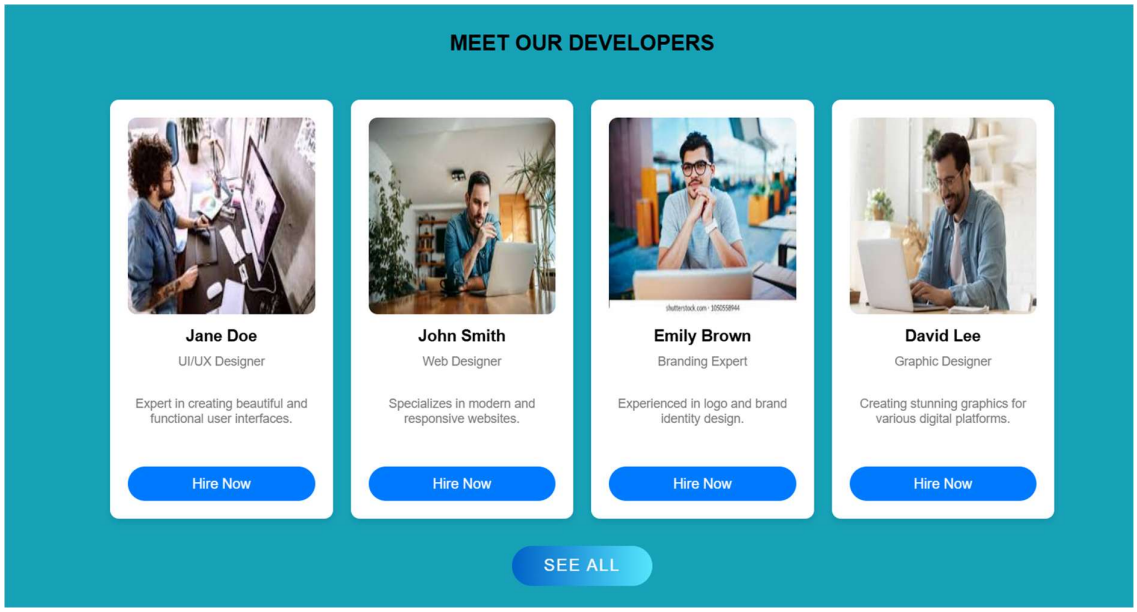
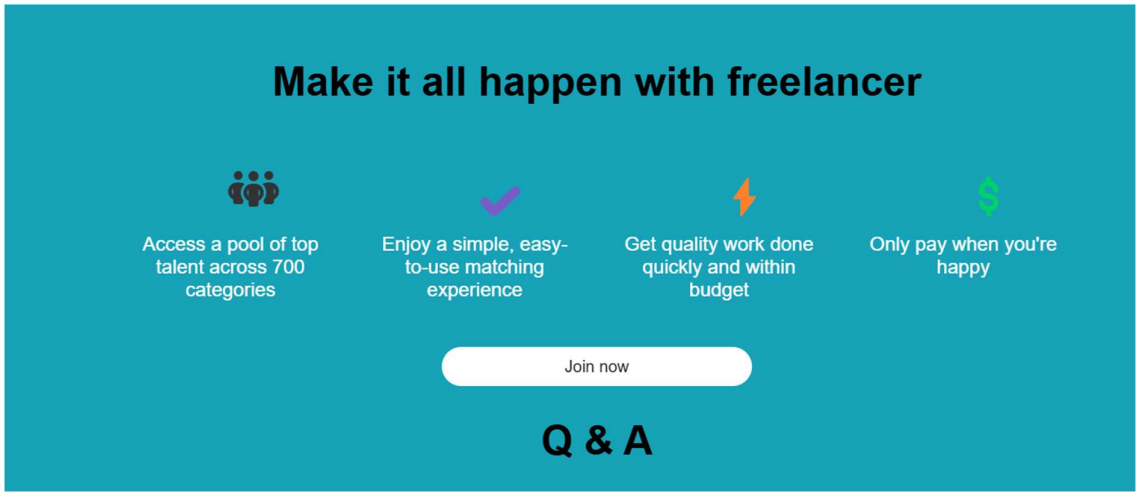
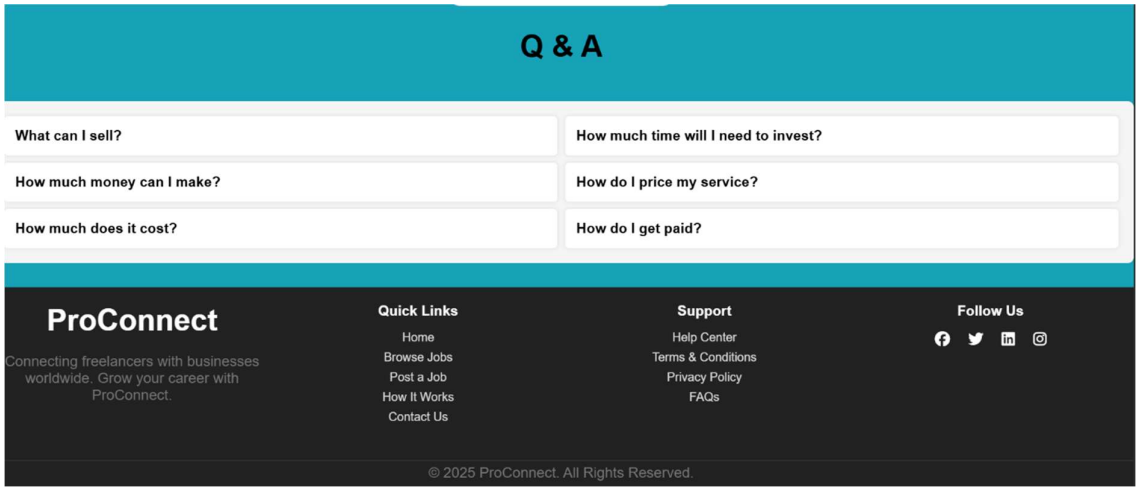

MEET OUR DEVELOPERS
Jane Doe
UI/UX Designer
Expert in creating beautiful and functional user interfaces.
Hire Now
John Smith
Web Designer
Specializes in modern and responsive websites.
Hire Now
Emily Brown
Branding Expert
Experienced in logo and brand identity design.
Hire Now
David Lee
Graphic Designer
Creating stunning graphics for various digital platforms.
Hire Now
SEE ALL


Make it all happen with freelancer
Access a pool of top talent across 700 categories
Enjoy a simple, easy-to-use matching experience
Get quality work done quickly and within budget
Only pay when you're happy
Join now
Q & A


Q & A
What can I sell?
How much time will I need to invest?
How much money can I make?
How do I price my service?
How much does it cost?
How do I get paid?
ProConnect
Connecting freelancers with businesses worldwide. Grow your career with ProConnect.
Quick Links
Home
Browse Jobs
Post a Job
How It Works
Contact Us
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FAQs
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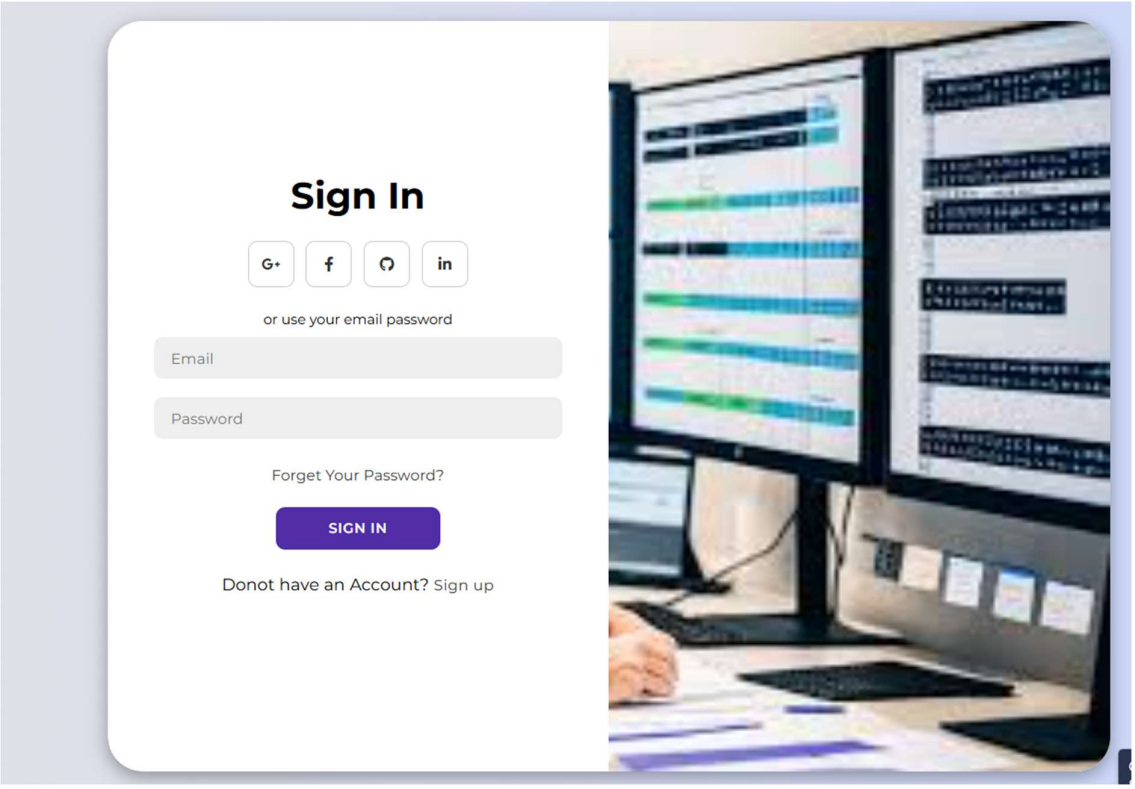
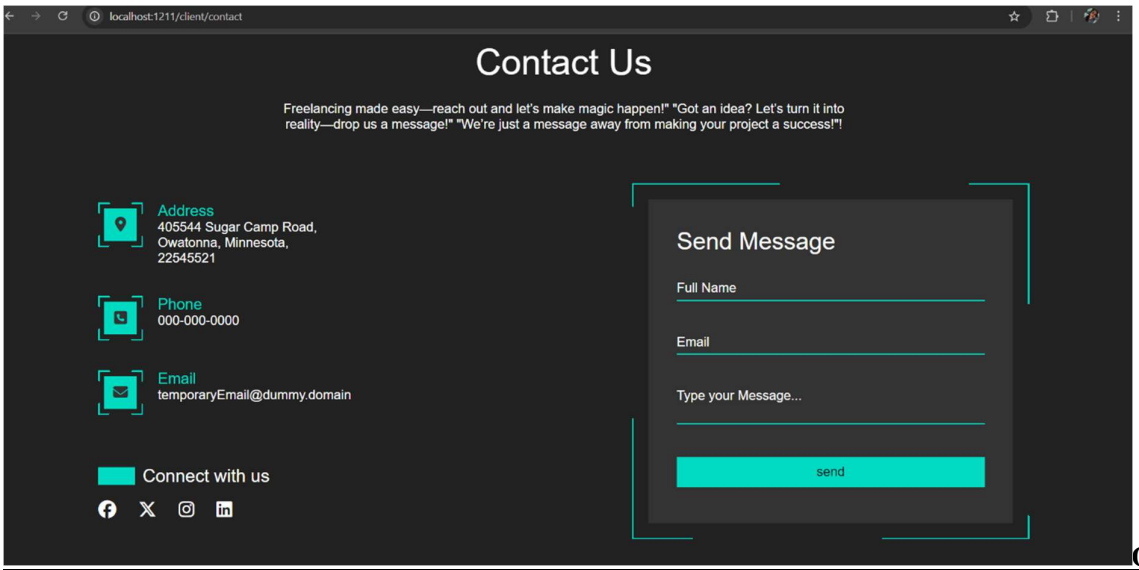
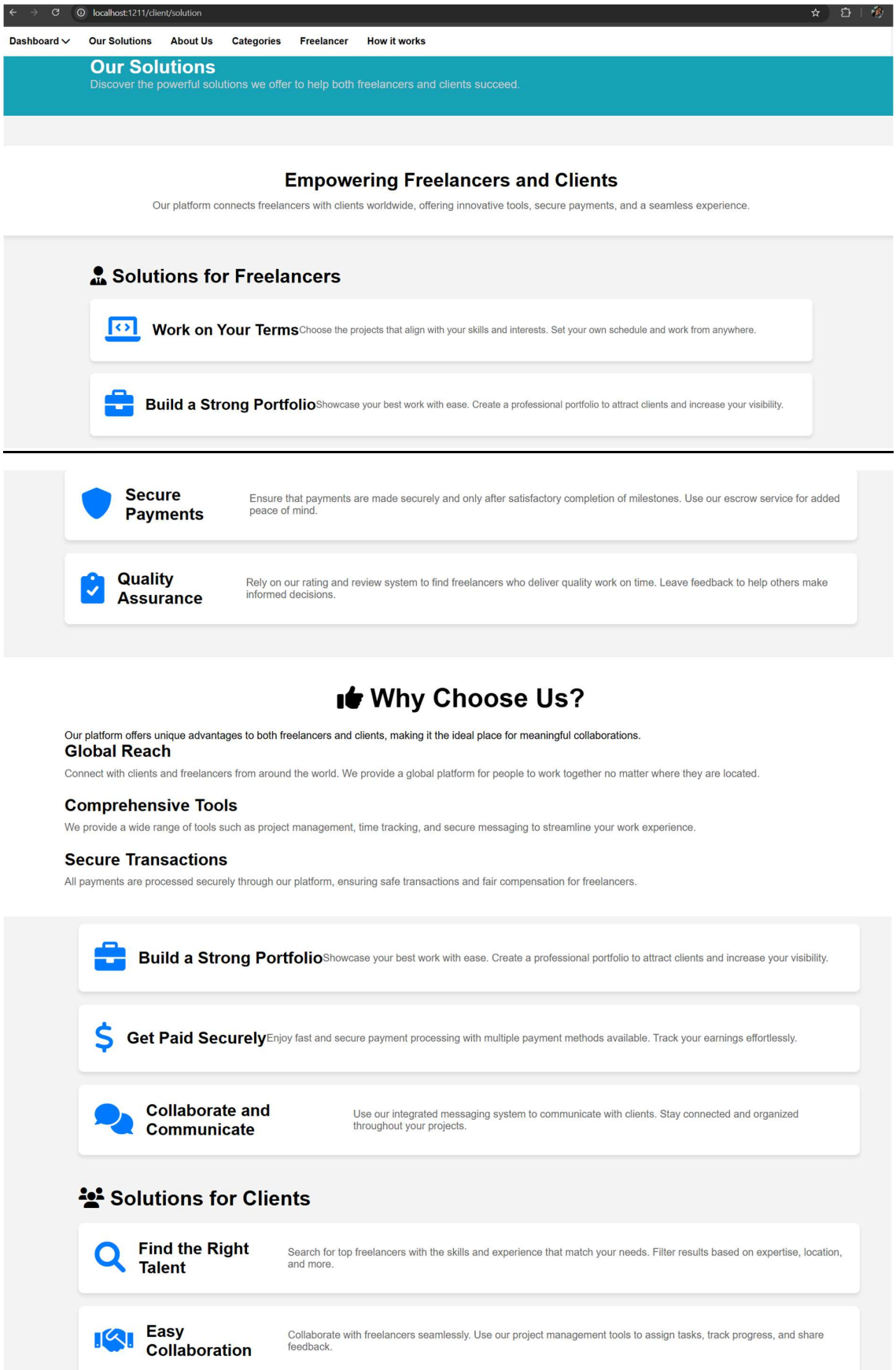
**SIGN IN PAGE**



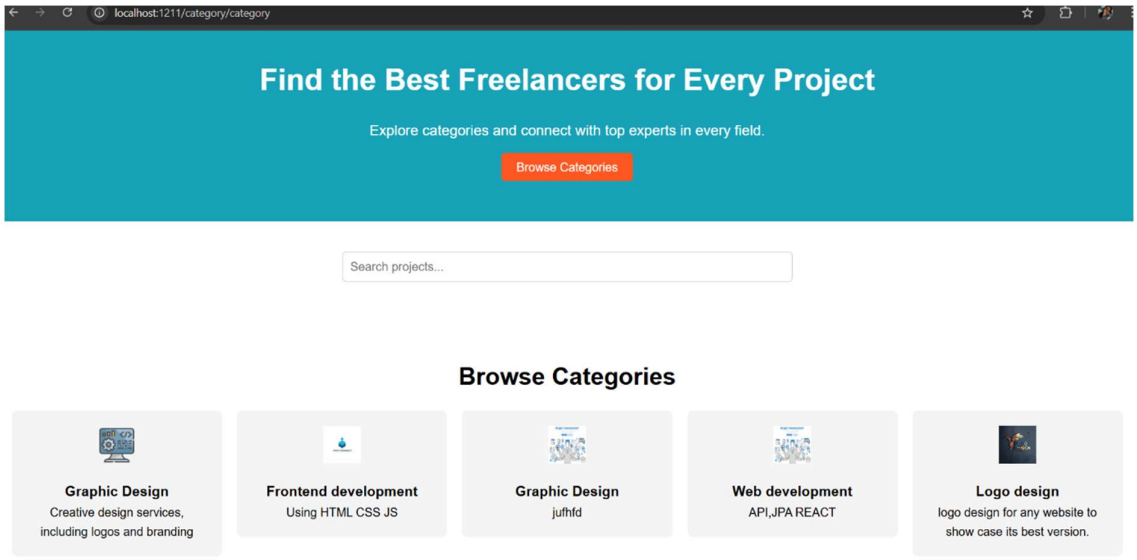

**CALL US PAGE :**




**OUR SOLUTION PAGE**


localhost:1211/client/solution
Dashboard
Our Solutions
About Us
Categories
Freelancer
How it works
Our Solutions
Discover the powerful solutions we offer to help both freelancers and clients succeed.
Empowering Freelancers and Clients
Our platform connects freelancers with clients worldwide, offering innovative tools, secure payments, and a seamless experience.
Solutions for Freelancers
Work on Your Terms
Choose the projects that align with your skills and interests. Set your own schedule and work from anywhere.
Build a Strong Portfolio
Showcase your best work with ease. Create a professional portfolio to attract clients and increase your visibility.
Secure Payments
Ensure that payments are made securely and only after satisfactory completion of milestones. Use our escrow service for added peace of mind.
Quality Assurance
Rely on our rating and review system to find freelancers who deliver quality work on time. Leave feedback to help others make informed decisions.
Why Choose Us?
Our platform offers unique advantages to both freelancers and clients, making it the ideal place for meaningful collaborations.
Global Reach
Connect with clients and freelancers from around the world. We provide a global platform for people to work together no matter where they are located.
Comprehensive Tools
We provide a wide range of tools such as project management, time tracking, and secure messaging to streamline your work experience.
Secure Transactions
All payments are processed securely through our platform, ensuring safe transactions and fair compensation for freelancers.
Build a Strong Portfolio
Showcase your best work with ease. Create a professional portfolio to attract clients and increase your visibility.
Get Paid Securely
Enjoy fast and secure payment processing with multiple payment methods available. Track your earnings effortlessly.
Collaborate and Communicate
Use our integrated messaging system to communicate with clients. Stay connected and organized throughout your projects.
Solutions for Clients
Find the Right Talent
Search for top freelancers with the skills and experience that match your needs. Filter results based on expertise, location, and more.
Easy Collaboration
Collaborate with freelancers seamlessly. Use our project management tools to assign tasks, track progress, and share feedback.

**CATEGORY PAGE:**

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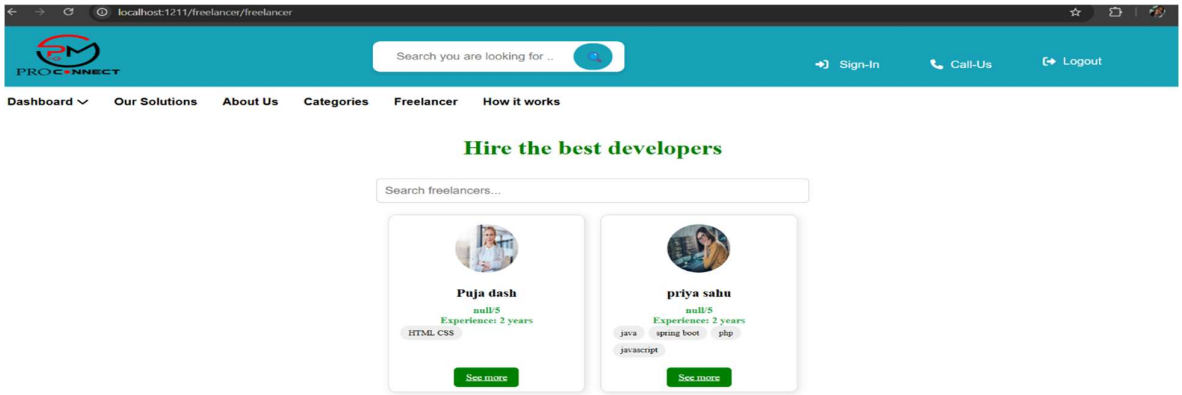


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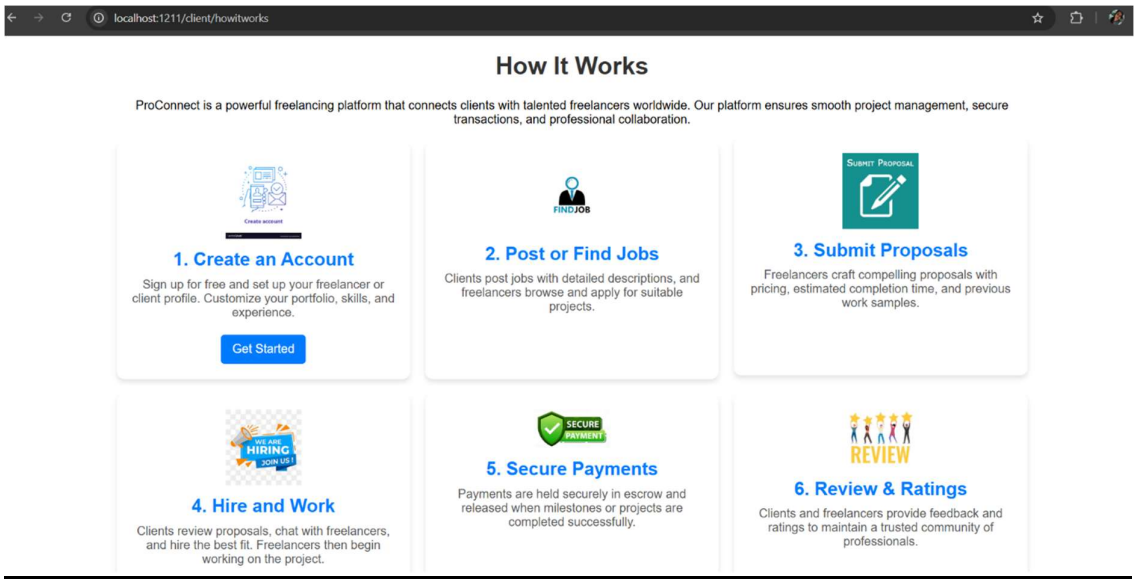


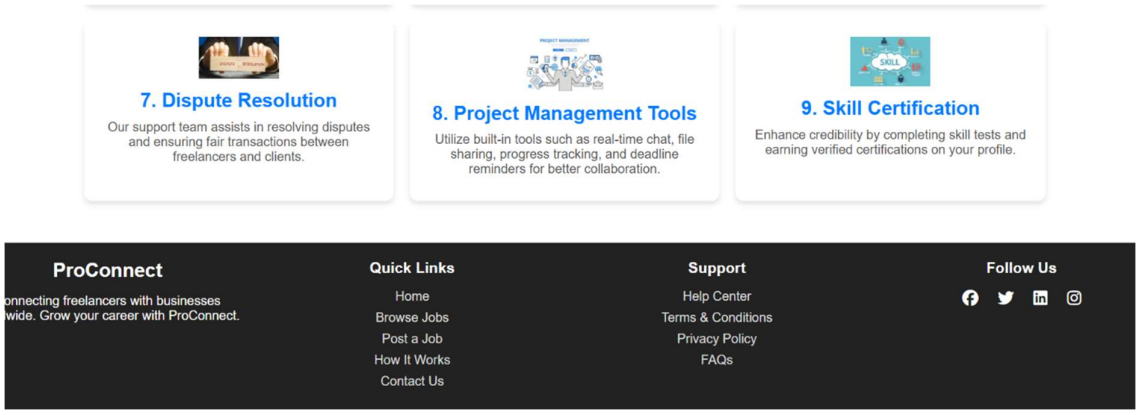


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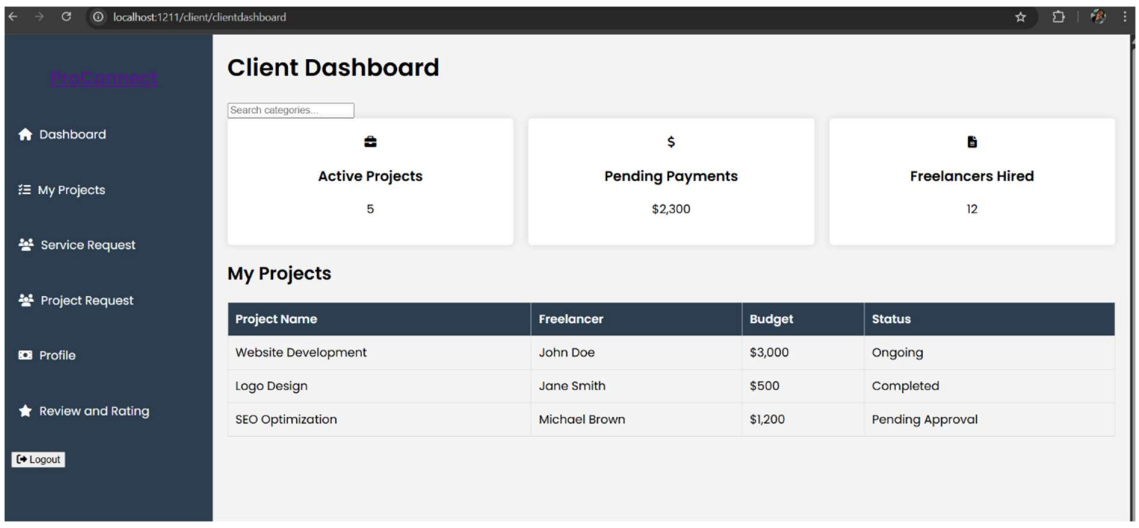


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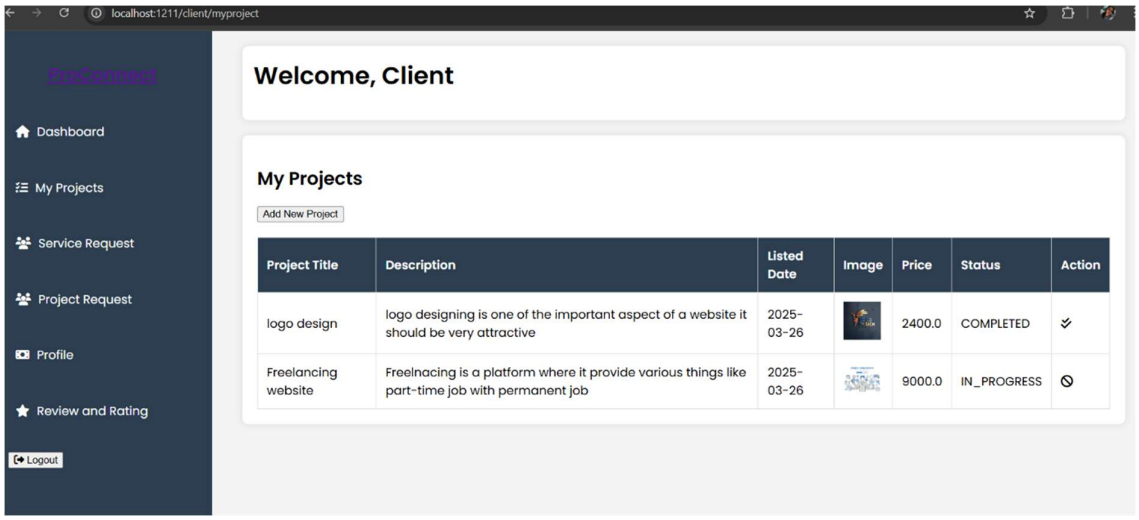


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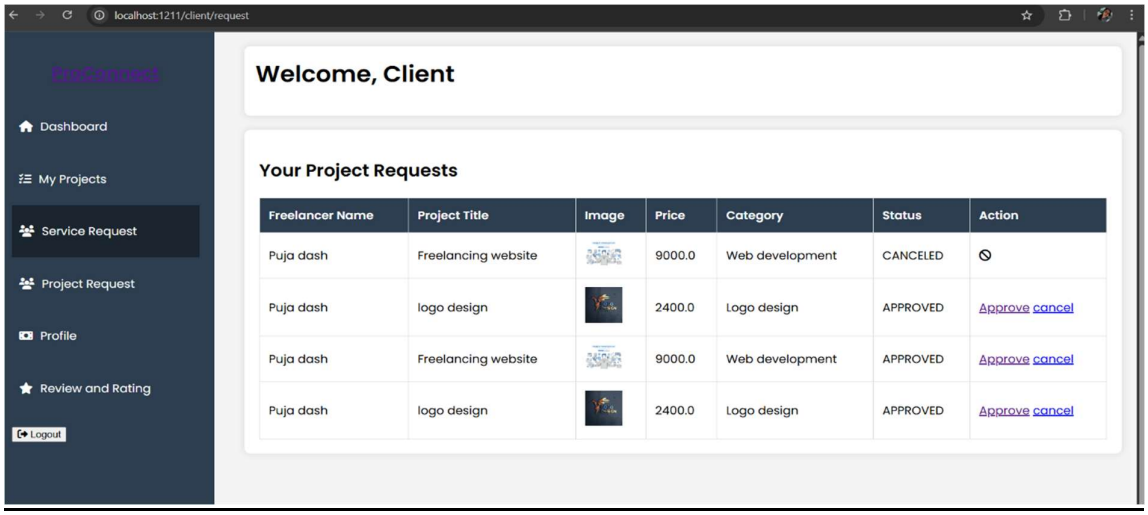


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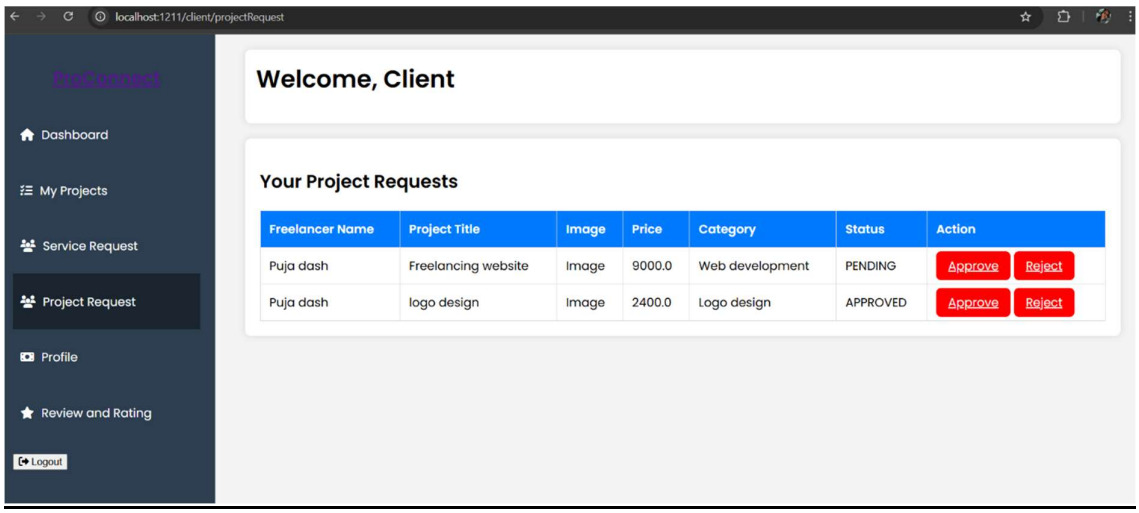

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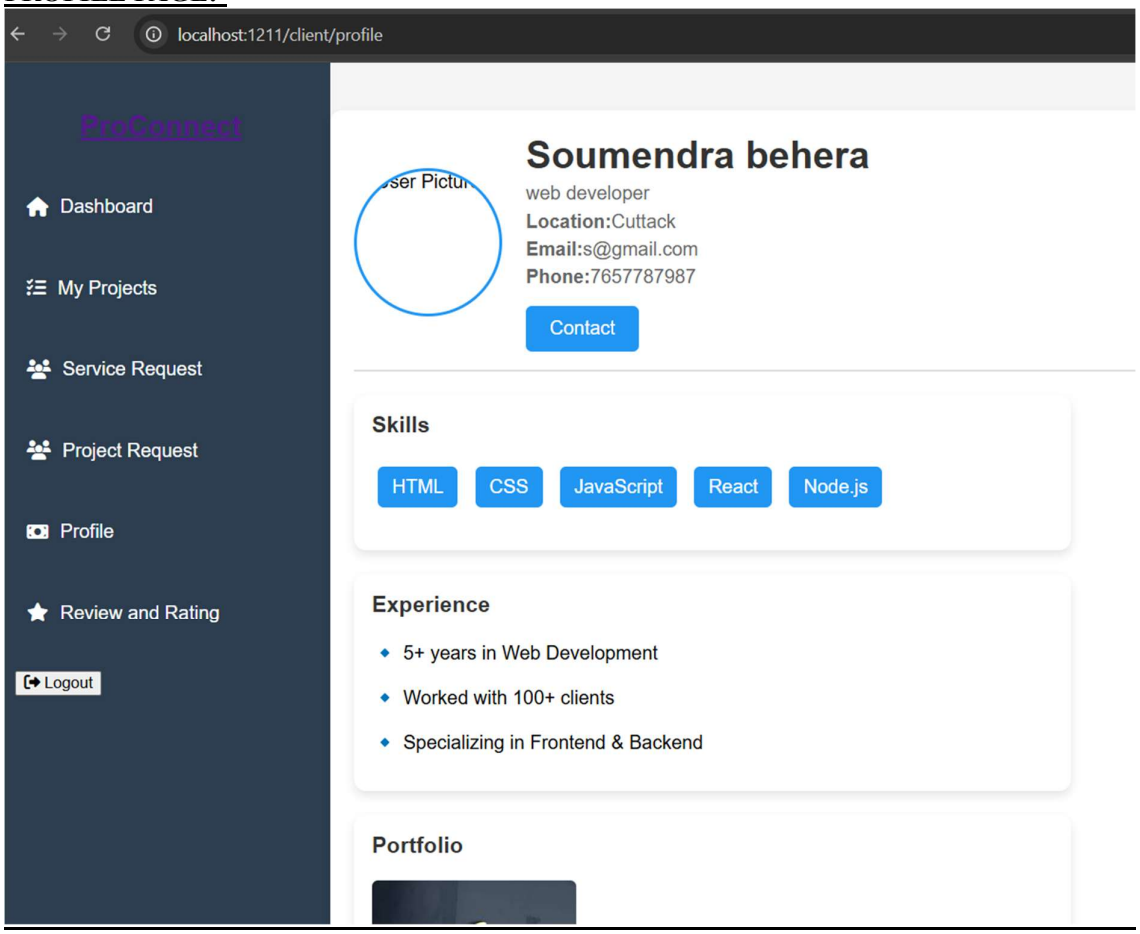


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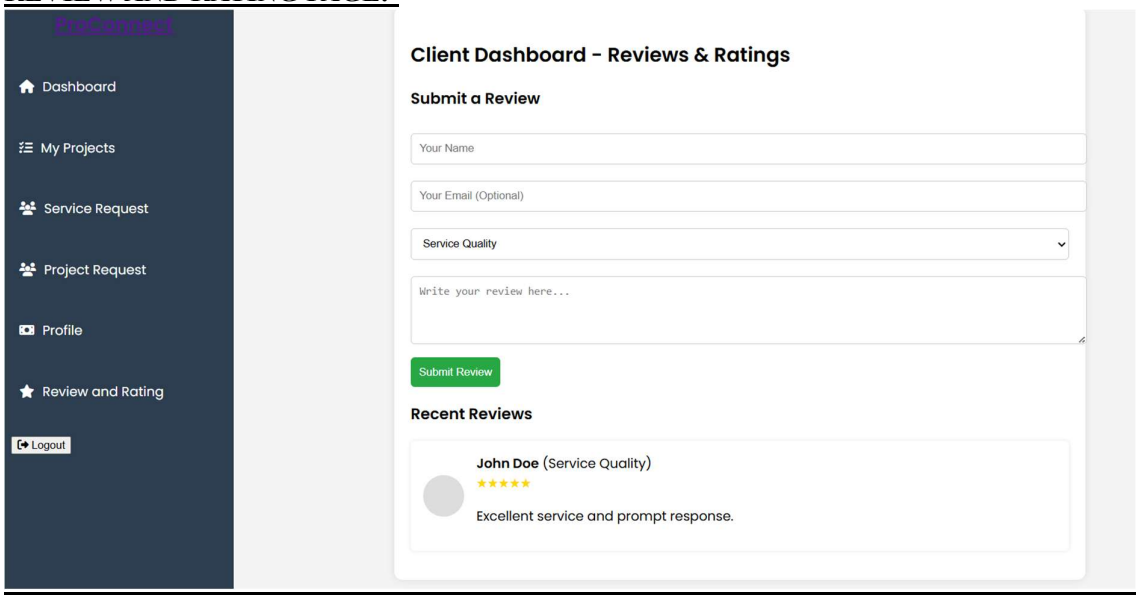
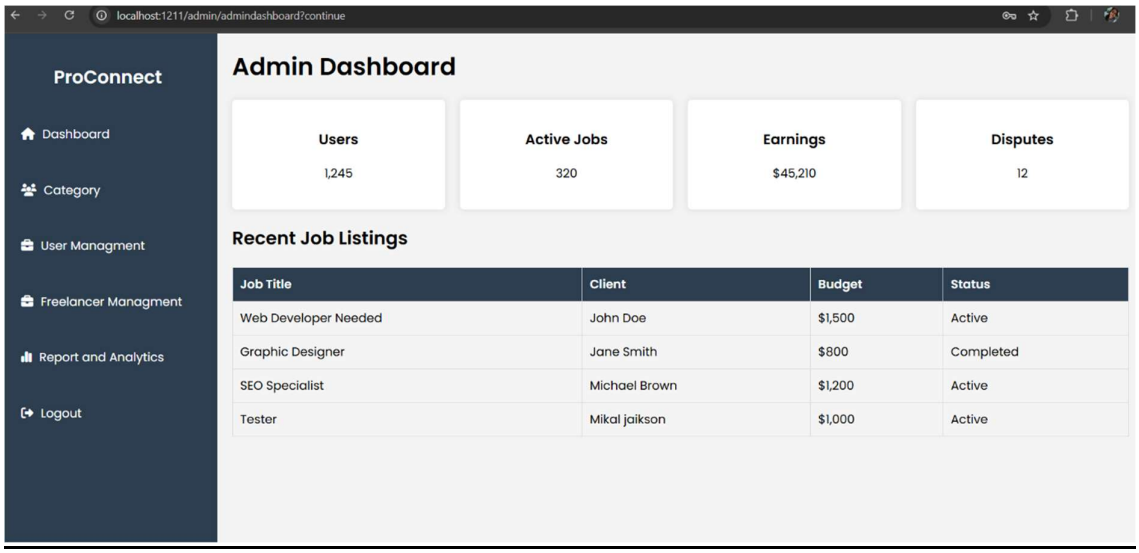



**ADMINDASHBOARD PAGE:-**

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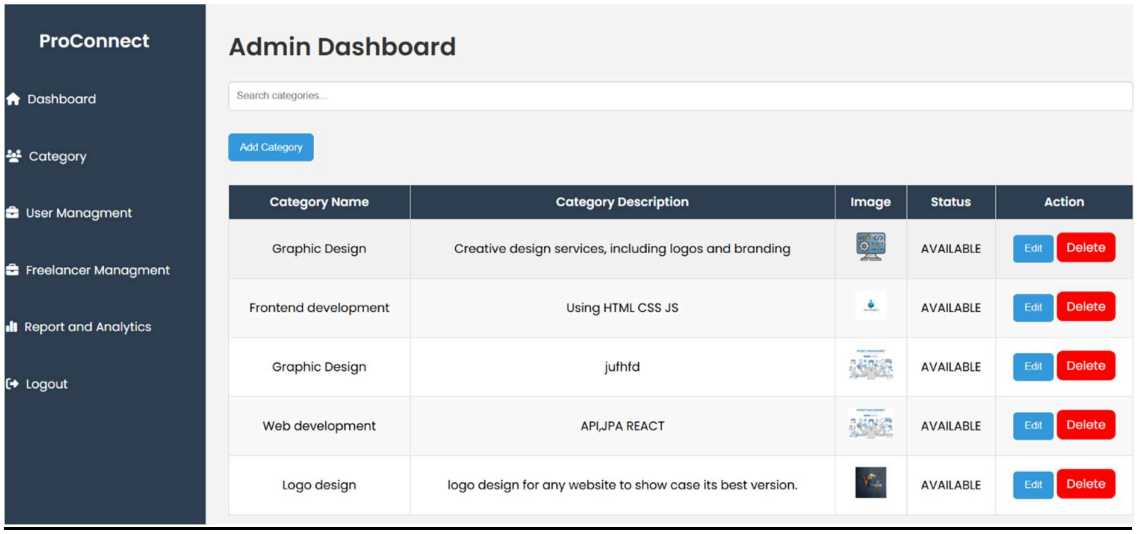


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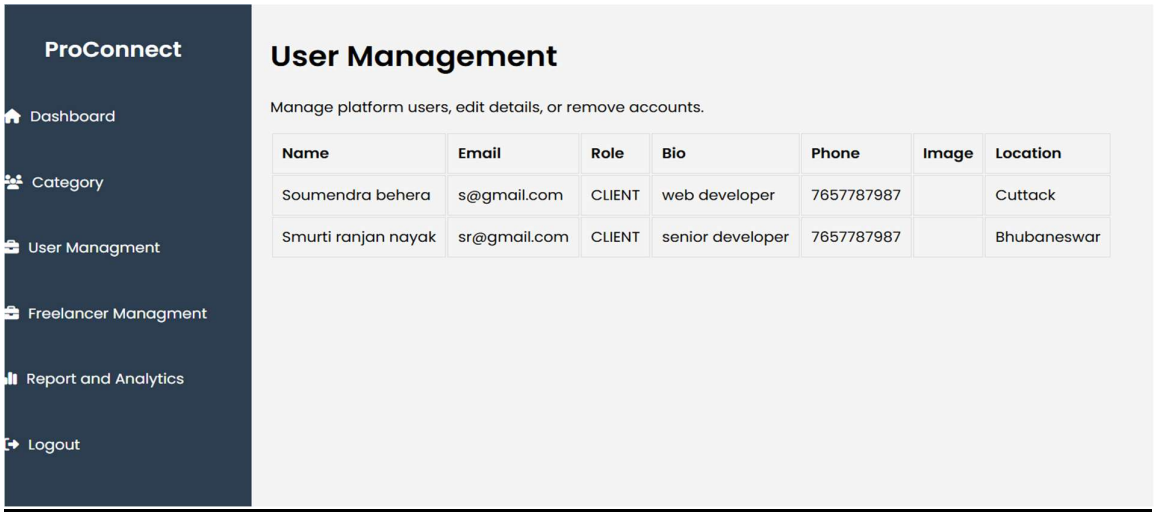

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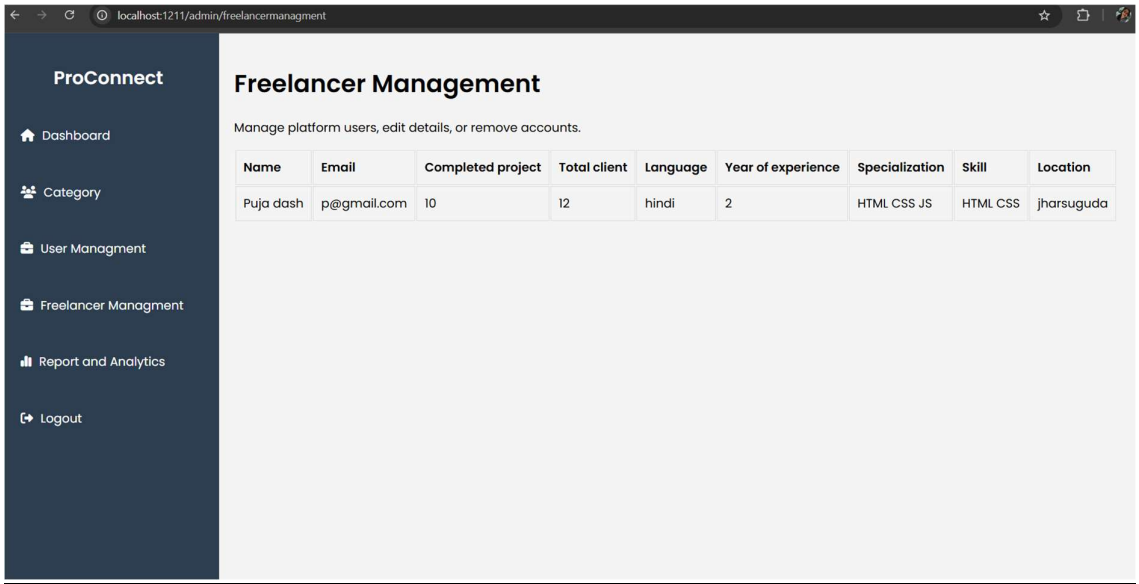


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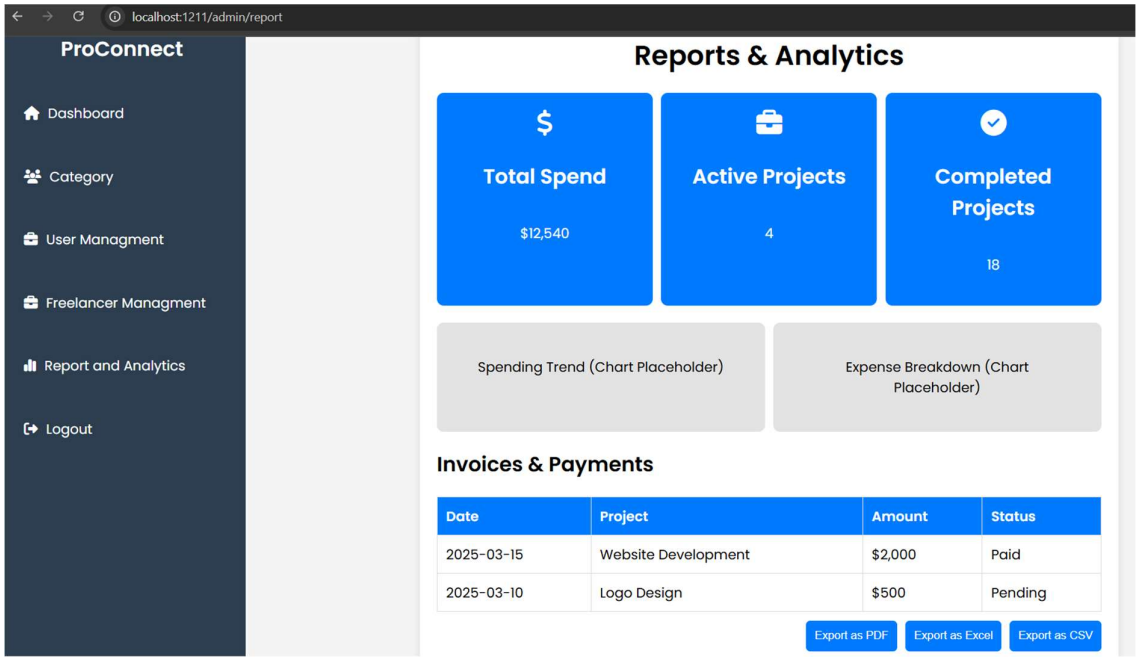
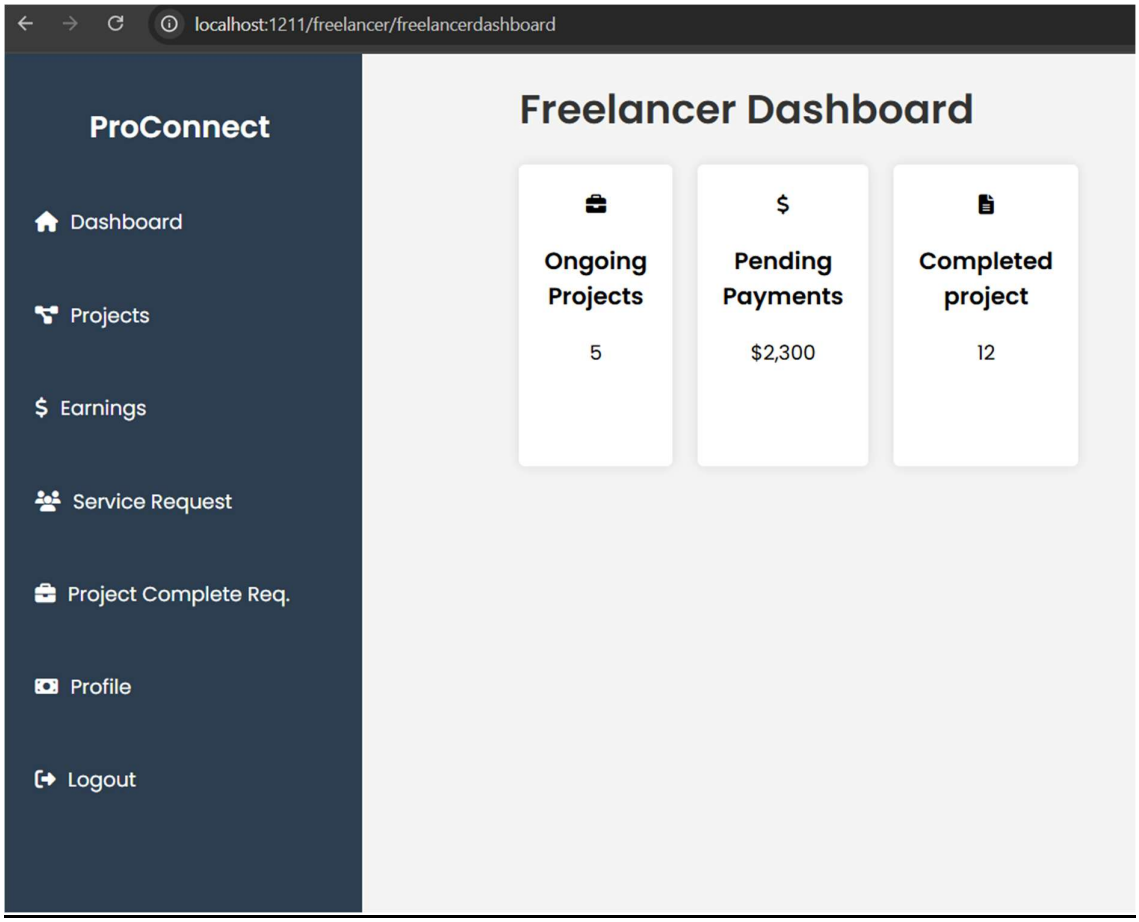



## FREELANCERDASHBOARD PAGE:-

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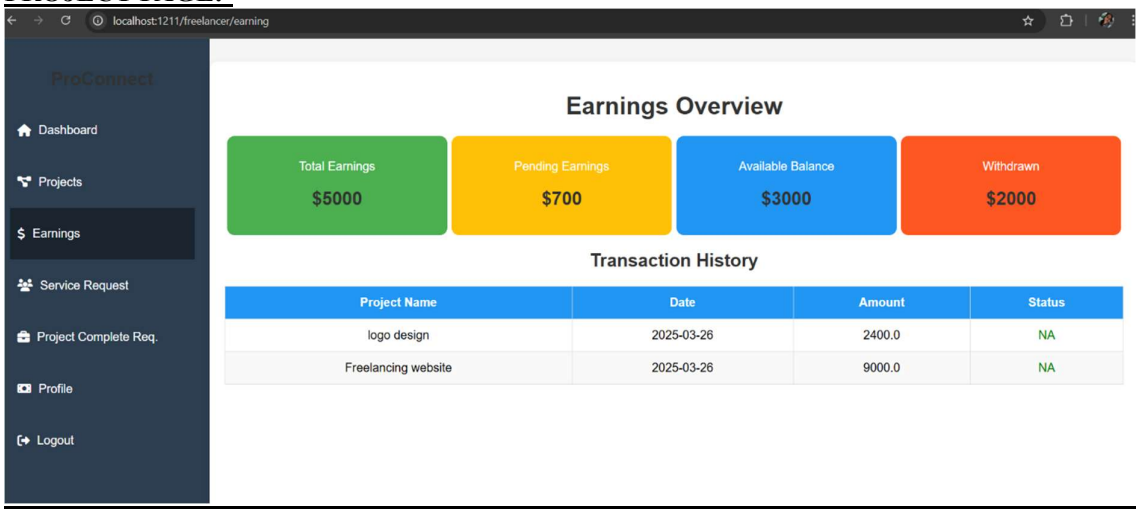


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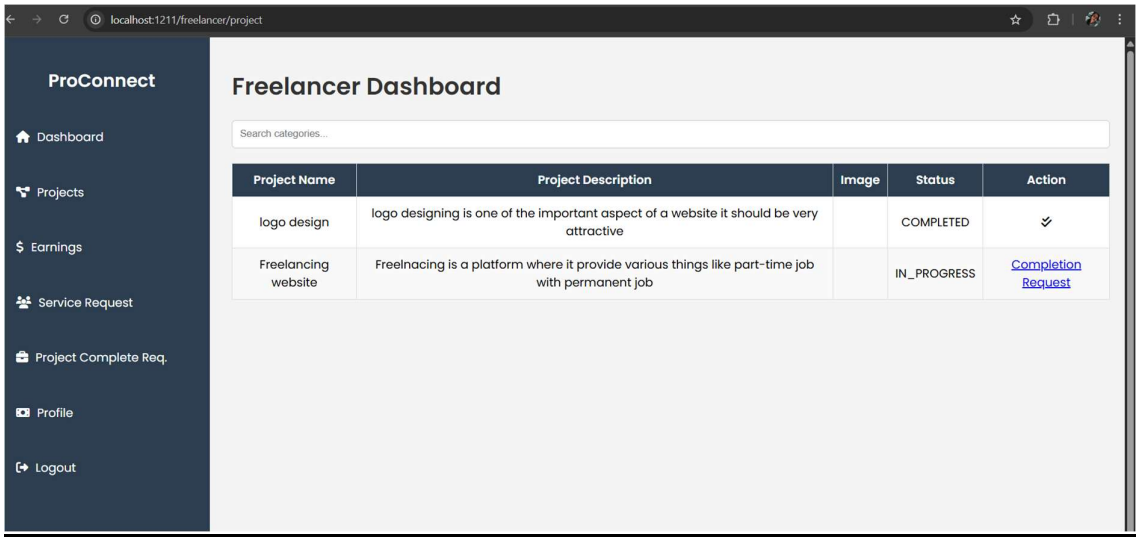
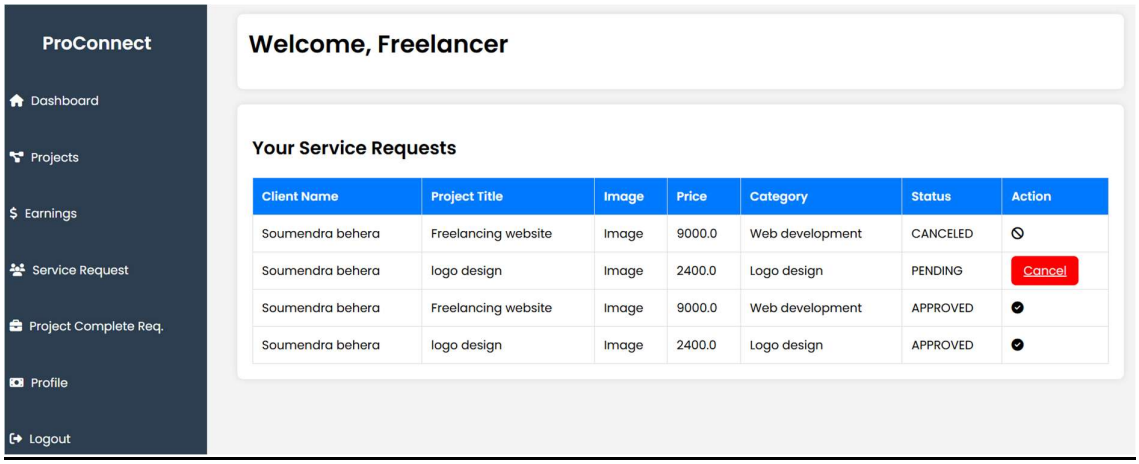



## SERVICE REQUEST PAGE:-

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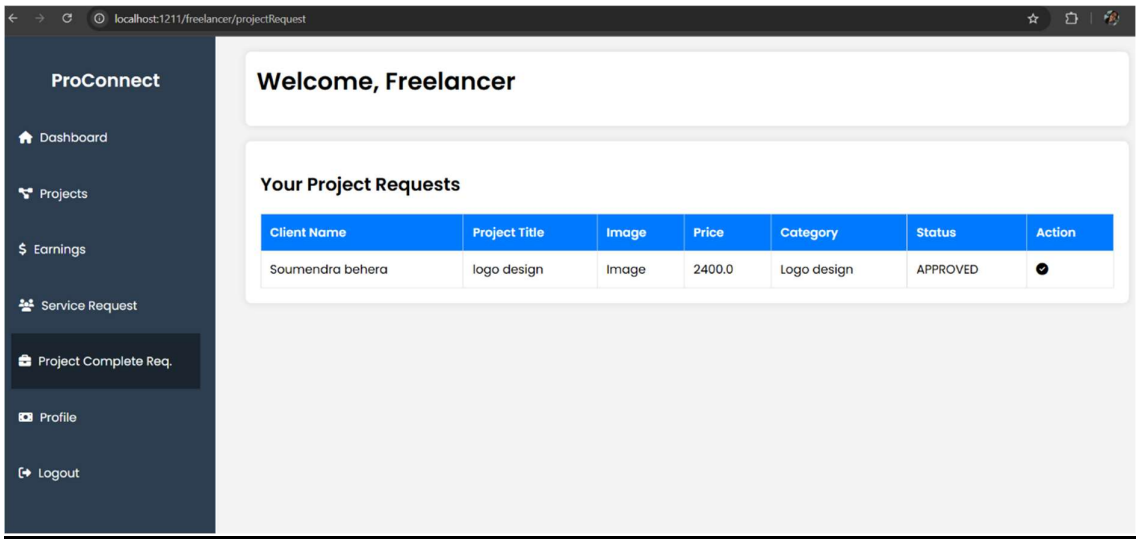


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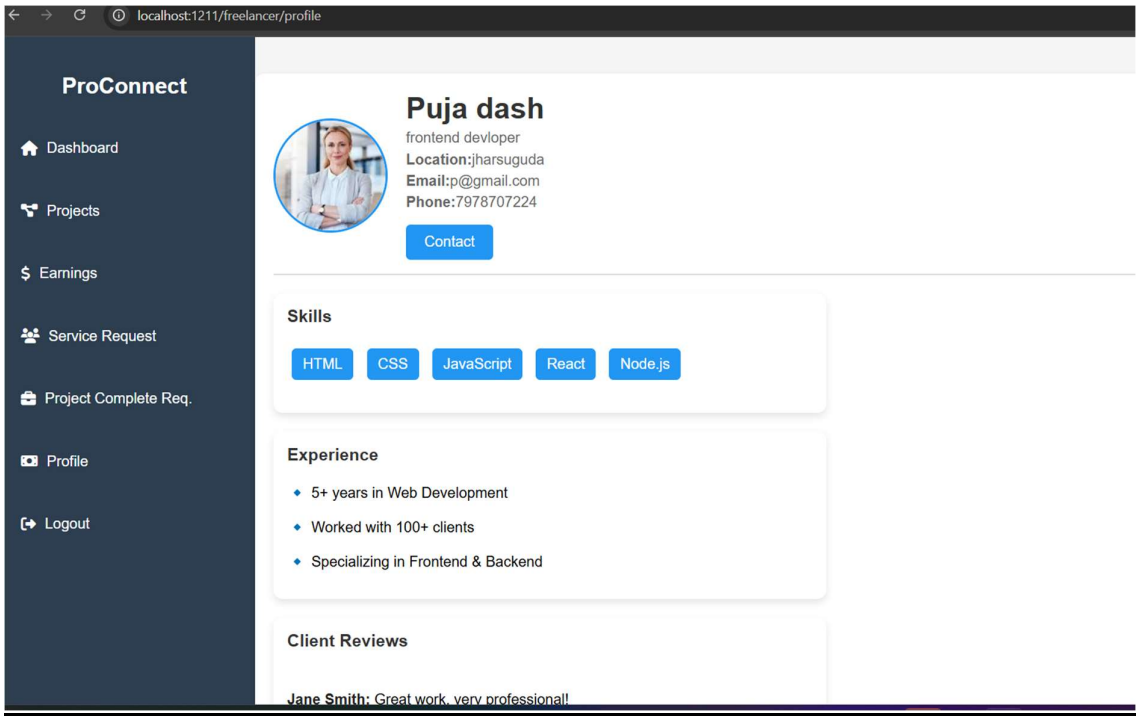
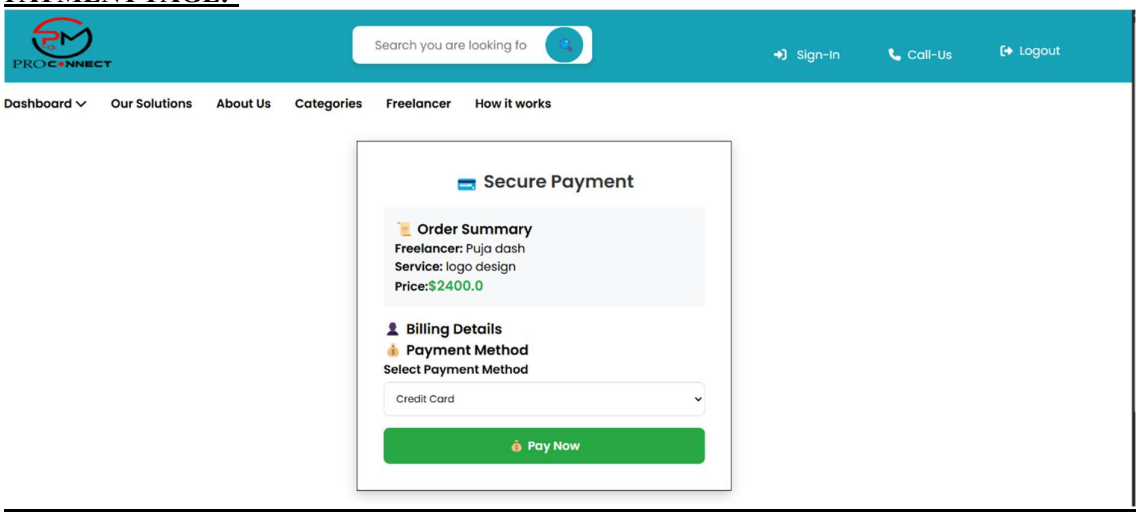



**PAYMENT PAGE:-**




# CHAPTER-12

# TESTING

### 1.Introduction

Testing is a critical phase in the **ProConnect freelancing platform** to ensure that all functionalities work as expected, data integrity is maintained, and the user interface functions properly. The testing process ensures that:

- The **Hibernate Entity layer** properly maps and retrieves data from the database.

- The **Thymeleaf templates** display correct information dynamically.
- The **Spring Boot application** handles user interactions, authentication, and transactions seamlessly.

**2. Unit Testing**

**Definition**

Unit testing in **ProConnect** focuses on validating individual modules, such as **database operations, web templates (Thymeleaf), and business logic in Spring Boot**.

**Tools Used:**

- **Hibernate Entity Testing** – Ensures the proper mapping and retrieval of data.
- **Thymeleaf Rendering Tests** – Validates dynamic content rendering in HTML pages.
- **Spring Boot Test** – Used for integration testing of services, repositories, and controllers.

**Unit Testing for Major Modules**

| Module | Tested Components | Expected Outcome |
|---|---|---|
| **User Authentication** | Hibernate Entity for User | User data is stored and retrieved correctly. |
| **Project Management** | Hibernate Entity for Projects | Project details are saved and fetched without errors. |
| **Payment Processing** | Payment Entity & Service | Transactions are stored securely. |
| **Profile Management** | Thymeleaf Profile Page | Correct user information is displayed. |
| **Messaging System** | Thymeleaf Message Templates | Messages are displayed dynamically. |

**3. Testing Scenarios**

**Functional Testing Scenarios**

| Test Scenario | Expected Result |
|---|---|
| User registers with valid details | Account is created successfully in the database. |
| User logs in with correct credentials | Dashboard loads with accurate user details. |
| Client posts a new project | Project appears in the freelancer's dashboard. |
| Freelancer applies for a project | Request is stored in the **ServiceRequest** entity. |
| Client makes a payment | Transaction data is stored in the **Payment** entity. |
| Admin generates reports | The system retrieves correct data from the database. |

**Performance Testing Scenarios**

| Test Scenario | Expected Result |
|---|---|
| Thousands of database transactions | Hibernate handles data efficiently without lag. |

| Test Scenario | Expected Result |
|---|---|
| Multiple users load the same page | Thymeleaf renders data quickly. |
| High volume of messaging | No delay in message display. |

**Security Testing Scenarios**

| Test Scenario | Expected Result |
|---|---|
| Unauthorized access to the admin panel | Access is denied. |
| SQL Injection attempt | Hibernate prevents direct database access. |
| Unauthenticated user tries to access a project | Redirected to the login page. |

Testing ensures that ProConnect functions efficiently, securely, and reliably. With Hibernate Entity testing, Thymeleaf validation, and Spring Boot integration tests, the system is well-prepared for deployment.

Testing scenarios define different cases to verify that the ProConnect freelancing platform functions correctly across all modules, ensuring a seamless user experience. These scenarios cover functional, performance, and security testing.

# CHAPTER-13

# CONCLUSION

The ProConnect Freelancing Platform has been successfully developed as a web-based application that connects clients and freelancers, facilitating smooth project posting, bidding, collaboration, and payments. The system provides a structured and secure environment where:

- Clients can post projects, hire freelancers, and manage project progress efficiently.
- Freelancers can browse projects, submit proposals, and communicate with clients seamlessly.
- Admin can manage users, monitor transactions, and ensure platform integrity.

The project is built using Spring Boot, Java, Hibernate, Thymeleaf, MySQL, HTML, CSS, and JavaScript. It integrates authentication mechanisms, secure data management, and a dynamic user interface, making it a reliable and scalable freelancing platform.

Through systematic testing and analysis, the platform has been validated for functionality, performance, and security. The user-friendly interface, structured workflow, and real-time communication system make ProConnect an effective marketplace for freelance services.

**Limitations**

Despite its success, the project has certain limitations that can be addressed in future enhancements:

**1. Limited Payment Integration**

- Currently, the system lacks a **fully automated** payment gateway. Payments are recorded manually, which may limit real-time transactions.

- **Future Improvement:** Integrate third-party payment gateways like **PayPal, Stripe, or Razorpay** for seamless transactions.

**2. Lack of Mobile Application**

- The platform is **optimized for web browsers**, but there is no dedicated **mobile app**.
- **Future Improvement:** Develop a mobile app for both **Android and iOS** to increase accessibility and user engagement.

**3. Basic Messaging System**

- The current messaging system allows basic text-based communication but lacks features like **file sharing, real-time notifications, and video calls**.
- **Future Improvement:** Implement **real-time chat features using WebSockets** and **media sharing** options.

**4. Performance Under Heavy Load**

- While the system performs well under normal conditions, **high concurrent users** may slow down responses due to database queries.
- **Future Improvement:** Optimize **database queries**, use **caching mechanisms**, and consider **server load balancing** to improve scalability.

**5. User Verification and Security**

- The system lacks advanced **identity verification** mechanisms, which could lead to **fake profiles or fraudulent activities**.
- **Future Improvement:** Implement **KYC (Know Your Customer)** verification using email, phone number OTP verification, and government ID checks.

**6. Limited Admin Features**

- The admin panel **manages users and projects** but lacks **detailed analytics and reports**.
- **Future Improvement:** Develop a **dashboard with analytics** to track user engagement, revenue, and system performance.

# CHAPTER-14

# FUTURE ENHANCEMENT AND SCOPE

**Future Scope**

The ProConnect platform has great potential for future expansion. Enhancements such as AI-based job recommendations, automated invoicing, advanced filters, and international payment support can further improve user experience.

By addressing these limitations, ProConnect can evolve into a comprehensive and competitive freelancing platform, ensuring better opportunities for both clients and freelancers.

**Future Enhancements**

The ProConnect Freelancing Platform has been successfully developed, but there are several areas for future enhancements to improve user experience, security, and platform scalability. The following improvements can be considered in upcoming versions:

1. Advanced Payment Integration

- Current Limitation: Payments are manually recorded, with limited automation.
- Enhancement:
    - Integrate secure third-party payment gateways like PayPal, Stripe, Razorpay, or UPI for seamless and real-time transactions.
    - Implement automated invoice generation for freelancers.
    - Introduce an escrow system to ensure secure payments between clients and freelancers.

2. Mobile Application Development

- Current Limitation: The platform is only web-based and lacks a dedicated mobile app.
- Enhancement:
    - Develop a cross-platform mobile app (Android & iOS) using Flutter or React Native.
    - Enable push notifications for project updates and messages.
    - Optimize UI/UX for mobile users.

3. AI-Based Job Recommendation System

- Current Limitation: Job recommendations are manual, and users must search for projects.
- Enhancement:
    - Use Artificial Intelligence (AI) and Machine Learning (ML) to recommend projects based on:
        - Freelancer skills.
        - Past work history.
        - Client preferences.
    - Implement a smart bidding system to suggest optimal bids based on market trends.

4. Real-Time Chat & Video Conferencing

- Current Limitation: Basic text-based messaging without real-time updates.
- Enhancement:
    - Implement WebSockets for real-time messaging.
    - Add file-sharing support for documents and images.
    - Integrate video conferencing for better client-freelancer communication.

5. Enhanced Security & Verification

- Current Limitation: User verification is basic, and fraudulent profiles can be created.
- Enhancement:
    - Implement KYC (Know Your Customer) verification with email, phone number OTP, and government ID verification.
    - Strengthen data encryption for secure transactions and user privacy.
    - Add two-factor authentication (2FA) for extra security.

6. Advanced Analytics & Reports for Admin Panel

- Current Limitation: Admins can manage users but lack detailed insights.
- Enhancement:
    - Develop a comprehensive admin dashboard with:
        - User activity reports (active freelancers, projects completed).
        - Financial analytics (total transactions, freelancer earnings).
        - Performance monitoring (system uptime, page load speed).

7. Multi-Language & Global Payment Support

- Current Limitation: The platform supports only a single language and limited payment options.
- Enhancement:
    - Introduce multi-language support for a global audience.
    - Allow payments in multiple currencies to expand international reach.

8. Freelancer Skill Assessment & Certification

- Current Limitation: There is no verification of freelancer skills.
- Enhancement:
    - Introduce built-in skill assessments to certify freelancers.

- Allow clients to filter freelancers based on certifications.

9. AI-Powered Dispute Resolution System

- Current Limitation: Dispute handling is manual and time-consuming.
- Enhancement:
  - Develop an AI-powered dispute resolution system that:
    - Analyzes chat and project history.
    - Suggests fair resolutions automatically.
  - Provide mediation tools for admins to intervene in disputes.

10. Blockchain-Based Contract & Payment Security

- Future Innovation:
  - Implement blockchain smart contracts for secure transactions.
  - Store contract details and payments on a decentralized network to prevent fraud.

These future enhancements will significantly improve the efficiency, security, and scalability of the ProConnect freelancing platform. By implementing AI-based job recommendations, real-time chat, advanced payment integration, and mobile applications, the platform can provide a seamless experience for clients, freelancers, and administrators.

# CHAPTER-15

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