WPL Project Report

Group members:

Muhammad Umair – IU04-0122-0158
Muhammad Ammad Fahim – IU04-0122-0107

Instructor: Faraz Basit

Project Title:

Freelancer Finance & Productivity Dashboard

Abstract

This project focuses on the development of a freelancer management web application that helps individual freelancers organize and manage their work-related information in a structured manner. The system provides features for managing clients, projects, invoices, and reports within a single platform. The application was developed by separating the frontend and backend to ensure better structure and understanding of how different parts of a web application interact with each other.

The main purpose of this project is to apply the concepts learned in the Web Programming Languages course, including database design, CRUD operations, session handling, and basic authorization techniques. The system allows users to register and log in, after which they can access their own data securely. The application was tested in a local environment and was able to perform all required functionalities correctly, fulfilling the objectives of the course project.

Objective

The objective of this project is to design and implement a web-based system that assists freelancers in managing their daily work activities efficiently. The project aims to reduce the manual effort required to keep records of clients, projects, and invoices by providing a centralized digital solution. By using this system, freelancers can store their data in a structured database and access it whenever needed.

Another important objective of this project is to practically implement the theoretical concepts taught in the Web Programming Languages course. These include working with PHP and MySQL, handling user authentication, managing sessions, and performing create, read, update, and delete operations. The project also focuses on ensuring that only authorized users can access the system and that user data remains protected from unauthorized access.

Introduction

Freelancers often work with multiple clients and projects at the same time, which makes it difficult to manage information using manual methods. Keeping records on paper or simple spreadsheets can lead to data inconsistency, loss of information, and difficulty in tracking payments and project progress. As the amount of work increases, managing this information manually becomes inefficient.

This project provides a web-based solution that allows freelancers to manage their work-related data in an organized and structured way. The system enables users to store client details, project information, and invoices in a database that can be accessed through a user-friendly interface. The project was developed as part of the Web Programming Languages course, with a focus on understanding core web development concepts rather than using complex or advanced technologies.

Methodology

The development of this project followed a structured and step-by-step methodology. Initially, the database was designed to store information related to users, clients, projects, and invoices. Proper relationships were defined between tables to ensure that data could be linked correctly. After completing the database design, the backend was developed using PHP to handle database operations and session management.

Each backend file was created to perform a specific task, such as inserting data, fetching records, updating information, or handling delete operations. Session management was implemented to ensure that only logged-in users could access protected pages. Authorization logic was added to restrict users from accessing data that does not belong to them. Soft delete functionality was implemented to prevent permanent removal of data.
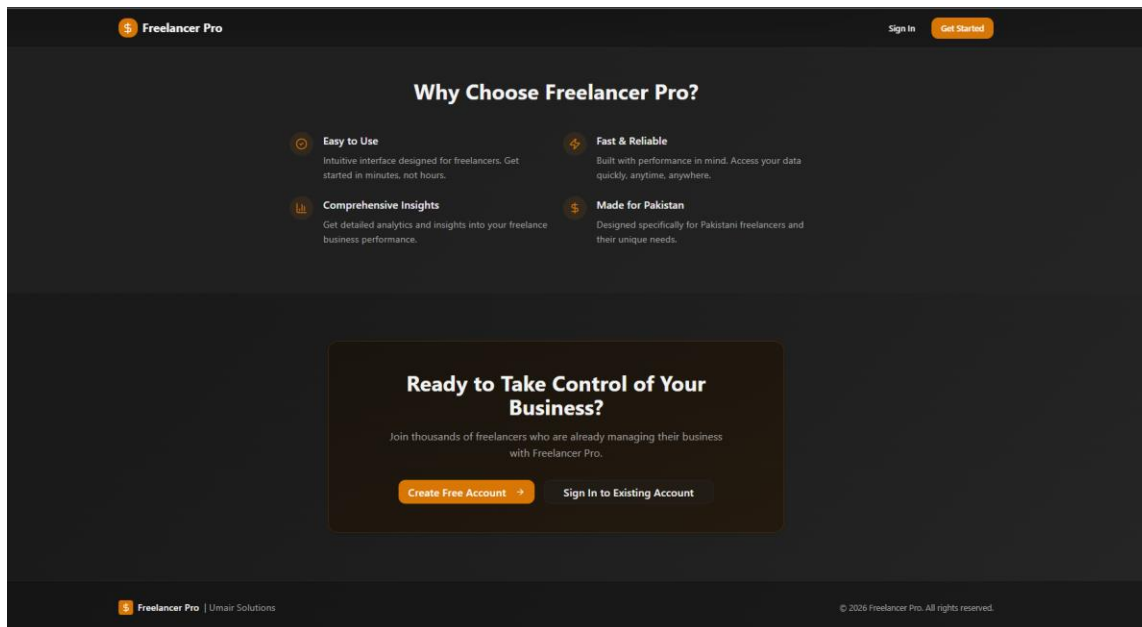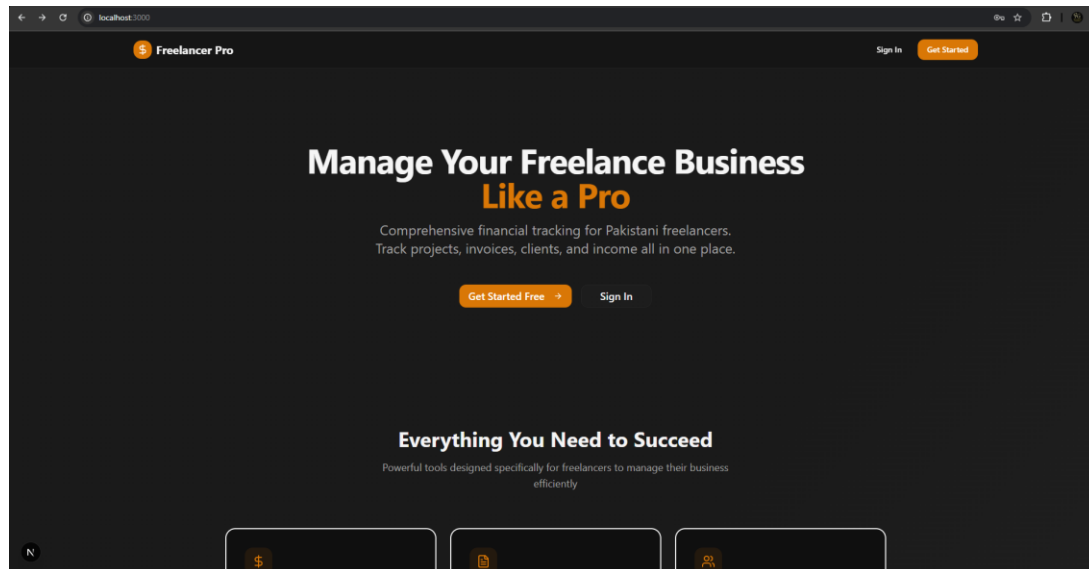
The frontend was built using a React-based structure, which communicates with the backend through HTTP requests. User actions on the interface trigger backend scripts, and the returned data is displayed dynamically. The system was tested by performing different operations such as adding records, editing data, and logging in and out to verify correct behavior.

Results

After completing the implementation, the system was tested under different scenarios to evaluate its functionality. The application successfully allows users to register and log in, and sessions are maintained across different pages of the system. Unauthorized users are restricted from accessing protected pages, ensuring basic security.

Users are able to add, view, update, and soft delete clients, projects, and invoices. Each user can only see and manage their own data, which confirms that authorization has been implemented correctly. The reporting section provides summarized information such as total income, number

of active clients, ongoing projects, and invoice details. Overall, the system performs as expected and meets the functional requirement of the project. Here are some screenshots of the project:

Welcome Back

Sign in to continue

Email

umair@gmail.com

Password

••••••••

Sign In

Don't have an account? **Create one**

Sign Up

Create your account

Full Name

umair

Email

umair@gmail.com

Password

•••••••

Confirm Password

•••••••

Create Account

Already have an account? **Sign in**

Finance ‹

Dashboard   U

Welcome back!

Here's what's happening with your freelance business today.

- ▤ Dashboard
- 👥 Clients
- 🗋 Projects
- 📄 Invoices
- 📊 Reports

Total Income	$
$700.00	
↗ All time	

Total Invoices	⏱
2	
↘ All invoices	

Completed Projects	⊘
0	
↗ All time	

Total Projects	⬈
2	
↗ All projects	

Monthly Income Trend
Your income over the last 12 months

■ Income

1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0

Client Distribution
Income distribution by client

■ ABC   ■ All rehman

N › Logout

Clients

Manage your client information and rates

+ Add Client

Client Name	Email	Phone	Company	Hourly Rate	Actions
Ali rehman	ali@gmail.com	92123124124	Ali International	$20.00/hr	✎ 🗑
ABC	abc@gmail.com	9242141414	abc	$55.00/hr	✎ 🗑

Showing 1 to 2 of 2 items

« ‹ Page 1 of 1 › »

Clients

Manage your client information and rates

+ Add Client

Client Name	Email	Hourly Rate	Actions
Ali rehman	ali@g...	$20.00/hr	✎ 🗑
ABC	abc@g...	$55.00/hr	✎ 🗑

Showing 1 to 2 of 2 items

« ‹ Page 1 of 1 › »

Edit Client   ✕

Update client information

Client Name *

Ali rehman

Email *

ali@gmail.com

Phone

92123124124

Company

Ali International

Hourly Rate ($) *

20.00

Notes

Add notes about this client...

Cancel   Update

Projects

Manage your projects and track earnings

+ Add Project

| Project Name	Client	Start Date	End Date	Price	Status	Actions
AI chatbot using RAG	Ali rehman	2025-12-31	2026-01-21	$200.00	ongoing	✎ 🗑
abc	ABC	2025-12-31	2026-01-02	$55.00/hr	ongoing	✎ 🗑

Showing 1 to 2 of 2 items

« ‹ Page 1 of 1 › »

Projects

Manage your projects and track earnings

+ Add Project

Project Name				Price	Status	Actions
AI chatbot using RAG				$200.00	ongoing	
abc				$55.00/hr	ongoing	

Showing 1 to 2 of 2 items

Page 1 of 1

Add New Project ✕

Project Name *

Website Redesign

Client *

Ali rehman ⌄

Description

Project details...

Start Date *

12/31/2025

End Date

mm/dd/yyyy

Price Type *

Hourly ⌄

Hourly Rate ($) *

0

Status *

Ongoing ⌄

Cancel   **Add Project**

Finance <

- ▦ Dashboard
- ☷ Clients
- ▥ Projects
- ▤ Invoices
- ▥ Reports

Ⓝ Logout

Dashboard   U

Invoices

Manage your invoices and payments

+ Create Invoice

Invoice #	Client	Project	Date	Due Date	Amount	Status	Actions
INV-1767205393063	ABC	abc	2025-12-31	2026-01-02	$500.00	Pending	

Showing 1 to 1 of 1 items

Page 1 of 1

Create Invoice ✕

Invoice Number *

INV-1767211864988

Client *

Ali rehman ⌄

Project *

AI chatbot using RAG ⌄

Invoice Date *

12/31/2025

Due Date

01/07/2026

Description *

AI chatbot using RAG

Amount ($) *

200

Status *

Pending ⌄

Cancel   **Create**

INVOICE

Invoice #INV-1767211864988

Invoice Date: December 31, 2025
Due Date: January 7, 2026

BILL TO
Ali rehman
Ali International
ali@gmail.com
92123124124

PROJECT
AI chatbot using RAG

DESCRIPTION	AMOUNT
AI chatbot using RAG	$200.00
Total Amount	**$200.00**

INVOICE STATUS

Pending

Print / Save as PDF

Finance

- Dashboard
- Clients
- Projects
- Invoices
- Reports

Logout

Dashboard

Reports
View your business analytics and performance

Total Income YTD	Active Clients	Active Projects	Avg Monthly Income
$830.00	**2**	**4**	**$296.67**
Year to date	Currently working with	In progress	Last 12 months

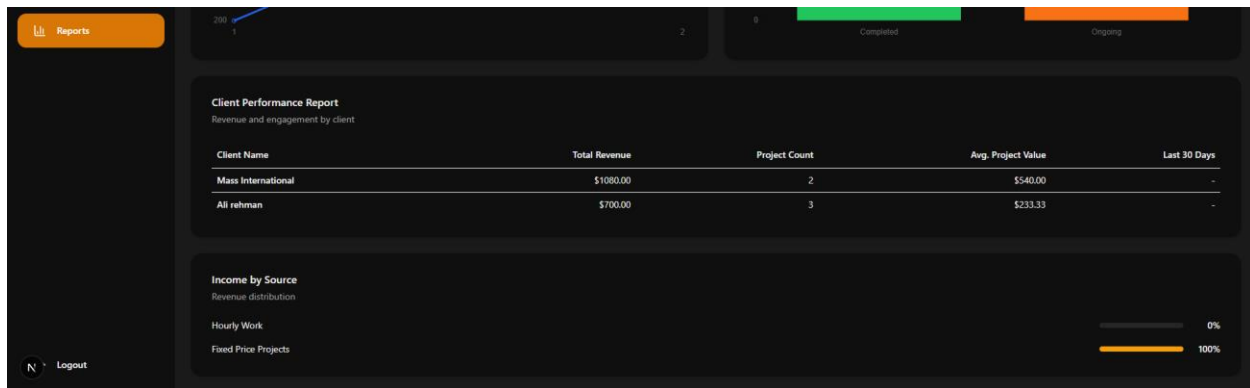**Yearly Income Trend**
Monthly income comparison

Income

Project Status Breakdown
Completed vs ongoing

Projects

Completed | Ongoing

Future Work

Although the current version of the system fulfills the project requirements, there are several areas where further improvements can be made. Additional features such as role-based access control can be implemented to differentiate between different types of users. The reporting module can be enhanced by adding graphical representations such as charts and graphs for better data visualization.

Other improvements may include better input validation, improved error handling, and additional security measures. The system can also be deployed on an online server instead of being limited to a local environment. These enhancements would make the application more robust and suitable for real-world use.

Conclusion

This project successfully demonstrates the development of a freelancer management web application using the concepts learned in the Web Programming Languages course. The system implements essential features such as user authentication, session management, authorization, CRUD operations, and reporting. Through this project, a clear understanding was developed regarding how frontend and backend components communicate with each other.

The project helped in gaining practical experience with PHP, MySQL, and frontend integration. It also highlighted the importance of data security and proper session handling in web applications. Overall, the project achieves its objectives and provides a solid foundation for future enhancements and learning.