KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

DEPARTMENT OF COMPUTER SCIENCE

FACULTY OF PHYSICAL AND COMPUTATIONAL SCIENCES

COLLEGE OF SCIENCE

FINAL YEAR PROJECT REPORT

TOPIC: Patfran Cleaning Service Management System

BY:

Name: Patrick Belebang Yagsori

Index Number: 3645522

Name: Francis Opoku Junior

Index Number: 3643222

SUPERVISED BY:

Supervisor Name: Prof. Asante

PROJECT REPORT SUBMITTED TO THE DEPARTMENT OF COMPUTER SCIENCE, FACULTY OF PHYSICAL AND COMPUTATIONAL SCIENCES IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF A BACHELOR OF SCIENCE (BSC.) DEGREE IN COMPUTER SCIENCE.

SEPTEMBER 2024

DECLARATION

We hereby declare that this project report titled "Patfran Cleaning Service Management System" is our own work and has not been submitted previously for any academic qualification. All sources of information used have been duly acknowledged.

Patrick Belebang Yagsori

Index Number: 3645522

Signature: _____

Date: _____

Francis Opoku Junior

Index Number: 3643222

Signature: _____

Date: _____

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Lastly, we appreciate the efforts of everyone who contributed directly or indirectly to the success of this project.

ABSTRACT

The Patfran Cleaning Service Management System is a web-based application developed to streamline the operations of a cleaning service company. It automates critical business processes, including service management, revenue tracking, expenditure monitoring, payroll management, and employee attendance. The system features dashboards for monthly and yearly performance evaluation, allowing management to track financial performance and service delivery effectively.

By the generation of invoices, receipts, and financial reports, the system reduces manual errors, increases efficiency, and provides real-time data for decision-making. The payroll module facilitates easy management of employee attendance and salary calculations, enhancing transparency. This system is designed to help small- and medium-sized cleaning businesses improve their operational workflows, resulting in better customer service and increased profitability.

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CHAPTER 1: INTRODUCTION

1.1 Background of the Study

The cleaning services industry is growing rapidly as individuals and organizations prioritize cleanliness and hygiene. Patfran Cleaning Service Management System is a web-based application aimed at streamlining and automating the day-to-day operations of a cleaning service business. The system will manage services, revenue tracking, expenditure, payroll, and employee attendance. The ultimate goal is to provide a comprehensive solution to improve efficiency and accountability in the cleaning service industry.

1.2 Problem Statement

Managing a cleaning service company involves several manual processes such as generating receipts, managing invoices, tracking expenditures, marking employee attendance, and calculating payroll. These processes are prone to errors, time-consuming, and inefficient. Therefore, there is a need for a web-based system that can automate these tasks and reduce the administrative burden on management.

1.3 Objectives of the Study

The main objectives of the Patfran Cleaning Service Management System are:

To provide a platform to add and manage cleaning services.

To track and report the revenue generated from monthly and yearly services.

To automate receipt and invoice generation for clients.

To record and manage business expenditures.

To track employee attendance and calculate salaries efficiently.

1.4 Scope of the Study

This project focuses on the design and implementation of a web-based cleaning service management system. The system will include features such as service management, net revenue tracking, receipt generation, invoice management, expenditure tracking, and payroll management. It will also provide dashboards for monthly and yearly service performance.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

A cleaning service management system falls within the broader category of business management software, which helps organizations automate various aspects of their operations. This chapter reviews existing systems and their capabilities in handling similar operations.

2.2 Existing Systems

There are various business management systems currently in use, such as **QuickBooks** and **Zoho Books**, which provide basic functionalities for managing invoices and expenditures. However, they are general-purpose and not tailored to the specific needs of a cleaning service business. Our system will fill this gap by offering industry-specific functionalities, such as service management and payroll for cleaning staff.

CHAPTER 3: SYSTEM ANALYSIS AND DESIGN

3.1 Introduction

This chapter focuses on the design and structure of the Patfran Cleaning Service Management System. It details the architecture, system modules, and database schema.

3.2 System Architecture

The system will follow a client-server architecture with the web application hosted on a server and accessed through web browsers. The system will be built using **PHP** for the backend and **MySQL** as the database. The front end will be developed using **HTML**,**CSS**, and **JavaScript.**

3.3 System Modules

3.3.1 Dashboard Section

Add Services: Allows the admin to add new cleaning services offered.

Service Management: Displays all services added to the system, with options for editing or removing them.

Monthly Service Dashboard: Displays the number of services rendered each month, the revenue generated, and rankings based on performance.

Yearly Service Dashboard: Similar to the monthly dashboard but tracks yearly performance.

3.3.2 Net Revenue Section

Net Revenue Summary: Displays total revenue, total expenditure, and net revenue for a selected time period.

Weekly, Monthly, and Yearly Revenue Pages: Breaks down the revenue and expenditure over the specified period.

3.3.3 Receipt Section

Generate Receipt: Allows the admin to create receipts for clients after services are rendered.

Receipt Management: Displays a list of generated receipts and offers the ability to print or export them.

Partial Payments: Displays all partial payments made by clients.

3.3.4 Invoice Section

Generate Invoice: Allows the admin to generate invoices for clients.

Invoice Management: Displays a list of generated invoices and offers the ability to print.

3.3.5 Expenditure Section

Generate Expenditure: Allows the admin to record and categorize business expenses.

Expenditure Management: Provides a list of all recorded expenditures.

3.3.6 Payroll Section

Add Worker: Provides a form for adding new staff to the system.

Mark Attendance: Allows the admin to mark the attendance of workers.

View Salary: Displays the total salary earned by each worker based on attendance.

CHAPTER 4: IMPLEMENTATION

4.1 Technologies Used

Backend: PHP (Hypertext Preprocessor)

Database: MySQL

Frontend: HTML, CSS, JavaScript

4.2 Database Design

The database consists of several tables:

services: Stores information about the services offered.

receipts: Stores generated receipts.

invoices: Stores generated invoices.

expenditures: Stores business expenditures.

employees: Stores employee details and attendance.

attendance: Tracks daily attendance of employees.

CHAPTER 5: TESTING AND RESULTS

5.1 Introduction

This chapter discusses the testing approach, methodology, and results of the testing phase.

5.2 Testing Methodology

Unit testing was performed on all modules, and integration testing ensured that all modules worked together seamlessly.

5.3 Test Results

The system was tested on the following criteria:

Service Management: Successfully added, viewed, and deleted services.

Revenue Tracking: Correctly calculated total, weekly, monthly, and yearly revenue.

Receipt and Invoice Generation: Receipts and invoices were generated and displayed correctly.

Expenditure Management: Expenditures were recorded and categorized without errors.

Payroll: Attendance was marked, and salaries were calculated based on attendance.

CHAPTER 6: CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

The Patfran Cleaning Service Management System successfully streamlines the operations of a cleaning service company. The system automates the process of managing services, revenue, expenditures, and payroll, which greatly improves efficiency and reduces the administrative burden.

6.2 Recommendations

Future versions of the system could incorporate mobile accessibility, additional payment methods, and integration with SMS or email notifications for clients and employees.

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https://dev.mysql.com/doc/](https://dev.mysql.com/doc/

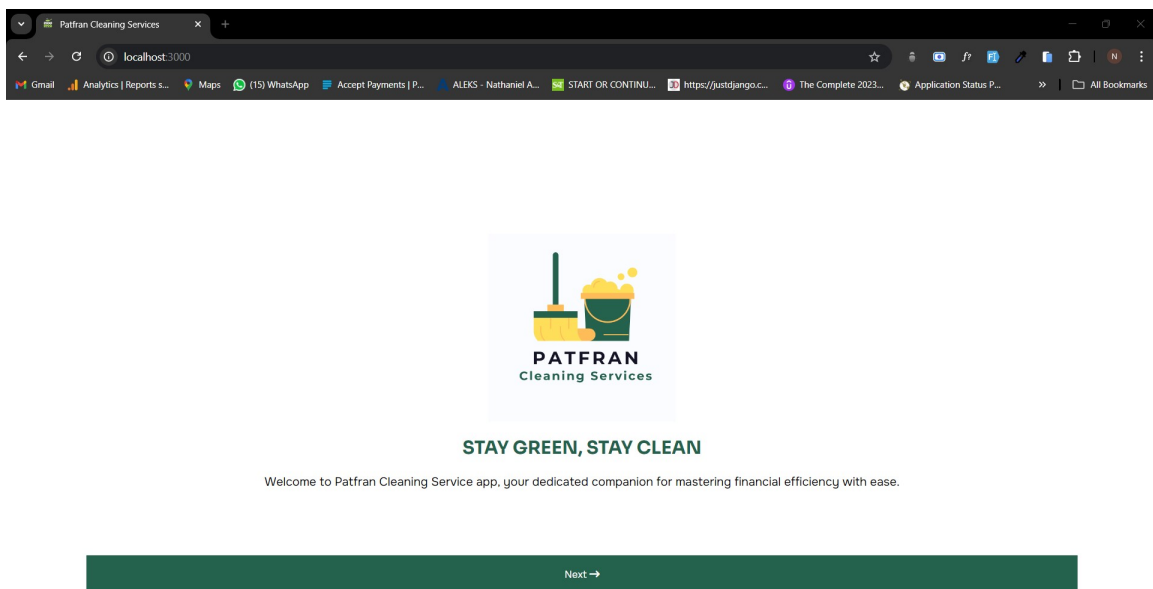This report presents the final year project on the Patfran Cleaning Service Management System, developed by Patrick Belebang Yagsori and Francis Opoku Junior under the supervision of Prof. Asante, at the Kwame Nkrumah University of Science and Technology.

Appendices

A.1 Sample Screenshots
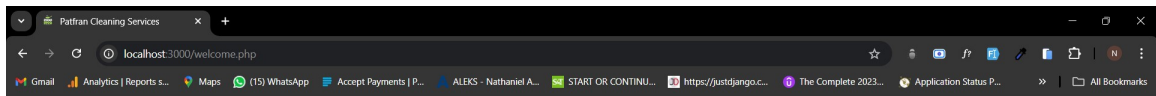
index page

welcome page

login page

Net Revenue Summary page
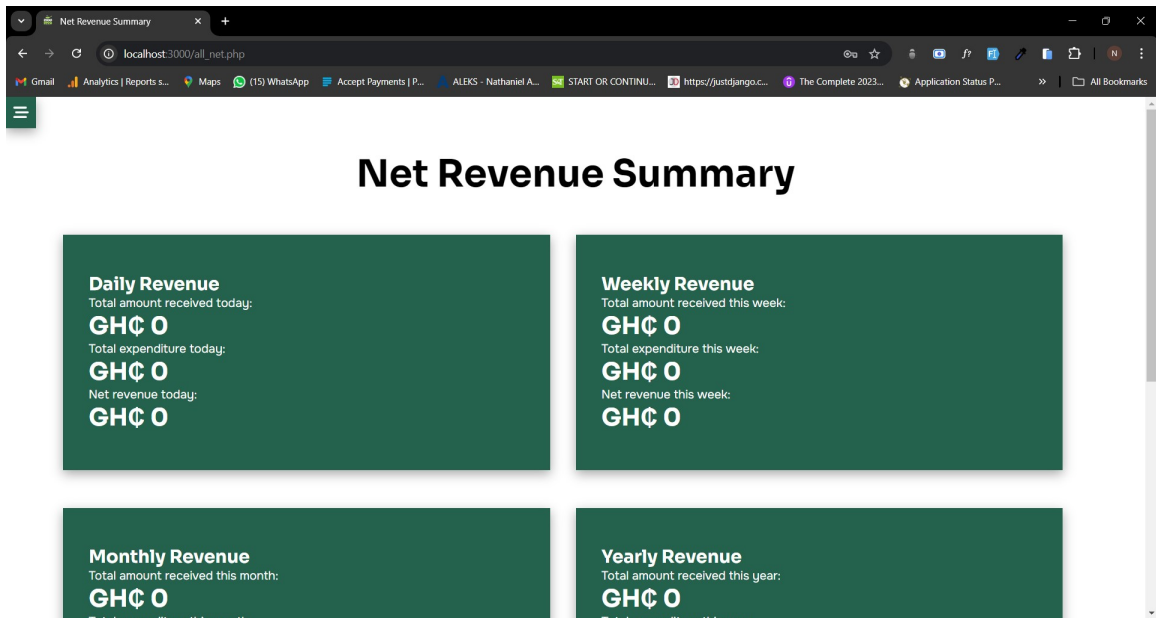
Add a New Service page

Manage Services page
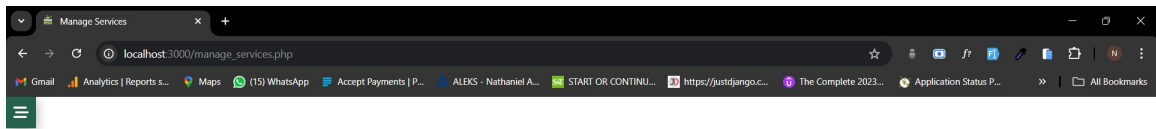
Manage Services

Service Name
Residential Cleaning
Commercial Cleaning
Carpet and Upholstery Cleaning
Window Cleaning (Interior & Exterior)
Floor Stripping and Waxing
Sanitization & Disinfection

Services and Money Gained for Each Month page
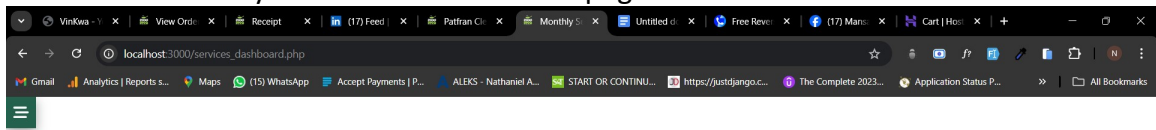
Services and Money Gained for Each Month

Select Year:

2024

FILTER

Service	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
No data available for the selected year.												

Ranking

Rank	Service	Total Money Gained (GH₵)
No data available for the selected year.		

Services and Money Gained for Each Year page

Services and Money Gained for Each Year

Select Year:

2024

FILTER

Service	2024
No data available for the selected year.	

Ranking

Year	Service	Total Money Gained (GH₵)
No data available for the selected year.		

Daily Revenue page

Daily Revenue

Search by Date:

dd/mm/yyyy

SEARCH

Date	Total Revenue	Total Expenditure	Net Revenue
2024-01-01	GH₵ 0	GH₵ 0	GH₵ 0
2024-01-02	GH₵ 0	GH₵ 0	GH₵ 0
2024-01-03	GH₵ 0	GH₵ 0	GH₵ 0
2024-01-04	GH₵ 0	GH₵ 0	GH₵ 0
2024-01-05	GH₵ 0	GH₵ 0	GH₵ 0
2024-01-06	GH₵ 0	GH₵ 0	GH₵ 0
2024-01-07	GH₵ 0	GH₵ 0	GH₵ 0
2024-01-08	GH₵ 0	GH₵ 0	GH₵ 0
2024-01-09	GH₵ 0	GH₵ 0	GH₵ 0

Weekly Revenue

Weekly Revenue (Sep 9, 2024 – Sep 15, 2024)

Day	Date	Total Revenue	Total Expenditure	Net Revenue
Monday	Sep 9, 2024	GH₵ 0	GH₵ 0	GH₵ 0
Tuesday	Sep 10, 2024	GH₵ 0	GH₵ 0	GH₵ 0
Wednesday	Sep 11, 2024	GH₵ 0	GH₵ 0	GH₵ 0
Thursday	Sep 12, 2024	GH₵ 0	GH₵ 0	GH₵ 0
Friday	Sep 13, 2024	GH₵ 0	GH₵ 0	GH₵ 0
Saturday	Sep 14, 2024	GH₵ 0	GH₵ 0	GH₵ 0
Sunday	Sep 15, 2024	GH₵ 0	GH₵ 0	GH₵ 0

Monthly Revenue

Monthly Revenue

Month	Total Revenue	Total Expenditure	Net Revenue
January	GH₵ 0	GH₵ 0	GH₵ 0
February	GH₵ 0	GH₵ 0	GH₵ 0
March	GH₵ 0	GH₵ 0	GH₵ 0
April	GH₵ 0	GH₵ 0	GH₵ 0
May	GH₵ 0	GH₵ 0	GH₵ 0
June	GH₵ 0	GH₵ 0	GH₵ 0
July	GH₵ 0	GH₵ 0	GH₵ 0
August	GH₵ 0	GH₵ 0	GH₵ 0
September	GH₵ 0	GH₵ 150.00	GH₵ -150
October	GH₵ 0	GH₵ 0	GH₵ 0
November	GH₵ 0	GH₵ 0	GH₵ 0
December	GH₵ 0	GH₵ 0	GH₵ 0

Yearly Revenue

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Yearly Revenue

Search by Year:

| Enter year |

| SEARCH |

Year	Total Revenue	Total Expenditure	Net Revenue
2024	GH₵ 0	GH₵ 150.00	GH₵ -150
2025	GH₵ 0	GH₵ 0	GH₵ 0
2026	GH₵ 0	GH₵ 0	GH₵ 0
2027	GH₵ 0	GH₵ 0	GH₵ 0
2028	GH₵ 0	GH₵ 0	GH₵ 0
2029	GH₵ 0	GH₵ 0	GH₵ 0
2030	GH₵ 0	GH₵ 0	GH₵ 0
2031	GH₵ 0	GH₵ 0	GH₵ 0
2032	GH₵ 0	GH₵ 0	GH₵ 0

Receipt Page

Receipt Form

Client Name:

Payment Method:

Cash

Full or Partial Payment:

Full

Select Service:

Service	Price
Residential Cleaning	Price for Residential Cleaning
	Price for Commercial Cleaning

Invoice page

Expenditure

Name:

Phone Number:

Date:

dd/mm/yyyy

Description:

Amount:

SUBMIT

payroll

View Salary

Worker:

All Workers

VIEW MONTHLY SALARY AND ATTENDANCE

Monthly Salary Details with Attendance

Worker	Month	Date	Status	Salary for the Day (GHS)
Bianca Foreman	August	2024-08-30	Present	100.00
Bianca Foreman	August	2024-08-31	Present	100.00
Total for Bianca Foreman in August				**200**
Chloe Huff	August	2024-08-30	Present	100.00
Chloe Huff	August	2024-08-31	Absent	0
Total for Chloe Huff in August				**100**
Emmanuel Asamoah	August	2024-08-30	Present	100.00
Emmanuel Asamoah	August	2024-08-31	Absent	0