A PBL REPORT

ON

# "Budget Tracking System"

Submitted to

## INFORMATION TECHNOLOGY , BHARATI VIDYAPEETH (DEEMED TO BE
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BACHELOR'S DEGREE IN

INFORMATION TECHNOLOGY

BY

2214110256     Aashray Maheshwari ( 2422930538 )

2214110274     Hardika Tandel ( 2422930552 )

2314110777     Navneet Giri ( 2422930568 )

2214110252     Kshitij Kamdi ( 2422930534 )

UNDER THE GUIDANCE OF

Prof. T. B. Patil

DEPARTMENT OF INFORMATION TECHNOLOGY

BHARATI VIDYAPEETH (DEEMED TO BE UNIVERSITY)

COLLEGE OF ENGINEERING, PUNE, INDIA - 411043

2023-2024

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# CERTIFICATE

This is to certify that the project entitled

## "Budget Tracking System "

submitted by

2214110256    Ashray Maheshwari ( 2422930538 )
2214110274    Hardika Tandel ( 2422930552 )
2314110777    Navneet Giri ( 2422930568 )
2214110252    Kshitij Kamdi ( 2422930534 )

is a record of bona fide work carried out by them, in the partial fulfilment of the requirement for the award of Degree of Bachelor of Technology in Information Technology at Bharati Vidyapeeth (Deemed to Be University) College of Engineering, Pune, India. This work is done during academic year 2023-2024.

Date:    /    /

Signature

Signature

(Dr.Sandeep Vanjale)                          (Prof. T.B. Patil)
( HOD,IT)                                     (PBL Guide)

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Aashray Maheshwari

Hardika Tandel

Navneet Giri

Kshitij Kamdi

# ABSTRACT

This report delves into the functionality, benefits, and implications of a budget tracking website designed to empower individuals in managing their finances effectively. In an era where financial literacy and responsible money management are paramount, digital tools play a pivotal role in facilitating these practices. The budget tracking website discussed herein offers users a comprehensive platform to monitor, analyze, and optimize their financial activities.

Key components of the website include intuitive user interfaces, customizable budget templates, real-time expense tracking, and insightful analytics. By aggregating financial data from various sources such as bank accounts, credit cards, and investments, the website provides users with a holistic view of their financial landscape. Through interactive charts, graphs, and expenditure categorization features, users gain actionable insights into their spending patterns, allowing for informed decision-making and budget adjustments.

Furthermore, the website fosters accountability and goal-setting by enabling users to set financial objectives, establish savings targets, and track progress over time. Privacy and security measures are paramount, with robust encryption protocols and stringent data protection policies safeguarding sensitive information.

The implications of such a budget tracking website are multifaceted. From individual users seeking to improve their financial literacy and achieve financial goals to businesses aiming to enhance employee financial wellness programs, the website offers a versatile solution. Moreover, the aggregation of anonymized user data can provide valuable insights for financial institutions, policymakers, and researchers to better understand consumer behavior and trends.

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# TABLE OF CONTENTS

1. **Introduction**

2. **How is budget tracking system related to IT services**

3. **Features**

4. **Implementation**

5. **Test Cases**

6. **Conclusion**

# 1.Introduction

A. Project Overview

The Budget Tracking Website project aims to develop an online platform that empowers individuals to manage their finances effectively by tracking their income, expenses, and savings goals. In an increasingly digital world, where financial literacy is crucial, this website provides a user-friendly solution for users to gain insights into their spending habits, set budgets, and work towards achieving financial stability.

B. Purpose and Scope

A budget tracking system serves as a vital tool for managing finances effectively. Here's the purpose and scope of such a system outlined in points:

- **Financial Control**: The primary purpose of a budget tracking system is to provide individuals or organizations with a means to control their finances by monitoring income, expenses, and savings.
- **Goal Setting and Monitoring**: It allows users to set financial goals and track progress towards achieving them. Whether it's saving for a vacation, paying off debt, or investing in a project, the system helps in staying on track.
- **Expense Tracking**: It enables users to record and categorize expenses, providing insights into spending patterns. This information is crucial for identifying areas where expenses can be reduced or optimized.
- **Income Management**: Alongside expenses, the system tracks income sources, facilitating a comprehensive view of cash flows. This helps in evaluating whether income aligns with financial goals and making adjustments accordingly.
- **Budget Planning**: Users can create and adjust budgets based on their financial objectives. The system assists in allocating funds to different categories such as housing, transportation, groceries, entertainment, etc., ensuring that spending aligns with predetermined limits.
- **Financial Awareness**: By providing real-time updates on financial status, the system promotes awareness of one's financial health. Users gain insights into their overall financial situation, enabling informed decision-making.
- **Forecasting and Prediction**: Through historical data analysis, the system can forecast future expenses and income trends. This aids in planning for future financial needs and identifying potential challenges or opportunities.

# 2.How is budget tracking system related in IT services

ITM stands for IT Management or Information Technology Management. It refers to the discipline of managing information technology (IT) resources within an organization to achieve business objectives effectively and efficiently. ITM encompasses various activities, processes, and services aimed at planning, organizing, directing, and controlling IT resources to support business operations and strategic goals.

Here are some of the key services within IT Management:

- **IT Strategy and Planning**
- **IT Governance and Compliance**
- **IT Project Management**
- **IT Service Management (ITSM)**
- **IT Infrastructure Management**
- **IT Security Management**
- **IT Financial Management**
- **IT Vendor and Contract Management**

## IT Financial Management:

ITIL **Financial Management,** also called **Financial Management for IT Services,** is a complex process. It's used for organizations as a basis for conducting business and managing **IT Services**. A Senior Leadership and Executive Team usually owns it. Managed by an **IT Financial Management** Function in partnership with Corporate Financial Management Function and focused on the following.

- o Financial Management for IT Services is the process responsible for managing an IT Budgeting, Accounting, and Charging requirements.
- o IT Financial Management process is used to quantify the value of IT services contributing to the business.
- o IT Financial Management enables the organization to manage its resources, ensuring that resources are being used to achieve the organization's goals and objectives.
- o Financial Management for IT Services refers to how IT has applied the process for Services to the Business.
- o Enterprise Financial Management refers specifically to the process as it is used by the 'corporate' Financial Department.
- o Financial Management enables IT to play a strategic role in the business.

- o This process helps to quantify ITs value and contributions and quantifies the business opportunities that IT services enable.
- o IT Financial Management, in terms of a strategic tool, is equally applicable to all three types of service providers.
  - Internal service providers are increasingly asked to operate with the same levels of financial visibility. As Business Units Accountability for their external counterparts.
  - Moreover, technology and innovation have become the core revenue-generating capabilities of many companies.
- o IT Financial management is the process of overseeing IT expenditures. It's intended to provide both business units and IT departments with the ability to evaluate services and plan investments to optimize IT expenses

## What are the Objectives of ITIL Financial Management for IT Services?

- Providing cost-effective stewardship of IT Assets and Resources providing IT services
- Maintaining after Defining a framework to identify, communicate, and manage the cost of providing IT Services.
- Evaluation of the financial impacts of changed or new strategies on the service provider.
- To secure the funding to manage the provision of services.
- Facilitating good stewardship of customer assets and services to ensure the organization meets its objectives. It should be done with Service Assets, Configuration Management, and Knowledge Management.
- Knowledge and understanding of the relationship between income and expenses ensuring that the two are balanced according to the organization's financial policies.
- On behalf of the organization's stakeholders, managing and reporting expenditure on service provisioning's
- In the provision of services, execute financial policies and practices.
- IT Accounting for money expenses on the creation, delivery, and support of services.
- Meet the service commitments to its customers by forecasting the IT Financial requirements for the organization and compliance with legislative and regulatory requirements.

Here's how a budget tracking website can be related to or used in an IT financial management system:

- **Expense Tracking**: The budget tracking website can be used to monitor and track expenses related to IT infrastructure, software licenses, hardware purchases, maintenance contracts, cloud services, and other IT-related costs. It provides a centralized platform for recording and categorizing IT expenses, allowing for better visibility and control over IT spending.

- **Budget Planning and Allocation**: IT financial managers can use the budget tracking website to create and manage budgets for different IT departments, projects, or initiatives. They can allocate funds to various budget categories such as hardware, software, personnel, training, and infrastructure upgrades, ensuring that spending aligns with strategic objectives and financial constraints.

- **Cost Analysis and Reporting**: The budget tracking website generates reports and analytics to analyze IT spending patterns, trends, and variances. IT financial managers can use these insights to identify cost-saving opportunities, optimize resource utilization, and make data-driven decisions regarding IT investments and budget allocations.

- **Vendor Management**: The budget tracking website can be used to track vendor contracts, agreements, and payments related to IT procurement and services. IT financial managers can monitor vendor performance, negotiate contracts, and ensure compliance with contractual terms and service level agreements (SLAs) to optimize vendor relationships and mitigate financial risks.

- **Capital Expenditure (CapEx) vs. Operational Expenditure (OpEx) Management**: The budget tracking website helps in distinguishing between capital expenditures (e.g., hardware purchases, infrastructure investments) and operational expenditures (e.g., software subscriptions, maintenance costs). IT financial managers can track and manage both types of expenses separately, ensuring accurate financial reporting and compliance with accounting standards.

- **Forecasting and Planning**: The budget tracking website facilitates long-term financial planning and forecasting for IT initiatives, projects, and investments. IT financial managers can use historical spending data and budget projections to forecast future expenses, allocate resources effectively, and align IT investments with organizational goals and priorities.

- **Compliance and Governance**: The budget tracking website supports compliance with financial regulations, policies, and governance frameworks governing IT spending and financial management. It provides audit trails,

documentation, and controls to ensure transparency, accountability, and regulatory compliance in IT financial management processes.

- **Integration with Financial Systems**: The budget tracking website can be integrated with other financial systems such as enterprise resource planning (ERP) systems, accounting software, and procurement platforms. This integration streamlines financial workflows, eliminates duplicate data entry, and ensures consistency and accuracy in financial reporting and analysis.

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# 3.Features

A budget tracking app typically includes a range of features to help users manage their finances effectively. Here are some key features commonly found in budget tracking apps:

- <u>Expense Tracking</u>: Users can input and categorize their expenses, including details such as amount, date, and category (e.g., groceries, utilities, entertainment).

- <u>Income Management</u>: Users can track various sources of income, including salaries, freelance earnings, investments, etc., to understand their overall financial picture.

- <u>Budget Planning</u>: Users can set budgets for different expense categories to allocate funds and track spending against predefined limits.

- <u>Goal Setting</u>: Users can set financial goals, such as saving for a vacation, paying off debt, or building an emergency fund, and track progress towards these goals.

- <u>Reports and Analytics</u>: Generate detailed reports and visualizations to analyze spending patterns, track progress towards goals, and gain insights into overall financial health.

- <u>Reminders and Alerts</u>: Receive notifications or reminders when approaching budget limits, missing bill payments, or achieving milestones towards financial goals.

- <u>Sync Across Devices</u>: Synchronize data across multiple devices (e.g., smartphones, tablets, desktops) to ensure users have access to their budget information wherever they go.

- <u>Customizable Categories</u>: Allow users to create custom expense categories or modify existing ones to better suit their individual financial needs.

- Bill Payment Tracking: Track upcoming bill payments, due dates, and payment history to avoid late fees and maintain good financial standing.

- <u>Debt Tracking</u>: Monitor outstanding debts, such as loans or credit card balances, and track progress towards repayment goals.

- <u>Financial Goal Tracking:</u> Set and track progress towards various financial goals, such as saving for a down payment, retirement, or education expenses.

- <u>Security Features</u>: Implement robust security measures, such as encryption, biometric authentication, or multi-factor authentication, to protect sensitive financial data.

- <u>Offline Access</u>: Provide offline access to budget data, allowing users to input expenses and view budget information even without an internet connection.

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# 4.Implementation

## Login Page
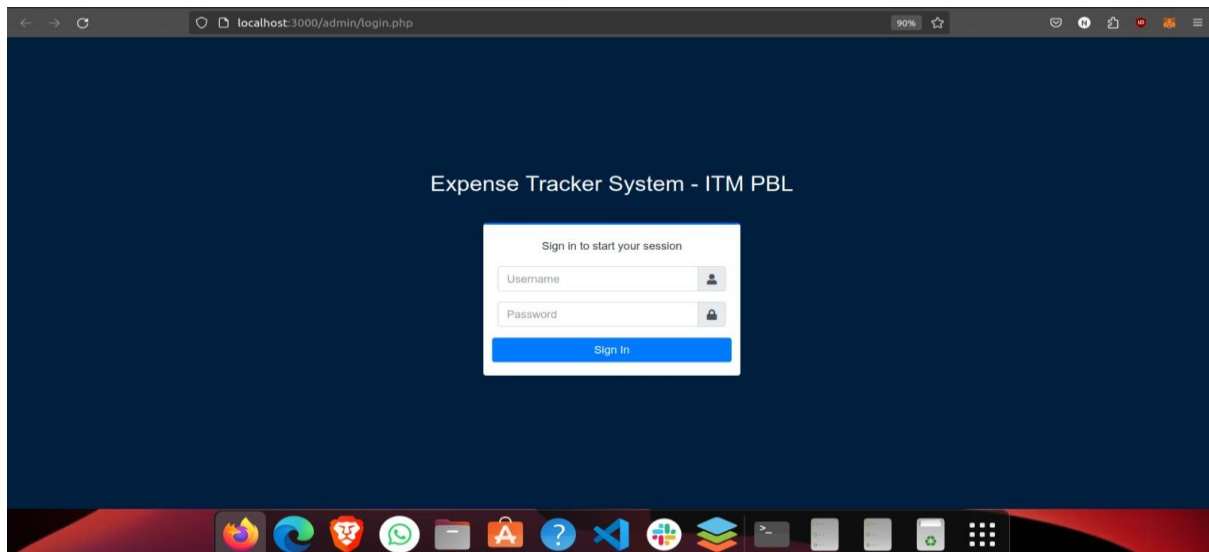


- <u>Access the Page</u>: Open a web browser and navigate to the URL where the PHP script is hosted.
- <u>Input Credentials</u>: On the login page, enter your username and password into the respective input fields.
- <u>Submit Form</u>: After entering your credentials, click on the "Sign In" button to submit the login form.
- <u>Authentication</u>: The script will then validate the provided credentials. If they are correct, you will be granted access to the system. Otherwise, an error message may be displayed indicating invalid credentials.
- <u>Navigation</u>: Upon successful authentication, you may be redirected to the main application page or a designated landing page.

## Dashboard

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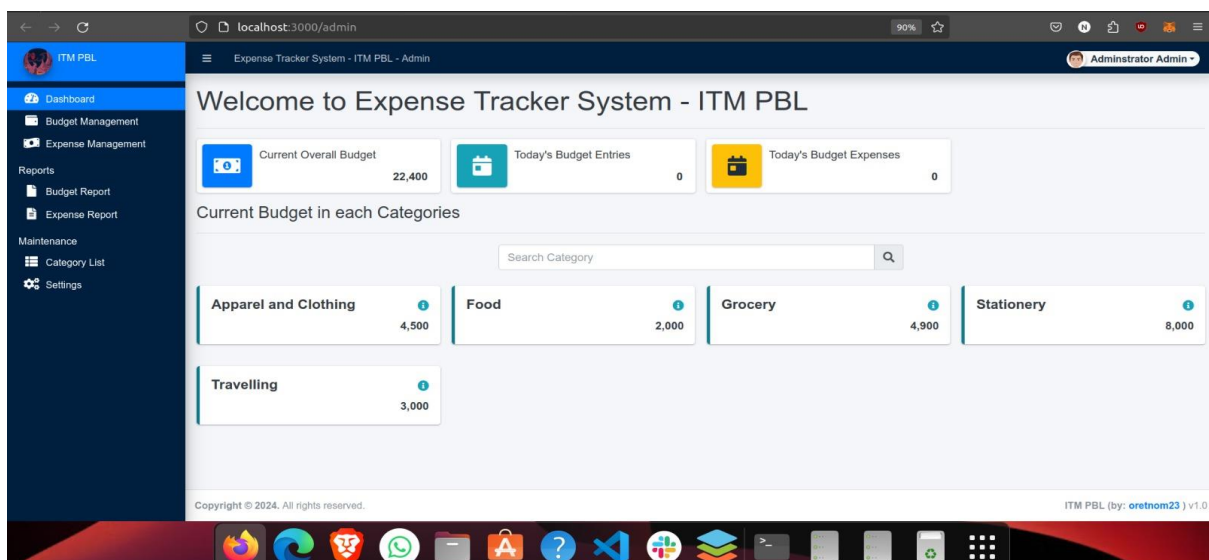
- The above dashboard consist of a vertical navbar which has sections of the main page, budget management, expense management, budget report, expense report, category list where you can add the required categories in the expense section.
- The main section contains all the contents wrapped together which displays various expense categories
- It also gives the current Overall budget, present days expense and the present days budget which is set by the admin.

# Budget Setting Page
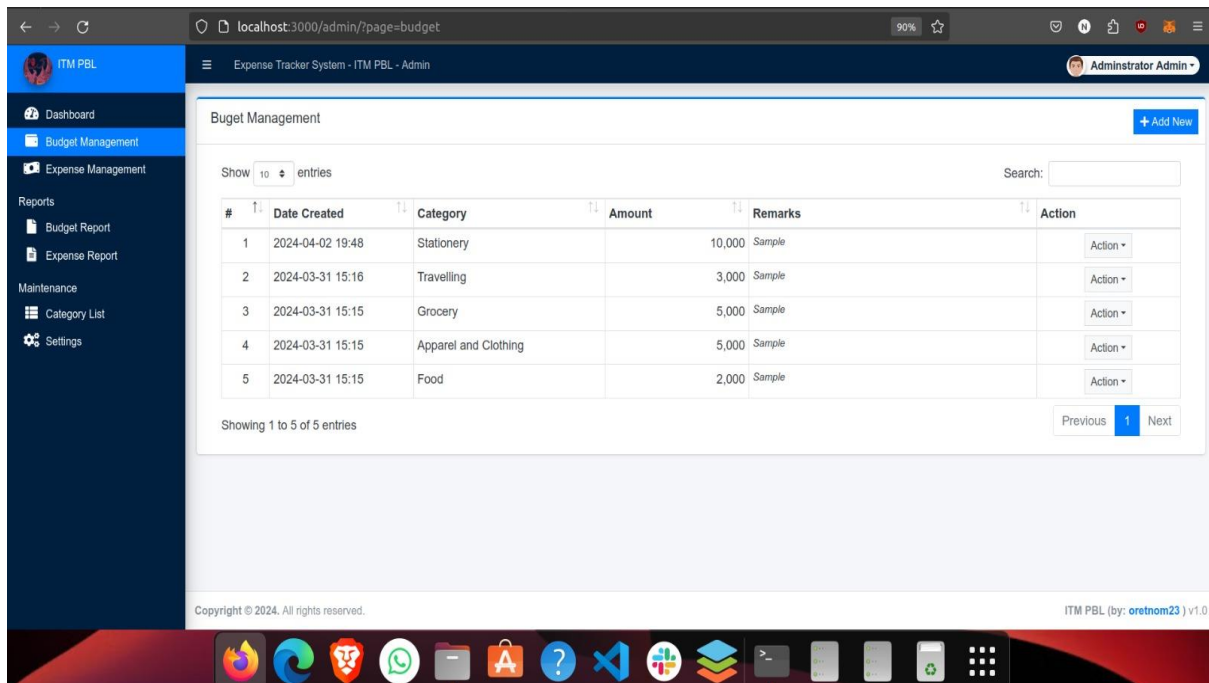


- Header displaying "Budget Management" title and an "Add New" button.
- Table showing existing budget entries with columns for date, category, amount, remarks, and action dropdown for editing or deleting entries.
- Functionality for adding, editing, and deleting entries using modals.
- JavaScript functions handle AJAX requests for CRUD operations.
- Utilizes DataTables and Summernote for enhanced user experience.

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## Expense Tracking
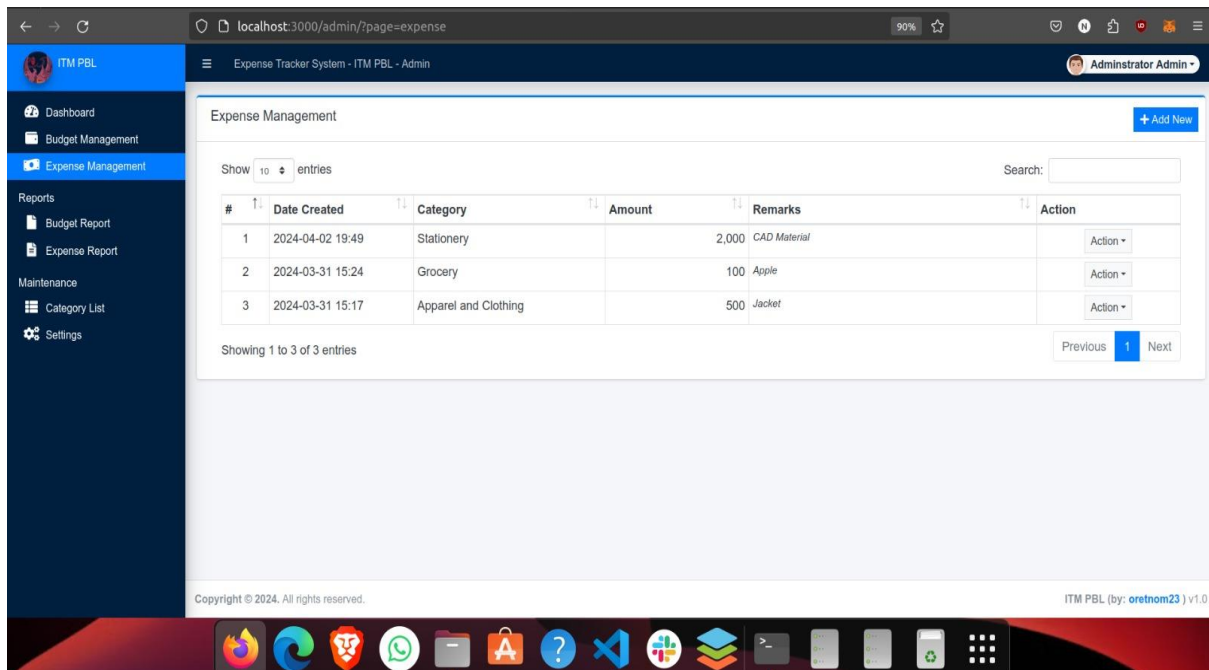


- A header with an "Add New" button.
- A table showing existing expense entries with options to edit or delete.
- Functionality to add, edit, and delete expenses using modals.
- JavaScript functions handling AJAX requests for CRUD operations.
- Utilizes features like DataTables and Summernote for improved user experience.

## Adding categories in expense section

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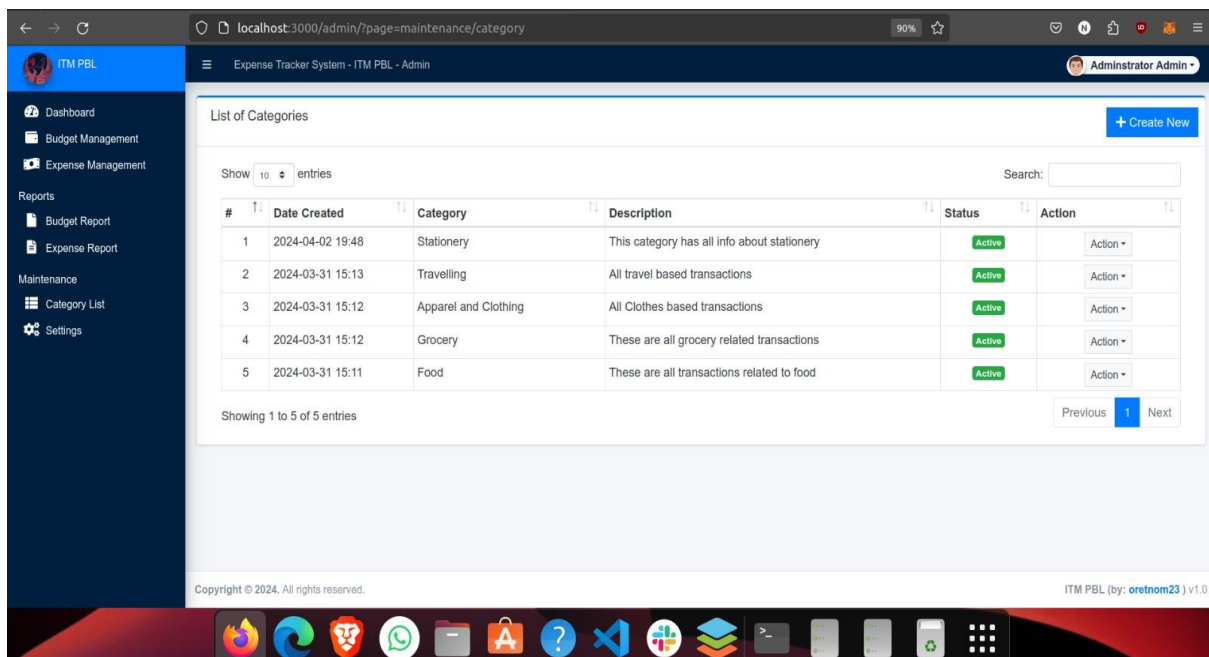
- A header displaying "List of Categories" and an option to create a new category.
- A table listing existing categories with columns for date created, category name, description, status (active or inactive), and action dropdown for editing or deleting categories.
- Functionality to edit or delete categories using the action dropdown.
- JavaScript functions handling deletion of categories via AJAX requests.
- Success message alert if any category-related action was successful.
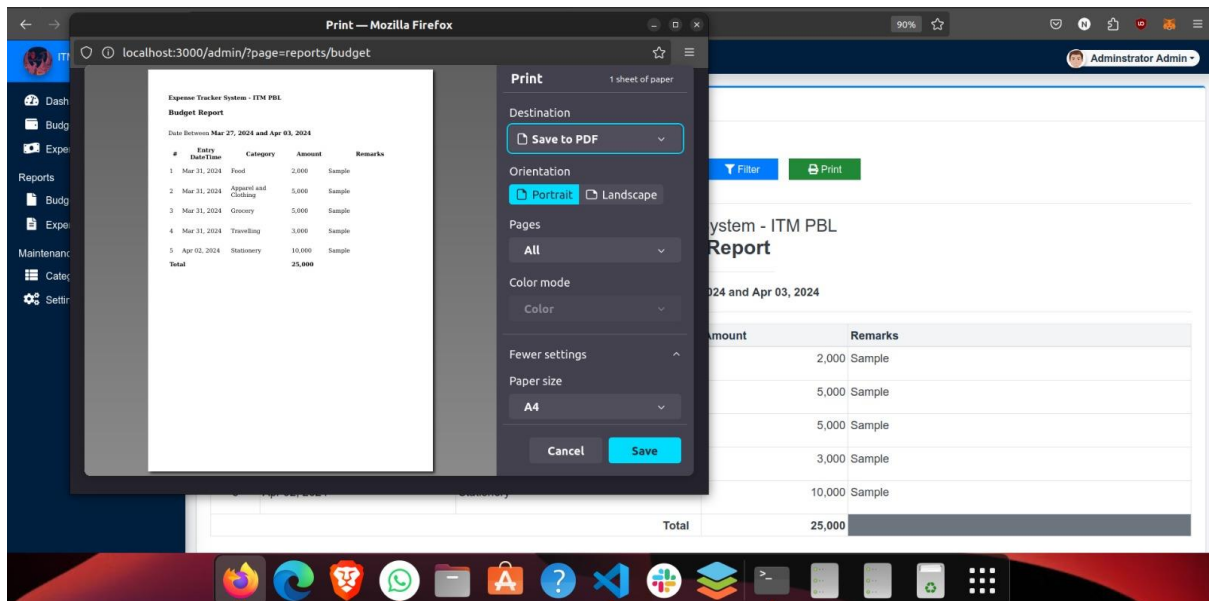
# Report of monthly expense



- Filters for selecting date range.
- Buttons to filter data and print the report.
- Displays the name of the report and the date range selected.
- Lists budget entries within the selected date range, showing entry date, category, amount, and remarks.
- Calculates and displays the total budget amount.
- Utilizes JavaScript to handle form submission for filtering data and printing the report

## Print report of monthly expense



- Filters for selecting date range.
- Buttons to filter data and print the report.
- Displays the name of the report and the date range selected.
- Lists budget entries within the selected date range, showing entry date, category, amount, and remarks.
- Calculates and displays the total budget amount.
- Utilizes JavaScript to handle form submission for filtering data and printing the report

# 5.Test Cases:

| Test Case ID | Test Case Description | Test Steps | Expected Result | Pass/Fail |
|---|---|---|---|---|
| TC001 | User Registration | 1. Navigate to the registration page. | Registration page is displayed. | Pass |
| | | 2. Fill in valid user details. | User is successfully registered. | |
| | | 3. Click on the 'Register' button. | User is redirected to the login page. | |
| TC002 | User Login | 1. Navigate to the login page. | Login page is displayed. | Pass |
| | | 2. Enter valid username and password. | User is logged in successfully. | |
| | | 3. Click on the 'Login' button. | User is redirected to the dashboard. | |
| TC003 | Expense Tracking - Manual Entry | 1. Navigate to the 'Add Expense' page. | 'Add Expense' form is displayed. | Pass |
| | | 2. Enter valid expense details (amount, category, etc.). | Expense is added successfully. | |
| | | 3. Click on the 'Save' button. | Expense is saved and reflected in the system. | |
| TC005 | Budget Planning | 1. Navigate to the 'Budget' page. | 'Budget' page is displayed. | Pass |
| | | 2. Set budget limits for different expense categories. | Budget limits are updated successfully. | |
| | | 3. Click on the 'Save' button. | Budget changes are saved in the system. | |
| TC006 | Goal Setting | 1. Navigate to the 'Goals' page. | 'Goals' page is displayed. | Pass |
| | | 2. Add a new financial goal (e.g., vacation savings). | Goal is added successfully. | |
| | | 3. Click on the 'Save' button. | Goal is saved and visible in the dashboard. | |
| TC007 | Reporting and Analysis | 1. Navigate to the 'Reports' section. | 'Reports' page is displayed. | Pass |
| | | 2. Generate a report on monthly expenses. | Report displays accurate expense data. | |
| | | 3. Export the report in PDF format. | PDF report is downloaded successfully. | |

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# 6.Conclusions

In conclusion, the budget tracking system plays a crucial role in the realm of IT service management by providing a comprehensive platform for managing financial resources effectively. Through its functionalities, the budget tracking system intertwines with various aspects of IT service management, contributing to the efficiency, transparency, and accountability of IT operations.

Furthermore, the budget tracking system supports compliance with financial regulations and governance frameworks governing IT expenditures. By maintaining detailed records of financial transactions, enforcing budget controls, and facilitating audit trails, the system helps organizations mitigate financial risks and ensure regulatory compliance in IT financial management practices.

Overall, the budget tracking system serves as a valuable tool in IT service management, bridging the gap between financial planning, resource allocation, and operational execution. Its integration into IT service management processes enhances financial visibility, control, and governance, ultimately contributing to the delivery of efficient and cost-effective IT services aligned with organizational objectives.