

EXPENSE TRACKER APPLICATION

INDEX

S.NO	TITLE	PAGE NO.
1	ABSTRACT	
2	OBJECTIVE	
3	PROBLEM STATEMENT	
4	MODULES AND DESCRIPTION	
5	FUNCTIONALITIES	
6	TOOLS USED	
7	USE CASE DIAGRAM	
8	DATABASE ER DIAGRAM	
9	OUTPUT	
10	CONCLUSION	
11	INFERENCE	

1. **ABSTRACT:**

Managing personal finances and tracking expenses is a vital aspect of financial stability and planning. The Expense Tracker Application is a user-friendly, digital tool designed to assist individuals and households in monitoring their expenditures, budgeting effectively, and achieving their financial goals. This application offers a seamless and convenient platform for users to record, categorize, and analyse their spending habits.

The Expense Tracker web application is designed to help users keep track of their expenses efficiently. This application leverages Java Server Pages (JSP), Servlets, Bootstrap for the front-end design, Java Database Connectivity (JDBC) to interact with a MySQL database, and provides users with a seamless experience to manage their financial transactions. The app allows users to log in, add expenses, view their spending history, and calculate their total spending over time.

2. **OBJECTIVE:**

The primary objective of the Expense Tracker Application is to empower individuals and households with a comprehensive, user-friendly tool that enables efficient management of personal finances. This digital solution aims to provide users with the ability to:

1. **Monitor Spending Habits:** Enable users to effortlessly record and categorize their expenses, providing a real-time overview of their spending patterns.
2. **Facilitate Effective Budgeting:** Assist users in creating and maintaining budgets by offering insights into their expenditures, helping them allocate resources more efficiently.
3. **Enhance Financial Awareness:** Provide users with a holistic view of their financial health, allowing them to make informed decisions and adjustments to meet their financial goals.
4. **Enable Seamless Expense Analysis:** Offer tools for users to analyze their spending history, identify trends, and make data-driven adjustments to their financial plans.
5. **Ensure Data Security:** Implement robust authentication measures to safeguard user information, instilling confidence in the security and privacy of their financial data.

6. **Promote Financial Discipline:** Encourage users to make informed financial decisions by fostering discipline through the regular tracking and review of their financial activities.
7. **Support Long-Term Financial Planning:** Provide features that allow users to calculate and assess their total spending over various time frames, facilitating long-term financial planning and goal setting.
8. **Offer a User-Friendly Experience:** Prioritize a seamless and intuitive user interface, making the application accessible to users of diverse technological backgrounds and ensuring a positive user experience.

3. PROBLEM STATEMENT:

In today's fast-paced and dynamic world, individuals and households often face challenges in managing their personal finances effectively. The lack of a streamlined and user-friendly tool for expense tracking and financial management hinders people from making informed decisions about their spending habits, budgeting, and achieving long-term financial goals.

4. MODULE AND DESCRIPTION:

1. User Authentication Module:

- Description: This module handles user registration and login functionalities.
- Functionalities:
 - User registration with email, username, and password.
 - User login with validation and session management.
 - Logout functionality for authenticated users.

2. Expense Management Module:

- Description: This module allows users to add and manage their expenses.
- Functionalities:
 - Add expenses with details like purpose, amount, and duration.

- Custom purpose entry option for diverse expenses.
- Radio buttons for selecting the duration (1 month, 3 months, 6 months, 12 months).

3. Expense Display Module:

- Description: This module displays the user's expense history.
- Functionalities:
 - List user-specific expenses from the database.
 - Option to view and edit expense details.
 - Calculate the total spending for the user, considering the duration of expenses.

4. Database Integration Module:

- Description: This module handles interactions with the MySQL database.
- Functionalities:
 - Store user account information (username, email, password).
 - Store and retrieve expense details (purpose, amount, duration) for each user.
 - Calculate total spending based on user expenses.

5. Front-End Styling and UI Module:

- Description: This module is responsible for the user interface using Bootstrap.
- Functionalities:
 - Create an intuitive and responsive user interface.
 - Provide an organized layout for expense entry and display.

6. Admin Module:

- Description: This module can only be used by the admin
- Functionalities:

- Review information about all users
- Provides the total no of users registered.

5. FUNCTIONALITIES:

1. User Authentication:

- **User Registration:**
 - Users can register by providing an email, username, and password.
 - Input validation ensures uniqueness of email and username.
 - Secure storage of user account information in the database.
- **User Login:**
 - Authenticated access to the application through validated user credentials.
 - Secure session management for logged-in users.
 - Implementation of password hashing for enhanced security.
- **Logout:**
 - Authenticated users can securely log out, terminating their active sessions.

2. Expense Management:

- **Add Expenses:**
 - Users can record expenses with details such as purpose, amount, and duration.
 - Custom purpose entry allows for the flexibility to categorize various types of expenses.
 - Radio buttons facilitate the selection of expense duration (1 month, 3 months, 6 months, 12 months).
- **List Expenses:**
 - Display of user-specific expenses retrieved from the database.

- Clear and organized presentation of expense details, including purpose, amount, and duration.
- **View and Edit Expenses:**
 - Users can view and edit details of their recorded expenses.
 - Intuitive interface for managing and updating expense history.
- **Calculate Total Spending:**
 - System calculates the total spending for the user, considering the duration of recorded expenses.

4. Database Integration:

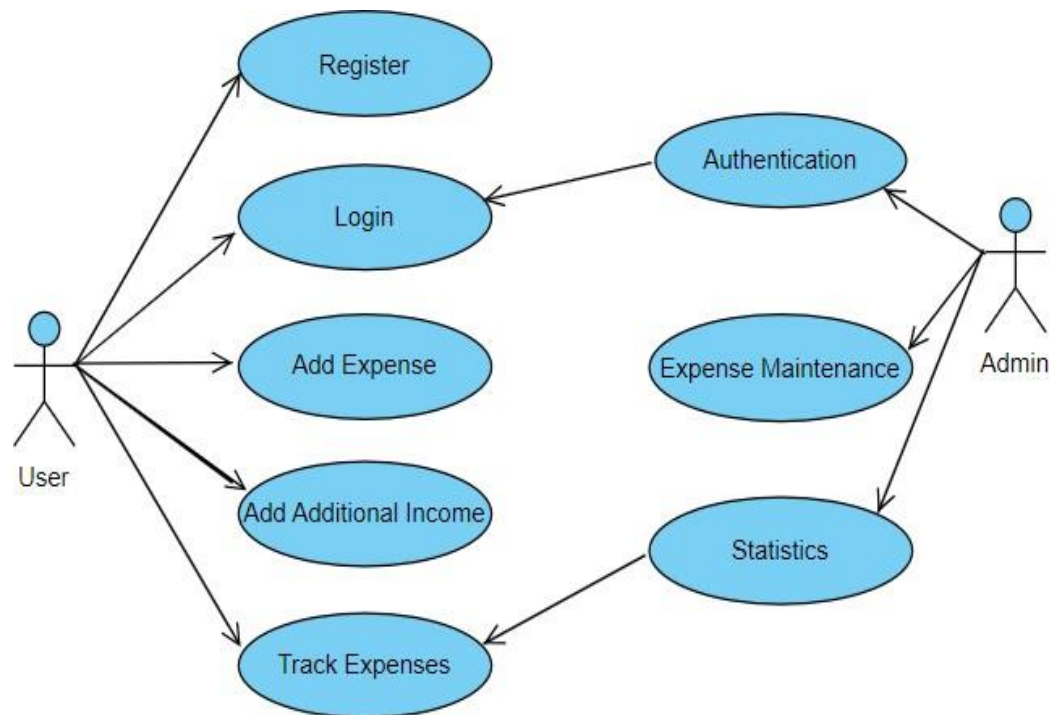
- **User Account Information:**
 - Secure storage and retrieval of user account information (username, email, password).
 - Ensures data integrity and security measures in place.
- **Expense Details:**
 - Storage and retrieval of expense details (purpose, amount, duration) for each user.
 - Calculation of total spending based on user expenses.

6. TOOLS USED:

FRONT END – HTML, CSS, JSP, JAVASCRIPT & BOOT STRAP

BACK END - Java, Servlet & JDBC

7. USE CASE DIAGRAM:

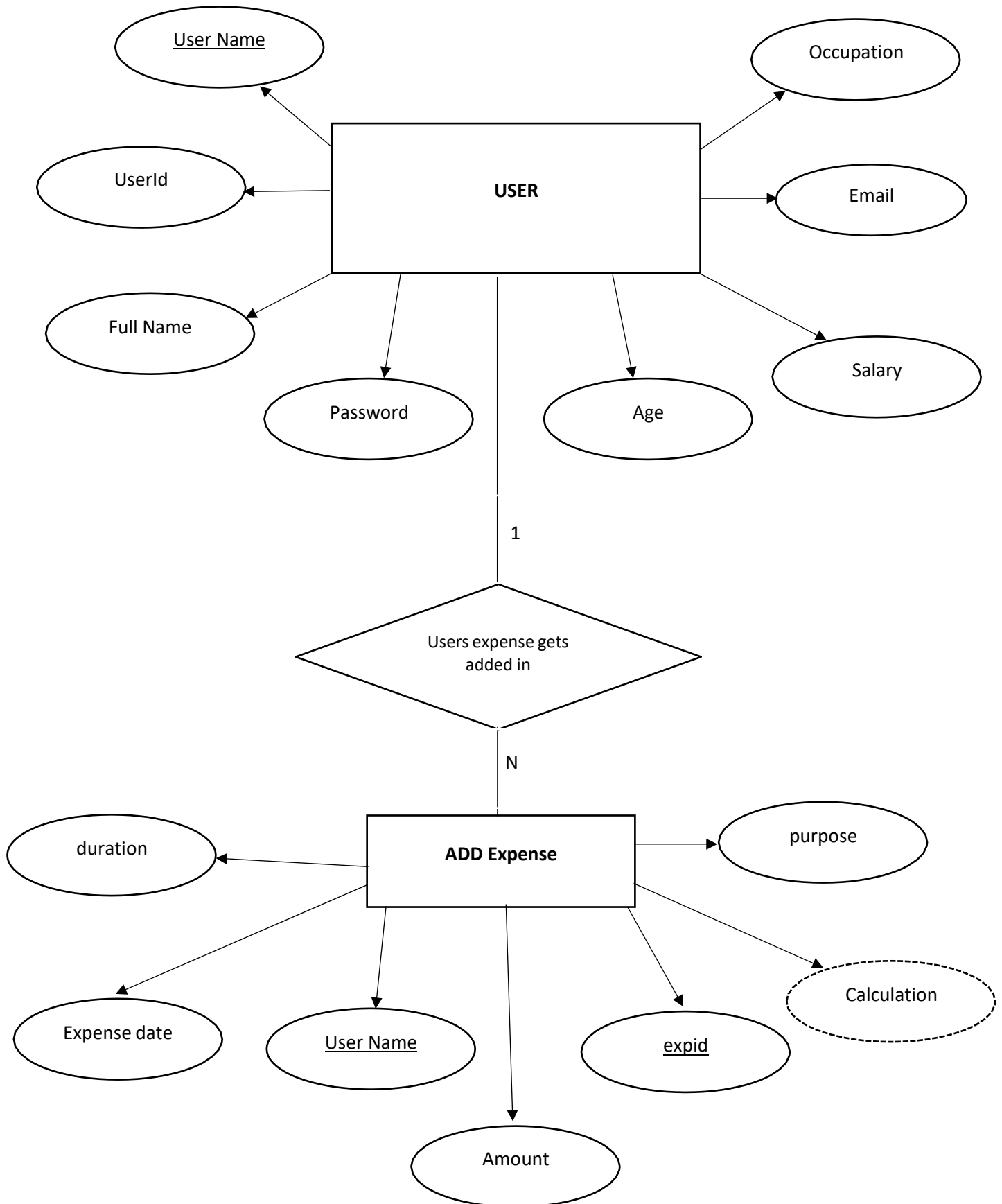


An expense tracker is a versatile tool that can be applied in various personal and professional contexts. An expense tracker serves as a comprehensive financial management tool, providing insights into income, expenses, and overall financial health. Whether for personal use or business purposes, it enables individuals and organizations to make informed financial decisions, plan, and achieve their financial goals.

The user can register, login, add expenses, add additional income if any and track their expenses whenever they need. The data of the user will get stored in the database.

The admin can authenticate the login of the users using the database, then maintain the expenses of the users and retrieve the statistics of the users' expenses.

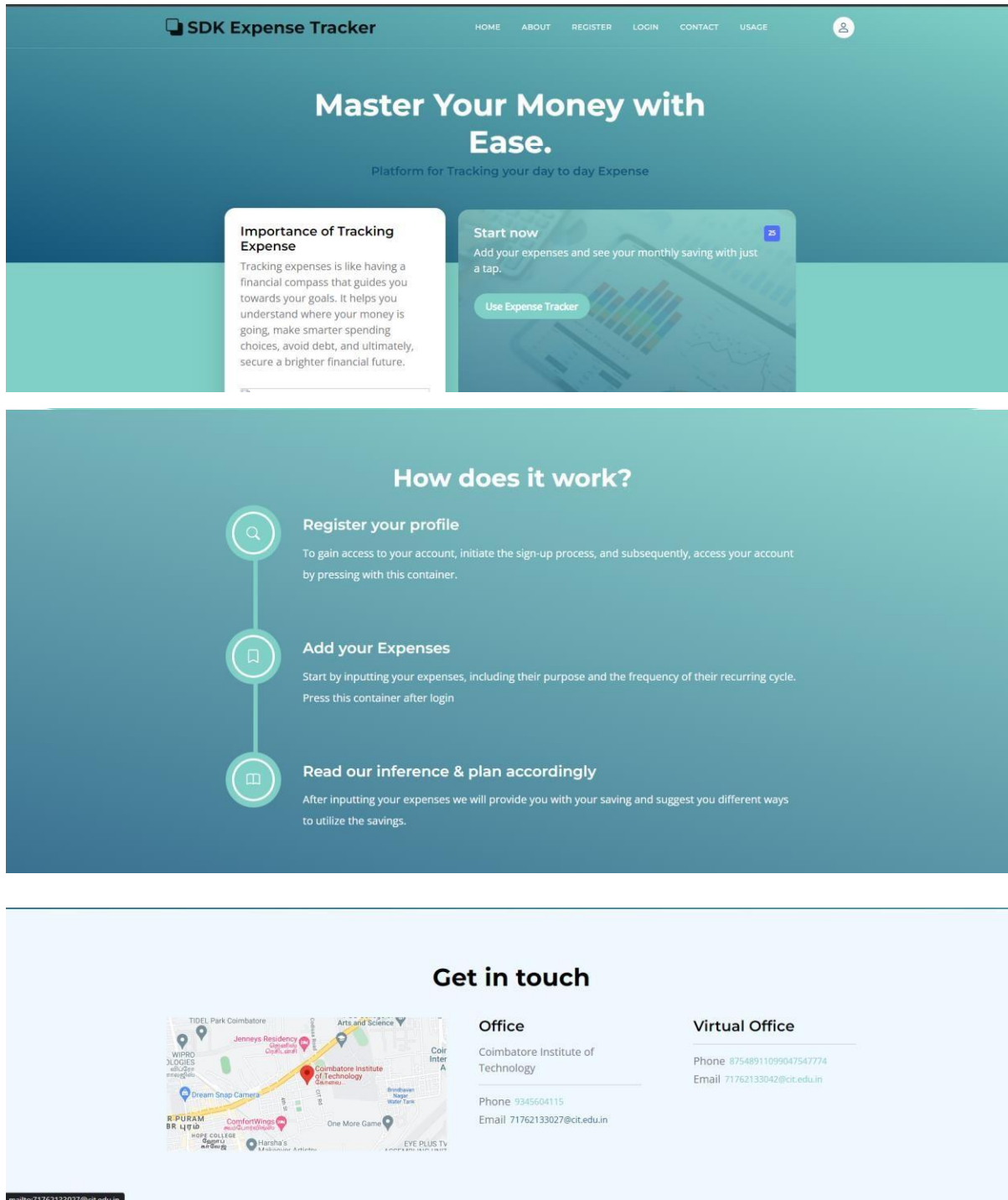
8. DATABASE ER DIAGRAM:



The database diagram gives an overview of the database structure and the attributes used for collecting and retrieving the data of the users for the expense tracker.

9. OUTPUT:

#HOME PAGE



The screenshot displays the home page of the 'SDK Expense Tracker' application. The page has a teal and blue color scheme. At the top, a navigation bar includes the logo 'SDK Expense Tracker' and links for HOME, ABOUT, REGISTER, LOGIN, CONTACT, and USAGE. A user profile icon is visible in the top right corner.

The main heading reads 'Master Your Money with Ease.' followed by the subtitle 'Platform for Tracking your day to day Expense'. Below this, there are two primary call-to-action boxes:

- Importance of Tracking Expense:** A text box explaining that tracking expenses is like having a financial compass that guides you towards your goals, helping you understand where your money is going, make smarter spending choices, avoid debt, and ultimately, secure a brighter financial future.
- Start now:** A box with the text 'Add your expenses and see your monthly saving with just a tap.' and a prominent 'Use Expense Tracker' button.

Below these boxes is a section titled 'How does it work?' which outlines a three-step process:

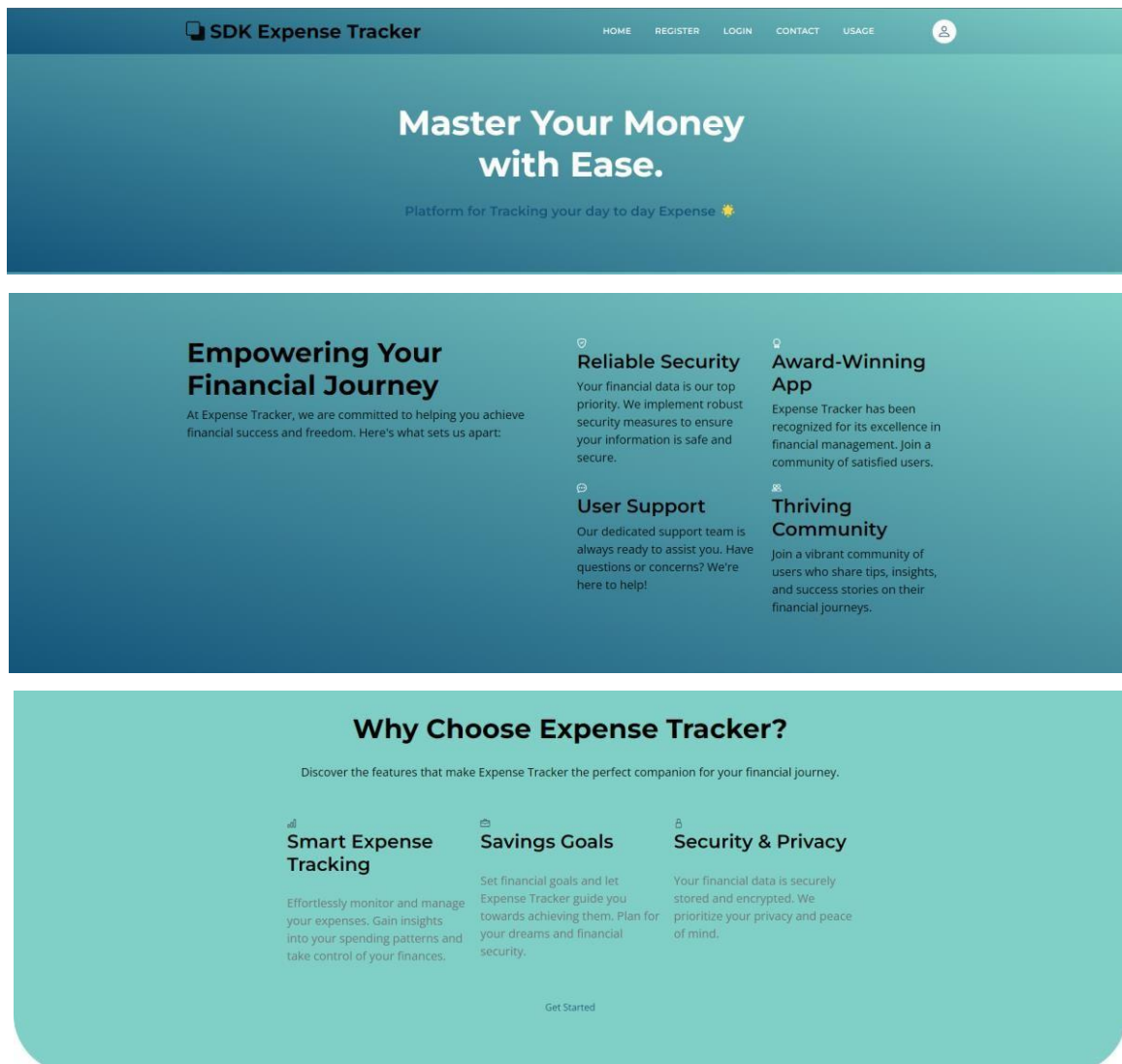
- Register your profile:** To gain access to your account, initiate the sign-up process, and subsequently, access your account by pressing with this container.
- Add your Expenses:** Start by inputting your expenses, including their purpose and the frequency of their recurring cycle. Press this container after login.
- Read our inference & plan accordingly:** After inputting your expenses we will provide you with your saving and suggest you different ways to utilize the savings.

The bottom section, titled 'Get in touch', provides contact information:

- Office:** Coimbatore Institute of Technology. Phone: 9345604115, Email: 71762133027@cit.edu.in.
- Virtual Office:** Phone: 87548911099047547774, Email: 71762133042@cit.edu.in.

A map of Coimbatore is shown on the left, highlighting the location of the Coimbatore Institute of Technology. At the bottom left, the email address 'mailto:71762133027@cit.edu.in' is provided.

#ABOUT PAGE



The screenshot shows the 'About' page of the SDK Expense Tracker. The header includes the logo and navigation links: HOME, REGISTER, LOGIN, CONTACT, USAGE, and a user profile icon. The main heading is 'Master Your Money with Ease.' followed by the tagline 'Platform for Tracking your day to day Expense'. Below this, there are four feature highlights: 'Empowering Your Financial Journey' (with a subtext about financial success), 'Reliable Security' (emphasizing robust security measures), 'Award-Winning App' (mentioning recognition in financial management), and 'User Support' (highlighting a dedicated support team). A 'Thriving Community' section invites users to join a community for tips and success stories. The 'Why Choose Expense Tracker?' section lists three key benefits: 'Smart Expense Tracking' (effortless monitoring), 'Savings Goals' (guidance towards achieving dreams), and 'Security & Privacy' (secure storage and encryption). A 'Get Started' button is located at the bottom of this section.

SDK Expense Tracker HOME REGISTER LOGIN CONTACT USAGE

Master Your Money with Ease.

Platform for Tracking your day to day Expense

Empowering Your Financial Journey

At Expense Tracker, we are committed to helping you achieve financial success and freedom. Here's what sets us apart:

Reliable Security

Your financial data is our top priority. We implement robust security measures to ensure your information is safe and secure.

Award-Winning App

Expense Tracker has been recognized for its excellence in financial management. Join a community of satisfied users.

User Support

Our dedicated support team is always ready to assist you. Have questions or concerns? We're here to help!

Thriving Community

Join a vibrant community of users who share tips, insights, and success stories on their financial journeys.

Why Choose Expense Tracker?

Discover the features that make Expense Tracker the perfect companion for your financial journey.

Smart Expense Tracking

Effortlessly monitor and manage your expenses. Gain insights into your spending patterns and take control of your finances.

Savings Goals

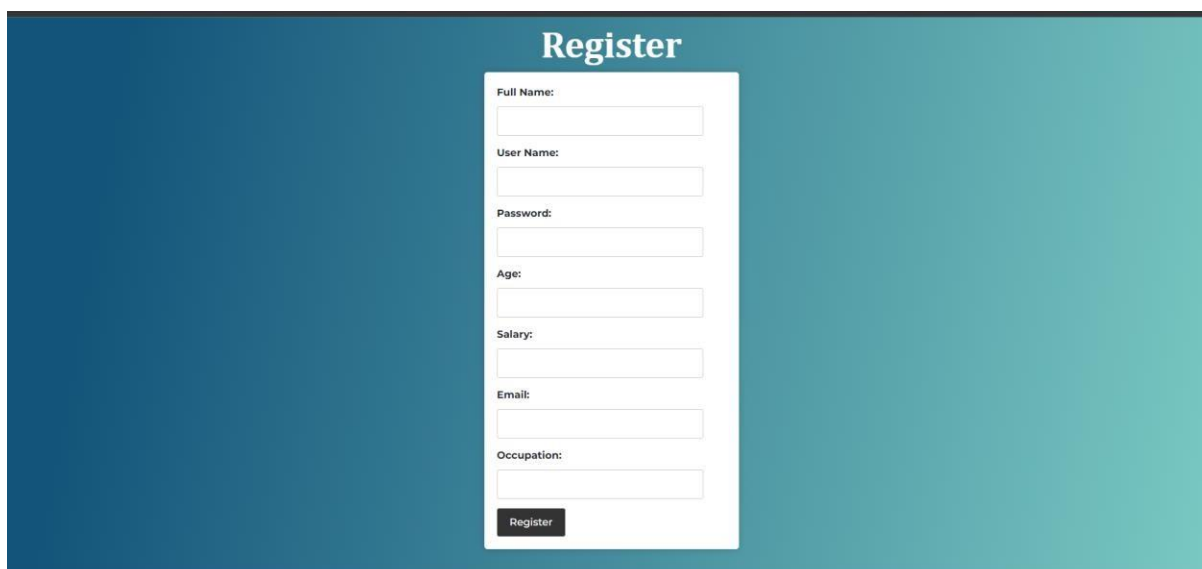
Set financial goals and let Expense Tracker guide you towards achieving them. Plan for your dreams and financial security.

Security & Privacy

Your financial data is securely stored and encrypted. We prioritize your privacy and peace of mind.

[Get Started](#)

#REGISTER PAGE



The screenshot shows the 'Register' page of the SDK Expense Tracker. The page has a dark blue header with the word 'Register' in white. Below the header is a white registration form with the following fields: Full Name, User Name, Password, Age, Salary, Email, and Occupation. A 'Register' button is located at the bottom of the form.

Register

Full Name:

User Name:

Password:

Age:

Salary:

Email:

Occupation:

[Register](#)

#LOGIN PAGE

SDK Expense Tracker

HOME ABOUT REGISTER CONTACT USAGE

Login

Userid:

Password:

Login

Invalid username or password.

#USAGE PAGE

SDK Expense Tracker

HOME ABOUT REGISTER LOGIN CONTACT USAGE

Add your expenses

Expense Purpose:

Electricity Bill

Amount:

Enter Duration:

Expense Date: dd-mm-yyyy

Add Expense

Add Additional Income

Additional Income

Update Salary

User Details

Full Name: anika

Email: anika@gmail.com

Age: 25

Salary: 400000

Total spending for anika3: \$268600.0

Remaining: 131400.0

Your funds are getting drained! Start your savings plan now. No ideas? Refer to your right side of the screen.

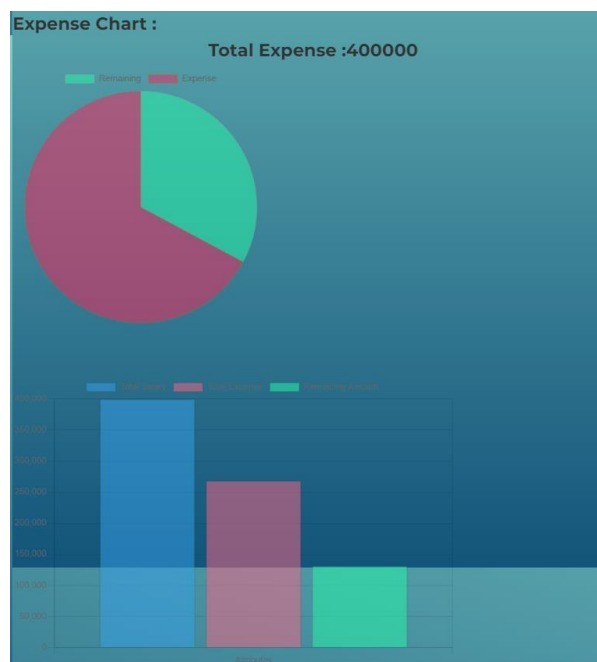
Expense Chart :

Total Expense :400000

Remaining Expense

Recommendations

Saving Time!



#ADMIN PAGE


SDK Expense Tracker


[HOME](#)
[ABOUT](#)
[USAGE](#)

Total Number of Entries:12

Username	Salary
anika3	400000
deepika	2500000
ggggg	20000
hello	2000
kp	25000
MANI	2565000
meena7	4000000
neha	150000
rithanya	250000
shri	16447500
Sneha	10000
sneha3	20000

#CONTACT SECTION

Get in touch



Office

Coimbatore Institute of Technology

Phone 9345604115

Email 71762133027@cit.edu.in

Virtual Office

Phone 87548911099047547774

Email 71762133042@cit.edu.in

10. CONCLUSION:

The Expense Tracker Project emerges as a comprehensive and user-centric solution addressing the critical need for efficient personal finance management. With its array of modules and functionalities, the project is poised to make a significant impact on users' ability to monitor, analyze, and plan their financial activities.

The Expense Tracker Project is not merely a digital tool for expense tracking but a holistic solution that empowers individuals and households to take control of their financial well-being. With its emphasis on user-friendliness, security, and insightful financial analysis, the project stands as a valuable companion for users on their journey towards financial stability and success.

11. INFERENCE:

1. Empowering Financial Control:

- The Expense Tracker empowers users to take control of their finances by offering a seamless platform for tracking and managing expenses.
- Users can make informed decisions about their spending habits, promoting financial discipline and responsible budgeting.

2. User-Friendly Experience:

- The user-centric design ensures a user-friendly experience, allowing individuals of varying technological backgrounds to navigate and utilize the application effortlessly.
- The intuitive interface enhances accessibility and encourages regular engagement with the tool.

3. Security and Data Confidentiality:

- The inclusion of secure authentication measures, such as password hashing, ensures the confidentiality and security of user data.
- Users can trust that their financial information is stored and managed with the highest level of protection.

4. Insightful Financial Analysis:

- The project provides users with valuable insights into their spending history and patterns.
- The ability to calculate total spending over specific durations enables users to conduct meaningful financial analyses and make informed adjustments to their financial plans.

5. Flexibility and Customization:

- The Expense Tracker offers flexibility through custom purpose entries for expenses, accommodating a diverse range of spending categories.
- Users can tailor their expense tracking experience to suit their unique financial needs and priorities.

6. Administrative Oversight:

- The inclusion of an Admin Module adds an extra layer of functionality for system administrators.
- Administrators can efficiently review user information and gain insights into the user base, facilitating effective system management.

7. Enhanced Financial Awareness:

- The project contributes to enhancing financial awareness among users.
- By providing a clear overview of spending history and total expenditures, users are better equipped to make strategic financial decisions and achieve their financial goals.