



PERSONAL EXPENSE TRACKER APPLICATION

A PROJECT REPORT

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BONAFIDE CERTIFICATE

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INTERNAL EXAMINER

EXTERNAL EXAMINER

ABSTRACT

The web application “Personal Expense Tracker” is developed to manage the daily expenses in a more efficient and manageable way. By using this application we can reduce the manual calculations of the daily expenses and keep track of the expenditure. In this application, user can provide his income to calculate his total expenses per day and these results will be stored for each user. The application has the provision to predict the income and expense for the manager using data mining. In this application, there are 3 logins such as admin, manager and staff. Admin has the privilege to add, edit, delete manager, add, edit, delete staff, and to get all custom reports. For Manager, the privileges are to add type of expense, verify expense, add type of income, verify income and generate reports. For staff, the privileges are to add and edit expense, income and calculations, and send for verifications.

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INTRODUCTION

1.1 OVERVIEW

In simple words, personal finance entails all the financial decisions and activities that a Finance app makes your life easier by helping you to manage your finances efficiently. A personal finance app will not only help you with budgeting and accounting but also give you helpful insights about money management. Personal finance applications will ask users to add their expenses and based on their expenses wallet balance will be updated which will be visible to the user. Also, users can get an analysis of their expenditure in graphical forms. They have an option to set a limit for the amount to be used for that particular month if the limit is exceeded the user will be notified with an email alert.

1.2 PURPOSE

When you track your spending, you know where your money goes and you can ensure that your money is used wisely. Tracking your expenditures also allows you to understand why you're in debt and how you got there. This will then help you design a befitting strategy of getting out of debt. Budgeting ensures you're not spending more than you're making, allowing you to plan for short- and long-term expenses. It's an easy, helpful way for people with all types of income and expenses to keep their finances in order.

LITERATURE SURVEY

2.1 EXISTING PROBLEM

In a study conducted by Forrester in 2016 surveying small and medium businesses (SMBs) across the world, 56% companies reported expense management as being the biggest challenge for their finance departments.

In another survey conducted by Level Research in 2018 in North America, respondents reported the following pain points in expense management before adopting automation:

- Manual entry and routing of expense reports (62%)
- Lack of visibility into spend data (42%)
- Inability to enforce travel policies (29%)
- Lost expense reports (24%)
- Lengthy expense approval system and reimbursement cycles (23%)

2.2 REFERENCES

- [1] <http://expense-manager.com/how-expense software/>
- [2] <https://www.splitwise.com/terms>
- [3] <http://code.google.com/p/socialauthandroid/wiki/Facebook>
- [4] <http://code.google.com/p/socialauth-android>
- [5] Developer.android.com
- [6] <http://www.appbrain.com/app/expensemanager/ com.expensemanager>
- [7] <https://www.xpenditure.com/en?>
- [8] <http://expense-manager.com/how-expense software/>
- [9] Donn Felker, “Android Application Development for Dummies”, published by For Dummies, 2010.

[10] Ed Burnette, “Hello, Android: Introducing Google's Mobile Development Platform”, published by Pragmatic Bookshelf, 2009.

Lee, “Beginning Android Application Development”, Published by Wrox Press, 2011.

2.3 PROBLEM STATEMENT DEFINITION

It is tough to keep track of all the financial decisions and activities that a person makes. Traditional expense tracking methods are inconvenient and unreliable. In order to get a quick overview about your total incomes and expenses and control spending, it's convenient to digitize the process by having a personal expense tracker

Who does the problem affect?	Working individuals, students and budget conscious consumers.
What are the boundaries of the problem?	Limited features to provide for expense tracking.
What is the issue?	To be vigilant about the expense spent increases financial stress. Being indecisive about the finances may result in less financial security and exceed the budget.
When does this issue occur?	When people are not able to track their expenses properly.
Where is the issue occurring?	In daily life of employees as well as students.
Why is it important that we fix the problem?	Fixing this issue will help users to better plan their budget and lead to financial well-being.

Sophie, who is a homemaker, finds it hard to control her desire to shop. To stop herself from overindulging in impulsive purchases, she needs to track her expenses and hold herself accountable.

Sam is a high school student who usually gets a limited allowance from his parents. Tracking his expenses and good budgeting technique allows him to spend on his regular expenses as well as on himself.

IDEATION & PROPOSED SOLUTION

3.1 EMPATHY MAP CANVAS

An empathy map is a simple, easy-to-digest visual that captures knowledge about a user's behaviours and attitudes.

It is a useful tool to help teams better understand their users. Creating an effective solution requires understanding the true problem and the person who is experiencing it. The exercise of creating the map helps participants consider things from the user's perspective along with his or her goals

Empathy Map for Personal Expense Tracker Application :



Fig 3.1 Empathy Map

3.2 IDEATION & BRAINSTORMING

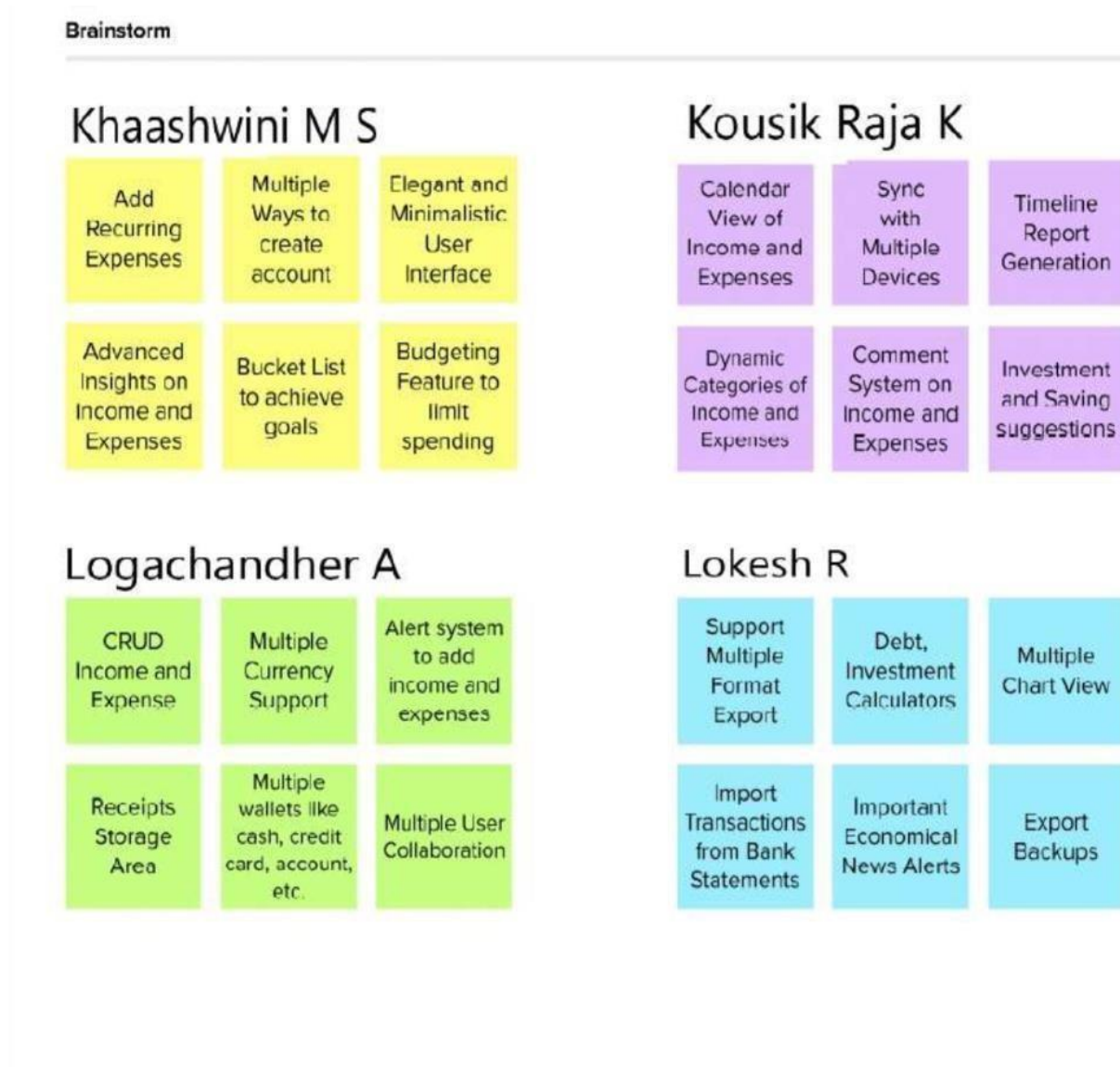


Fig 3.2.1 Brainstorm

GROUP IDEAS

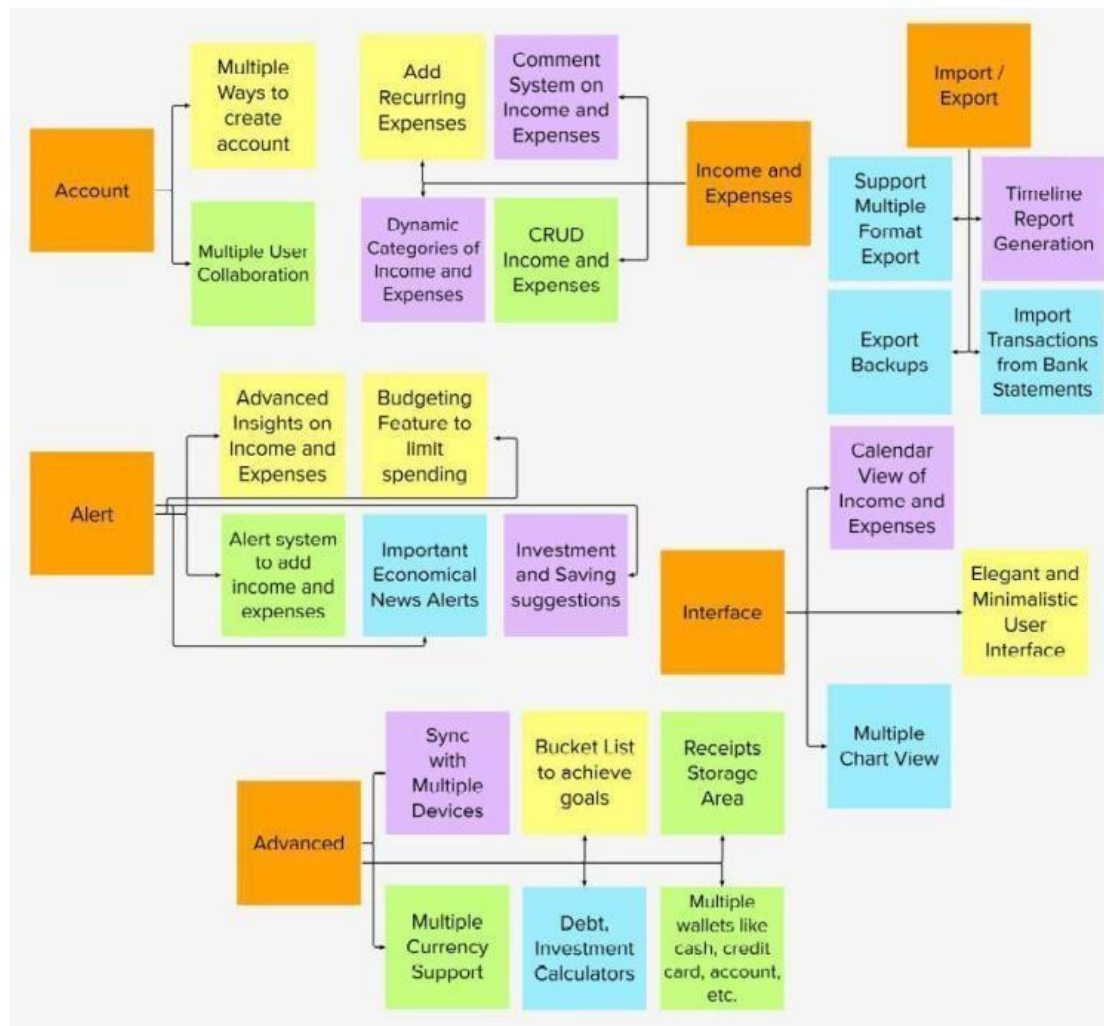


Fig 3.2.2 Group Ideas

PRIORITIZE



Fig 3.2.3 Prioritize

3.3 PROPOSED SOLUTION

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Attempting to manage the expenses of an individual in an efficient and manageable manner, as compared to the traditional way of expense tracking.
2.	Idea / Solution description	The application will be helpful for the individuals in not just managing their expenses, but also in enabling them to improve their investments.
3.	Novelty / Uniqueness	The application gives the user a chance to plan his/her monthly expenses at the start of the month. Besides this, the user gets a notification when he/she exceeds the limit that is set.
4.	Social Impact / Customer Satisfaction	With such applications, the public will start to plan their expenses better leading to their own financial stability. With more users, this application will ensure that financial state of our society improves.
5.	Business Model (Revenue Model)	Free trial for 1 month can be given to the users, so that a significant userbase is created. Following the free trial, the users can be given subscription for 3 months, 6 months or 1 year.
6.	Scalability of the Solution	Since the application takes the same set of input from all the users and does not perform many complex computations, it will be easy for us to scale the application to a larger set of users.

3.4 Problem Solution fit

Define CS, fit into CC	1. CUSTOMER SEGMENT(S) <ul style="list-style-type: none">• Working Individuals• Students• Budget conscious consumers	6. CUSTOMER CONSTRAINTS <ul style="list-style-type: none">• Internet Access• Device (Smartphone) to access the application• Data Privacy• Cost of existing applications• Trust	5. AVAILABLE SOLUTIONS <ul style="list-style-type: none">• Expense Diary or Excel sheet <p>PROS : Have to make a note daily which helps to be constantly aware</p> <p>CONS : Inconvenient, takes a lot of time</p>						
	2. JOBS-TO-BE-DONE / PROBLEMS <ul style="list-style-type: none">• To keep track of money lent or borrowed• To keep track of daily transactions• Alert when a threshold limit is reached	9. PROBLEM ROOT CAUSE <ul style="list-style-type: none">• Reckless spendings• Indecisive about the finances• Procrastination• Difficult to maintain a note of daily spendings (Traditional methods like diary)	7. BEHAVIOUR <ul style="list-style-type: none">• Make a note of the expenses on a regular basis.• Completely reduce spendings or spend all of the savings• Make use of online tools to interpret monthly expense patterns						
Focus on J&P, tap into BE, understand RC	3. TRIGGERS <ul style="list-style-type: none">• Excessive spending• No money in case of emergency	10. YOUR SOLUTION <p>Creating an application to manage the expenses of an individual in an efficient and manageable manner, as compared to traditional methods</p>	8. CHANNELS OF BEHAVIOUR <p>ONLINE</p> <p>Maintain excel sheets and use visualizing tools</p>						
	4. EMOTIONS <table><tr><td>BEFORE</td><td>AFTER</td></tr><tr><td>• Anxious</td><td>• Confident</td></tr><tr><td>• Confused</td><td>• Composed</td></tr><tr><td>• Fear</td><td>• Calm</td></tr></table>		BEFORE	AFTER	• Anxious	• Confident	• Confused	• Composed	• Fear
BEFORE	AFTER								
• Anxious	• Confident								
• Confused	• Composed								
• Fear	• Calm								
Identify strong TR & EM									

Fig 3.4 Problem Solution fit

REQUIREMENT ANALYSIS

4.1 FUNCTIONAL REQUIREMENT

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Application Registration through Gmail
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	User monthly expense tentative data	Data to be registered in the app
FR-4	User monthly income data	Data to be registered in the app
FR-5	Alert/ Notification	Alert through E-mail Alert through SMS
FR-6	User Budget Plan	Planning and Tracking of user expense vs budget limit

4.2 NON-FUNCTIONAL REQUIREMENTS

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Effectiveness, efficiency and overall satisfaction of the user while interacting with our application.
NFR-2	Security	Authentication, authorization, encryption of the application.
NFR-3	Reliability	Probability of failure-free operations in a specified environment for a specified time.
NFR-4	Performance	How the application is functioning and how responsive the application is to the end-users.
NFR-5	Availability	Without near 100% availability, application reliability and the user satisfaction will affect the solution.
NFR-6	Scalability	Capacity of the application to handle growth, especially in handling more users.

PROJECT DESIGN

5.1 DATA FLOW DIAGRAMS

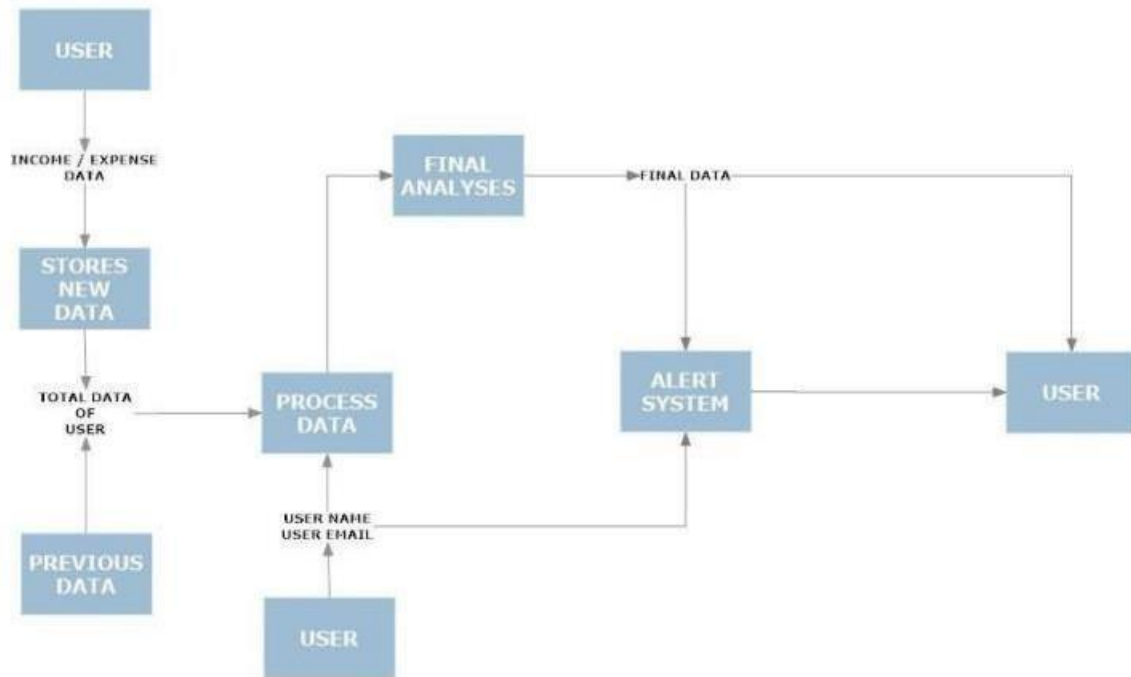


Fig 5.1 Data Flow Diagram

5.2 SOLUTION & TECHNICAL ARCHITECTURE

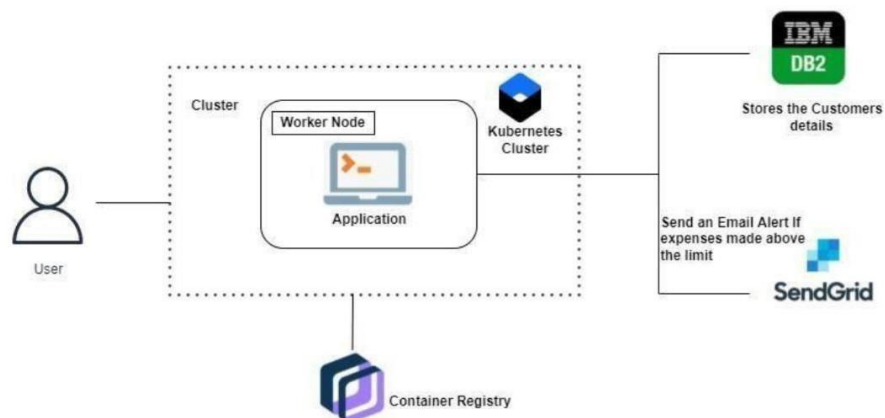


Fig 5.2.1 Technical Architecture

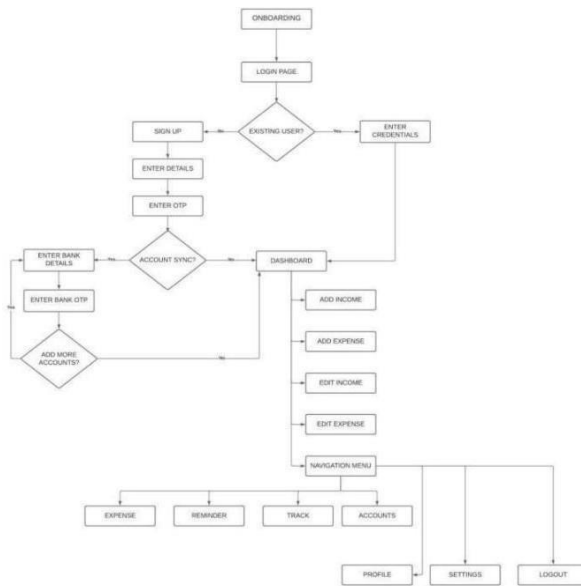


Fig 5.2.2 Solution Architecture

5.3 USER STORIES

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Mobile user)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	I can access my account / dashboard	High	Sprint-1
		USN-2	As a user, I will receive confirmation email once I have registered for the application	I can receive confirmation email & click confirm	High	Sprint-1
		USN-3	As a user, I can register for the application through Gmail	I can access my account	Medium	Sprint-1

	Login	USN-4	As a user, I can log into the application by entering email & password	I can access the dashboard	High	Sprint-1
	Dashboard	USN-5	As a user, I can add income and expenses in the application	I can keep track of the expenses	high	Sprint-1
		USN-6	As a user, I can change the expenses as I spend and can even categorize them	I can keep track, account and budget for the expenses	High	Sprint-1
	Alerting	USN-7	As a user, I can set a limit on the amount of money that can be spent.	Whenever the limit is exceeded, the user gets notified through mail or text messages.	High	Sprint-1
	Reporting	USN-8	As a user, the expense that is spent can be categorized and a report (in any graphical form) can be generated.	I can manage money efficiently from the report	High	Sprint-1
Customer (Mobile user)	Accounting	USN-9	As a user, the income and expenses can be added and categorized	From the report generated, money management could be done	Medium	Sprint-2
Administrator	Supervising and updating	USN-10	As an administrator, I supervise and update from the user feedback	Updating the app makes it more user friendly	Medium	Sprint-1

PROJECT PLANNING & SCHEDULING

6.1 SPRINT PLANNING & ESTIMATION

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	2	High	Khaashwini M S
Sprint-1		USN-2	As a user, I will receive confirmation email once I have registered for the application	1	High	Kousik Raja K
Sprint-1	Login	USN-3	As a user, I can register for the application through Gmail	1	High	LogaChandher A
Sprint-1	Dashboard	USN-4	As a user, I can log into the application by entering email & password	2	High	Lokesh R
Sprint-2	Workspace	USN-1	Workspace for personal expense tracking	2	High	Khaashwini M S
Sprint-2	Charts	USN-2	Creating various graphs and statistics of customer's data	1	Medium	Kousik Raja K
Sprint-2	Connecting to IBMDB2	USN-3	Linking database with dashboard	2	High	LogaChandher A
Sprint-2		USN-4	Making dashboard interactive with JS	2	High	Lokesh R

Sprint-3		US N-1	Wrapping up the server side works of frontend	1	Medium	Khaashwin i M S
Sprint-3	Watson Assis- tant	US N-2	Creating Chatbot for expense tracking and for calrifying user's query	1	Medium	Kousik Raja K
Sprint-3	SendGrid	US N-3	Using SendGrid to send mail to the user about	1	Low	LogaChan- dher A
Sprint-3		US N-4	Integrating both frontend and backend	2	High	Lokesh R
Sprint-4	Docker	US N-1	Creating image of website using docker	2	High	Khaashwin i M S
Sprint-4	Cloud Registr- y	US N-2	Uploading docker image to IBM Cloud registry	2	High	Kousik Raja K

6.2 SPRINT DELIVERY SCHEDULE

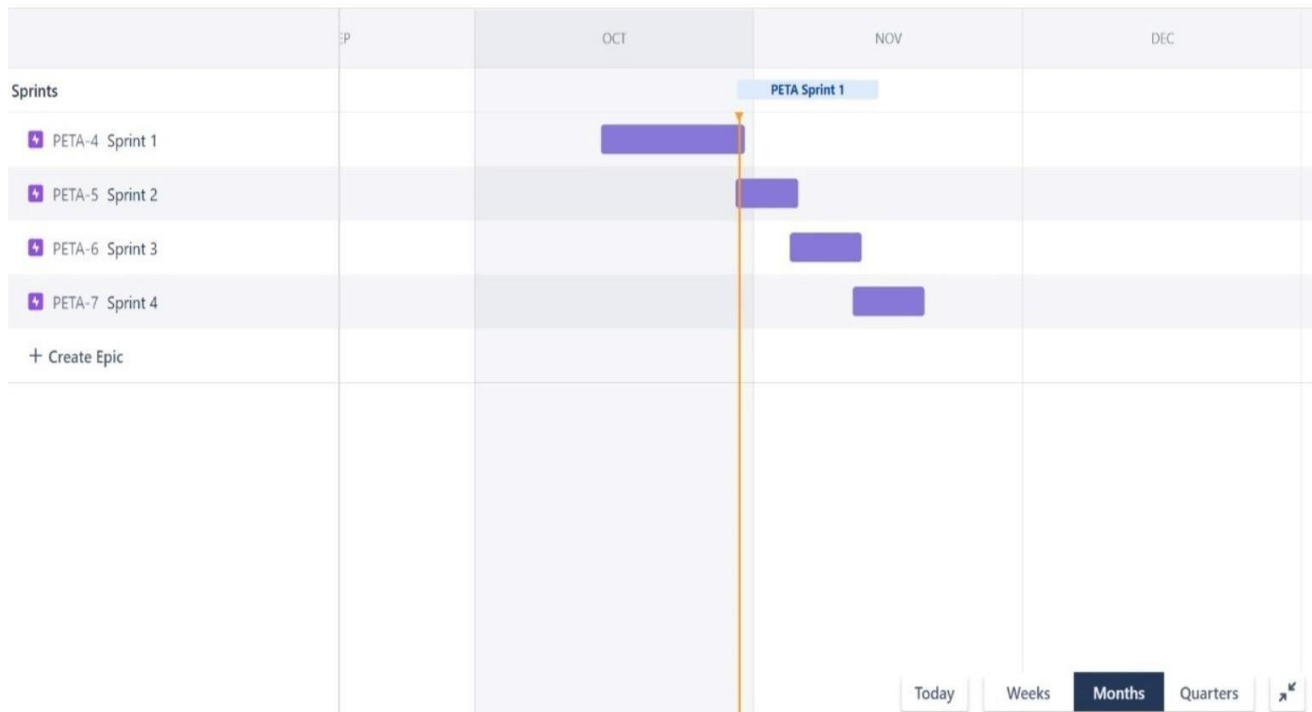


Fig 6.2. Sprint Delivery Schedule

6.3 REPORTS FROM JIRA

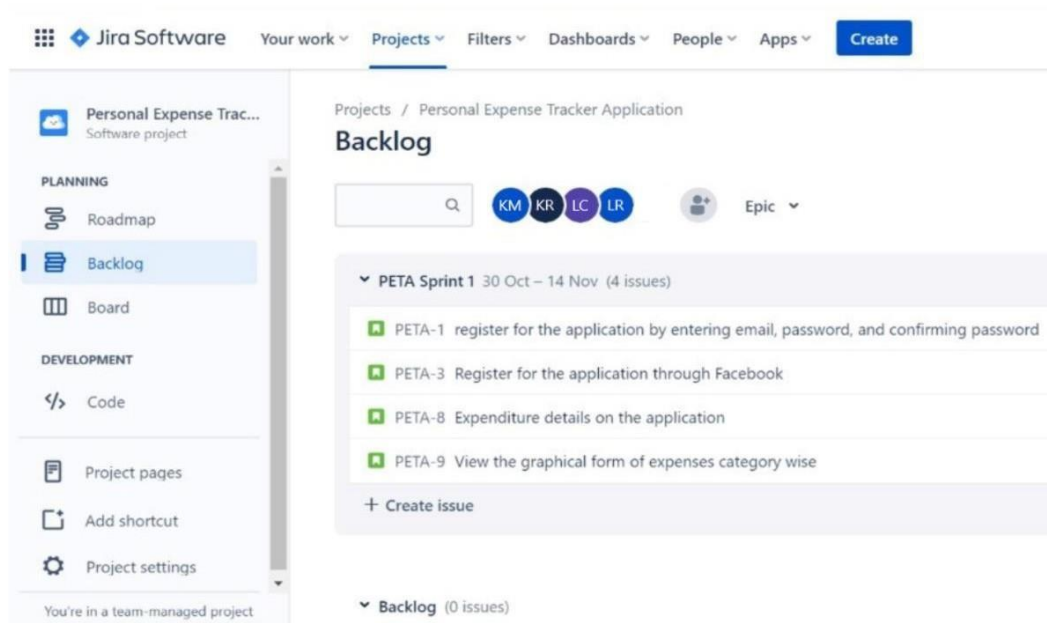


Fig 6.3. Sprint report

CODING AND SOLUTIONING

7.1 FEATURE 1

1. Expense and Revenue Tracking
2. Managing transaction receipts and records.
3. Paying taxes in time.
4. Processing payment and invoices.
5. Create in-depth reports

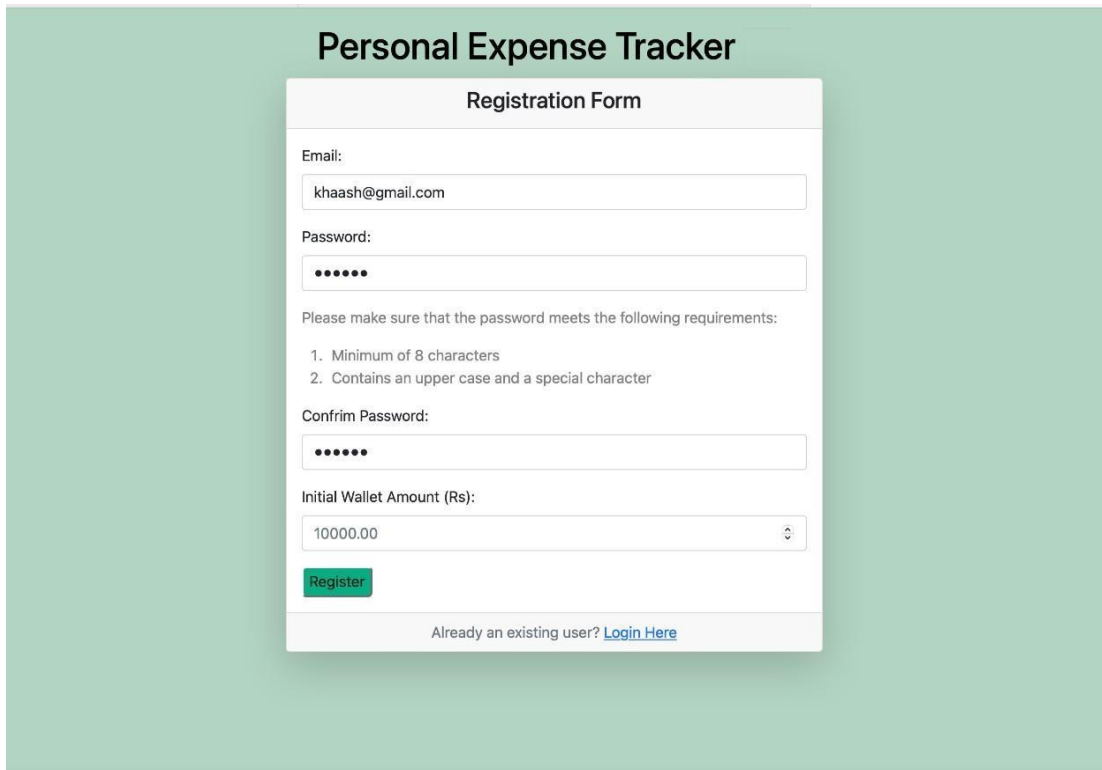
7.2 FEATURE 2

Email notifications will be sent to the users once they cross the expenditure limit through send grid mail system. Most notifications are transactional, meaning a recipient's action or account activity triggers them. But some notifications are marketing related, encouraging the recipient to take a specific action. Ecommerce product notifications inform recipients about new products or discounts. Plus, unlike general marketing emails, these are highly personalized and focus on a single product. For example, if a customer views an item on your website and that item goes on sale, you can send the customer a notification to let them know this is the best time to buy. Users can also opt into receiving notifications when an out-of-stock item is back in stock. Notification emails tend to perform well because the content is highly relevant to the recipient. But the only way for the recipient to know this is if you state the content clearly in the subject line. For example, the subject line "New Sign-in to Your Account" gets straight to the point, letting the user know why you sent this notification.

TESTING

8.1 TEST CASES

REGISTRATION PAGE

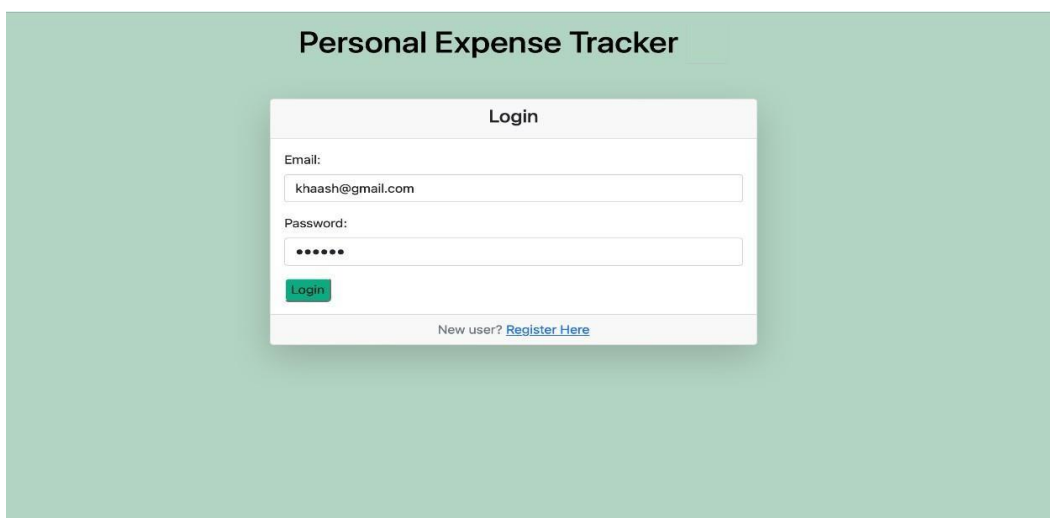


The screenshot shows a web page titled "Personal Expense Tracker" with a "Registration Form" overlay. The form contains the following fields and elements:

- Email:** A text input field containing "khaash@gmail.com".
- Password:** A password input field with six dots representing masked characters.
- Password Requirements:** A text prompt "Please make sure that the password meets the following requirements:" followed by a list:
 1. Minimum of 8 characters
 2. Contains an upper case and a special character
- Confirm Password:** A password input field with six dots representing masked characters.
- Initial Wallet Amount (Rs):** A text input field containing "10000.00" with a currency symbol icon on the right.
- Register:** A green button with white text.
- Footer:** A link "Already an existing user? [Login Here](#)".

Fig 8.1.1 Registration Page

LOGIN



The screenshot shows a web page titled "Personal Expense Tracker" with a "Login" overlay. The form contains the following fields and elements:

- Email:** A text input field containing "khaash@gmail.com".
- Password:** A password input field with six dots representing masked characters.
- Login:** A green button with white text.
- Footer:** A link "New user? [Register Here](#)".

Fig 8.1.2 Login Page

ADD EXPENSE

Personal Expense Tracker

- Home
- Add Expense**
- Modify Expense
- View Analysis
- Rewards & Goals

Add expense

Expense Made ☐

Amount Spent: (Rs)
1000

Expense Category:
Internet

Date of Expense:
17/11/2022

Description of Expense:
wifi - October

Submit Expense

Fig 8.1.3 Add Expense

RESULTS

9.1 PERFORMANCE METRICES

- Tracking income and expenses: Monitoring the income and tracking all expenditures (through bank accounts, mobile wallets, and credit & debit cards).
- Transaction Receipts: Capture and organize your payment receipts to keep track of your expenditure.
- Organizing Taxes: Import your documents to the expense tracking app, and it will streamline your income and expenses under the appropriate tax categories.
- Payments & Invoices: Accept and pay from credit cards, debit cards, net banking, mobile wallets, and bank transfers, and track the status of your invoices and bills in the mobile app itself. Also, the tracking app sends reminders for payments and automatically matches the payments with invoices.
- Reports: The expense tracking app generates and sends reports to give a detailed insight about profits, losses, budgets, income, balance sheets, etc.,
- E-commerce integration: Integrate your expense tracking app with your eCommerce store and track your sales through payments received via multiple payment methods.
- Vendors and Contractors: Manage and track all the payments to the vendors and contractors added to the mobile app.
- Access control: Increase your team productivity by providing access control to particular users through custom permissions.
- Track Projects: Determine project profitability by tracking lab or costs, payroll, expenses, etc., of your ongoing project.

- **Inventory tracking:** An expense tracking app can do it all. Right from tracking products or the cost of goods, sending alert notifications when the product is running out of stock or the product is not selling, to purchase orders.
- **In-depth insights and analytics:** Provides in-built tools to generate reports with easy-to-understand visuals and graphics to gain insights about the performance of your business.
- **Recurrent Expenses:** Rely on your budgeting app to track, streamline, and automate all the recurrent expenses and remind you on a timely basis.

ADVANTAGES AND DISADVANTAGES

ADVANTAGES

- Improved customer service
- Cloud-based solution
- Order Fulfilment
- Harness Customer Loyalty and Retention
- Achieve your business goals with a tailored mobile app that perfectly fits your business.
- Scale-up at the pace your business is growing.
- Deliver an outstanding customer experience through additional control over the app.
- Control the security of your business and customer data
- Open direct marketing channels with no extra costs with methods such as push notifications.
- Boost the productivity of all the processes within the organization.
- Increase efficiency and customer satisfaction with an app aligned to their needs.
- Seamlessly integrate with existing infrastructure.
- Ability to provide valuable insights
- Optimize sales processes to generate more revenue through enhanced data collection

DISADVANTAGES

- System Clash
- Reduced Physical Audits
- No solution to improve or eliminate bottlenecks in the service cycle

CONCLUSION

From this project, we are able to manage and keep tracking the daily expenses as well as income. While making this project, we gained a lot of experience of working as a team. We discovered various predicted and unpredicted problems and we enjoyed a lot solving them as a team. We adopted things like video tutorials, text tutorials, internet and learning materials to make our project complete. Taking proper care of our record is crucial in every business, no matter how big or little, we must understand. We must educate ourselves about the idea of effective inventory management and its applications because we can see that managers do not fully grasp it. A company's inventory management system is one of the reasons for its failure. Many customs to combat failure are present, and we can start from this point. Modern technologies can support us in managing and keeping an eye on our inventory. We may learn, put new ideas into practice, and assess our company.

FUTURE SCOPE

The project assists well to record the income and expenses in general. However, this project has some limitations:

- The application is unable to maintain the backup of data once it is uninstalled.
- This application does not provide higher decision capability.

To further enhance the capability of this application, we recommend the following features to be incorporated into the system:

- Multiple language interface.
- Provide backup and recovery of data.
- Provide better user interface for user.
- Mobile apps advantage.

APPENDIX

SOURCE CODE:

LOGIN

```
<!doctype html>

<html lang="en">

<head>

<!-- Required meta tags -->

<meta charset="utf-8">

<meta name="viewport" content="width=device-width, initial-scale=1">

<!-- Bootstrap CSS -->

<link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
EVSTQN3/azprG1Anm3QDgpJLIm9Nao0Yz1ztcQTwFspd3yD65VohhpuuCO
mLASjC"
crossorigin="anonymous">

<title>Login</title>

</head>

<script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/js/bootstrap.bundle.min.j
s"
integrity="sha384-
```


MrcW6ZMFYlzcLA8NI+NtUVF0sA7MsXsP1UyJoMp4YLEuNSfAP+JcXn/t
WtIaxVXM"

crossorigin="anonymous"></script>

<body style="background-color:#B2D3C2">

<div class="container mt-3">

<h1 style="color: black; text-align: center;">

Personal Expense Tracker

</h1>

<div class="container mt-5" style="width: 600px;">

<div class="card shadow-lg bg-white rounded">

<div class="card-header" style="text-align: center;">

<h4>Login</h4>

</div>

<div class="card-body">

<form action="/login" method="POST">

<div class="mb-3">

<label for="email" class="form-label">Email: </label>

<input type="email" class="form-control" name="email" id="email"

placeholder="abc@gmail.com">

</div>

<div class="mb-3">

```

<label for="passowrd" class="form-label">Password: </label>

<input type="password" class="form-control" name="password"
id="password"></input>

</div>

<button type="submit" style="background-color:#00AD83;
bordercolor:#00AD83; border-radius:5px;">Login</button>

</form>

</div>

<div class="card-footer text-muted" style="text-align:center">
New user? <span><a href="registration.html">Register Here</a></span>

</div>

</div>

</div>

</div>

</div>

</body>

</html>

```

REGISTRATION PAGE

```

<!doctype html>

<html lang="en">

<head>

<!-- Required meta tags -->

```

```

<meta charset="utf-8">

<meta name="viewport" content="width=device-width, initial-scale=1">

<!-- Bootstrap CSS -->

<link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
EVSTQN3/azprG1Anm3QDgpJLIm9Nao0Yz1ztcQTwFspd3yD65VohhpuuCO
mLASjC"
crossorigin="anonymous">

<title>Registration</title>

</head>

<script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/js/bootstrap.bundle.min.j
s"
integrity="sha384-
MrcW6ZMFYlzcLA8Nl+NtUVF0sA7MsXsP1UyJoMp4YLEuNSfAP+JcXn/t
WtIaxVXM"
crossorigin="anonymous"></script>

<body style="background-color:#B2D3C2">

<div class="container mt-3">

<h1 style="color: black; text-align: center;">

Personal Expense Tracker 

```

```

</h1>

<div class="container mt-2" style="width: 600px;">

<div class="card shadow-lg bg-white rounded">

<div class="card-header" style="text-align: center;">

<h4>Registration Form</h4>

</div>

<div class="card-body">

<form action="/" method="POST">

<div class="mb-3">

<label for="email" class="form-label">Email: </label>

<input type="email" class="form-control" name="email" id="email"

placeholder="abc@gmail.com">

</div>

<div class="mb-3">

<label for="password" class="form-label">Password: </label>

<input type="password" class="form-control" name="password"

id="password"></input>

<p style="color: gray;" class="mt-3">Please make sure that the password

meets the following requirements:</p>

<ol style="color: gray;"><li>Minimum of 8 characters</li><li>Contains

an upper case and a special character</li></ol>

</div>

```

```

<div class="mb-3">

<label for="confirmpassword" class="form-label">Confrim Password:

</label>

<input type="password" class="form-control" name="confirmpassword"
id="confirmpassword" placeholder="****">

</div>

<div class="mb-3">

<label for="wallet" class="form-label">Initial Wallet Amount (Rs):

</label>

<input type="number" class="form-control" name="wallet" id="wallet"
placeholder="10000.00">

</div>

<button type="submit" style="background-color:#00AD83;
bordercolor:#00AD83; border-radius:5px;">Register</button>

</form>

</div>

<div class="card-footer text-muted" style="text-align:center">

Already an existing user? <span><a href="login">Login Here</a></span>

</div>

</div>

</div>

</div>

```

</body>

</html>

ADD EXPENSE

!doctype html>

<html lang="en">

<head>

<!-- Required meta tags -->

<meta charset="utf-8">

<meta name="viewport" content="width=device-width, initial-scale=1">

<!-- Bootstrap CSS -->

<link

href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css"

rel="stylesheet" integrity="sha384-

EVSTQN3/azprG1Anm3QDgpJLIm9Nao0Yz1ztcQTwFspd3yD65VohhpuuCO
mLASjC"

crossorigin="anonymous">

<title>AddExpense</title>

</head>

<script

src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/js/bootstrap.bundle.min.js"

integrity="sha384-

MrcW6ZMFYlzcLA8NI+NtUVF0sA7MsXsP1UyJoMp4YLEuNSfAP+JcXn/t
WtIaxVXM"

crossorigin="anonymous"></script>

<div class="container-fluid" >

<div class="row flex-nowrap">

<div class="col-auto col-md-3 col-xl-2 px-sm-2 px-0" style="background-color:
#B2D3C2">

<div class="d-flex flex-column align-items-center align-items-sm-start px-3 pt-
2

min-vh-100" style="color:black">

<p class="d-flex align-items-center pb-3 mb-md-0 me-md-auto text-white
text-decoration-none">

<span class="fs-5 d-none d-sm-inline" style="color:black; font-weight:
bold;">Personal Expense Tracker

</p>

<ul class="nav nav-pills flex-column mb-sm-auto mb-0 align-items-center
align-items-sm-start" id="menu">

<li class="nav-item mt-2">

<a href="dashboard.html" class="nav-link align-middle px-0"
style="color:black;">

Home

```

</a>

</li>

<li class="nav-item mt-2" style="background-color:#00AD83; height: 50px;
width: 150px; border-radius: 5px;" >

<a href="addexpense.html" class="nav-link px-0 align-middle"
style="color:black;">

<span class="ms-1 d-none d-sm-inline">Add Expense</span>

</a>

</li>

<li class="nav-item mt-2">

<a href="modifyexpense.html" class="nav-link px-0 align-middle"
style="color:black;">

<span class="ms-1 d-none d-sm-inline">Modify Expense</span>

</a>

</li>

<li class="nav-item mt-2">

<a href="analysis.html" class="nav-link px-0 align-middle"
style="color:black;">

<span class="ms-1 d-none d-sm-inline">View Analysis</span>

```



```

</a>

</li>

<li class="nav-item mt-2">

<a href="rewards.html" class="nav-link px-0 align-middle"
style="color:black;">

<span class="ms-1 d-none d-sm-inline">Rewards & Goals</span>

</a>

</li>

</ul>

</div>

</div>

<div class="col py-3" style="background-color:black">

<h3 style="color:white; text-align: center;">Add expense</h3>

<div class="container mt-3" style="width: 600px;">

<div class="card shadow-lg bg-white rounded">

<div class="card-header" style="text-align: center;">

<span style="display:inline-flex"><h4>Expense Made</h4></span>

</div>

<div class="card-body">

<form>

```

```
<div class="mb-3">

<label for="amountspent" class="form-label">Amount Spent: (Rs)

</label>

<input type="number" class="form-control" name="amountspent"
id="amountspent" placeholder="100.00">

</div>

<div class="mb-3">

<label for="expensecategory" class="form-label">Expense Category:

</label>

<input type="text" class="form-control" name="expensecategory"
id="expensecategory"></input>

</div>

<div class="mb-3">

<label for="date" class="form-label">Date of Expense: </label>

<input type="date" class="form-control" name="date"
id="date"></input>

</div>

</label>

<div class="mb-3">

<label for="description" class="form-label">Description of Expense:

<input type="text" class="form-control" name="description"
id="description"></input>
```



```

dictionary.update({ document['USERNAME']:
document['PASSWORD']})

document = ibm_db.fetch_assoc(out)

def
insertTableData(conn,rollno,username,email,password):

sql="INSERT INTO userdetails(rollno,username,email,password)

VALUES ({},'{}','{}','{}').format(rollno,username,email,password)

out = ibm_db.exec_immediate(conn,sql)

print('Number of affected rows : ',ibm_db.num_rows(out),"\n")

def updateTableData(conn,rollno,username,email,password):

sql = "UPDATE userdetails SET (username,email,password)=('{}','{}','{}')

WHERE

rollno={ }".format(username,email,password,rollno)

out = ibm_db.exec_immediate(conn, sql)

print('Number of affected rows : ', ibm_db.num_rows(out), "\n")

def deleteTableData(conn,rollno):

sql = "DELETE FROM userdetails WHERE rollno={ }".format(rollno)

out = ibm_db.exec_immediate(conn, sql) print('Number of affected rows : ',

ibm_db.num_rows(out), "\n")

try:

conn=ibm_db.connect("DATABASE=bludb;HOSTNAME=2f3279a5-73d1-

4859-88f0-

```

```

a6c3e6b4b907.c3n41cmd0nqnrk39u98g.databases.appdomain.cloud;PORT=307
56;Security=

SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=ctb99199;PWD=G
ybYxLw1rH

z86oSh;"", "", "")

print("Db connected")

except:

print("Error")

from flask import Flask,render_template,request,url_for,session

app=Flask( name )

@app.route("/")

@app.route("/login",methods=['POST','GET'])

def login():

if request.method=="POST":

printTableData(conn) username=request.form['username']

password=request.form['password']

try: if dictionary[username] == password and username in dictionary:

```

APP.PY

```
from flask import Flask, render_template, request
import logging
from logging import Formatter, FileHandler
from forms import *
import os
```

```
app = Flask(__name__)
app.config.from_object('config')
```

```
@app.route('/')
def home():
    return render_template('pages/placeholder.home.html')
```

```
@app.route('/about')
def about():
    return render_template('pages/placeholder.about.html')
```

```
@app.route('/login')
def login():
    form = LoginForm(request.form)
    return render_template('forms/login.html', form=form)
```

```
@app.route('/register')
def register():
    form = RegisterForm(request.form)
    return render_template('forms/register.html', form=form)
```

```
@app.route('/forgot')
def forgot():
    form = ForgotForm(request.form)
    return render_template('forms/forgot.html', form=form)
```

```
@app.errorhandler(500)
def internal_error(error):
    #db_session.rollback()
    return render_template('errors/500.html'), 500
```

```
@app.errorhandler(404)
def not_found_error(error):
    return render_template('errors/404.html'), 404
```

```
if not app.debug:
    file_handler = FileHandler('error.log')
```

```

file_handler.setFormatter(
    Formatter('%(asctime)s %(levelname)s: %(message)s [in
%(pathname)s: %(lineno)d]')
)
app.logger.setLevel(logging.INFO)
file_handler.setLevel(logging.INFO)
app.logger.addHandler(file_handler)
app.logger.info('errors')

# _____#
# Launch.
# _____#

if __name__ == '__main__':
    app.run()

```

CONFIG.PY

```

import os

# Grabs the folder where the script runs.
basedir = os.path.abspath(os.path.dirname(__file__))

# Enable debug mode.
DEBUG = True

# Secret key for session management. You can generate random strings here:
# https://randomkeygen.com/

```



```
SECRET_KEY = ''
```

```
# Connect to the database
```

```
SQLALCHEMY_DATABASE_URI = 'sqlite:/// ' + os.path.join(basedir,  
'database.db')
```

FABFILE

```
from fabric.api import local, settings, abort
```

```
from fabric.contrib.console import confirm
```

```
# prepare for deployment
```

```
def test():
```

```
    with settings(warn_only=True):
```

```
        result = local(
```

```
            "python test_tasks.py -v && python test_users.py -v", capture=True
```

```
        )
```

```
    if result.failed and not confirm("Tests failed. Continue?"):
```

```
        abort("Aborted at user request.")
```

```
def commit():
```

```
    message = raw_input("Enter a git commit message: ")
```

```
    local("git add . && git commit -am '{ }'.format(message))
```

```
def push():
```

```
local("git push origin master")
```

```
def prepare():
```

```
    test()
```

```
    commit()
```

```
    push()
```

```
# deploy to heroku
```

```
def pull():
```

```
    local("git pull origin master")
```

```
def heroku():
```

```
    local("git push heroku master")
```

```
def heroku_test():
```

```
    local(
```

```
        "heroku run python test_tasks.py -v && heroku run python test_users.py -v"
```

```
    )
```

```
def deploy():
```

```
    pull()
```

```
test()
commit()
heroku()
heroku_test()
```

```
# rollback
```

```
def rollback():
    local("heroku rollback")
```

FORMS.PY

```
from flask_wtf import Form
```

```
from wtforms import TextAreaField, PasswordField
```

```
from wtforms.validators import DataRequired, EqualTo, Length
```

```
# Set your classes here.
```

```
class RegisterForm(Form):
    name = TextAreaField(
        'Username', validators=[DataRequired(), Length(min=6, max=25)]
    )
    email = TextAreaField(
        'Email', validators=[DataRequired(), Length(min=6, max=40)]
    )
```

```

password = PasswordField(
    'Password', validators=[DataRequired(), Length(min=6, max=40)]
)
confirm = PasswordField(
    'Repeat Password',
    [DataRequired(),
     EqualTo('password', message='Passwords must match')]
)

```

```

class LoginForm(Form):
    name = TextAreaField('Username', [DataRequired()])
    password = PasswordField('Password', [DataRequired()])

```

```

class ForgotForm(Form):
    email = TextAreaField(
        'Email', validators=[DataRequired(), Length(min=6, max=40)]
    )

```

MODELS.PY

```

from sqlalchemy import create_engine
from sqlalchemy.orm import scoped_session, sessionmaker
from sqlalchemy.ext.declarative import declarative_base
# from sqlalchemy import Column, Integer, String
# from app import db

```

```

engine = create_engine('sqlite:///database.db', echo=True)
db_session = scoped_session(sessionmaker(autocommit=False,
                                           autoflush=False,
                                           bind=engine))

Base = declarative_base()
Base.query = db_session.query_property()

```

```
Base.metadata.create_all(bind=engine)
```

ADD.HTML

```

<!DOCTYPE html>
<html lang="en">
<head>
  <link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap@4.5.3/dist/css/bootstrap.min.css"
integrity="sha384-
TX8t27EcRE3e/ihU7zmQxVncDAy5uIKz4rEkgIXeMed4M0jlfIDPvg6uqKI2x
Xr2" crossorigin="anonymous">
  <script
src="https://cdn.jsdelivr.net/npm/chart.js@3.2.1/dist/chart.min.js"></script>
  <script src="https://code.jquery.com/jquery-3.5.1.slim.min.js"
integrity="sha384-
DfXdz2htPH0lsSSs5nCTpuj/zy4C+OGpamoFVy38MVBnE+IbbVYUew+OrC
XaRkfj" crossorigin="anonymous"></script>

  <script
src="https://cdn.jsdelivr.net/npm/popper.js@1.16.1/dist/umd/popper.min.js"
integrity="sha384-

```

9/reFTGAW83EW2RDu2S0VKaIzap3H66lZH81PoYlFhbGU+6BZp6G7niu73
5Sk7lN" crossorigin="anonymous"></script>

<script
src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"
integrity="sha384-
B4gt1jrGC7Jh4AgTPSdUtOBvfO8shuf57BaghqFfPlYxofvL8/KUEfYiJOMMV
+rV" crossorigin="anonymous"></script>

<link rel="stylesheet"
href="https://pro.fontawesome.com/releases/v5.10.0/css/all.css"
integrity="sha384-
AYmEC3Yw5cVb3ZcuHtOA93w35dYTsvhLPVnYs9eStHfGJvOvKxVfELGr
oGkvsg+p" crossorigin="anonymous"/>

<title>Document</title>

</head>

<body>

<nav class="navbar sticky-top navbar-expand-lg navbar-light"
style="background-color: #e3f2fd;">

MyBudget

<button class="navbar-toggler" type="button" data-toggle="collapse" data-
target="#navbarSupportedContent" aria-controls="navbarSupportedContent"
aria-expanded="false" aria-label="Toggle navigation">

</button>

<div class="collapse navbar-collapse" id="navbarSupportedContent">

<ul class="navbar-nav mr-auto">

<li class="nav-item active">

```

    <a class="nav-link" href="#home.html">Home </a>
  </li>
  <li class="nav-item">
    <a class="nav-link" href="add.html">Add</a>
  </li>
  <li class="nav-item">
    <a class="nav-link" href="display.html">History</a>
  </li>
  <li class="nav-item">
    <a class="nav-link" href="limit.html">LIMIT</a>
  </li>
  <li class="nav-item dropdown">
    <a class="nav-link dropdown-toggle" href="#" id="navbarDropdown"
role="button" data-toggle="dropdown" aria-haspopup="true" aria-
expanded="false">
      Report
    </a>
    <div class="dropdown-menu" aria-labelledby="navbarDropdown">
      <a class="dropdown-item" href="today.html">Today</a>
      <a class="dropdown-item" href="month.html">Month</a>

      <a class="dropdown-item" href="year.html">Year</a>
    </div>
  </li>
</ul>

<div class="form-inline my-5 my-lg-1" style="position: absolute; left:
1250px;">
  <ul class="navbar-nav mr-auto " > <li class="nav-item dropdown btn-
group open">

```

```
<a class="btn btn-primary" href="#"><i class="fa fa-user fa-fw"></i>User</a>
```

```
<a class="btn btn-primary dropdown-toggle" href="#" id="navbarDropdown" data-toggle="dropdown" aria-haspopup="true" aria-expanded="false">
```

```
</a>
```

```
<div class="dropdown-menu" aria-labelledby="navbarDropdown">
```

```
<a class="dropdown-item" href="#">Profile</a>
```

```
<a class="dropdown-item" href="#">Settings</a>
```

```
<a class="dropdown-item" href="#">Contact-Us</a>
```

```
<div class="dropdown-divider"></div>
```

```
<a class="dropdown-item" style="color: crimson;" href="/logout">Log-Out <i class="fa fa-sign-out" aria-hidden="true"></i></a>
```

```
</div>
```

```
</li>
```

```
<div >
```

```
</ul>
```

```
</div>
```

```
</div>
```

```
</nav>
```

```
</div><br><br><br><br>
```

```
<div class="container">
```

```
<div class="row">
```



```

<div class="col-md-6">
  <h3>Add Expense</h3>
  <form action="/addexpense" method="POST">

    <div class="form-group">
      <label for="">Date</label>
      <input class="form-control" type="datetime-local" name="date"
id="date"></div>
      <div class="form-group"> <label for="">Expense name</label>
      <input class="form-control" type="text" name="expensename"
id="expensename">
    </div>
    <div class="form-group">
      <label for="">Expense Amount</label>
      <input class="form-control" type="number" min="0"
name="amount" id="amount">
    </div>

    <div class="form-group">
      <label for=""></label>
      <select class="form-control" name="paymode" id="paymode">
        <option selected hidden>Pay-Mode</option>
        <option name="cash" value="cash">cash</option>
        <option name="debitcard"
value="debitcard">debitcard</option>
        <option name="creditcard"
value="creditcard">creditcard</option>
        <option name="epayment"
value="epayment">epayment</option>

```

```
        <option name="onlinebanking"
value="onlinebanking">onlinebanking</option>
```

```
</select>
```

```
<div class="form-group">
```

```
    <label for=""></label>
```

```
    <select class="form-control" name="category" id="category">
```

```
        <option selected hidden>Category</option>
```

```
        <option name = "food" value="food">food</option>
```

```
        <option name = "entertainment"
value="entertainment">Entertainment</option>
```

```
        <option name = "business" value="business">Business</option>
```

```
        <option name = "rent" value="rent">Rent</option>
```

```
        <option name = "EMI" value="EMI">EMI</option>
```

```
        <option name = "other" value="other">other</option>
```

```
</select>
```

```
</div>
```

```
<input class="btn btn-danger" type="submit" value="add" id="">
```

```

</form>

<div style="position: relative; left: 590px; top: -460px;"
class="image">

</div>

</div>

</div>

</div>

</body>

</html>

```

DISPLAY.HTML

```

<!DOCTYPE html>

<html lang="en">

<head>

    <link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap@4.5.3/dist/css/bootstrap.min.css"
integrity="sha384-
TX8t27EcRE3e/ihU7zmQxVncDAy5uIKz4rEkgIXeMed4M0jlfIDPvg6uqKI2x
Xr2" crossorigin="anonymous">

    <script
src="https://cdn.jsdelivr.net/npm/chart.js@3.2.1/dist/chart.min.js"></script>

    <script src="https://code.jquery.com/jquery-3.5.1.slim.min.js"
integrity="sha384-

```

DfXdz2htPH0lsSSs5nCTpuj/zy4C+OGpamoFVy38MVBnE+IbbVYUew+OrC
XaRkfj" crossorigin="anonymous"></script>

<script
src="https://cdn.jsdelivr.net/npm/popper.js@1.16.1/dist/umd/popper.min.js"
integrity="sha384-
9/reFTGAW83EW2RDu2S0VKAIZap3H66lZ81PoYlFhbGU+6BZp6G7niu73
5Sk7lN" crossorigin="anonymous"></script>

<script
src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"
integrity="sha384-
B4gt1jrGC7Jh4AgTPSduUOBvfO8shuf57BaghqFfPIYxofvL8/KUEfYiJOMMV
+rV" crossorigin="anonymous"></script>

<link rel="stylesheet"
href="https://pro.fontawesome.com/releases/v5.10.0/css/all.css"
integrity="sha384-
AYmEC3Yw5cVb3ZcuHtOA93w35dYTsvhLPVnYs9eStHfGJvOvKxVfELGr
oGkvsg+p" crossorigin="anonymous"/>

<title>Document</title>

</head>

<body>

<nav class="navbar sticky-top navbar-expand-lg navbar-light"
style="background-color: #e3f2fd;">

MyBudget

<button class="navbar-toggler" type="button" data-toggle="collapse" data-
target="#navbarSupportedContent" aria-controls="navbarSupportedContent"
aria-expanded="false" aria-label="Toggle navigation">

</button>

<div class="collapse navbar-collapse" id="navbarSupportedContent">

<ul class="navbar-nav mr-auto">

<li class="nav-item active">

Home

<li class="nav-item">

Add

<li class="nav-item">

History

<li class="nav-item">

LIMIT

<li class="nav-item dropdown">

Report

<div class="dropdown-menu" aria-labelledby="navbarDropdown">

Today

Month

Year

</div>

```

    </li>
  </ul>

  <div class="form-inline my-5 my-lg-1" style="position: absolute; left:
1250px;">

    <ul class="navbar-nav mr-auto " > <li class="nav-item dropdown btn-
group open">

      <a class="btn btn-primary" href="#"><i class="fa fa-user fa-fw"></i>User
</a>

      <a class="btn btn-primary dropdown-toggle "href="#" id="navbarDropdown"
data-toggle="dropdown" aria-haspopup="true" aria-expanded="false">

</a>

      <div class="dropdown-menu" aria-labelledby="navbarDropdown">

        <a class="dropdown-item" href="#">Profile</a>

        <a class="dropdown-item" href="#">Settings</a>

        <a class="dropdown-item" href="#">Contact-Us</a>

        <div class="dropdown-divider"></div>

        <a class="dropdown-item" style="color: crimson;" href="/logout">Log-
Out <i class="fa fa-sign-out" aria-hidden="true"></i></a>

      </div>

    </li>

  <div >

  </ul>

</div>

</div>

```

</nav>

<div class="container ">

<h3 class="mt-3">EXPENSES</h3>

<div class="row">

<div class="col-md-12">

<div class="card shadow-sm mb-2 bg-white rounded"></div>

<div class="card-body">

<div class="row">

<div class="col-md-2">

{ {row[2]} } </div>

<div class="col-md-2 mt-3"><H6>{ {row[3]} }</H6></div>

<div class="col-md-2 mt-3" > ₹{ {row[4]} }</div>

<div class="col-md-2 mt-3">

{ {row[5]} }

</div>

<div class="col-md-2 mt-3">

{ {row[6]} }

</div>

```
<div class="col-md-1 mt-3">
```

```
    <a href="edit.html" class="btn btn-sm btn-success">Edit</a>
```

```
</div>
```

```
<div class="col-md-1 mt-3">
```

```
    <a href="/delete/{ {row[0]} }" class="btn btn-sm btnDelete  
btn-success">Delete</a>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
<!--when no DATA-Found-->
```

```
<div class="card shadow-sm mb-2 bg-white rounded"></div>
```

```
<div class="card-body">
```

```
    <div style="text-align: center ; font-family: monospace; color:red ; "><h5><a  
href="add.html"> ADD-DATA </a> to Display</h3></div>
```

```
    
```

```
</div>
```

```
<div class="row">
```



```
<div class="col-md-6">
```

```
  <h3 class="mt-5">Expense Breakdown</h3>
```

```
<div class="card shadow mb-2 bg-white rounded-bottom">
```

```
  <div class="card-body ">
```

```
    <div class="row">
```

```
      <div class="col-md-6">Food</div>
```

```
      <div id="tfood" class="col-md-6"> {{ t_food }} </div>
```

```
    </div>
```

```
  </div>
```

```
</div>
```

```
<div class="card shadow mb-2 bg-white rounded">
```

```
  <div class="card-body">
```

```
    <div class="row">
```

```
      <div class="col-md-6">Entertainment</div>
```

```
      <div id="tentertainment" class="col-md-6"> {{ t_entertainment }} </div>
```

```
</div>
```

```
  </div>
```

```
</div>
```

```
</div>
```

```
<div class="card shadow mb-2 bg-white rounded">
```

```
  <div class="card-body">
```

```
    <div class="row">
```

```
      <div class="col-md-6">Business</div>
```

```
      <div id="tbusiness" class="col-md-6"> {{ t_business }} </div>
```

```
</div>
</div>
</div>
```

```
<div class="card shadow mb-2 bg-white rounded">
  <div class="card-body">
    <div class="row">
      <div class="col-md-6">Rent</div>
      <div id="trent" class="col-md-6"> {{ t_rent }} </div>
    </div>
  </div>
</div>
```

```
<div class="card shadow mb-2 bg-white rounded">
  <div class="card-body">
    <div class="row">
      <div class="col-md-6">EMI</div>
      <div id="temi" class="col-md-6"> {{ t_EMI }} </div>
    </div>
  </div>
</div>
```

```
<div class="card shadow mb-2 bg-white rounded">
  <div class="card-body">
```

```

<div class="row">
  <div class="col-md-6">Other</div>
  <div id="tother" class="col-md-6"> {{ t_other }} </div>
</div>
</div>
</div>

```

```

<div class="card shadow mb-2 btn-outline-danger rounded-pill">
  <div class="card-body">
    <div class="row">
      <div class="col-md-6">Total</div>
      <div class="col-md-6">₹ {{ total }} </div>
    </div>
  </div>
</div>
</div>

```

```

</div>
<div class="col-md-6">
  <canvas id="myChart" width="400" height="400"></canvas>
  <script>
    let food = document.getElementById('tfood').innerHTML
    let entertainment =
document.getElementById('tentertainment').innerHTML
    let business = document.getElementById('tbusiness').innerHTML
    let rent = document.getElementById('trent').innerHTML
    let emi = document.getElementById('temi').innerHTML
    let other = document.getElementById('tother').innerHTML
    var ctx = document.getElementById('myChart').getContext('2d');

```

```

var myChart = new Chart(ctx, {
  type: 'doughnut',
  data: {
    labels: ['Food', 'Entertainment', 'Business', 'Rent', 'EMI', 'Other'],
    datasets: [{
      label: 'Expenses Chart',
      data: [food, entertainment, business, rent, emi, other],
      backgroundColor: [
        'rgb(255, 99, 132)',
        'rgb(0, 0, 0)',
        'rgb(255, 205, 86)',
        'rgb(201, 203, 207)',
        'rgb(54, 162, 235)',
        'rgb(215, 159, 64)'
      ],

    }]
  },
  options: {
    responsive: true,
    plugins: {
legend: {
  position: 'bottom',
},
title: {
  display: true,
  text: 'EXPENSE BREAKDOWN'

```

```
}  
}  
}  
});
```

```
</script>  
</div>  
</div>  
</div>  
</body>  
</html>
```

BASE.HTML

```
<!DOCTYPE html>  
<html lang="en">  
<head>  
  <link rel="stylesheet"  
href="https://cdn.jsdelivr.net/npm/bootstrap@4.5.3/dist/css/bootstrap.min.css"  
integrity="sha384-  
TX8t27EcRE3e/ihU7zmQxVncDAy5uIKz4rEkgIXeMed4M0jlfIDPvg6uqKI2x  
Xr2" crossorigin="anonymous">  
  <script  
src="https://cdn.jsdelivr.net/npm/chart.js@3.2.1/dist/chart.min.js"></script>
```

```
<script src="https://code.jquery.com/jquery-3.5.1.slim.min.js"
integrity="sha384-
DfXdz2htPH0lsSSs5nCTpuj/zy4C+OGpamoFVy38MVBnE+IbbVYUew+OrC
XaRkfj" crossorigin="anonymous"></script>
```

```
<script
src="https://cdn.jsdelivr.net/npm/popper.js@1.16.1/dist/umd/popper.min.js"
integrity="sha384-
9/reFTGAW83EW2RDu2S0VKA1Zap3H66lZ81PoYlFhbGU+6BZp6G7niu73
5Sk7lN" crossorigin="anonymous"></script>
```

```
<script
src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"
integrity="sha384-
B4gt1jrGC7Jh4AgTPSdUtOBvfO8shuf57BaghqFfPIYxofvL8/KUEfYiJOMMV
+rV" crossorigin="anonymous"></script>
```

```
<link rel="stylesheet"
href="https://pro.fontawesome.com/releases/v5.10.0/css/all.css"
integrity="sha384-
AYmEC3Yw5cVb3ZcuHtOA93w35dYTsvhLPVnYs9eStHfGJvOvKxVfELGr
oGkvsg+p" crossorigin="anonymous"/>
```

```
<title>Document</title>
```

```
</head>
```

```
<body>
```

```
<nav class="navbar sticky-top navbar-expand-lg navbar-light"
style="background-color: #e3f2fd;">
```

```
<a class="navbar-brand" href="#">MyBudget</a>
```

```
<button class="navbar-toggler" type="button" data-toggle="collapse" data-
target="#navbarSupportedContent" aria-controls="navbarSupportedContent"
aria-expanded="false" aria-label="Toggle navigation">
```

```

    <span class="navbar-toggler-icon"></span>
</button>

<div class="collapse navbar-collapse" id="navbarSupportedContent">
    <ul class="navbar-nav mr-auto">
        <li class="nav-item active">
            <a class="nav-link" href="{ { url_for('home') } }">Home <span class="sr-
only">(current)</span></a>
        </li>
        <li class="nav-item">
            <a class="nav-link" href="/add">Add</a>
        </li>
        <li class="nav-item">
            <a class="nav-link" href="/display">History</a>
        </li>
        <li class="nav-item">
            <a class="nav-link" href="/limit">LIMIT</a>
        </li>
        <li class="nav-item dropdown">
            <a class="nav-link dropdown-toggle" href="#" id="navbarDropdown"
role="button" data-toggle="dropdown" aria-haspopup="true" aria-
expanded="false">

```

Report

```

</a>

<div class="dropdown-menu" aria-labelledby="navbarDropdown">
    <a class="dropdown-item" href="/today">TODAY</a>
    <a class="dropdown-item" href="/month">Month</a>

```

```

        <a class="dropdown-item" href="/year">Year</a>
    </div>
</li>
</ul>

<div class="form-inline my-5 my-lg-1" style="position: absolute; left:
1250px;">

    <ul class="navbar-nav mr-auto " > <li class="nav-item dropdown btn-
group open">

        <a class="btn btn-primary" href="#"><i class="fa fa-user fa-fw"></i>User
    </a>

        <a class="btn btn-primary dropdown-toggle "href="#" id="navbarDropdown"
data-toggle="dropdown" aria-haspopup="true" aria-expanded="false">

</a>

        <div class="dropdown-menu" aria-labelledby="navbarDropdown">
            <a class="dropdown-item" href="#">Profile</a>
            <a class="dropdown-item" href="#">Settings</a>
            <a class="dropdown-item" href="#">Contact-Us</a>
            <div class="dropdown-divider"></div>
            <a class="dropdown-item" style="color: darkred;" href="/logout">Log-
Out <i class="fa fa-sign-out" aria-hidden="true"></i></a>
        </div>
    </li>

    <div ">

</ul>

</div>

```



```

</div>

</nav>

{ % block body % }

{ % endblock % }

</body>

</html>

```

CREATE.HTML

```

{ % extends 'base.html' % }

{ % block body % }

<div class="container ">

<div class="row">
  <div class="col-md-5">
    <h3 class="mt-5">YEAR Expense Breakdown</h3>

    <div class="card shadow mb-2 bg-white rounded-pill">
      <div class="card-body ">
        <div class="row">
          <div value = "month" class="col-md-6"> </div>
          <div class="col-md-6"> AMOUNT </div>
        </div>

```

</div>

</div>

{ % for row in texpanse % }

<div class="card shadow mb-2 bg-white rounded-bottom">

<div class="card-body ">

<div class="row">

<div id ="ttime" class="col-md-6">{ { row [0] } }</div>

<div id="tamount" class="col-md-6"> { { row[1] } } </div>

</div>

</div>

</div>

{ % endfor % }

</div>

</div>

<section>

<div class="row">

<div class="col-md-6">

<h3 class="mt-5">Expense Breakdown BY Category</h3>

<div class="card shadow mb-2 bg-white rounded-bottom">

<div class="card-body ">

<div class="row">

<div class="col-md-6">Food</div>

```

        <div id="tfood" class="col-md-6"> {{ t_food}} </div>
    </div>
</div>
</div>

<div class="card shadow mb-2 bg-white rounded">
    <div class="card-body">
        <div class="row">
            <div class="col-md-6">Entertainment</div>
            <div id="tentertainment" class="col-md-6"> {{ t_entertainment}}
</div>
        </div>
    </div>
</div>

```

```

<div class="card shadow mb-2 bg-white rounded">
    <div class="card-body">
        <div class="row">
            <div class="col-md-6">Business</div>
            <div id="tbusiness" class="col-md-6"> {{t_business}} </div>
        </div>
    </div>
</div>

```

```

<div class="card shadow mb-2 bg-white rounded">
    <div class="card-body">

```

```

<div class="row">
  <div class="col-md-6">Rent</div>
  <div id="trent" class="col-md-6"> {{ t_rent }} </div>
</div>
</div>
</div>

```

```

<div class="card shadow mb-2 bg-white rounded">
  <div class="card-body">
    <div class="row">
      <div class="col-md-6">EMI</div>
      <div id="temi" class="col-md-6">{{ t_EMI }} </div>
    </div>
  </div>
</div>
</div>

```

```

<div class="card shadow mb-2 bg-white rounded">
  <div class="card-body">
    <div class="row">
      <div class="col-md-6">Other</div>
      <div id="tother" class="col-md-6"> {{ t_other }} </div>
    </div>
  </div>
</div>
</div>

```

```

<div class="card shadow mb-2 btn-outline-danger rounded-pill">
  <div class="card-body">
    <div class="row">
      <div class="col-md-6">Total</div>
      <div class="col-md-6">₹ {{total}} </div>
    </div>
  </div>
</div>

</div>
<div class="col-md-6">
  <canvas id="myChart" width="400" height="400"></canvas>
  <script>
    let food = document.getElementById('tfood').innerHTML
    let entertainment =
document.getElementById('tentertainment').innerHTML
    let business = document.getElementById('tbusiness').innerHTML
    let rent = document.getElementById('trent').innerHTML
    let emi = document.getElementById('temi').innerHTML
    let other = document.getElementById('tother').innerHTML
    var ctx = document.getElementById('myChart').getContext('2d');
    var myChart = new Chart(ctx, {
      type: 'doughnut',
      data: {
        labels: ['Food', 'Entertainment', 'Business', 'Rent', 'EMI', 'Other'],
        datasets: [{
          label: 'Expenses Chart',
          data: [food, entertainment, business, rent, emi, other],

```

```

        backgroundColor: [
            'rgb(255, 99, 132)',
            'rgb(0, 0, 0)',
            'rgb(255, 205, 86)',
            'rgb(201, 203, 207)',
            'rgb(54, 162, 235)',
            'rgb(215, 159, 64)'
        ],

    }
},
options: {
    responsive: true,
    plugins: {
legend: {
    position: 'bottom',
},
title: {
    display: true,
    text: 'EXPENSE BREAKDOWN'
}
}
    }
});

```

```
</script>
</div>
</div>
</div>
```

```
</section>
```

```
</div>
```

```
{% endblock % }
```

LIMIT.HTML

```
{% extends 'base.html' % }
```

```
{% block body % }
```

```
<p> Currently your MONTHLY limit is ₹ {{y}} </p>
```

```
<form action="/limitnum" method="POST">
```

```

<p> ENTER the MONTHLY LIMIT to avoid over EXPENSES</p> <br/>
<input type="number" name="number" required/> <span>
    <button class="btn btn-warning" type="submit">ENTER</button>
</span>

</form>
{ % endblock % }

```

MONTH.HTML

```

{ % extends 'base.html' % }

{ % block body % }
<div class="container ">

<div class="row">
    <div class="col-md-5">
        <h3 class="mt-5">MONTH Expense Breakdown</h3>

        <div class="card shadow mb-2 bg-white rounded-pill">
            <div class="card-body ">
                <div class="row">
                    <div class="col-md-6"> DATE </div>
                    <div class="col-md-6"> AMOUNT  </div>
                </div>

```



```

        </div>
    </div>
    { % for row in texpanse % }

    <div class="card shadow mb-2 bg-white rounded-bottom">
        <div class="card-body ">
            <div class="row">
                <div id ="ttime" class="col-md-6">{ { row [0] } }</div>
                <div id="tamount" class="col-md-6">  { { row[1] } }  </div>
            </div>
        </div>
    </div>
</div>

    { % endfor % }
</div>
</div>
<section>

    <div class="row">
        <div class="col-md-6">
            <h3 class="mt-5">Expense Breakdown BY Category</h3>

            <div class="card shadow mb-2 bg-white rounded-bottom">
                <div class="card-body ">
                    <div class="row">
                        <div class="col-md-6">Food</div>

```

```

        <div id="tfood" class="col-md-6"> {{ t_food}} </div>
    </div>
</div>
</div>

<div class="card shadow mb-2 bg-white rounded">
    <div class="card-body">
        <div class="row">
            <div class="col-md-6">Entertainment</div>
            <div id="tentertainment" class="col-md-6"> {{ t_entertainment}}
</div>
        </div>
    </div>
</div>

```

```

<div class="card shadow mb-2 bg-white rounded">
    <div class="card-body">
        <div class="row">
            <div class="col-md-6">Business</div>
            <div id="tbusiness" class="col-md-6"> {{t_business}} </div>
        </div>
    </div>
</div>

```

```

<div class="card shadow mb-2 bg-white rounded">
    <div class="card-body">

```

```
<div class="row">
  <div class="col-md-6">Rent</div>
  <div id="trent" class="col-md-6"> {{ t_rent }} </div>
</div>
</div>
</div>
```

```
<div class="card shadow mb-2 bg-white rounded">
  <div class="card-body">
    <div class="row">
      <div class="col-md-6">EMI</div>
      <div id="temi" class="col-md-6"> {{ t_EMI }} </div>
    </div>
  </div>
</div>
</div>
```

```
<div class="card shadow mb-2 bg-white rounded">
  <div class="card-body">
    <div class="row">
      <div class="col-md-6">Other</div>
      <div id="tother" class="col-md-6"> {{ t_other }} </div>
    </div>
  </div>
</div>
</div>
```

```

<div class="card shadow mb-2 btn-outline-danger rounded-pill">
  <div class="card-body">
    <div class="row">
      <div class="col-md-6">Total</div>
      <div class="col-md-6">₹ {{total}} </div>
    </div>
  </div>
</div>

</div>
<div class="col-md-6">
  <canvas id="myChart" width="400" height="400"></canvas>
  <script>
    let food = document.getElementById('tfood').innerHTML
    let entertainment =
document.getElementById('tentertainment').innerHTML
    let business = document.getElementById('tbusiness').innerHTML
    let rent = document.getElementById('trent').innerHTML
    let emi = document.getElementById('temi').innerHTML
    let other = document.getElementById('tother').innerHTML
    var ctx = document.getElementById('myChart').getContext('2d');
    var myChart = new Chart(ctx, {
      type: 'doughnut',
      data: {
        labels: ['Food', 'Entertainment', 'Business', 'Rent', 'EMI', 'Other'],
        datasets: [{
          label: 'Expenses Chart',
          data: [food, entertainment, business, rent, emi, other],

```

```

        backgroundColor: [
            'rgb(255, 99, 132)',
            'rgb(0, 0, 0)',
            'rgb(255, 205, 86)',
            'rgb(201, 203, 207)',
            'rgb(54, 162, 235)',
            'rgb(215, 159, 64)'
        ],

    }],
},
options: {
    responsive: true,
    plugins: {
legend: {
    position: 'bottom',
},
title: {
    display: true,
    text: 'EXPENSE BREAKDOWN'
}
}
});

```

```
</script>
</div>
</div>
</div>
```

```
</section>
```

```
</div>
```

```
{% endblock % }
```

TODAY.HTML

```
{% extends 'base.html' % }
```

```
{% block body % }
```

```
<div class="container ">
```

```
<div class="row">
```

```
<div class="col-md-5">
```

```
<h3 class="mt-5">Today Expense Breakdown</h3>
```

```
<div class="card shadow mb-2 bg-white rounded-pill">
```

```
  <div class="card-body ">
```

```
    <div class="row">
```

```
      <div class="col-md-6">TIME</div>
```

```
      <div class="col-md-6"> AMOUNT  </div>
```

```
    </div>
```

```
  </div>
```

```
</div>
```

```
{ % for row in texpanse % }
```

```
<div class="card shadow mb-2 bg-white rounded-bottom">
```

```
  <div class="card-body ">
```

```
    <div class="row">
```

```
      <div id ="ttime" class="col-md-6">{{ row [0] }}</div>
```

```
      <div id="tamount" class="col-md-6">  {{ row[1] }}  </div>
```

```
    </div>
```

```
  </div>
```

```
</div>
```

```
{ % endfor % }
```

```
</div>
```

```
</div>
```

```
<section>
```

```

<div class="row">
  <div class="col-md-6">
    <h3 class="mt-5">Expense Breakdown BY Category</h3>

    <div class="card shadow mb-2 bg-white rounded-bottom">
      <div class="card-body ">
        <div class="row">
          <div class="col-md-6">Food</div>
          <div id="tfood" class="col-md-6"> {{ t_food}} </div>
        </div>
      </div>
    </div>

    <div class="card shadow mb-2 bg-white rounded">
      <div class="card-body">
        <div class="row">
          <div class="col-md-6">Entertainment</div>
          <div id="tentertainment" class="col-md-6"> {{ t_entertainment}}
</div>
        </div>
      </div>
    </div>

    <div class="card shadow mb-2 bg-white rounded">
      <div class="card-body">
        <div class="row">

```



```

    <div class="col-md-6">Business</div>
    <div id="tbusiness" class="col-md-6"> {{ t_business }} </div>
  </div>
</div>
</div>
</div>

```

```

<div class="card shadow mb-2 bg-white rounded">
  <div class="card-body">
    <div class="row">
      <div class="col-md-6">Rent</div>
      <div id="trent" class="col-md-6"> {{ t_rent }} </div>
    </div>
  </div>
</div>
</div>

```

```

<div class="card shadow mb-2 bg-white rounded">
  <div class="card-body">
    <div class="row">
      <div class="col-md-6">EMI</div>
      <div id="temi" class="col-md-6"> {{ t_EMI }} </div>
    </div>
  </div>
</div>
</div>

```

```

<div class="card shadow mb-2 bg-white rounded">
  <div class="card-body">
    <div class="row">
      <div class="col-md-6">Other</div>
      <div id="tother" class="col-md-6"> {{ t_other }}</div>
    </div>
  </div>
</div>

```

```

<div class="card shadow mb-2 btn-outline-danger rounded-pill">
  <div class="card-body">
    <div class="row">
      <div class="col-md-6">Total</div>
      <div class="col-md-6">₹ {{ total }} </div>
    </div>
  </div>
</div>

```

```

</div>
<div class="col-md-6">
  <canvas id="myChart" width="400" height="400"></canvas>
  <script>
    let food = document.getElementById('tfood').innerHTML
    let entertainment =
document.getElementById('tentertainment').innerHTML
    let business = document.getElementById('tbusiness').innerHTML
    let rent = document.getElementById('trent').innerHTML
    let emi = document.getElementById('temi').innerHTML
  </script>

```

```

let other = document.getElementById('tother').innerHTML
var ctx = document.getElementById('myChart').getContext('2d');
var myChart = new Chart(ctx, {
  type: 'doughnut',
  data: {
    labels: ['Food', 'Entertainment', 'Business', 'Rent', 'EMI', 'Other'],
    datasets: [{
      label: 'Expenses Chart',
      data: [food, entertainment, business, rent, emi, other],
      backgroundColor: [
        'rgb(255, 99, 132)',
        'rgb(0, 0, 0)',
        'rgb(255, 205, 86)',
        'rgb(201, 203, 207)',
        'rgb(54, 162, 235)',
        'rgb(215, 159, 64)'
      ],

    }]
  },
  options: {
    responsive: true,
    plugins: {
      legend: {
        position: 'bottom',
      },
    },
    title: {

```

```
        display: true,  
        text: 'EXPENSE BREAKDOWN'  
    }  
}  
    }  
});
```

```
</script>  
</div>  
</div>  
</div>
```

```
</section>
```

```
</div>
```

```
{% endblock % }
```

GITHUB AND PROJECT DEMO LINK

GITHUB LINK

<https://github.com/IBM-EPBL/IBM-Project-20206-1659714679>

DEMO LINK

<https://drive.google.com/file/d/1Y05nVoGmaQ6RICOqnmW49va8Hpe8Wo7b/view?usp=drivesdk>