SPRINT 3 - Personal Expense Tracker

Team Id: PNT2022TMID23221

Description of USN and Screenshots:

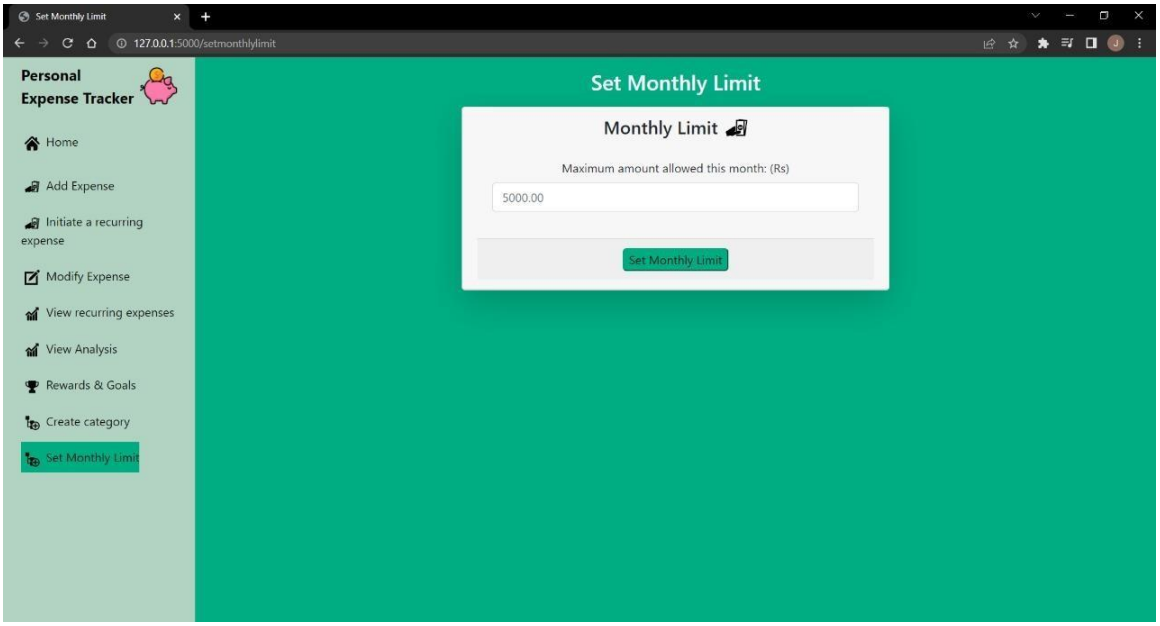
USN-7: As a user, if I exceed my limit, I should be warned with an email.

```
def check_monthly_limit(month, year):
    sql = 'SELECT SUM(EXPENSE_AMOUNT) FROM PETA_EXPENSE WHERE USERID = ? AND MONTH(DATE) = ? AND YEAR(DATE) = ?'
    statement = execute_sql(sql, USERID, month, year)
    amt_spent = ibm_db.fetch_tuple(statement)

    sql = 'SELECT LIMITAMOUNT FROM PETA_LIMIT WHERE USERID = ? AND LIMITMONTH = ? AND LIMITYEAR = ?'
    statement = execute_sql(sql, USERID, month, year)
    monthly_limit = ibm_db.fetch_tuple(statement)

    if amt_spent and monthly_limit and int(amt_spent[0]) > int(monthly_limit[0]):
        diff = int(amt_spent[0]) - int(monthly_limit[0])
        print(diff)
        msg = Message('Monthly limit exceeded', recipients=[email])
        msg.body = (
            f'Monthly limit exceeded by {diff} for the month of {month}, {year}')
        mail.send(msg)
```

USN-9:

As a user, I can set a monthly limit for my expenses.

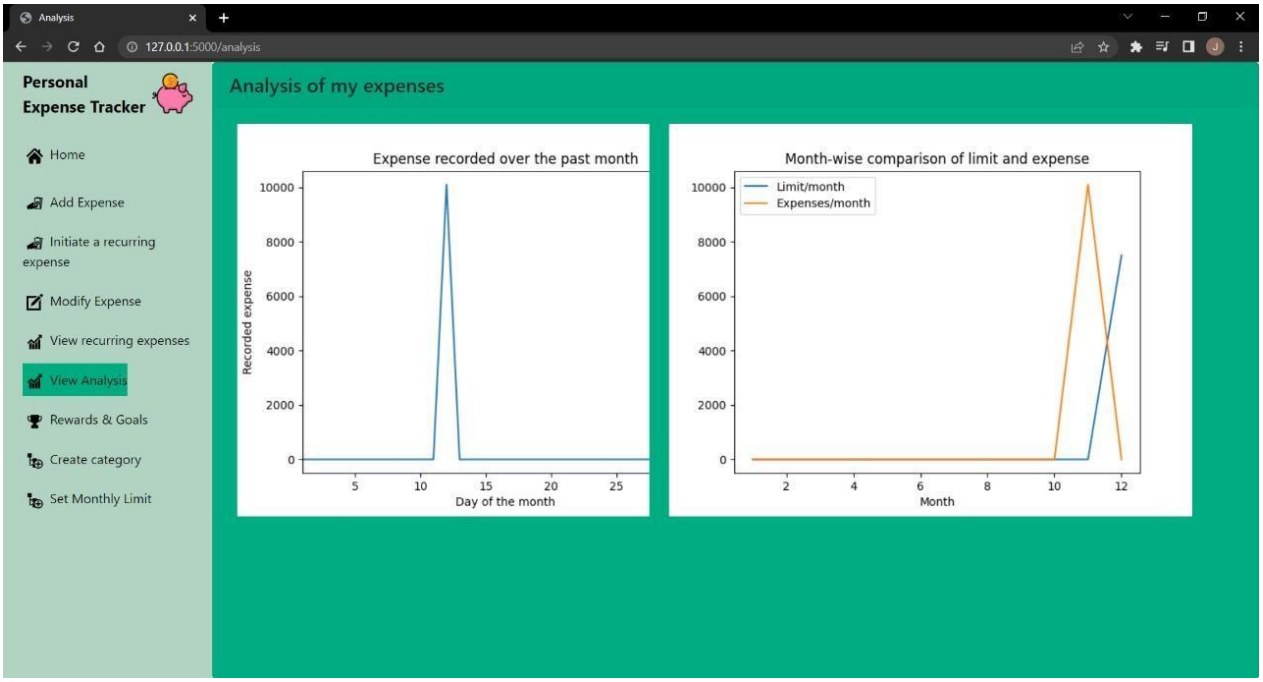
Screenshots:



USN-11:

At the end of every month, as a user, I should be able to view my monthly expenses, projections in the form of graphs.

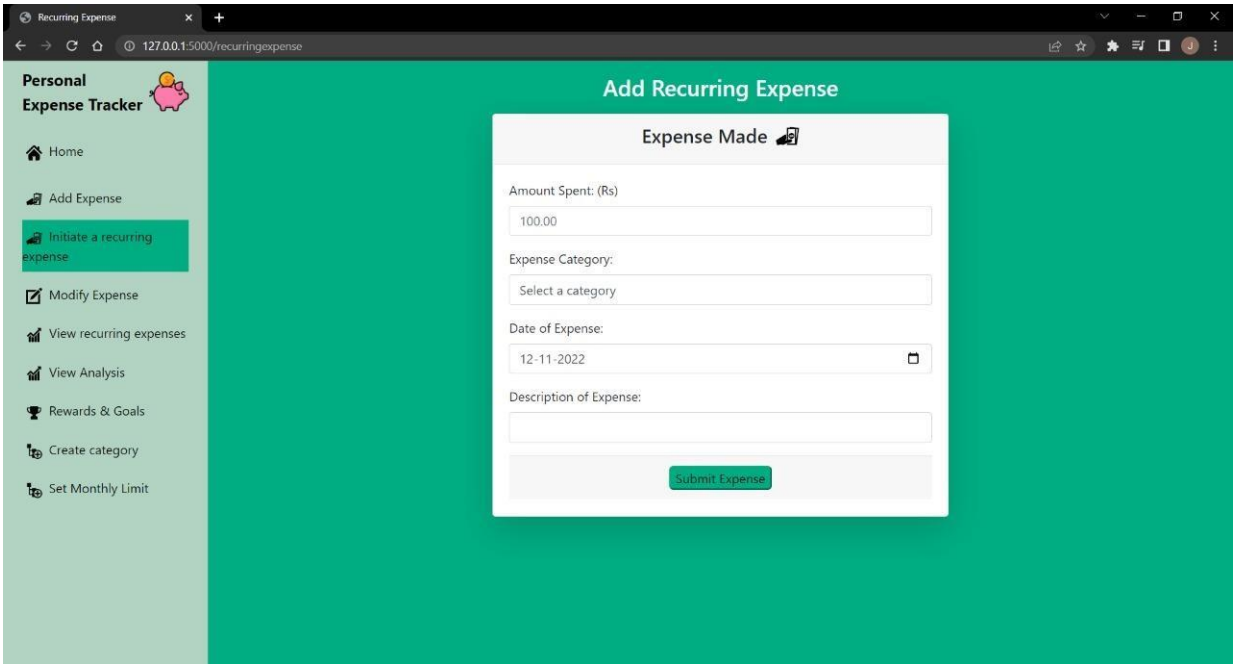
Screenshots:

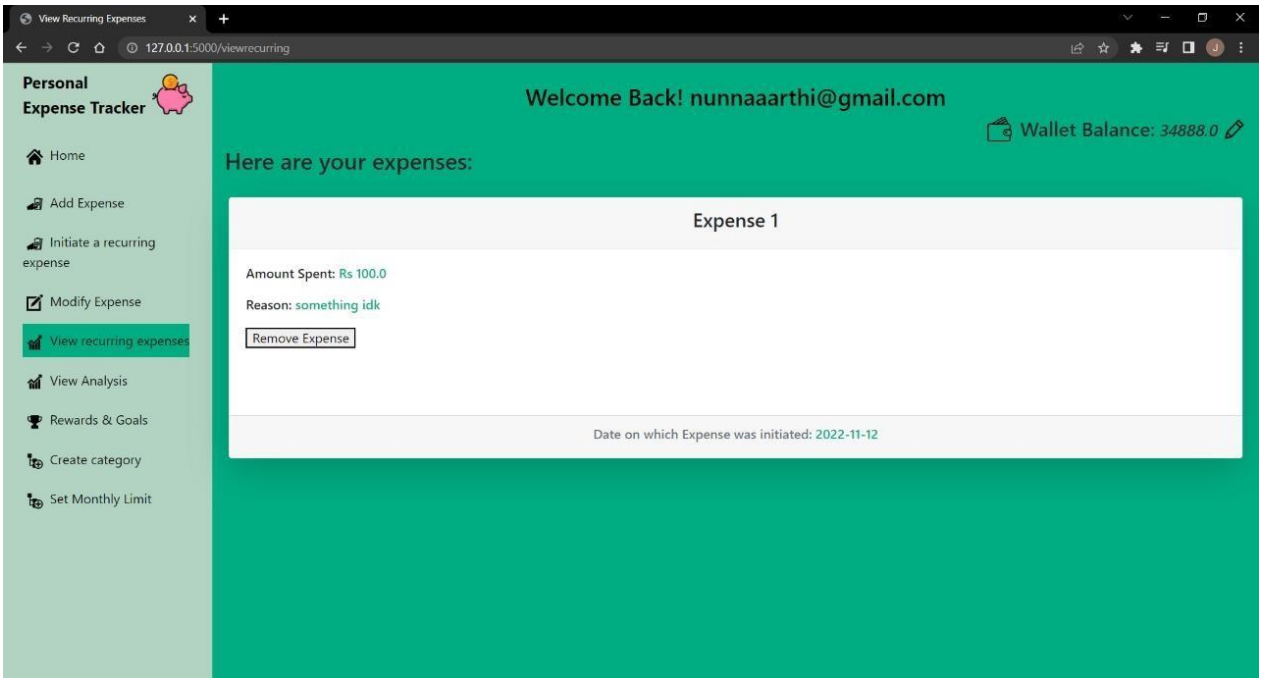


USN-12:

As a user, I should be able to set reminders to alert me of periodic transactions or delayed expenses that are to be completed.

Screenshots:





Please Note:

USN 8 has been pushed to Sprint 4. Instead, User Stories 11 and 12 have been completed for Sprint3.

Therefore, **USN for Sprint 4** are: **USN 8 and USN 10**

Test Cases:

USN – 7 & 9 Test Cases:

1. Test case - 1:

1. Go to /setmonthlylimit.

2. Enter the limit.

3. Submit the limit amount.

4. If your expenditure has exceeded the limit, then an alert is sent through SendGrid.

2. Test case - 2:

1. Go to /setmonthlylimit.

2. Ignore the field specified for entering the money, i.e., leave the field blank.

3. Try to add the expense by clicking 'Set Monthly Limit'.

4. Check that an error message has popped up to notify that you cannot specify nothing for the ignored required field.

USN -11 Test Cases:

1. Test case - 1:

1. Go to /analysis.

2. View the expenditure in the form of a graph.

3. View 2 graphs denoting various data.

2. Test case – 2:

1. Go to /analysis.

2. The graphs are not visible.

3. This means that no expenses have been made, or monthly limit has not

been set, i.e., there is insufficient data to represent the graph.

USN - 12 Test Cases:

1. Test case - 1:

1. Go to /recurringexpense.

2. Enter appropriate information in all the fields.

3. Submit the recurring expense.

4. View the dashboard and observe that the expense has been made.

5. On the same day next month, observe a deduction of the same amount from

the wallet and the creation of a card denoting the expense made.

2. Test case – 2:

1. Go to /viewrecurring.

2. View the active recurring expenses that will be made over the

consecutive months unless removed by the user.

3. Test case – 3:

1. Go to /viewrecurring.

2. To remove a recurring expense, click on the button "Remove Expense",

the expense will no longer be deducted from your wallet