

**VMware Tanzu Build-A-Thon  
(Python Flask Track)**

**PROJECT REPORT ON  
PERSONAL EXPENSE TRACKER**

Submitted By :  
Sneha M  
2019it0026@svce.ac.in

# **VMware Tanzu Build-A-Thon**

## **(Python Flask Track)**

### **ABSTRACT**

In today's busy and expensive life we are in a great rush to make money. But at the end of the month we broke off. As we are unknowingly spending money on little and unwanted things. So, I have come over with the idea to track our earnings. Personal Expense Tracker (PET) aims to help everyone who are planning to know their expenses and save from it. PET is an website which users can execute in their mobile phones as well as in laptops and update their daily expenses so that they are well known to their expenses. Here user can define their own categories for expense type like food, clothing, rent and bills where they have to enter the money that has been spent and also can add some information in additional information to specify the expense. User can also define expense categories. User will be able to see graph of expense. Although this website is focused on new job holders, interns and teenagers, everyone who wants to track their expenses can use this web app.

Every day Personal Expense Tracker System is intended to monitor Income-Expense of a Housewife on an everyday premise. Initially users need to create new account and after that they can start using the app. Users can set the limit of expense per month and if the limit exceeded, users will be notified through registered email. They will also get an alert mail if they have reached their limit set for the month. They can update the limits and they can also view their previous expenses and expense graph. After adding new expense, the amount will be deducted from the wallet and available amount will be displayed.

### **INTRODUCTION**

In simple words, personal finance entails all the financial decisions and

# **VMware Tanzu Build-A-Thon**

## **(Python Flask Track)**

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.

The Users can go through the homepage first if they want to know more about the Personal Expense Tracker and the services offered by it. Then, the users need to register with the Personal Expense Tracker Application by providing their mail address and set a username and password of their choice.

Once the users have completed their registration, they need to login with their credentials. In case, of providing incorrect credentials they will be notified that they have entered an incorrect username/password.

On successful login into the application, the users will be directed to the dashboard. In the dashboard, users can view the limit set by them for this month, total expenditure recorded this month, amount remaining this month, and the number of notifications sent by the Personal Expense Tracker application. The users can also get to know some facts about the Personal Expense Tracker Application like total number of expenses recorded by all the users of Personal Expense Tracker Application, total number of alert notifications sent to all the users of the application, total number of users registered with the application and total expense amount recorded by all the users of the application in the Personal Expense Tracker. This information about the Personal Expense Tracker will motivate the users and thus the users will stay ahead in the track and use the application in a very effective way.

## **VMware Tanzu Build-A-Thon**

### **(Python Flask Track)**

The users can set the limit for the current month and start adding the expenses. Based on their expenses the wallet balance will be updated and it will be displayed on the dashboard. If the users have set a limit for their expenses last month and if they want to continue it for this month, then there is an option by which the user can set the current month's limit with the last month's limit.

If the users reach the limit set for the month, the Personal Expense Tracker application will send an alert message to the mail address given by the user during registration. If the user exceeds the limit set by them for that particular month, then the user will be notified through mail stating that they have exceeded the limit for the month.

The users can add the expense amount along with the category of the expense. The users can define their own category or description of the expense unlike the default categories for expenses set by the application itself. This way of describing the expense by the users themselves will help them keep track of their expense and the users will be able to recollect the expense even after sometime when they review their expenses.

The users can view their profile information in the profile page. The users will also be able to view all the expenses done in a week and in a month in a tabular form. The users can also view all the expenses they have recorded in the application from the date they have registered in a tabular form.

Also, users can get an analysis of their expenditure in graphical forms. The users can view a pie chart which depicts the limit remaining this

# VMware Tanzu Build-A-Thon

## (Python Flask Track)

month vs the expenses done this month. The users can also view a line graph which shows their expenditure over time. They can get some insights on which part of the month they have spent the most.

## STACK USED

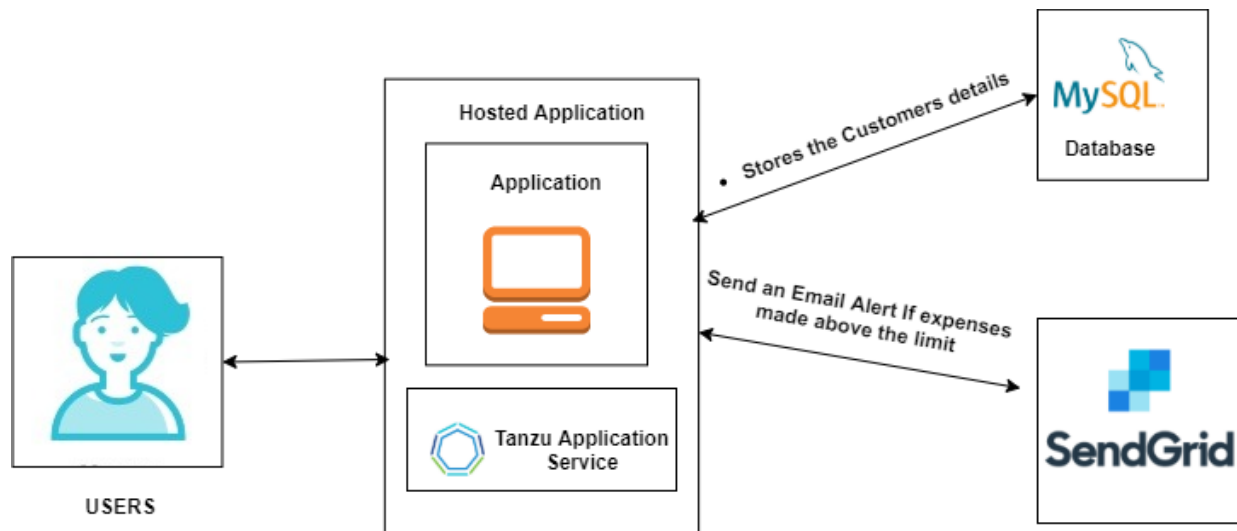
**FRONT END:** HTML, CSS, BOOTSTRAP, Javascript

**BACKEND:** Python Flask

**DATABASE :** Remote MySQL database

## THEORITICAL ANALYSIS

### ARCHITECTURE OF THE PROJECT



The users will be connected with the application hosted in Tanzu Application Service and Remote MySQL database along with SendGrid which is an email delivery service will be connected with the hosted

# **VMware Tanzu Build-A-Thon**

## **(Python Flask Track)**

application. The remote MySQL database will store the customer details and SendGrid sends the email alerts to the users if they have reached or exceeded the limit.

### **HARDWARE/SOFTWARE DESIGNING**

**Browser** : Google Chrome recommended

### **PROJECT LINK**

<https://snehampersonalexpensetrackerapp.apps.pcfdev.in/>

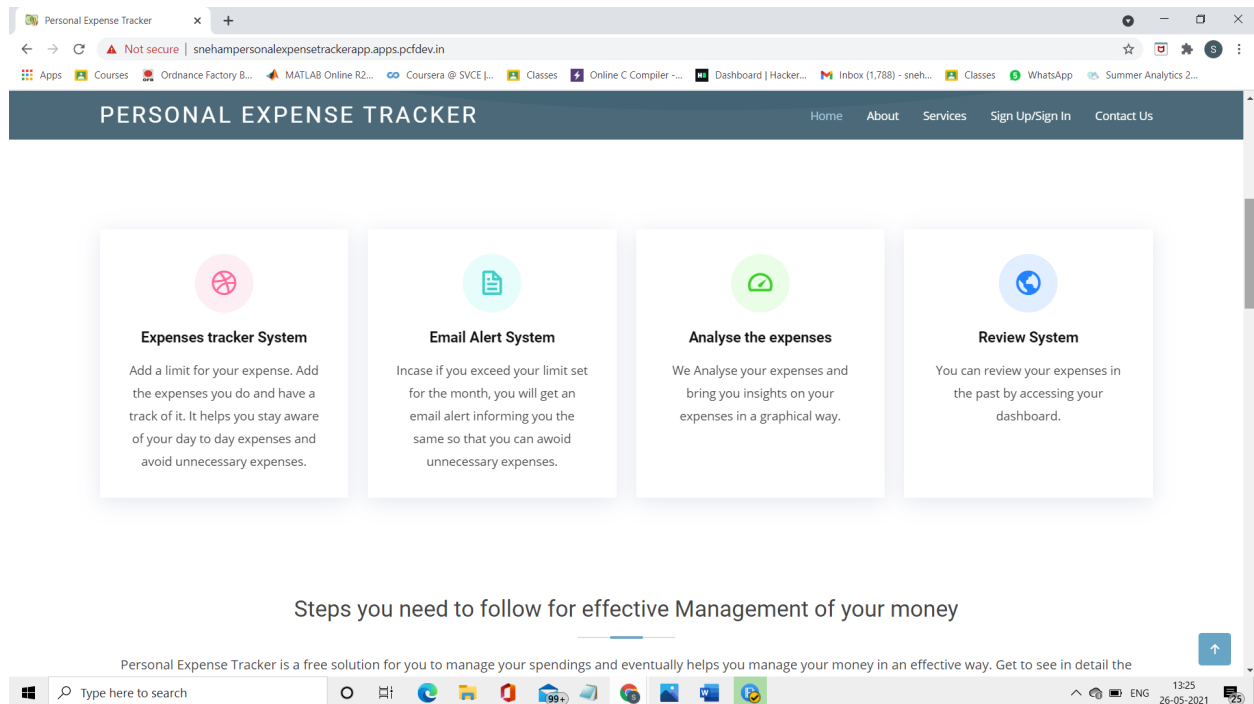
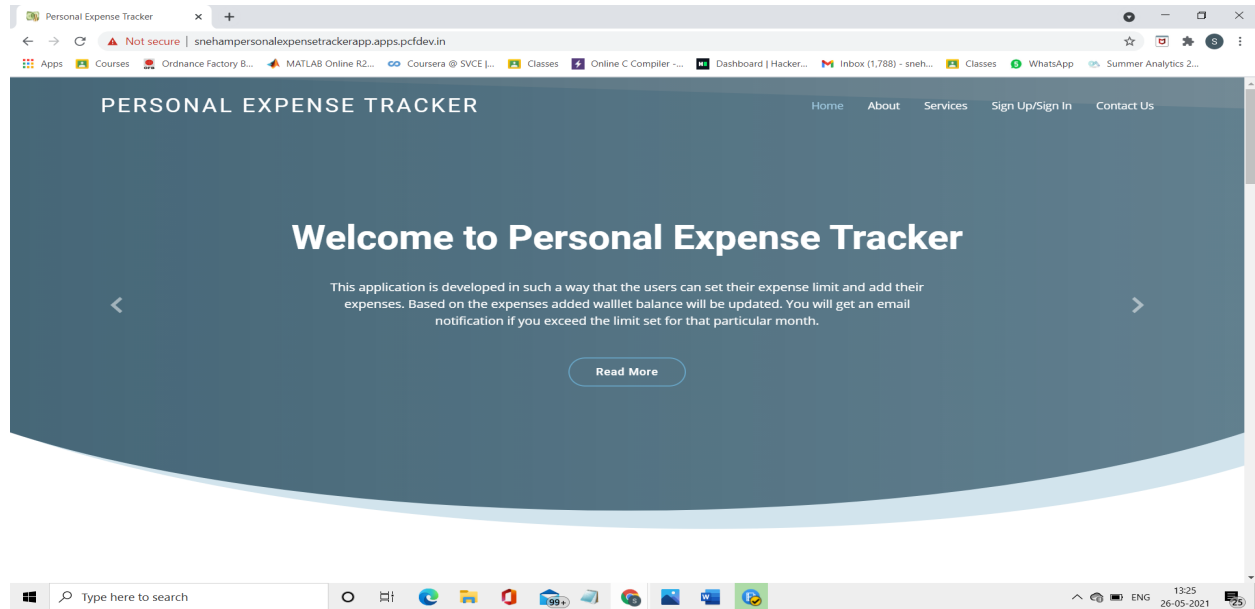
### **VIDEO DEMONSTRATION**

[https://drive.google.com/file/d/1\\_2AMwkGEKnkaEP\\_r2RJxUnViTFTjW-iV/view?usp=sharing](https://drive.google.com/file/d/1_2AMwkGEKnkaEP_r2RJxUnViTFTjW-iV/view?usp=sharing)

# VMware Tanzu Build-A-Thon (Python Flask Track)

## RESULT

## HOMEPAGE



# VMware Tanzu Build-A-Thon (Python Flask Track)

The screenshot displays the 'PERSONAL EXPENSE TRACKER' web application in a browser window. The page features a dark blue header with the application name and navigation links: Home, About, Services, Sign Up/Sign In, and Contact Us. The main content area is titled 'Steps you need to follow for effective Management of your money' and describes the application as a free solution for managing expenses. It includes an illustration of three people interacting with a large screen displaying various data points. The 'Register with our application' section lists the steps: Enter a Username, Enter your email address, and Enter your password. Below this, it states 'This ends your registration. Now you can login to your dashboard.' The browser's address bar shows the URL 'snehampersonalexpensetrackerapp.apps.pcfdev.in'. The Windows taskbar at the bottom shows the search bar and several open applications, including Chrome, Firefox, and various development tools. The system clock indicates the time is 13:26 on 26-05-2021.

PERSONAL EXPENSE TRACKER

Steps you need to follow for effective Management of your money

Personal Expense Tracker is a free solution for you to manage your spendings and eventually helps you manage your money in an effective way. Get to see in detail the features of our tracker system and the things you need to follow for effective management of your money.

Register with our application

Our Personal Expense Tracker is toatlly free and you are one step away from using the key features of our application. Register now and enjoy our services.

- ✓ Enter a Username
- ✓ Enter your email address
- ✓ Enter your password

This ends your registration. Now you can login to your dashboard.

PERSONAL EXPENSE TRACKER

Track the expenses for the month

Set a limit for your expenses for the month. Track all the expense in your dashboard. Incase if you exceed the limit set for the month, we will alert you with a mail. Cut down unnecessary expenses and stay ahead in saving your money

Get to see the expenses you have done in the past in your dashboard.

Get insights on your expenses in a graphical way



# VMware Tanzu Build-A-Thon (Python Flask Track)

PERSONAL EXPENSE TRACKER

Home About Services Sign Up/Sign In Contact Us

Get insights on your expenses in a graphical way

We bring to you graphs and charts and help you analyse how you have managed your expenditure.

- ✓ Get to know how much you have spent in a week.
- ✓ Get to know how much you have spent in a month.
- ✓ Get to know how much you have spent so far.

Review your expenses

*It is very important to look at the past to know how you have reached the level you are at the present.*

We have all your details stored and you can review your expenses anytime.

Useful Links

- > Home
- > Register

Our Services

- > Expenses Tracker System
- > Email Alert System

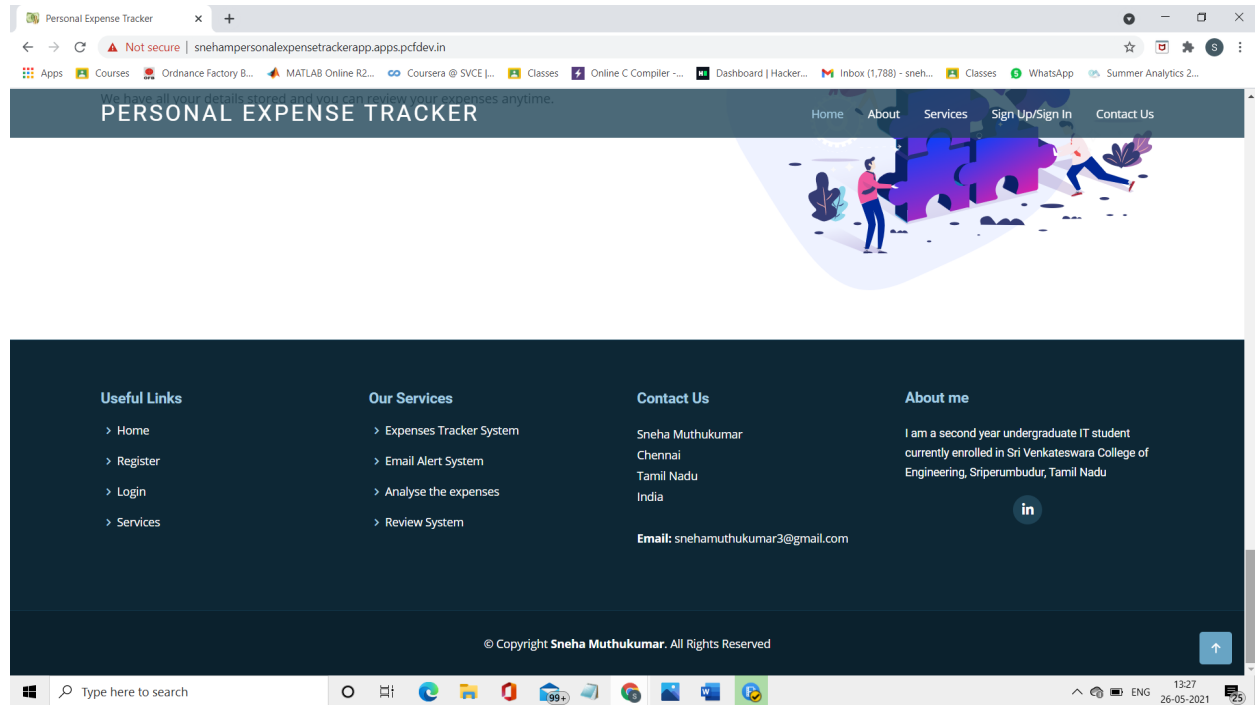
Contact Us

Sneha Muthukumar  
Chennai

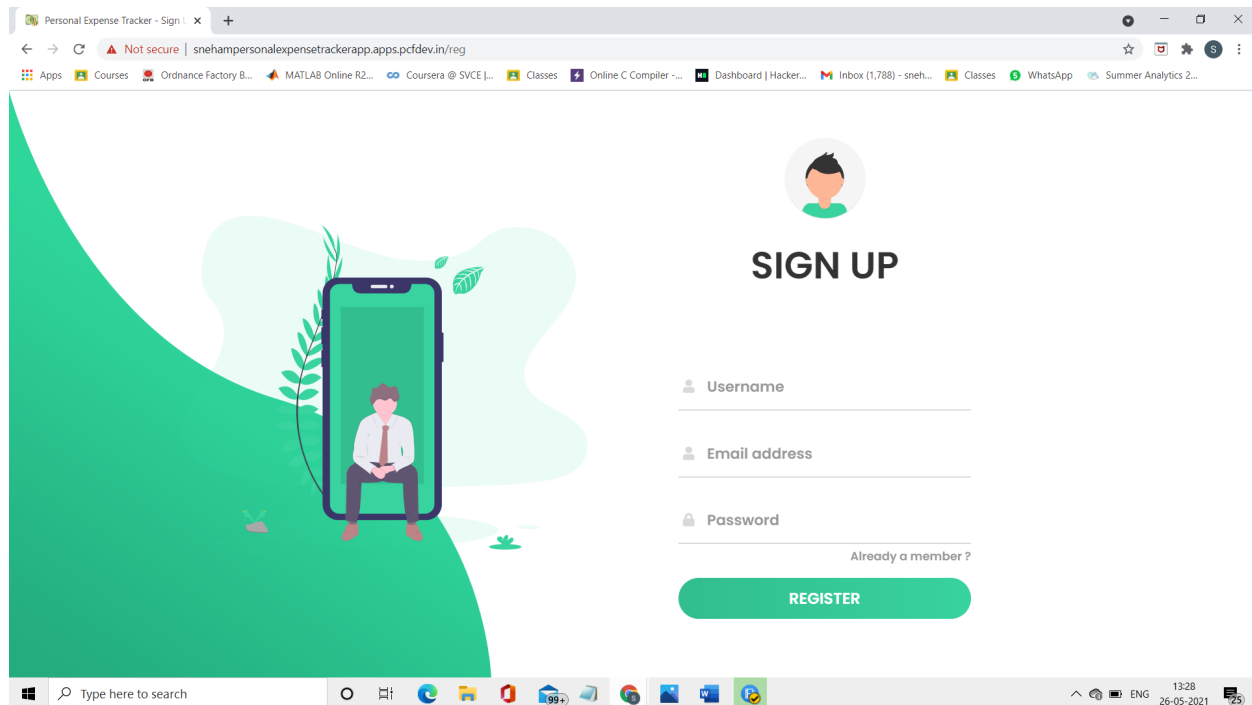
About me

I am a second year undergraduate IT student  
currently enrolled in Sri Venkateswara College of

# VMware Tanzu Build-A-Thon (Python Flask Track)

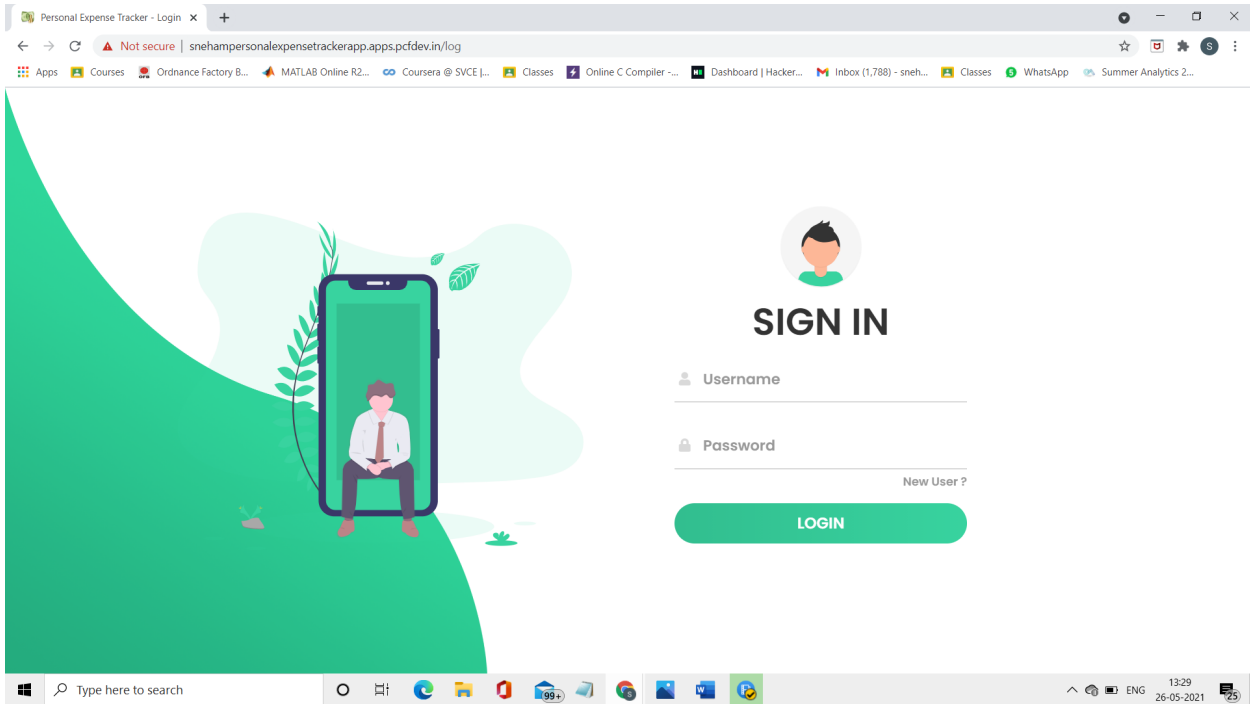


## REGISTER PAGE / SIGN UP PAGE

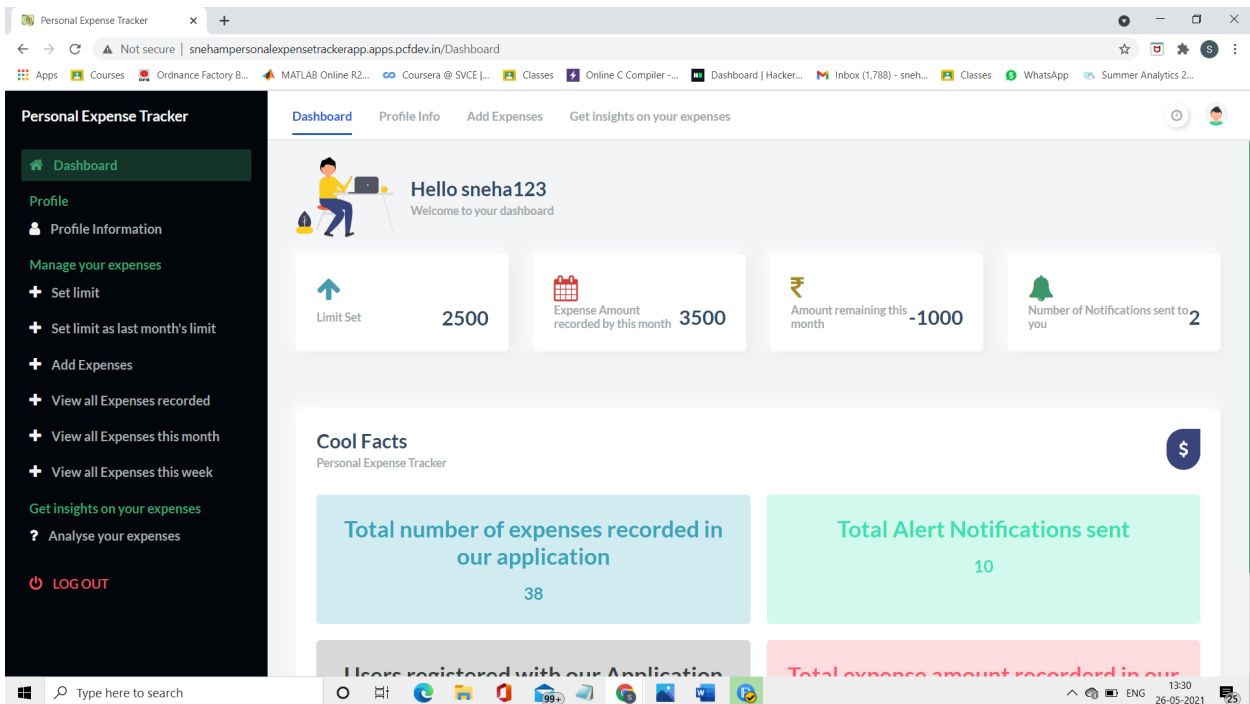


# VMware Tanzu Build-A-Thon (Python Flask Track)

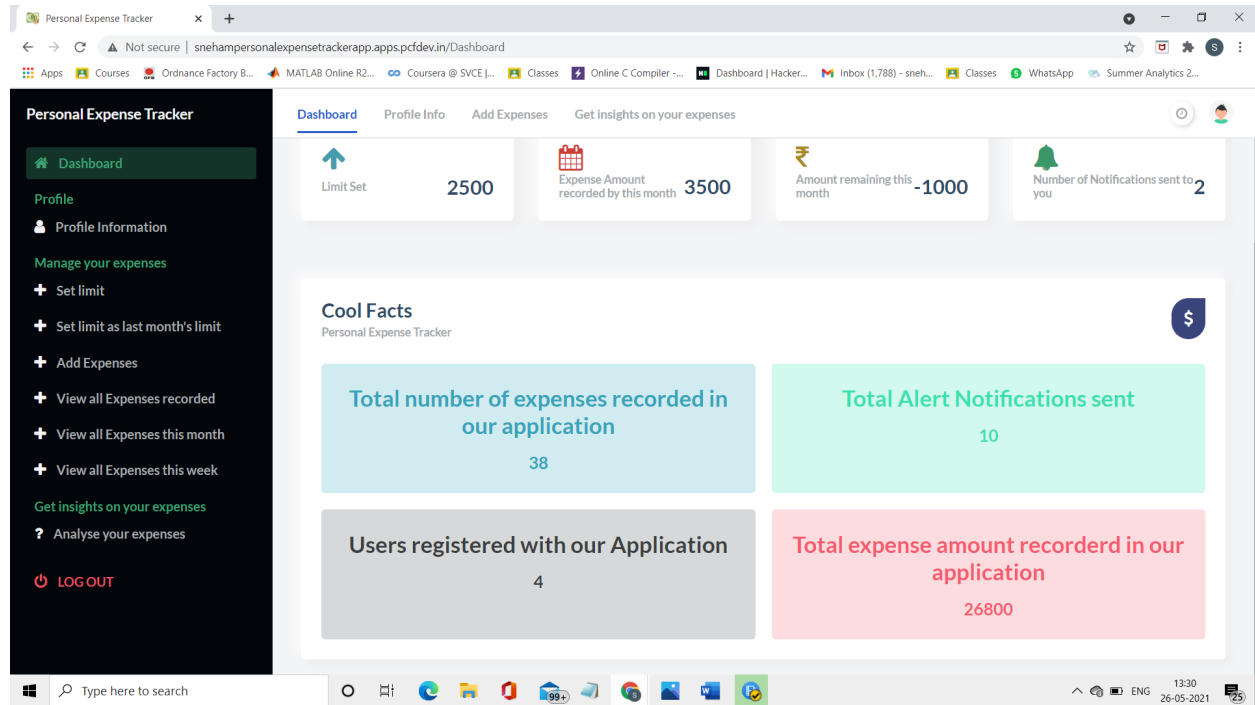
## LOGIN PAGE / SIGN IN PAGE



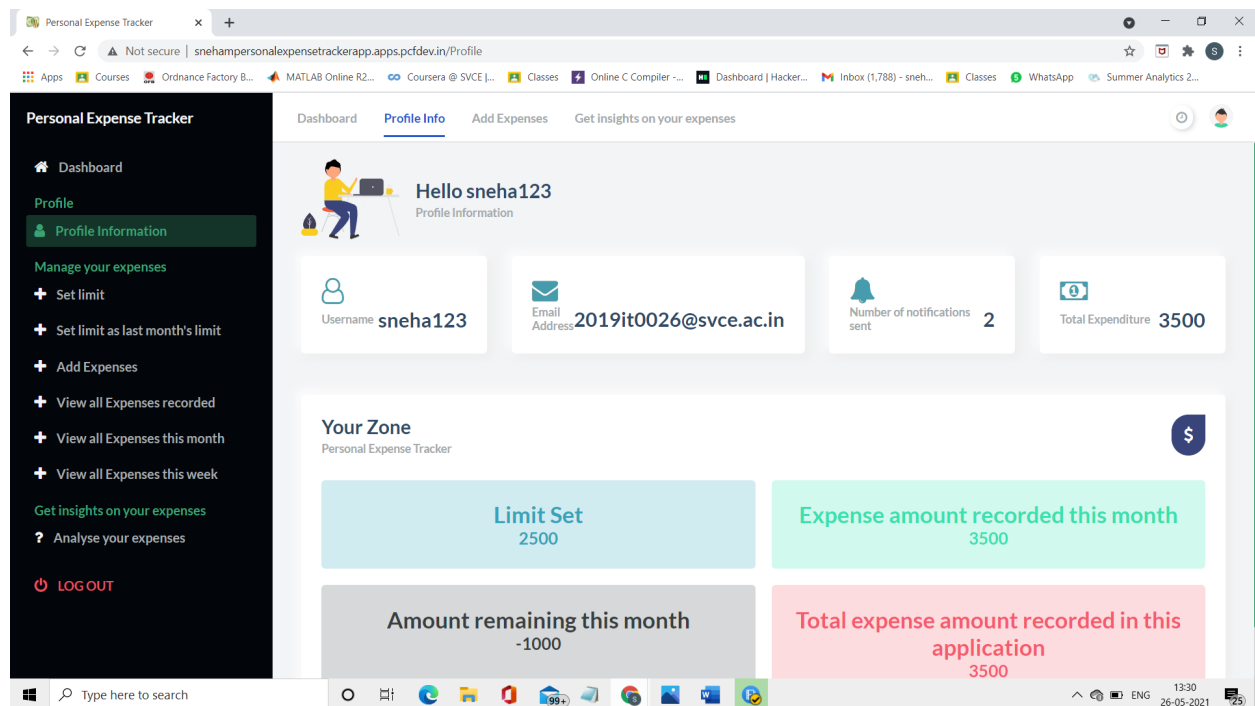
## DASHBOARD



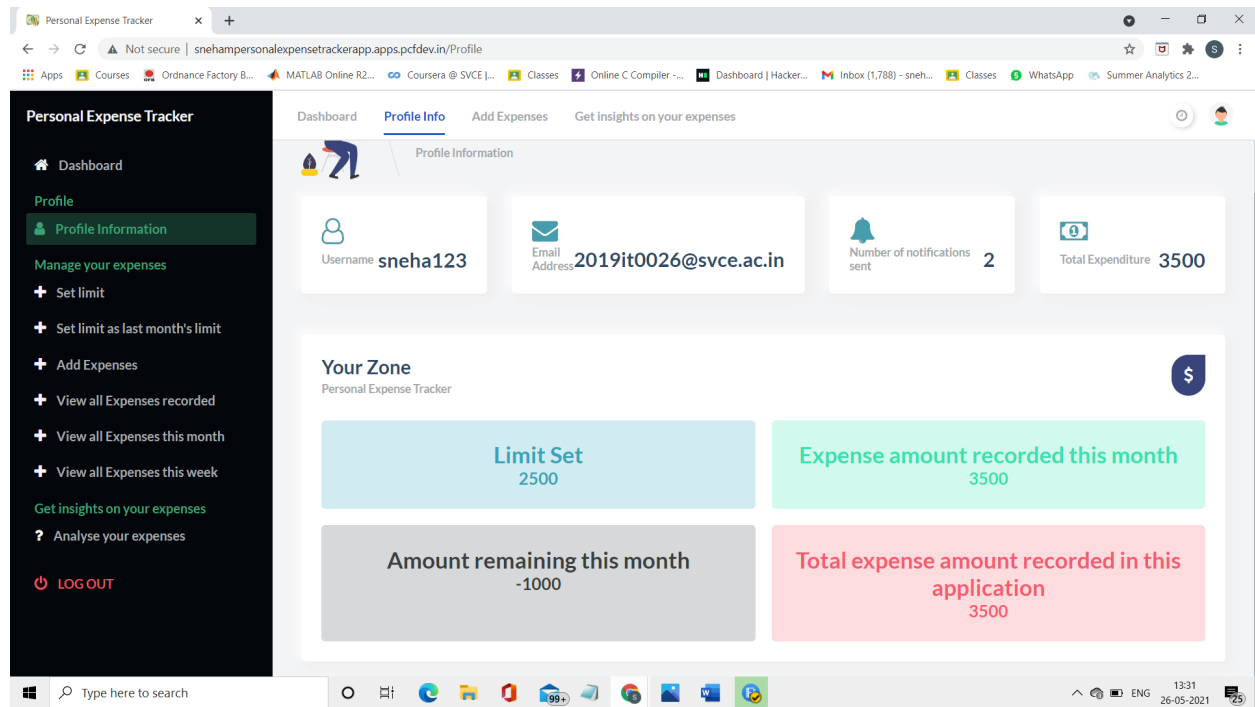
# VMware Tanzu Build-A-Thon (Python Flask Track)



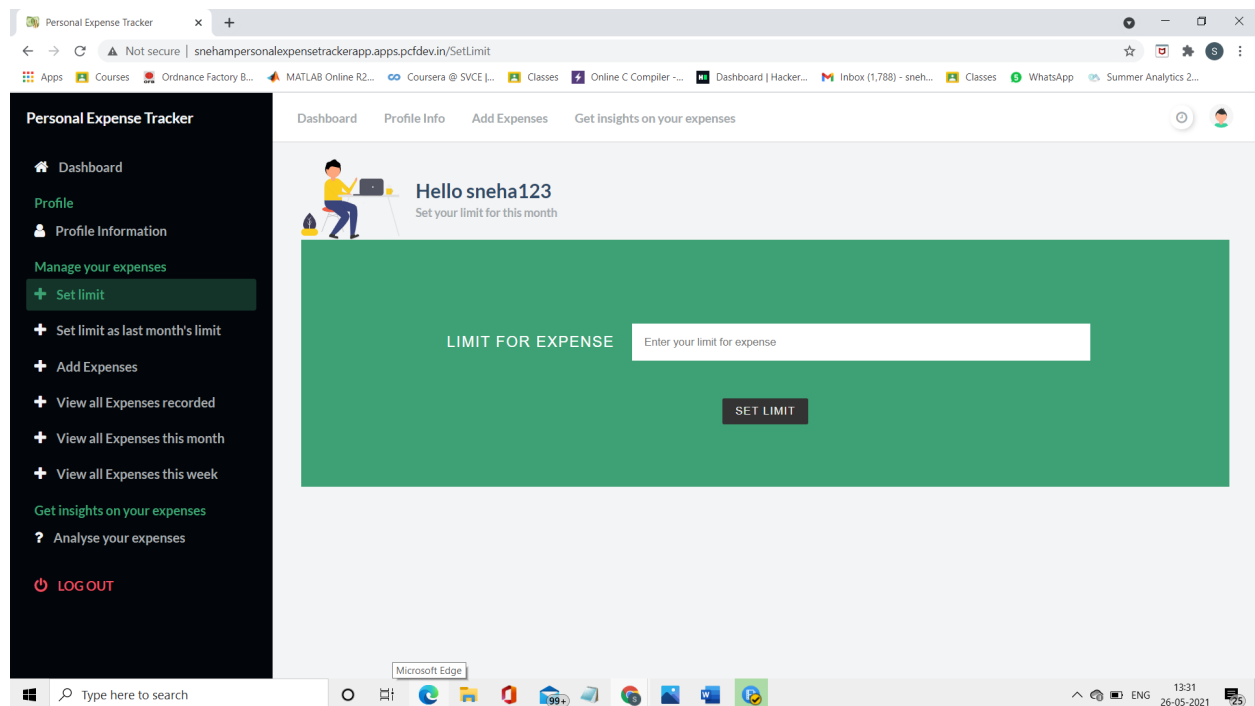
## PROFILE INFORMATION PAGE



# VMware Tanzu Build-A-Thon (Python Flask Track)

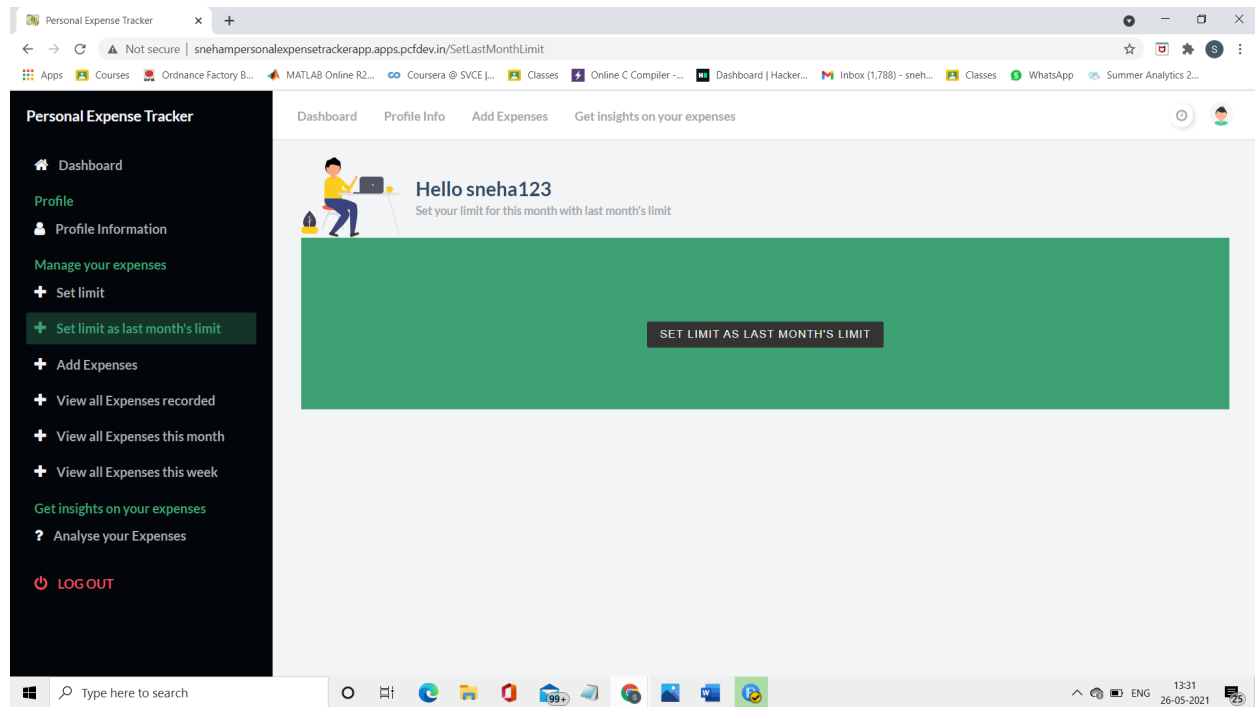


## SET LIMIT PAGE

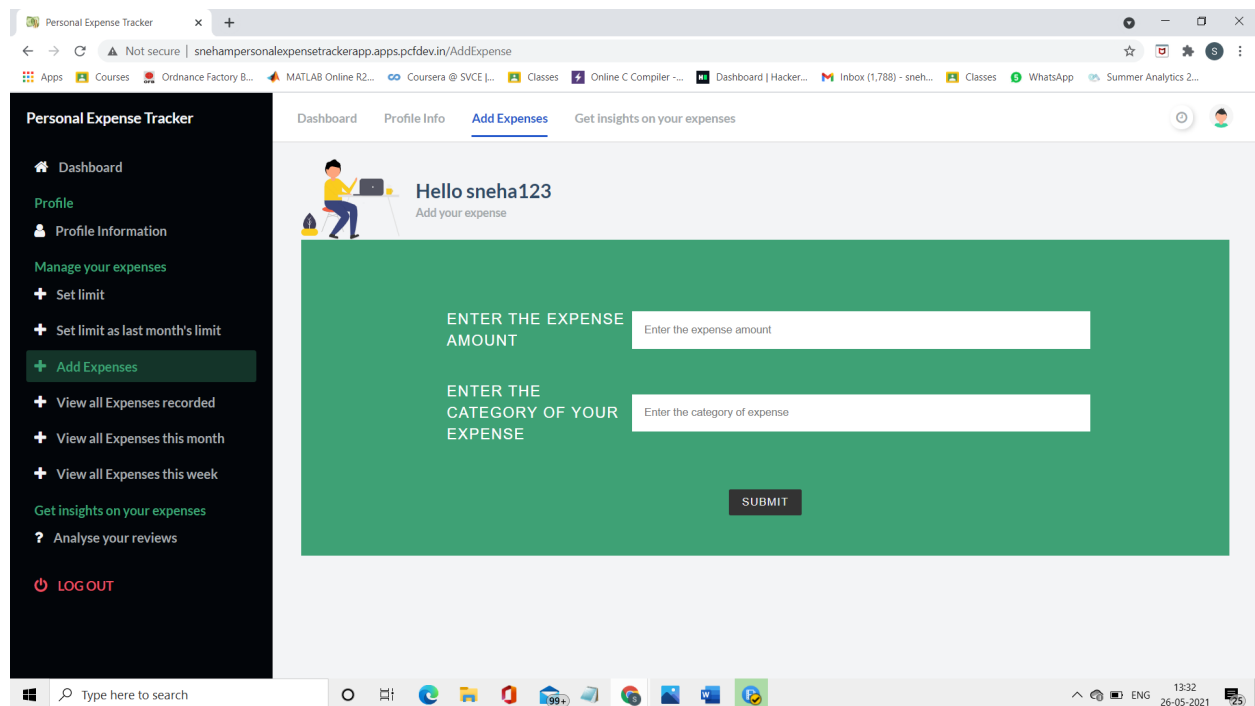


# VMware Tanzu Build-A-Thon (Python Flask Track)

## SET LIMIT AS LAST MONTH'S LIMIT PAGE



## ADD EXPENSES PAGE



# VMware Tanzu Build-A-Thon (Python Flask Track)

## VIEW ALL EXPENSES RECORDED PAGE

The screenshot shows the 'View all Expenses recorded' page of the Personal Expense Tracker. The left sidebar contains a navigation menu with options: Dashboard, Profile, Profile Information, Manage your expenses, Set limit, Set limit as last month's limit, Add Expenses, View all Expenses recorded (highlighted), View all Expenses this month, View all Expenses this week, Get insights on your expenses, Analyse your reviews, and LOGOUT. The main content area displays a greeting 'Hello sneha123' and a link to 'View all expenses recorded'. Below this, a table titled 'Expenses' shows a list of recorded expenses. The table has three columns: Expense Category, Expense Amount, and Timestamp. The data rows are: Food (1000, 2021-05-25 19:33:13), Water (500, 2021-05-25 19:37:05), Electricity (1000, 2021-05-25 19:37:26), and Food (1000, 2021-05-25 19:40:29). The browser's address bar shows the URL 'snehampersonalexpensetrackerapp.apps.pcfdev.in/AllExpenses'.

Expense Category	Expense Amount	Timestamp
Food	1000	2021-05-25 19:33:13
Water	500	2021-05-25 19:37:05
Electricity	1000	2021-05-25 19:37:26
Food	1000	2021-05-25 19:40:29

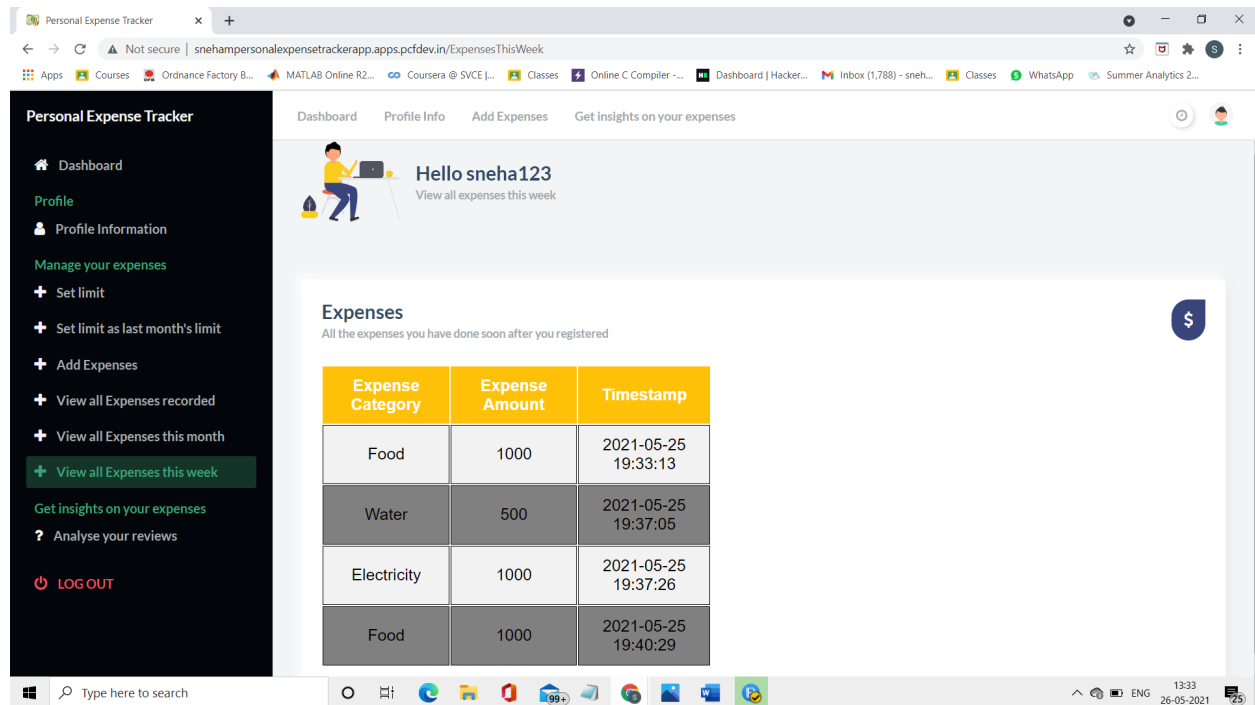
## VIEW ALL EXPENSES THIS MONTH PAGE

The screenshot shows the 'View all Expenses this month' page of the Personal Expense Tracker. The left sidebar contains a navigation menu with options: Dashboard, Profile, Profile Information, Manage your expenses, Set limit, Set limit as last month's limit, Add Expenses, View all Expenses recorded, View all Expenses this month (highlighted), View all Expenses this week, Get insights on your expenses, Analyse your reviews, and LOGOUT. The main content area displays a greeting 'Hello sneha123' and a link to 'View all expenses this month'. Below this, a table titled 'Expenses' shows a list of recorded expenses. The table has three columns: Expense Category, Expense Amount, and Timestamp. The data rows are: Food (1000, 2021-05-25 19:33:13), Water (500, 2021-05-25 19:37:05), Electricity (1000, 2021-05-25 19:37:26), and Food (1000, 2021-05-25 19:40:29). The browser's address bar shows the URL 'snehampersonalexpensetrackerapp.apps.pcfdev.in/ReviewExpenses'.

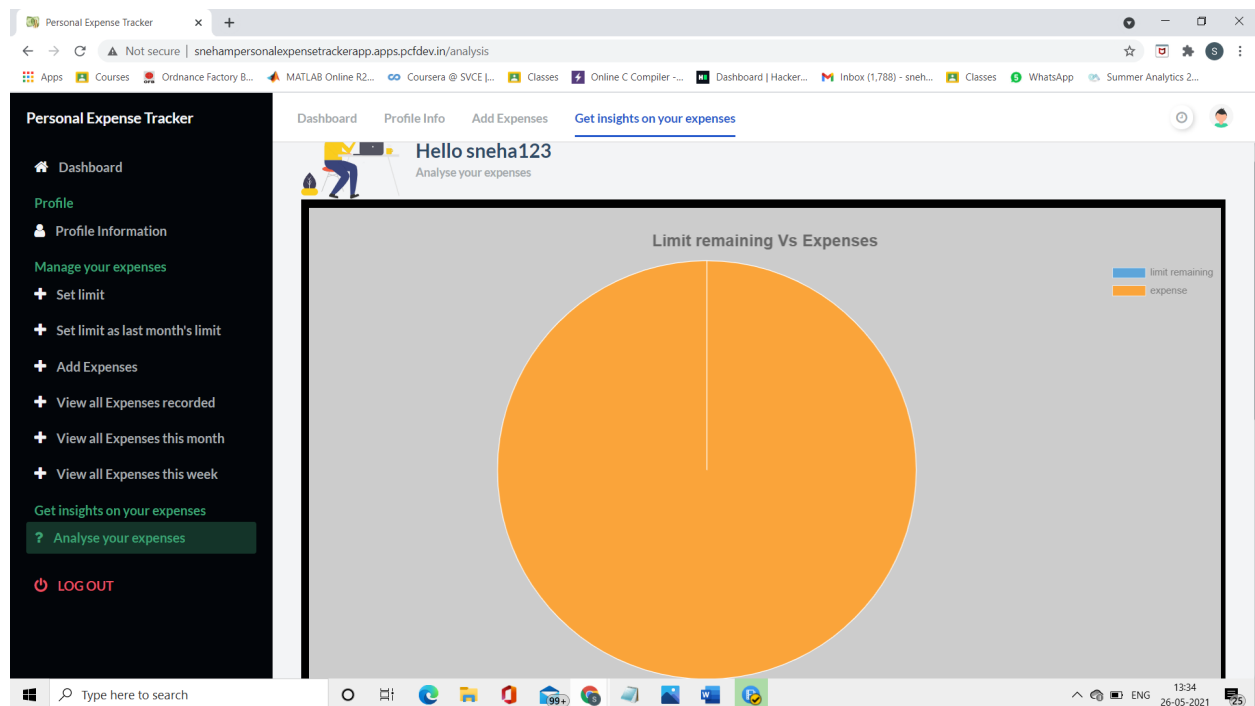
Expense Category	Expense Amount	Timestamp
Food	1000	2021-05-25 19:33:13
Water	500	2021-05-25 19:37:05
Electricity	1000	2021-05-25 19:37:26
Food	1000	2021-05-25 19:40:29

# VMware Tanzu Build-A-Thon (Python Flask Track)

## VIEW ALL EXPENSES THIS WEEK PAGE

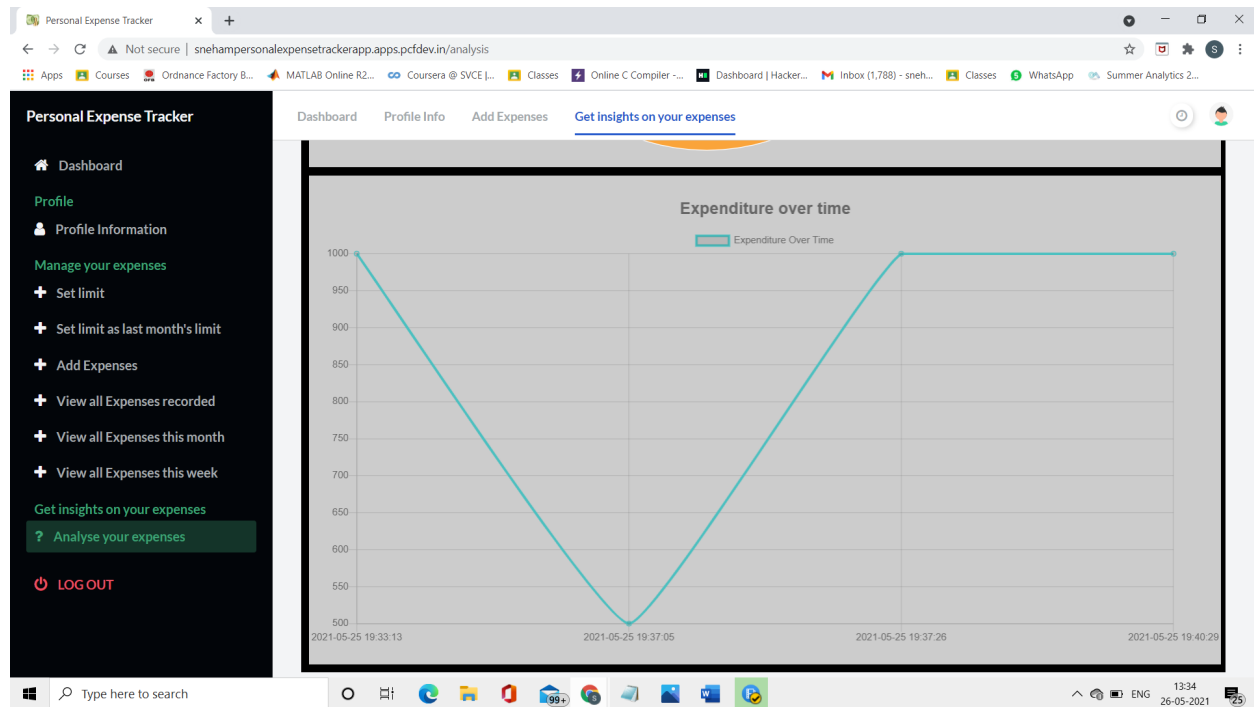


## ANALYSE YOUR EXPENSES PAGE





# VMware Tanzu Build-A-Thon (Python Flask Track)



## ADVANTAGES OF USING PERSONAL EXPENSE TRACKER APPLICATION

1. User-friendly interfaces
2. Track your expenses easily
3. Set expense limit
4. Graphical view of expenses

## DISADVANTAGES OF USING PERSONAL EXPENSE TRACKER APPLICATION

The users need to add their expenses on time so that the current date and time of the expense will be recorded. This is considered as the only disadvantage of using personal expense tracker.

# **VMware Tanzu Build-A-Thon (Python Flask Track)**

## **CONCLUSION**

After making this application I assure that this application will help its users to manage the cost of their expenditure. It will guide them and will create awareness about their monthly expenses. It will prove to be helpful for the people who are frustrated with their daily budget management, irritated because of the amount of the expenses and wishes to manage money and to preserve the record of their daily cost which may be useful to change their way of spending money. In short, this application will help its users to overcome the wastage of money.

## **FUTURE SCOPE**

The Personal Expense Tracker has turned out be very important in present time and the demand has also raised in recent times. This will help the users to effectively manage their money.

## **BIBLIOGRAPHY**

- <https://www.stackoverflow.com>
- <https://youtube.com>
- <https://www.chartjs.org/>

## **APPENDIX**

<https://github.com/smartinternz02/SPS-11298-Personal-Expense-Tracker>