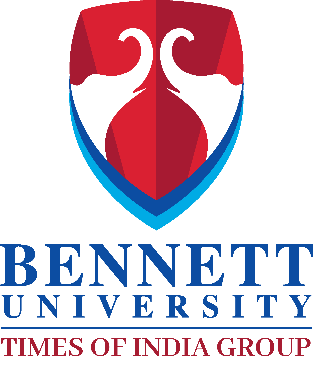
**Project Report**

**Computational Thinking and Programming (ECSE105L)**

**Project Title – EXPENSE MANAGER**



**Bennett University**

**School of Engineering & Applied Sciences**

**Department of Computer Sciences & Information Technology**

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**Feb 2021**

**ACKNOWLEDGEMENT**

**Our sincere thanks to our Computer Science Teachers, Dr Shashank Sheshar, Dr Vijaypal Singh Rathore and Dr Divya Srivastva for their timely guidance and support throughout our Course and Project.**

**To all our teachers, Classmates and Parents we owe our sincere love and gratitude for the day-to-day support in all that we do.**

**The University has given us this great opportunity to carry out this Project for which we are grateful.**

**ABSTRACT**

**Expense Manager is a user-based application that helps the users keep track of their regular transactions thus providing an efficient space on a single platform for effective and efficient expense management.**

**It has been developed keeping in mind the behaviour of different users when it comes to operating any application. The User Interface is simple and easy to navigate through, for utmost comfort for our users.**

**Expense Manager can be used by people of all ages and everyone can avail of its useful features without any complexity of the operation.**

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# Introduction

## Problem Statement

* **Nowadays, college students which fall under the category of millennials, have started spending more and more on various e-commerce sites which increases their expenditure drastically on both useful and non-useful resources. They do not exhibit responsibility while keeping a detailed account of their expenditures as compared to the previous generations.**

## Objectives

* **This project will help them to keep track of their expenses and provide analytical data in return, through which they can observe and manage their expenses. This will prove to be beneficial in the long run.**

## Importance and Need of your Project

* **Everyone needs to have basic knowledge of managing their accounts and finances which include tracking transactions and analyzing them based on their necessities and priorities.**

# Proposed Solution/Approach/Technique

* **Expense Manager is a user-based application.**
* **The Project performs certain calculations based on the type of input given by the user. It is mainly numerical, in the form of statistics or statements, all based on the input.**
* **The data is collected through basic input operations and output is generated through in-house built algorithms.**
* **The project cannot directly access the user’s transactions from other sources/applications user will have to input the data by themselves.**

# Project Execution

## Project Setup

* **The project uses the features of High-level language like python.**
* **Our Graphic User Interface (GUI) has been made with ‘Tkinter’- a GUI toolkit in python.**
* **The Back-end functioning takes place using python and MYSQL based SQLite.**
* **A User can register himself/herself for utilizing the features of Expense Manager with the creation of unique IDs.**

## Project Features

**1. User can create a unique account.**

**2. User can enter details such as current balance, set expense limit and record expenses over many fields.**

**3. They can track their weekly and monthly expenses.**

**4. Target population - Young adults**

**5. A calculator is also available in the application.**

**6. A Statistical report in terms of graphs can be generated based on the input given by the user for detailed and easy analysis for the user.**

## Results and discussion

**This project will greatly impact and provide sufficient assistance for users without any great expense management or accounting knowledge.**

**Our Expense Manager can be a great hit amongst millennial students and give them an edge over others in managing their finances in the present and future.**

# Future Work

**This project holds huge potential with its modern approach and modifiable features. In the near future, it can avail direct access to e-wallets, online transactions, stocks and banking apps. This project will be a go-to option for people of all age groups, thus overcoming the age barrier for financial knowledge. It will give the user a wholesome experience, from optimized data on expenditures and savings to easy and secure transactions anywhere.**

# Major Contributions

1. **Utkarsh Vijayvergia – User Interface Developer   
     
   Utkarsh has designed the layout of the project and developed the source code for Graphic User Interface (GUI).**
2. **Aryan Jindal – Back End Processing Developer  
     
   Aryan has designed the basic layout of the program and developed the source code for programs for the final output.**

# References

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