

## Project Design Phase-I

### Proposed Solution

<b>Date</b>	28 September 2022
<b>Project Name</b>	Personal Expense Tracker
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### Proposed Solution:

<b>S.No.</b>	<b>Parameter</b>	<b>Description</b>
1.	Problem Statement (Problem to be solved)	Users spend money on various transactions that may be a part of their daily routine or could be a one-time transaction. Every user has different priorities and thus different expenses. To keep track of these expenses would be a herculean task if the user were to do the same using pen and paper or by relying solely on their memory. Using these poor alternatives would result in an increase in the probability of errors and thus lead to wrong conclusions about spending.

2.	Idea / Solution description	Our team aims to develop a customizable Personal Expense Tracker that allows users to tailor-make the application to suit their needs. We aim to do so through the provision of user-defined expense categories, rewards, goals, and limits to name a few. The application will also provide users with the feature to view a graphical analysis of their expenditure to understand their spending patterns and reach conclusions accordingly.
3.	Novelty / Uniqueness	There exist certain applications that allow users to track expenses. Our project aims to make an application that is customizable, thus providing the user with the most access. The ability of the application to be customized introduces the main novelty of our project. Apart from this, other features such as allowing users to set rewards and goals for themselves to spend wisely introduces further novelty to our project.
4.	Social Impact / Customer Satisfaction	This application will help our users track their expenses effortlessly. Customers will be put at ease when it comes to their spendings as the only requirement is for the user to update the application when an expense occurs. The social impact of the web application would be far-reaching as the application is applicable to users of different stratas. With its ability to be customized, the application is developed to suit the needs of all our users alike.
5.	Business Model (Revenue Model)	<b>Key partners:</b> The members of the team alongside SSN and IBM mentors will work towards the development of this application.

		<p><b>Key resources:</b> The resources for the development are obtained using our personal equipment, various IDE, IBM's database and software, college systems etc.</p> <p><b>Activities:</b> The main activities include developing the application using Flask, interfacing it with IBM DB2, SendGrid, containerizing the application, and hosting it on the cloud.</p> <p><b>Value Proposition:</b> The users will be provided with a web application that has a friendly GUI and serves all the tasks of the application in a transparent manner. Security compliance will be strictly monitored to ensure that the user's data is safeguarded against any form of threats.</p> <p><b>Cost Structure:</b> Cost is levied due to the usage of proprietary software. However, IBM's software is provided to us due to the fortunate initiative. Other such software that are non-IBM may add on to the expenses if inevitable.</p> <p><b>Revenue Streams:</b> Subscription fees, unlocking premium features, expanding the storage of the application etc.</p> <p><b>Customer Segments:</b> Students, Interested individuals, Family Members, Working Professionals</p> <p><b>Customer Relationships:</b> All the customer segments will be treated alike. Thus, all the users will be treated in a strictly professional manner, i.e every user will be treated in a fair manner, a prospective customer with no additional priorities etc.</p>
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6.	Scalability of the Solution	<p>The application will be scalable based on the requirements of the future. For instance, the application could partner with Payment applications like GPay and provide users with an incentive to spend wisely through GPay rewards. Similarly, the application could be made more advanced and modern by integrating a service bot that could aid users in customizing the app with ease.</p>