

Personal Expense Tracker Application

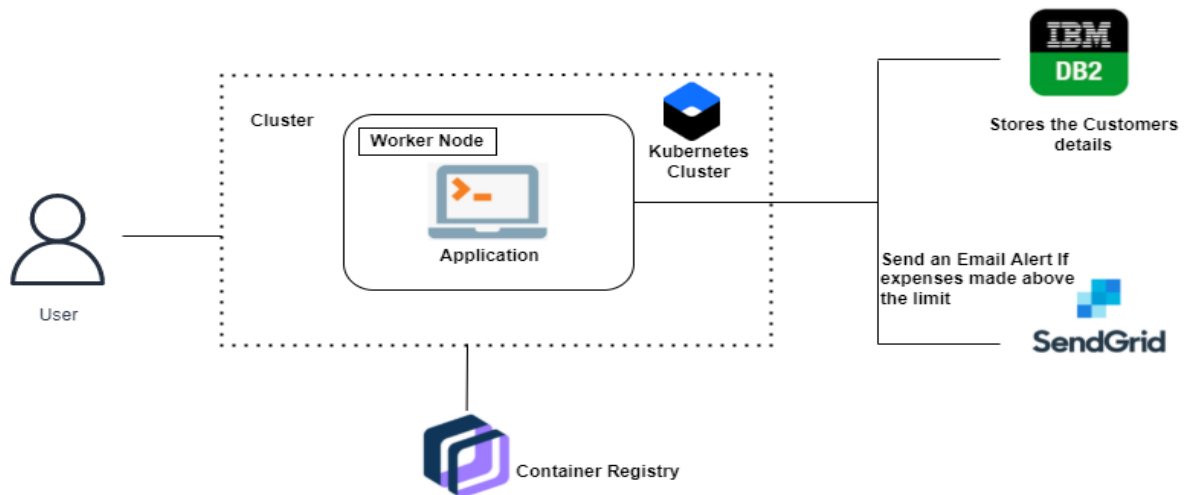
Introduction

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.

Category: Cloud App Development

Required: IBM Cloud, HTML, CSS, JavaScript, Python-Flask, Kubernetes, IBM DB2, IBM Container Registry.

Technical Architecture:



Literature Review

An exhaustive literature survey on related topic suggest that earlier tracking was performed manually. These things were done in an old school way you can say more likely in a notebook or copybook these things were written as per the willingness of a person in simple words you can call is as "The quite manually stuff". Then after that they have calculate the entire expenditure at the end of the month or week and a report is generated against the expenditure in comparison to the previous month or information related to that. So, they face a certain problem that time:

- Data is not accurate
- Reports in not up to the mark
- A single mistake in a manual calculation and actually cost you much
- Its time consuming boring and most of the time insufficient
- Going through all the data back then rewriting them off actually, makes way fussier
- It can be easily stolen or loss as well your information is not safe there

(Baba and Balachandran, 1993) states that traditional cost accounting systems maintain all overheads in one pool and give equal weight to all activities and costs in it. We always have known that “pen is mightier than sword” but that thing doesn’t fit with every specific tasks it varies from need-to-need or tasks-to-tasks these days when the amount data is quite enormous. It becomes way more difficult to handle them off. Soon excel also become a way on maintain a record of expenses and analysis. Though excel was an effective software to handle such stuff but still lacks in many things so some of the researchers even started using excel with certain tools designed by them. Research at university on Tennessee on expense tracker of by (Dan Underwood, 2011): In which using excel accounting team designed a Cost Allocation tool 1 in which a spreadsheet is used to allocate the product category both by site and the cooperation and a Cost allocation tool 2 which is a

developed to further integrate and allocate cost to identify which manufacturer is profitable or which is not. This research used excel and designed this CAT tool in which both the spreadsheets are required to use to identify where we could reduce expenses or better managed it.

Background Study

The idea of developing this paper in platform arises with the lack of financial awareness in the country as well as frequent concerns being experienced by people to manage their money properly. Some of the problem include selecting the right investment option suitable for them, reading authenticated financial news, splitting bill among friends and groups, having a good stock market analysis interface and being aware of the latest ongoing promotions at various ecommerce websites. Some of traditional methods used to tackle these problems in daily life is the use of sticky notes. Proficient people deal with problems by using spreadsheet to record expenses,

this is easy when the data is small but when the data is large it becomes unmanageable.

Features Of Application

- Keep track of all your daily transactions.
- Keep track of your money lent or borrowed.
- Suggest you with the best investment options.
- Offers in popular categories.
- To view stock market.
- To read latest authenticated financial news.

Results And Discussion

We chose to build this idea on android platform because of its highest market share in mobile operating system. Most Used Mobile Operating System Graph In the first phase of installing the application we need to give SMS read permission to the app since the whole idea of the app revolves around the transactions made online for which you get a

message after any transaction done. The blueprint was finally put into custom designed the following output was obtained.

Conclusion

We have developed a mobile application that Keeps track of all your daily transactions, keeps track of your money lent or borrowed, suggests you with the most effective investment options, offers your discounts in popular categories, view exchange and to read latest authenticated financial news. This paper's main aim to eliminate the

use of sticky notes, spreadsheets and handling of large chunks of data is successful, the new experience is hassle-free and very handy. Now, with our application user can manage his expenses more effectively. This application can also help digital marketing agencies in rolling out their advertising campaigns more effectively. As a part of further research, we considered adding certain features to create more enhanced experience to the user. We are also going to link this profile with their mobile number, email account, social networks so that the application offers portability, other features to be added are discussed above below within the future enhancement section. The application delivered efficiently in calculating split expenses and recording the expenses together accurately with date and time.

References:

[1]

Mayan, J.A., Priya, K.L., " Novel approach to reuse unused test cases in a GUI based application", IEEE International Conference on Circuit,Power and Computing Technologies, ICCPCT 2015

[2]

Sankari.A,Albert Mayan.J,"Retrieving call logs and SMS by messaging services", International Journal of Pharmacy & Technology, Vol. 8 , Issue No.4 , pp.22951-22958,Dec 2016.

[3]

<https://www.groupon.com/>

[4]

Velmurugan A, Albert Mayan J, Mohana Prasad R, Yuvan Felix A, "Implementing Health Care Centre using Hadoop for Analysis and Prediction of Diseases", International Journal of Engineering and Advanced Technology (IJEAT), Vol.8, No.6, pp.3456-3459,2019.

[5]

Ankayarkanni B, Albert Mayan J, Aruna J, "Support vector machine for effective robust visualtracking",Journal of Computational an Theoretical Nanoscience, Vol.18 , No.8, pp.3571-3575.

[6]

Eswar V.O.S, Vinil.B, Ankayarkanni B and Albert,"Integrated Collective Node Behavior Analysis with Onion Protocol for Best and Secured Data Transmission," 2018 International Conference on Communication and Signal Processing (ICCSP), Chennai, 2018, pp. 0918-0921.

[7]

Mary Posonia A, S. Vigneshwari, Albert Mayan J, D. Jamunarani,"Service Direct : Platform that Incorporates Service Providers and Consumers Directly",International Journal of Engineering and Advanced Technology(IJEAT) , Vol.8 ,No.6,pp.3301-3304,2019.

[8]

<https://www.w3schools.com/>

[9]

Velmurugan.A, Ravi T "Optimal Symptom Diagnosis for Efficient Disease Identification using SOMARS Approach", Journal of Computational and Theoretical Nanoscience,Vol.14,,pp.1-6,2017Issue2

[10] Surya.V, J. Albert Mayan," A Secure Data Sharing Mechanism In Dynamic Cloud By Using KP-ABE", Research Journal of Pharmacy and Technology , Vol 10 , Issue 1 , pp:83-86,2017 [11] Mohan Prasad K, Sai Nagendra Goru Rajeev, Vamsi Desu, Albert Mayan M.J , "Automated Payroll Using GPS Tracking and Image Capture ", IOP Conference Series: Materials Science and Engineering, Vol.590, 012026 ,pp.1-6,2019 doi:10.1088/1757-899X/590/1/012026

[12] Albert Mayan J, Velmurugan A, Nitin Narayanan Kokkoori, Lokesh Koleti,"Forecasting Hospital Admissions in Emergency Department using Data Mining",Journal of Critical Reviews, Vol. 7, Issue.15,pp. 356-362,2020