



Budget Tracking App

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Abstract : For working people and particularly for college students, managing personal funds is an important aspect of academic life which often makes the college students face challenges. In this research paper we have addressed this need, and this research paper presents the design and implementation of a Budget Tracking app, which is specifically suited to the college students to manage their expenses. The motive of making this budget tracking app is to provide a complete financial management solution. The design process involves a detailed study of current websites and budget trackers to know more about the requirements and difficulties which the college students have to go through financially. For the comfort of the users, the app has been designed in such a way that it has user friendly interface so that it is easy to use and more accessible for its audience.

IndexTerms – Budget tracking, expenses, money, flutter

I. INTRODUCTION

In today's fast-paced and ever-evolving society, budgeting has emerged as a crucial aspect of financial management, not only for individuals but also for organizations. The practice of budgeting involves the meticulous process of analysing and recording daily expenses over a specific period. This activity provides a comprehensive overview of spending patterns, enabling individuals and entities to make informed financial decisions. Furthermore, budgeting requires a forward-looking approach, where future goals are identified and formalized, thus ensuring a strategic path towards financial stability and growth.

The establishment of a budget is not merely an exercise in tracking expenses; it is a fundamental step towards achieving financial discipline. By setting clear financial goals, individuals and organizations can develop strategies to control their spending and optimize their resources. In the contemporary digital age, where online transactions dominate the financial landscape, the necessity for effective budgeting has become even more pronounced. These seemingly minor expenses often go unnoticed, leading to a cumulative effect that can significantly impact one's financial health.

Budgeting, therefore, is a vital skill for managing finances in a world that is constantly changing due to technological advancements and new financial behaviours. It helps people and organizations keep their finances in check, stay accountable, and work towards their long-term financial goals. This research paper will explore the different aspects of budgeting, how digital transactions affect expense management, and ways to improve budgeting practices in today's world. Our goal is to provide helpful insights and practical advice for those looking to achieve financial stability and succeed.

II. METHODOLOGY

2.1 Process

1. Requirements Gathering: Building a Budget or Expense Tracking app for managing personal finances and achieving financial goals.
2. UI/UX Design: With the simple tools in Flutter Flow, you can easily create multiple interfaces. Creating and modifying the app with simplicity, so that we can guarantee the apps' optimal functionality and aesthetic appeal.
3. Firebase Integration: Created Firebase to handle authentication, real-time database and cloud storage to deal with user data and transactions.
4. User Authentication: Use Firebase Authentication for registration, login, and account management.
5. Expense tracking: Use Flutter Flow application to create an expense tracker app and store data in Firebase.
6. Manage your budget: We invest a great deal of work into keeping our products perfect so that we are certain that everything is operating properly in terms of security and functionality, we test everything. Following confirmation of its quality, we transmit the application to major retailers. This approach will assist us in monitoring potential issues and areas for further improvement.
7. Connect your bank account: We can connect your bank account in a secure way by integrating it with the bank's API. This also allows for automatic transactions, which import balances instantly and make them available for you to use by way of financial information and confirmations.

8. Instant synchronization: Whenever you wish, our app updates your data on your smartphone. Firebase's Instant Library functionality will ensure flawless connectivity for you. There are no longer any problems with manual synchronization or concerns about missing crucial updates.
9. Testing and deployment: For our products to remain flawless, we put a lot of work. We hence test everything so that we know for sure that they are functioning well in terms of their security and functionality. We then forward the application to big retailers once it has been proven its caliber. This will help us keep an eye out for any possible bugs or areas where development can be done.
10. Deploy and Monitor: Start the application to track its performance and identify and close errors, crashes, and latency problems. Use Firebase Performance Monitoring and Firebase Crashlytics. Regularly analyze data to spot patterns, boost output, and quickly address problems. Continue to update the app in response to user input and consider suggestions to enhance the user experience and uphold app security.

2.2 Software Development

1. Create in Firebase: Create a Firebase project by opening Firebase, logging in, and setting up the Fire Store.
2. Setting up Flutter Flow: Start a project and connect it to Firebase.
3. User interface: Establish screens for registration, activity, events, dashboard, and login.
4. Authentication Settings: To enable login and registration, turn on Firebase Authentication.
5. Add Event: Set up windows and buttons so that you may create and save new events in Fire store.
6. Examine the events: Use Fire store searches to quickly search for and see events.
7. Test and Deploy: Finish the application, compile it for Android and iOS, and upload it to the app and Google Play store.

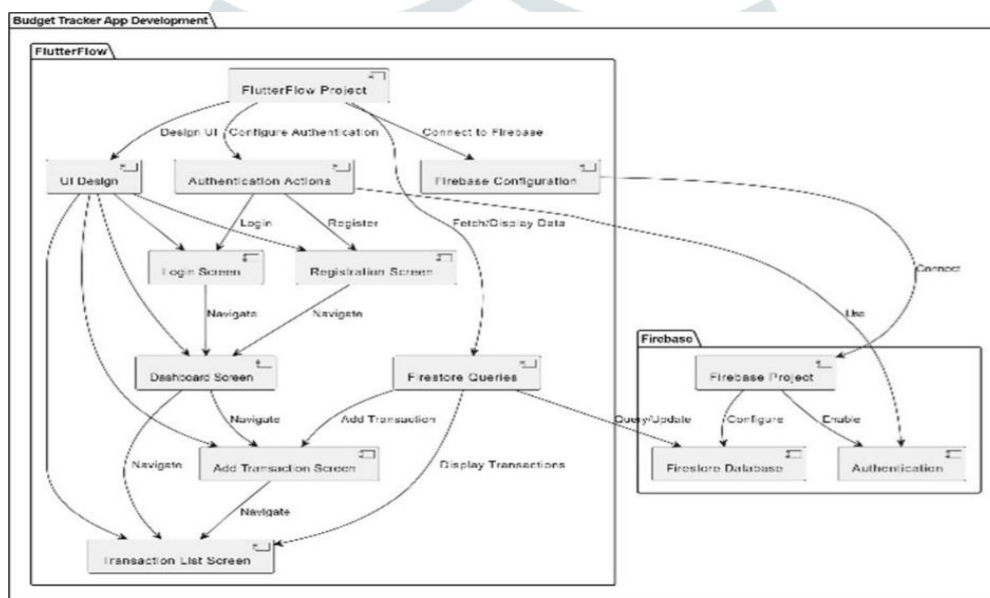


Fig 1-System Architecture of the project

2.3 Flowchart

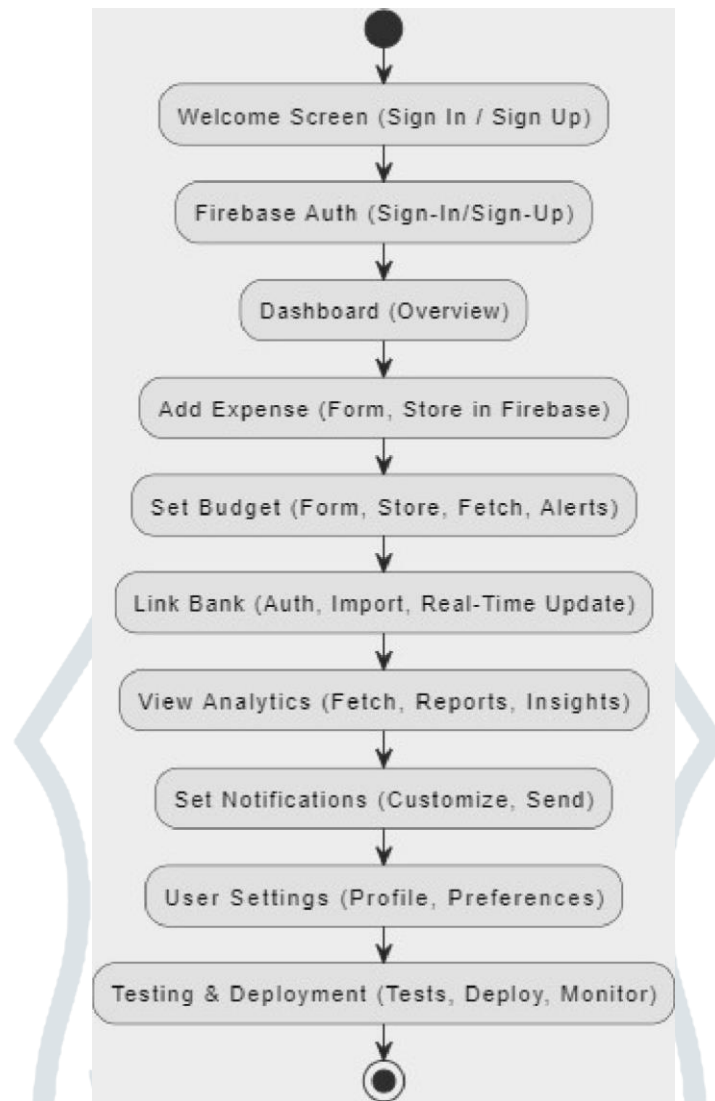


Fig2-Flowchart

III. RESULTS AND DISCUSSIONS

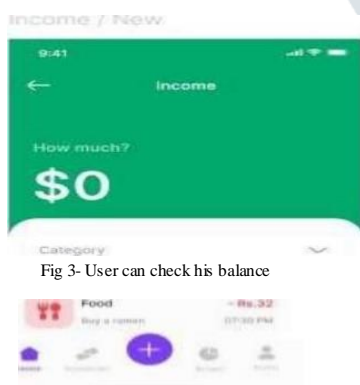


Fig 3- User can check his balance

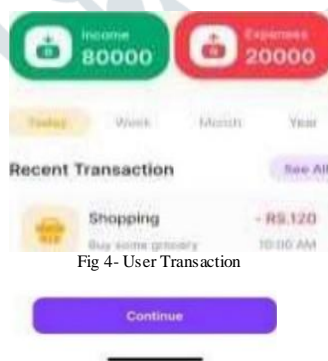


Fig 4- User Transaction

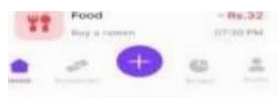


Fig 5- Bottom Line of the app

The Budget Tracker app is made with Firebase and Flutter Flow to provide you with a seamless and strong backend features combined with a hassle-free UX. You can successfully manage your budget, keep tabs on your spending in real time, and even link your bank account with this software. We put the app through testing to ensure that it is dependable, effective, and secures your data. It offers an intuitive interface that facilitates the management of your personal money. This program fulfills your demands whether you wish to control your spending or take care of your different financial requirements.

IV. FUTURE SCOPE

The future scope of weather monitoring system is endless. Here are some possible future developments:

1. Augmented analytics: offers predictive analytics and AI-powered insights to deliver individualized financial advice and projections for future expenditure.

2. Support for several currencies: Enables users to handle their money and utilize various currencies to satisfy the demands of international clients.
3. Resource Integration: To obtain a summary of finances, including spending plans, investments, and budgets, make a connection with investment services.
4. Advanced security features: Use biometrics, twofactor authentication, and encryption to increase customer confidence and data security.

V. CONCLUSION

An expenses tracker is a helpful tool that can assist people in monitoring their spending tterns and practicing efficient money management. y tracking expenses, individuals can gain insights into where their money is going and identify areas where they can reduce spending. To effectively use an expenses tracker, it's important to create a budget and set financial goals. This will assist people in setting spending priorities and choosing wisely where to spend their money. To make sure the tracker is accurate and up to date, it's also critical to examine and update it frequently.

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