

Business Friend - A Smart App

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Abstract—The system is all about creating a unique platform to cater the needs of common men in their day-to-day living. With the intention of meeting the needs of many users we developed this solution. Our effort will be really useful as it meets the requirements of the needy people. Developed an application which acts as an unique platform for the users to avail the services like bill payments, services of service providers (Carpenter, Mason, Caterer, Dhobi, Electrician etc.). Every user will be given an option to have unique account, through which they can login and avail the services of any service provider. Similarly, every service provider will be given an option to create a separate account through which they can interact with any user.

Keywords: Cloud, Firebase, Android, MyWallet, Service_Providers, Forum, Bills.

I. INTRODUCTION

The whole intent of the project is to help both the customers and the service providers by providing a common platform using which both parties can interact with each other for the services and eventually, can benefit each other mutually. Every now and then we read of corruptions, frauds and malpractices. So, to make the system fair, the provision for providing payment online is also considered. To increase the fairness further, ratings for the services are also being considered so that those who cheat or do not provide good services can be rated poorly and hence, depriving them of customers so that they can improve their services.

In today's world, people keep on moving from one place to another for their various needs like food, shelter, job, study, transfer etc. When they move to any new place, they are unfamiliar with the people and service providers like cook, washer men, carpenters, painters etc but these service providers are vital to fulfill our basic needs of life. Due to unfamiliarity, firstly, it becomes cumbersome to get their services and secondly, even if they happen to get someone who possibly can be unskilled charge more for their services. Finally, there would be no identity of the service provider who can steal, misbehave or plunder the house later on. Let's look at another case from the service providers point of view. The service providers are mainly from the countryside or out-skirts of a big city. They need to move to cities either in search of casual work during non-agricultural season or just for higher pay. It is very difficult task for them to search a job. Either they end up getting no job or have to work under commission which fetch them little money. In few cases, some are lucky but not aware of the standard rate of their service and thus, have to work for under price than the actual rate. So, the **Business Friend** is the product of our idea to solve the above crisis. It provides an easy to use platform for both the customers and service providers to help themselves. People who have moved to other places can use **Business Friend** to look for service providers in the area and select the one based on the ratings given by previous customers or based on the rate at which a service provider is ready to work at. Similarly, service providers moving to cities for work can register themselves and can get a call for service without searching anywhere and can also get fair price for their services. As far as Industry is concerned, they can charge a premium from the service providers and registration fees from the customers. This is the sole idea with which Ola and Uber cab started. The car is owned by driver who is registered to the company. The company just provides the platform to make meet the commuters and car drivers. In this way, at the larger scale, service providers can work under a company and company can receive the payments directly or indirectly from the customers. Not only this, there is also wallet service for the customers who can deposit their money for direct payment. The company can use this deposit for investment to get higher interest.

II. PROPOSED ARCHITECTURE

The proposed system architecture is divided into three modules namely bill module, service module and forum module. Each module plays a distinct and fundamental function.

The figure 1 shows the architecture for Android. In the beginning, a splash with Business Friend logo is shown. Then, login/signup page is prompted for the users to enter their credentials to validate the process. On successful logging, main page is going to open which gives notifications from the news feed and various options for the user to choose like Bill payment, Services, Wallet, Wish list, payment. Finally, the option to exit the application is also there.

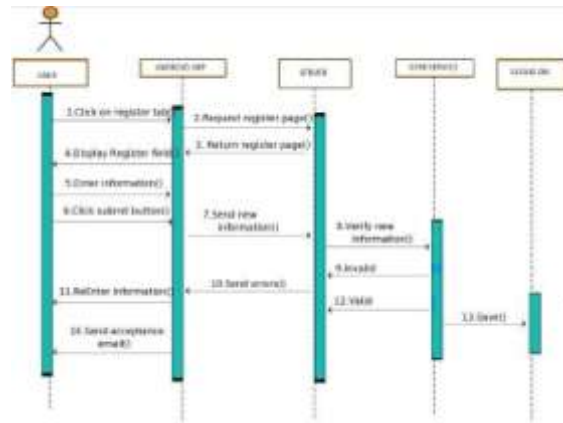


Fig. 3. Signup

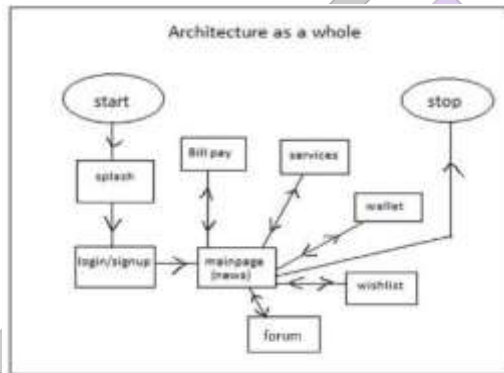


Fig. 1. Proposed Architecture

III. SYSTEM DESIGN

A. Login

The figure 2 shows the process of Login. When for the first time users comes in, they have to enter correct id and password to log into the system. The system then verify the entered data using data stored in database. If the system verifies, successful message is prompted otherwise login failure message is prompted and asks user to enter again.

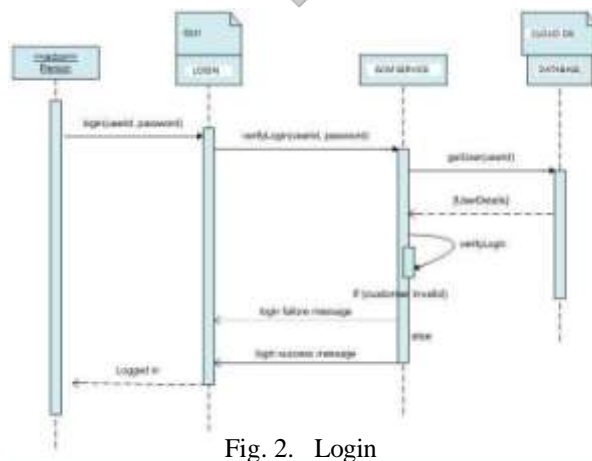


Fig. 2. Login

B. Signup

The figure 3 shows the process of Signup. For accessing Signup page, the users have to click on register tab. The system sends the request to server and the server returns register page displaying fields to register. The users enter the information and click submit button. The information is sent to server which is in turn sent to GCM[Google Cloud Messaging] Service. On validating, the information is saved in database .The user gets the email for confirmation.

C. Bill Payment

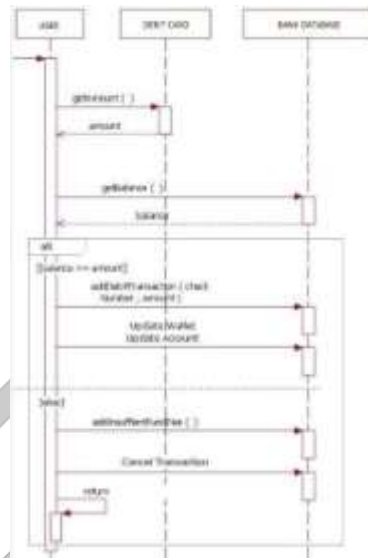


Fig. 4. Adding Money

The figure 5 shows the process of bill payment. The registered users try to log in the system . The control goes to GCM server and then to Cloud DB[Database] to authenticate the user. If user is valid, authentication successful message is prompted and then another page opened asks to choose service provider. The request is sent to the service provider and service provider responds. Next, user is asked to enter the payment amount. The entered amount is sent to service provider to respond . Then, payment option is selected which takes control to payment gateway. On successful payment, delivery is acknowledged to the user.

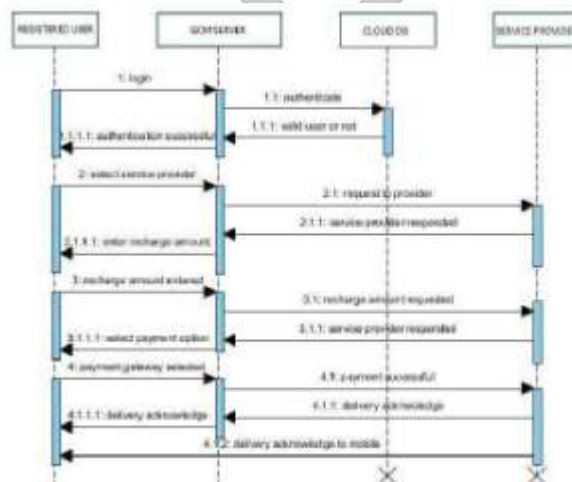
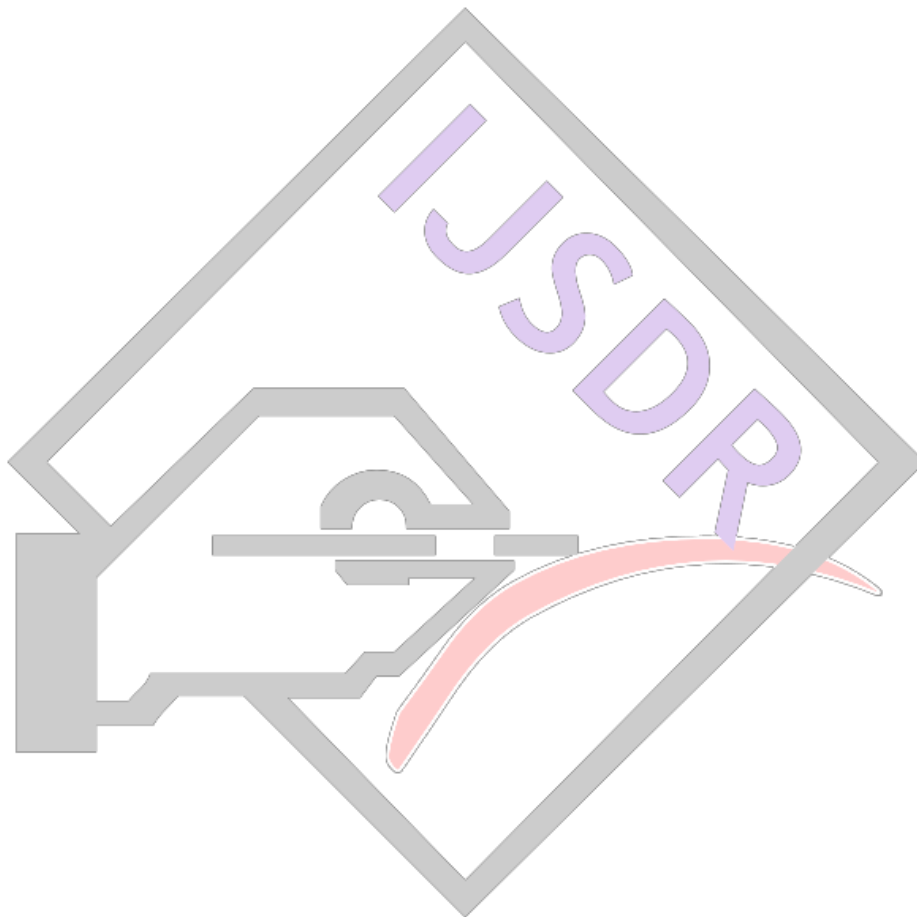


Fig. 5. Bill Payment

D. Add Money

The figure 4 shows the process of adding money to wallet. Users have to enter the amount to Wallet from the Debit card. The balance available in the account is accessed from the Bank database. The available amount is compared with the entered amount. If balance is greater than amount, it deducts the amount from the balance and updates the MyWallet with the balance equal to amount. However, if the balance is lower than amount, the users can either enter sufficient money so that balance exceeds the amount and user can update wallet or the users can cancel the transaction for time being.



E. User Update

The figure 6 shows the process of User Update. The users edit their personal information to validate. If the system fails to validate, the failed information is sent to user. However, if the conditions are met, the data is updated in GCM Server and then in Cloud DB. The update success message is sent to the user.

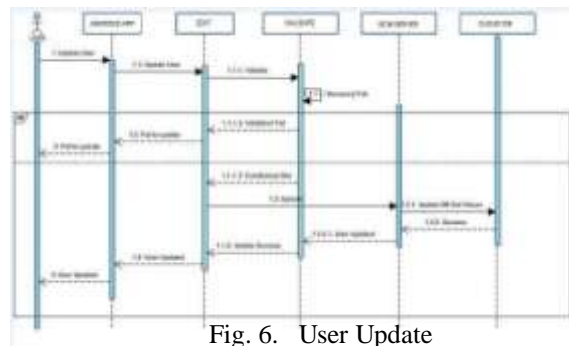


Fig. 6. User Update

IV. IMPLEMENTATION

Modules used in this application are as follows:

- A. Bills.
- B. Services.
- C. Submit Ratings.
- D. Forum.
- E. Wishlist.

A. Bills

The users have to select the facility for which to pay the bill followed by selecting the Service provider. Then, the users have to enter their customer Id and finally the amount due. Next, the users have two options to pay the bill based on their convenience. It asks user to enter the CVV[Card Verification Value] to generate OTP[One-Time Password]. The OTP is sent to the registered mobile number for verification of the genuine user. Once OTP is entered by the user, the transaction gets accomplished.

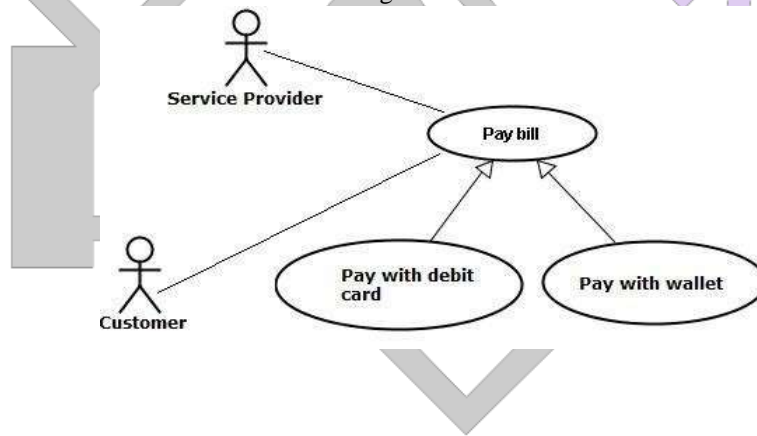
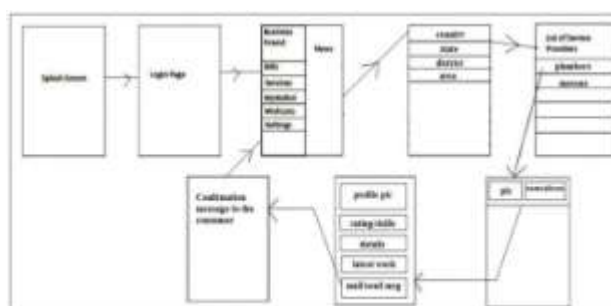


Fig. 7. Bills

B. Services

The users can easily choose the Service Provider for which to pay not only by reading but also with the corresponding picture available. It's so much clear and simple that even less skilled persons can use it.



V. CONCLUSION & FUTURE SCOPE

In essence, **Business Friend** acted as an intermediate between the customers seeking service and service providers looking for job. The registration and login facilities have been made very simple so that even less skilled persons can manage to use the applications. It provided a suitable mode of communication between both the parties and also provided a means to get regular updates for their needs. Thus, both parties got mutually benefited. Apart from communication, the payment for the services has also been made simple and convenient. The MyWallet option made the whole payment process further simpler, easier and smoother. Also, personal information update can be done in no time by the users. Finally, the Bill payment and Recharge facility provided more colors to the application and made the application more worth for the users.

The application currently provides limited service providers but there are large number of other types of services like photographer, wedding planner, yoga instructor, interior de- signer and so on. Also, the payment system can add other Bills and Recharges for Bookmyshow, Makemytrip, FoodPanda and many others. The service providers can be mischievous and so, proper background check and police verification are very important. Similarly, the application can provide online shopping options to increase the revenue and to provide more accesses to users. Finally, the application can provide various advertisements and can enhance the revenue system.

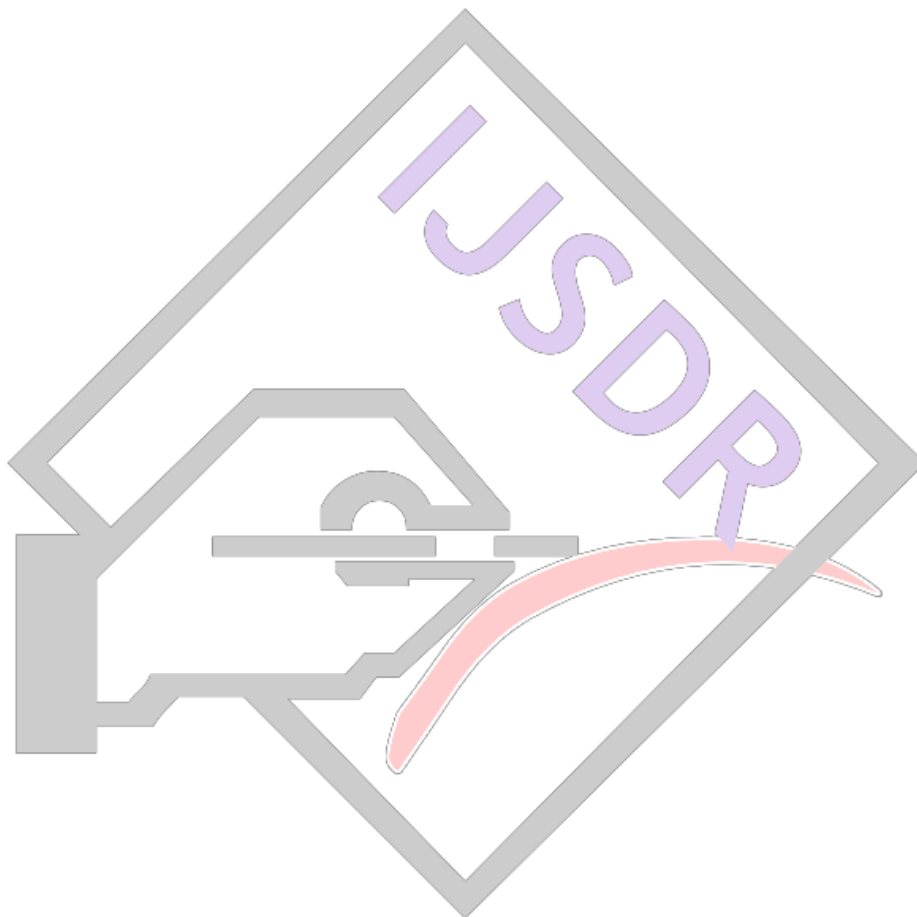




Fig. 11. Wishlist

VI. ACKNOWLEDGMENT

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