**E-money**

• Declaration of Sole Authorship

We acknowledge that this report to be assessed is a group work by Ramya Radhakrishnakumar, Sushant Sharma and Vinokkumar Uthayakumar. The entire report and the project itself is prepared with the group’s consent and has almost our own ideas and words. All the other references and ideas invoked in this report are confirmed and are provided in the bibliography session. Ramya Radhakrishnakumar worked on the Hardware and the Technical aspect, Sushant Sharma handled the Database connectivity and Vinokkumar Uthayakumar on the other hand focused on developing the mobile application and the establishing connectivity between the sensors.

• Abstract

The Technical report is about the application E-money. The contributors for this application are Ramya Radhakrishnakumar, Sushant Sharma and Vinokkumar Uthayakumar. The reason we got the very idea to develop E-money is that one does not have the need of going to a bank to transfer money to someone far away. Also all this app needs is sufficient amount of memory and access to the cellular data/Wi-Fi. This requires 3 months’ time to build both the software and the hardware part that collaborates the whole application as a working system. It is something like a banking application but has more to it. This application’s peculiarity is that one can transfer, pay and also manage their bank account all in one. The database of this project stores the fingerprint, Account number and password. Also during transactions it stores the QR code. This QR code only stays for 24 hours, within this time span the money should be accepted. In case one fails to accept the money within that period the QR code will be discarded and the money cannot be accepted. The ideology of E-money is to save time, carry transactions and bill payments with ease. This application is available for android mobile OS only for time being.

• Introduction

The significant problem being faced by man these days is that, he has to go to the bank to perform his banking needs such as monitoring his account. These are somehow successfully being voided by few of the inventions of certain banking apps. However there are still few limitations for such apps namely, one has to download app-A for monitoring his bank account or transactions and also one needs to download app-B to pay bills. But there is no online application where one can pay bills, manage one’s account and also perform transactions using the same app. The very need for such an app is that it basically reduces travelling to a bank, waiting in line to be helped and then consult our needs with the representative.

To make this app work, it requires certain basic information to be stored in the database which will then be accessed via both a hardware and Smartphone application, providing on-the-go banking experience. This application is convenient and efficient keeping user friendliness as a principal key to work with the application.

Since our mobile application needs a Wi-Fi or cellular data to send an email to the recipient, the whole set-up should be placed in an environment that supports either Wi-Fi or network.

Some of the libraries inculcated in this project is as follows:

* To Scan the QR code we used Zxing,
* Firebase for database,
* Bitmap for conversion of code into image file.