

Online Budget Tracking

M.Dharani priya¹,

Asso.Prof. Mrs. R. Vijayalakshmi., MCA., M. Phil.,(Ph.D.)

Associate Professor

Department of Computer Application

Krishnasamy college of Engineering and Technology,Cuddalore.

ABSTRACT

Budget Tracking is an essential part of every people who wants to keep track of their income and expense then make a savings from it. Budgeting is an integral part of the society. Today, since people are living in a hurry up and expensive society many people are looking forward to make a efficient way to budget their time and money. The main purpose of Online Budget Tracking is to provide an online means to store and manage the financial data(budget) of the people. It also provide appropriate interface between the people where they can store all their financial data for every month/years. It must be able to analyse the data as well as generating desired reports from it. It predicts the healthy financial future for everyone in a great manner.

1.Introduction

Budget Tracking involves recording and analyzing the incomes and expenses of a person or an organization over a particular period of time. Budgeting also requires us to look ahead and formalize future goals. To analyse and compare income and expenses over a period of time, by calculating

monthly/yearly profits and expenses as well as deviations, help us to take important decisions. A budget is a financial plan for a defined period of the time. There are several methods or tools that available for creating, using and adjusting a personal budget with expenses. For example, jobs are an income source, while bills or rent payments are expenses. In this, we can also show the graphical representation and bargraph as well. It will track your daily expenses by week, monthly, and based on the income it will show you the balance you can also view the report of previous transactions and expenses year or month wise. You can also add expenses category like food, travel, rentals, school, college, etc.

Objectives

- ✓ Add and manage expenditure records.
- ✓ Statistical report view for expense.
- ✓ Application can be used by any organizations.
- ✓ Easy to signup and login functionality.

2. Existing System

In existing system people will follow the traditional and manual way to keep track of the expense and budget on every month. In most cases, budget management is being done mentally and

never being put on paper which makes Budget Tracking very difficult. This is probably due to the fact that many people do not know how to do it or do not have an appropriate means that will do Budget Tracking and Analysis for them. If we want to balance a income and expense for each month we have to do it manually but we can't do this for each and every month those who have a lot of income and expenses. To overcome all of the issues made in this existing system we can proposed a new Online Budget Tracking system as online.

The problems identified with the existing system being used by most people are as follows:

- Much detail cannot be able to kept since there is much rewrite to be done which makes the task boring.
- Involves much paperwork.
- Searching and referencing is difficult.
- Took lots of time.
- Analysis and comparison of data becomes difficult.
- Reports generation is a tedious process.
- The work being done is not accurate.

3. Proposed System

Proposed system of budget tracking will help user to stay in control while spending the money and achieve the financial goal in easy and efficient way. Online Budget Tracking will be able to generate the user expense and it will briefly divide and showcase the expenses spending on monthly and yearly basis. A solution for the problem

described in existing system is to provide an online means to store and manage the financial data (budget) of these people. It will generate the report for every expenses on monthly and yearly basis. It also provide an efficient way of managing expense like pie chart, bar chart and line chart. The major reason why the proposed system should be online is that household owners can access their financial data from anywhere at any time via the Internet either from the browser of a computer or that of android phones.

4. Security Analysis

The users of the Intelligent Online Budget Tracker will have to send their personal data (like their income and expenses) online. But the fundamental question that arises is "Who will like to send all his financial details online?" In a way, thinking like this would have been correct twenty years or thirty years ago when the Internet World was not much developed. But today, where the world is becoming a cyber one and thousands of new users per day are accessing the World Wide Web in the Computer and Internet World is so fast that new technologies, platforms or computer-related issues, such as security, agent technology, and robotics, are being brought to the world at a pretty fast pace. So, sending personal data online is not a real problem as such.

For this, security measures, keeping the anonymity of the users, secure authentication or access control can be used to ensure that the user is really the one whom he claims to be. A User Tracking System (accounting) can also be integrated in the web-

application so as to keep a log file about which user has accessed which page or performed what task at what instant and from which computer (IP Tracking) so that if any malicious task takes place in the online application, the source of the problem can easily be tracked. Also, techniques like cryptography is given in **Figure 1** or hashing can be used to protect the data entered by users. In other words, the data stored in the database will not be the same as the data entered by the user. Public Keys can also be used which is known only by the user and without this, the data stored in the database cannot be decrypted easily. So, if anyone has gained illegal access to the system database, they will not be able to interpret the data easily. Hence, security is a crucial issue for the Online Budget Tracker which has to be implemented with great care.

standard adopted by the U.S. government. The standard comprises three block ciphers, AES-128, AES-192 and AES-256, adopted from a larger collection originally published as Rijndael. Each of these ciphers has a 128-bit block size, with key sizes of 128, 192 and 256 bits, respectively. The AES ciphers have been analysed extensively and are now used worldwide. AES was announced by National Institute of Standards and Technology (NIST) as U.S. FIPS PUB 197 (FIPS 197) on November 26.

There are three versions of AES with 10, 12 and 14 rounds. The key size can be 128, 192, 256 bits depending on the number of rounds. General design of an AES encryption cipher is given in **Figure 2**.

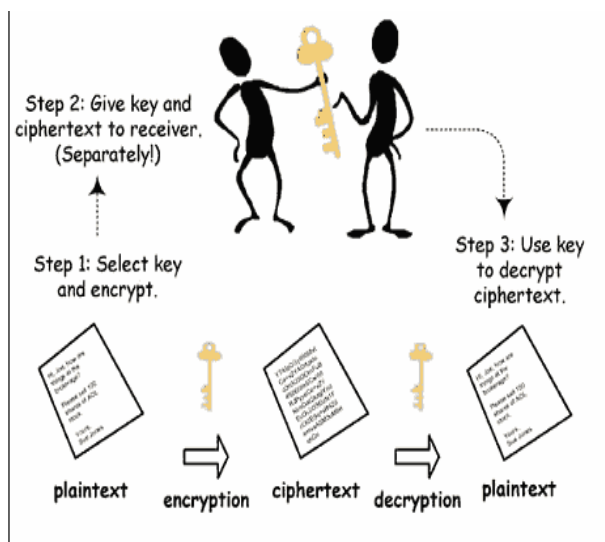


Figure 1- Cryptography

4.1 Advanced Encryption Standard

In cryptography, the Advanced Encryption Standard (AES) is a symmetric-key encryption

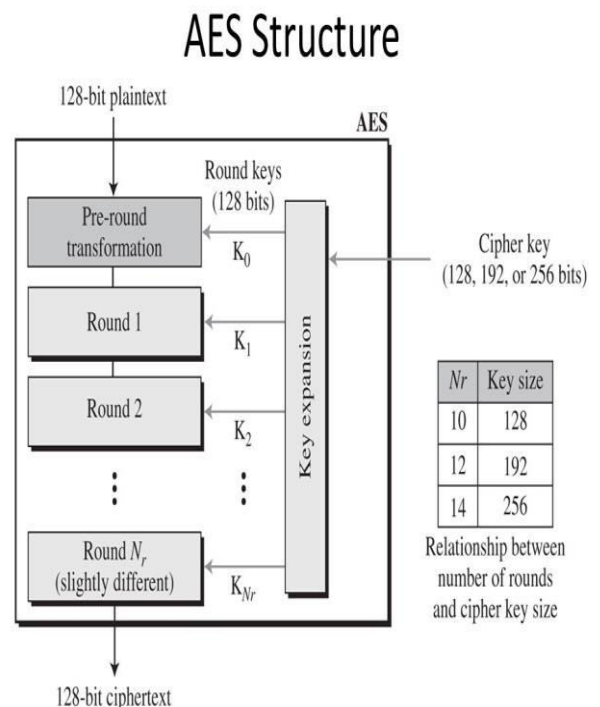


Figure 2- Structure of AES

5.The Online Budget Tracker

This system is an independent and completely self-contained product which will prove to be beneficial and confidential to the people who make use of it. Many features will be present in the system that will facilitate money management of the users of the system.

On the first instance, the members need to register with the system. They will get unique login information which they can use every time they visit the system. Our Online Budget Tracker will then allow them to:

5.1 Modules

- Registration
- Login
- Track their budget
- Generate Report
- View Charts

Registration

It is used for the people new to the Online Budget Tracker. By registering this system, a particular user can make a new account by filling all the personal details. A new account is created when the registration process is done successfully as represented in **Figure 3**.

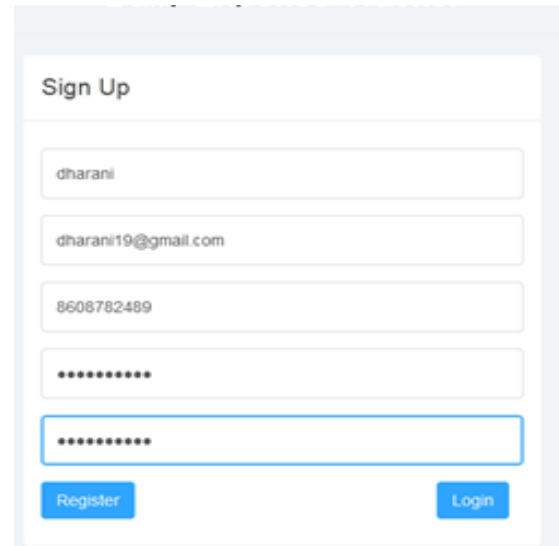


Figure 3 – Registration Page

Login

Login is the mandatory part for every system and services while we are entering through online. Online Budget Tracking is also having a login page to enter into the system only after the user can register a user account in a registration page. We are asking Email and Password as a mandatory part while logging into the Online Budget Tracker, as represented in **Figure 4**.

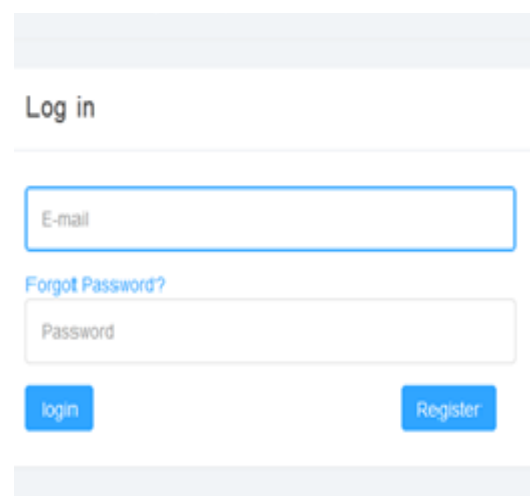


Figure 4- Login Page

Track their budget

Here the overall budget tracker is displayed and user can view the budget details like monthly and yearly basis. To track all the budget in a single view we can make use of this page and the page is represented below in **Figure 5**.



Figure 5- Track all Budget

Generate Report

Report will be generated for the outcomes of expenses. Report will be generate based upon the date we have given . Once we given the from and to date to the system then it will generate the report with certain information needed and it will be shown in **Figure 6**.

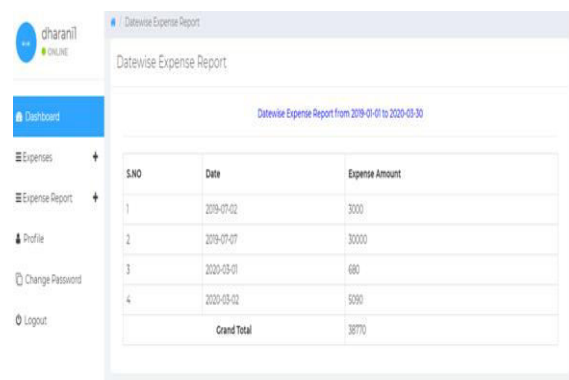


Figure 6- Report Generated

View Charts

Charts can be used to easily identify the budget growth through different ways like bar chart, pie chart and line chart will be shown in **Figure 7** and **8**.

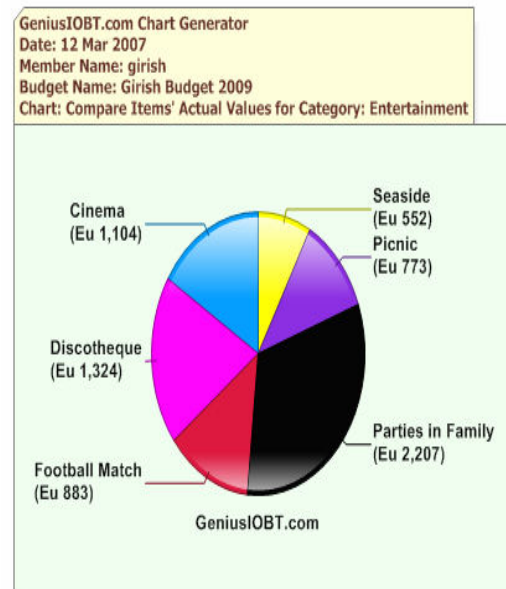


Figure 7 - Pie Chart

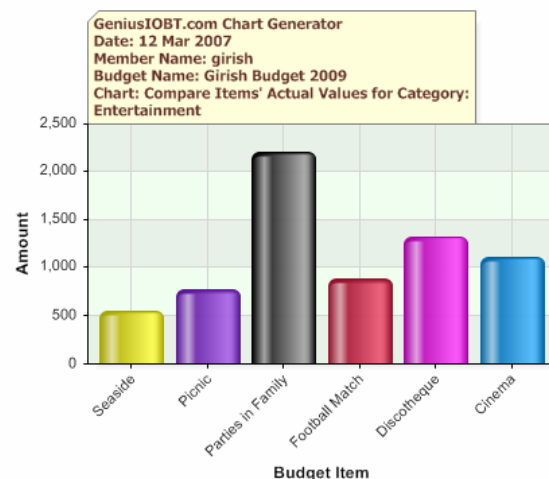


Figure 8–Vertical Bar Chart

6.Miscellaneous Forms

Our system also has many other features that enhance the system and provide the user with simpleuseful tools that he can use during his

Budget Tracking process. Examples include the userguide or the Contact Form for communication between guests and our system. Similarly, we also have a scientific calculator (Figure 9), a currency converter (Figure 10), a loan calculator, exchangerates, etc.



Figure 9 - Scientific Calculator



Figure 10 - Currency Converter

7. Technical Details

As methodology, the Rational Unified Process (RUP), which is an iterative software development, has been adopted. The object oriented methodology is better than other

functionoriented software methodologies since it is highly customizable according to the system needs in addition to its iterative nature. The choice of the methodology which involves the use of Object Oriented Programming concepts which is very advantageous in the way that it promotes code reuse and encapsulation. Also, the system has been developed using several modern technologies so that it can fulfil the requirements of the users.

To construct the Online Budget Tracker, the WAMP server platform has been used where php is implemented over here. Javascript has been the main client-side scripting language used for validations and the display of friendly user messages to the user. CSS technology has been used massively which renders the constant display of the design in all the forms. CSS reduces the size of the pages which makes it faster to load than the use of images. XML Technologies have also been used so as to dynamically configure the server from a client host by the administrator. XML is platform independent and will also help a lot in later migration of components of the system if expansion is needed.

8. Conclusion

We have presented a working prototype of an Online Budget Tracker. The development of this application has been conducted in a stepwise manner using the well defined methodology, RUP, customised according to the requirements of the system. Most of the goals set at the beginning of the development phase have been met. Security issues like web security or network security have also been treated in the design and development of the

system, thus increasing the reliability of the system. Quality management issues have also been handled satisfactorily.

9. Future Enhancement

In future, this system try to make a synchronization with mail and bank account so upcoming alerts and notifications should send to the mail and transactions should stop if there is less balance in account. More functionality like capture results, add location, data backup can be added soon. We are trying to increase software performance by using maximum use of core.

9. References

- 1)FKJ Software. (2005). *Graphics Account 1.3*. Retrieved November 9, 2006, from <http://www.softplatz.com/Soft/HomeHobby/Personal-Finance/Graphic-Accounts.html>
- 2)In2M Corporation. (2007). *Home budget software for household, family & personal money management*. Retrieved April 10, 2007, from <http://www.mvelopes.com/>
- 3)Muellbauer, J. (2006). *Housing and personal wealth in a global context*. United Nations World Institute for Development Economics Research. Retrieved January 11, 2007, from <http://www.csae.ox.ac.uk/resprogs/smmsae/pdfs/smmsae-2006-02.pdf>
- 4)Redpath, B. (1986). Family expenditure surveys: a second study of differential responses comparing census characteristics of FES respondents and non-respondents. *Statistical News*, 72, 151-171.
- 5)RLT Family Budget Related. (2003). Retrieved November 9, 2006,

from <http://www.sharewareconnection.com/rlt-family-budget.htm>

- 6)Yemtsov, R. (2007). *Housing privatization and household wealth in transition*. World Institute for Development Economics Research. Research Paper No. 2007/02. Retrieved February 19, 2007, from <http://www.wider.unu.edu/publications/rps/rps2007/rp2007-02.pdf>