



Science and Engineering Symposium
4th International Science, Social Science, Engineering and Energy Conference 2012

A Program Support Management and Discipline Construction of Personal Finance

S. Punthawanunt^{a,*}, P. Chitapong^b, S. Chitapong^c

^a*Faculty of Science and Technology, Kasem Bundit University, Bangkok 10250, Thailand*

^b*School of Applied Statistics, National Institute of Development Administration, Bangkok, 10240, Thailand*

^c*Quality Assurance Office, Kasem Bundit University, Bangkok, 10250, Thailand*

Abstract

The purposes of Program Support Management and Discipline Construction of Personal Finance are the creation of management supporting system and the stimulation of discipline construct in personal finance online; warning in payment in case of economic sufficiency and facilitation for planning of personal finance.

In terms of design and development, the researchers have chosen Netbeans program for Web application development, JDBC is data base of driver and JAVA development kits is program environment. Program Support Management and Discipline Construction of Personal Finance is created by JSP language that has stabilization and popular program development in WebBase type. Then the researcher is develop these program connect with MySQL database.

This program include two parts that administrator and user. The user part has home accounting or revenue-expend accounting, investment accounting and debt accounting. However, the researcher create these program refer to user requirements and model from literature review, mainly.

© 2013 The Authors. Published by Kasem Bundit University.

Selection and/or peer-review under responsibility of Faculty of Science and Technology, Kasem Bundit University, Bangkok.

Keywords: Discipline Construction; Personal Finance; JSP

* Corresponding author. *E-mail address:* suphanchai@kbu.ac.th

1. Introduction

Housing account is considered significantly important to sufficient path. The participants need to be aware of their affordability, planning of spending habits carefully and having awareness in living lives which includes good planning and taking good notes of correct information. They also need to gather information about their daily income and expenses of their houses in order to make housing account sufficient; reducing unnecessary expenses and increasing incomes in an attempt to create sufficiency. Housing account is a record of daily expenses and incomes of the houses. Hence the housing account is important because:

- it tells the income, expense, and debt of the family that can be in the form of cash or family's asset gained through working in the form of interest, salary, etc. Debt is cash or family's asset that have to be paid back in the future such as borrowing money from the bank, borrowing money from friends, and loan payment etc. Expense is cash or asset that is used in exchange of goods or services such as rent, water bill, electric bill, or food etc.
- it tells the amount of remaining money for each day.
- the information can be used in order to manage household's money, and plan the expenses in order to tell whether or not, each expense is important.

The household's account makes people concerned in the importance of taking note which can make us see easily the origin of our money, and make the most out of it. The best start would be from us and family members which is the base of stableness and sustainable development [1].

Most of general household's accounts are started from farmer families by note taking [2]. The researchers suggest using technology which would make household account easy, accurate and accessible, and can be analyzed in real time. This research focuses on the teacher group because they have complicated problems in finance management. Finally, researchers hope that it will be a warning system and management system in financial transactions as it corresponds with sufficient economy theory.

Table 1 Difference of Personal finance management system in Thailand and other country [3].

Personal finance management system			
Thailand		other country	
Program	Website	Program	Website
Current account demonstration and management program which cannot support another function of financing such as loan and investment.	There is no personal finance managing program on web site. Available for all information of financial service as an advertisement to present all products and services.	The functions of program that mostly not suit Thailand e.g. tax calculation. Program is expensive Cannot work with network must be installed to each PC.	Just for specific user not available for general users. Expensive program
Example MyMoney	Example http://www.silkspan.com/	Example Quiken Microsoft Money	Example Personal Mvelopes (http://www.mvelopes.com)

Two of the limitations of program development are that it cannot share the data and cannot be utilized to work as a network. Also, it cannot satisfy the purposes of personal financial activities in sufficient economy. Web service is an online financial program development which is composed of calculation functions such as simulation of budget, asset - liability, etc.

The program processing calculates input and returns the results, for development, as a database which is useful for personal financing. The procedures started by the record of the user through web server. After that, the system will return to XML for accounting. The web developer doesn't need to construct the whole program for calculating. This project is supported by the program developer with the same standard and purpose for budget

management without wasting time reconstructing the whole procedures of calculating even though this project only satisfies financial organizations [4].

The development program for personal financial administration supports - based on house account - the allocation and management of the account following the sufficient economy project as it is an interesting topic to develop the new program. It also needs to consider the demand and financial standard form, in order to develop it in the right manner as satisfaction of the user is its main objective. To use technology as a tool in finance, which can immediately show financial result, helps financial administration more efficiently [5]. In a business that desires good personal administration, the data should be a real qualified data so that it will show good result [6].

2. Objectives

- Generate supporting management system and discipline for online personal financial activities.
- To support expense notification.
- To support sufficient life management.
- To improve facilities of personal finances management.

3. Methodology

3.1 Observations

The researchers made a survey to obtain primary data of personal financing management supporters. It started with an interviewed to four samples who Thai government teachers. The results show that they always face shortage and low quality statement. The second question is about the program requirement that they are looking in knowing how to manage their financial activities through accounting. With the advice of bank officers, the researchers also researched on the detail of accounting financing with the consideration that data are legally and appropriately obtained without the risk of the user and programmer breaching banking regulations. The researchers also study accounting theory, financial accounting and managerial accounting including tax regulations and interest rates for all transaction. The researchers study JSP from several sources to get complete understanding of its structures and components. Importance is given to system analysis and design, which are the main idea of the program development. The researchers also learn the tools which can be applied to the research such as flow chart ,data flow diagram and entity relationship etc. as a secondary data.

3.2 Program development

The design of the working process started with a study of all the programs that are used to develop web application design, database program, graph making program, database management program. These are then used to develop the new program. After constructing and designing the procedure of the program, researchers divided the users into 2 categories

The first one is the controller and the second one is the user. Controller creates data which is useful for user in making considerations. User can use the program to calculate accounts and follow the sufficient economy that can control expenses, and can keep track on saving accounts. Also, it will be able to set up the expending plan.

Database design started with the setting up of all results that users want to get. Next, the development the program in an ER-diagram is processed for mapping and normalization. The software required are FusionCharts, MySQL Community Edition, AppServ2.5.10, NetBeans IDE 7.0.1, JDK 6 Update 25, and Flash Effect Maker.

3.3 Survey of satisfaction

The samples are 50 teachers from Bang Toey School, Beung Goom Office using five levels to measure their satisfaction with regards to their experiences, the benefits, and personal features.

4. Result and discussion

From the gathered documents and analyzed interview, it is observed that the development of the program to support the administration and to create personal discipline in financing match with the fact and they go along with what user want as shown in figure 1.

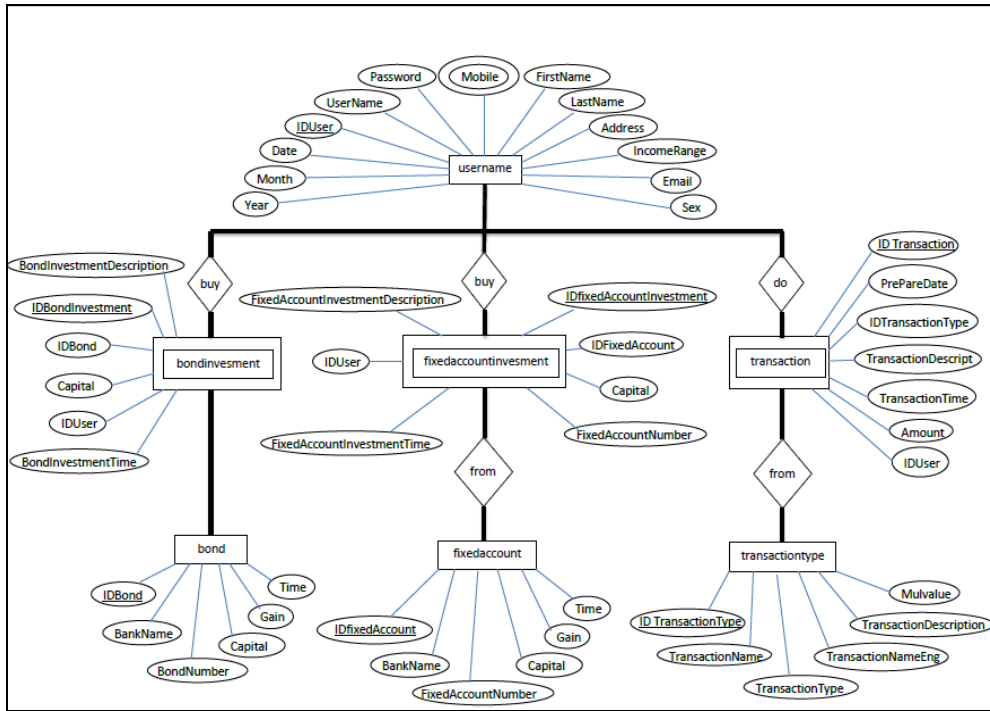


Fig. 1. Design of program data base

When the principal design is done, innovation of the program is based on My SQL and the innovator. An innovator is created and developed for non-profit program is in freeware form. However, limitations occur along this freeware as it shows that the graph report is difficult to understand and is not available in every language. This is the limitation of base My SQL program because it has less function and it takes time to create and innovate. The result shown on the web page is illustrated in Fig. 2.

Fig. 3 present the program that supports management and disciplinary development in personal fund. After the program’s development, it is found that the outcome turned out as expected. More accurate and less time consumption in accounting is gained. To sum up, pattern, practicality and usefulness are satisfactory in general.



Fig. 2. Web design supported management system of personal financial



Fig. 3. Display of Program analyze

5. Conclusion

A consequence of using this program is the benefit of seeing correct financial status. Moreover, the program is reliable and useful. Users can manage and analyze their accounts. Also, it gives them overview of all their transactions in the account. This program has been evaluated as good because all objectives are met. Finally, Users are able to manage their own account through online notification system to help them control their financial activities in sufficient economic way.

6. Suggestion

Financial program application should be updated to current financial conditions or situations such as current gold price and stock market situations, so users can check on their financial status quickly. The program should be distributed and be made familiar to users so the developer can observe on limitations and improve the program in advance.

Acknowledgements

Thanks to the institution of NIDA for allowing the use of the location and tools in doing this research. Also, thanks to Prof. Dr. Suppoj Sutantawiboon and Assist. Prof. Dr. Ohm Sornil for all their suggestions and valuable advice.

References

- [1] Saruno, Y. Accounting System is right, you have saving money. *EAU Heritage Journal*; 2006, Vol. 1, No. 2, pp. 41-47.
- [2] Girnnguangsong, M. Factors effecting the Household Bookkeeping's Clients of the Bank for Agriculture and Agricultural Cooperatives, Bang Nam Preow Branch, Chachoengsao Province. Thesis, Master of Science in Cooperative Economics, Maejoe University; 2008.
- [3] Narakornpijit, V. Personal Finance Management on Website. Thesis. Science Technology Management College of Innovation, Thammasat University; 2009.
- [4] Treesinthuros, W. WEB SERVICES FOR ACCOUNTING SYSTEM. Thesis, School of Computer Engineering, Suranaree University; 2009.
- [5] Dalcı, I. and Tanis, V.N. Benefits of Computerized Accounting Information Systems on the JIT Production Systems. *Review of Social, Economic & Business Studies*; 2003, Vol.2, pp. 45-64.
- [6] Xu, H. Data quality issues for accounting information systems' implementation: stakeholders, and organizational factors. *Journal of Technology Research. Data Quality Issues*; 2005, pp. 1-11.