# LITERATURE SURVEY

**Team Members:**

# Personal Expense Tracker

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**Paper 1**

**Title: Design of a Personal Financial Planning Management Information System**

**Authors:** [*Ting-Sheng Weng*](https://ieeexplore.ieee.org/author/37087367097)*;* [*Shin-Fa Tseng*](https://ieeexplore.ieee.org/author/37088101674) *(2010, IEEE)*

**Methodology:** This paper proposes the idea of expense management system on the Web application area. This study uses Visual Basic for programming, and adopts the Open Database method of saving data in an Access database, in order to develop a personal financial planning management system. This system provides financial planning functions, including accounting, budgeting, financial planning, and monitoring. The system design includes user accounts, password settings, a security management system, journal-type account management, displayable account subjects, options for additional budgeting lists, modification and deletion options, revenues and expenditures of annual accounting subjects, and legends and records displays for related income and expenses, assets and liabilities, profit and loss accounts. The system is suitable for personal financial planning

**Advantages:** This system collects the information related to the expenses and proposes a simple aggregation of these figures which reduces the tedious manual work that must be performed by the employee of the company.

**Paper 2**

**Title: The design and implementation of inpatient medical expenses analysis system**

**Authors:** [Wangbin](https://ieeexplore.ieee.org/author/37085572448), [Xieqi](https://ieeexplore.ieee.org/author/37085566911), [Shihuaxin](https://ieeexplore.ieee.org/author/37085568418), [Caoxinyu](https://ieeexplore.ieee.org/author/37085570348), [Wangwenjing](https://ieeexplore.ieee.org/author/37085575239), [Chendi](https://ieeexplore.ieee.org/author/37085582403) *(2015, IEEE)*

**Methodology:** The system is based on the hospital's existing HIS system database, real-time processing and large quantities of data in the database querying. HIS database as the server part of the back-office services, data query and processing. This system provides various forms of statistical analysis of patients for hospital administrators. There are two modules in the system.

They are the module of querying inpatients financial information and the analysis for cost- effectiveness of single disease. These modules help in reducing the hospital cost spent by the patients by analysing total hospital costs, the average hospitalization costs, drug costs and the proportion of each department or ward. The relevant professionals can develop reasonable and effective insurance policy.

**Advantages:** This system reduces the hospital cost of the patients by provding them a reasonable and effective insurance policy by using the HIS system database.

**Paper 3**

**Title: Smart Expense Management Model for Smart Homes Authors:** *Sumit Yadav, Richa Malhotra, Jyoti Tripathi (2016, IEEE)*

**Methodology:** This paper proposes a model that helps in monitoring all types of expenses that occur in the smart home technology. It focuses on the efficient expense management by monitoring its timing and quantum of cash outflow. This model keeps track of all type of expenses incurred by the house hold owner. The integration of smart home technology with the expense tracker increases the efficiency and effectiveness of the purpose of maintaining the house hold budget within the available funds.

**Advantages:** The integration of smart home technology with the expense tracker helps in maintaining the expenses of the house hold budget efficiently and effectively within the available funds.

**Paper 4**

**Title: A Smart Approach to Track Everyday Expense**

**Authors:** [*Shahed Anzarus Sabab*](https://ieeexplore.ieee.org/author/37086067258)*;* [*Sadman Saumik Islam*](https://ieeexplore.ieee.org/author/37086607842)*;* [*Md. Jewel Rana*](https://ieeexplore.ieee.org/author/37086457753)*;* [*Monir Hossain*](https://ieeexplore.ieee.org/author/37086613694) *(2018,IEEE)*

**Methodology:** This approach is carried out to find the rate of expense made at the end of the day and the average rate of expense made per day. It is a mobile application that uses the scanned images of the bills to get the data. It scans the textual information to get data and also monitor the messages received regarding income. From the income and expenses made it produces a user’s balance in monthly and yearly basis. Overall, this is a smart automated solution for tracking expense.

**Advantages:** It helps in making expenses with concern to the income made. Provides user balance in monthly and yearly basis.

**Paper 5**

**Title: Time Scheduling and Finance Management: University Student Survival Kit**

**Authors:** *J.L. Yeo, P.S. JosephNg, K.A. Alezabi, H.C. Eaw, K.Y. Phan (2020, IEEE)*

**Methodology:** This paper describes about the multifunctional application which helps the students to manage their time and money efficiently. The application aims to improve student knowledge and promote self-reflection which helps in tracking their time and financial expenses. The time scheduling in the application helps the students to perform better in the academics. Money management skills in the application helps the user to log their weekly income and expenses. The user-friendly interface of the application helps to promote the student’s development.

**Advantages:** The student can manage their time and money efficiently using the application.

**Paper 6**

**Title: Development of an Application for Expense Accounting Authors:** *Denis E. Yurochkin; Anton A. Horoshiy; Saveliy A. Karpukhin (2021, IEEE)*

**Methodology:** The idea of this article is to develop a mobile application that can be used to maintain the expenses of an individual. The bills, invoices and receipts are scanned and the data is obtained from the scanned copy. The text recognition algorithm is used to understand and classify the data. The obtained data is stored in a database which can infer the expenses made and can be used to make a budget plan. This idea helps in finding out the sectors in which the expenses are made at the most and at the least providing an understanding of the expenses.

**Advantages:** This application provides the luxury of converting materialistic data such as bills and receipts into a digital data. This helps in more analysis of the data and easy management of the bills.

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| **S.NO** | **Author** | **Year** | **Title of the paper** | **Contribution** |
| 1 | [*Ting-Sheng*](https://ieeexplore.ieee.org/author/37087367097)  [*Weng*](https://ieeexplore.ieee.org/author/37087367097)*;* [*Shin-Fa Tseng*](https://ieeexplore.ieee.org/author/37088101674) | 2010 | Design of a Personal Financial Planning Management Information System | This system provides financial planning functions, including accounting, budgeting, financial planning,  and monitoring |
| 2 | [Wangbin,](https://ieeexplore.ieee.org/author/37085572448) [Xieqi,](https://ieeexplore.ieee.org/author/37085566911) [Shihuaxin](https://ieeexplore.ieee.org/author/37085568418), [Caoxinyu,](https://ieeexplore.ieee.org/author/37085570348) [Wangwenjing,](https://ieeexplore.ieee.org/author/37085575239) [Chendi](https://ieeexplore.ieee.org/author/37085582403) | 2015 | The design and implementation of inpatient medical expenses analysis system | They are the module of querying inpatients financial information and the analysis for cost-effectiveness of single disease. These modules help in reducing the hospital cost spent by the patients by  analysing total hospital costs |
| 3 | Sumit Yadav, Richa Malhotra, Jyoti Tripathi | 2016 | Smart Expense Management Model for Smart Homes | This model keeps track of all type of expenses incurred by the house hold owner. The integration of smart home technology with the expense tracker increases the  efficiency |
| 4 | [Shahed Anzarus](https://ieeexplore.ieee.org/author/37086067258) [Sabab](https://ieeexplore.ieee.org/author/37086067258); [Sadman](https://ieeexplore.ieee.org/author/37086607842) [Saumik Islam](https://ieeexplore.ieee.org/author/37086607842); [Md.](https://ieeexplore.ieee.org/author/37086457753) [Jewel Rana](https://ieeexplore.ieee.org/author/37086457753); [Monir](https://ieeexplore.ieee.org/author/37086613694) [Hossain](https://ieeexplore.ieee.org/author/37086613694) | 2018 | A Smart Approach to Track Everyday Expense | It is a mobile application that uses the scanned images of the bills to get the data. It scans the textual information to get data and also monitor the messages received regarding  income |
| 5 | *J.L. Yeo, P.S.*  *JosephNg, K.A. Alezabi, H.C. Eaw,*  *K.Y. Phan* | 2020 | Time Scheduling and Finance Management: University Student Survival Kit | The time scheduling in the application helps the students to perform better in the academics. Money management skills in the application helps the user to log their weekly income and  expenses |
| 6 | Denis E. Yurochkin; Anton A. Horoshiy; Saveliy A.  Karpukhin | 2021 | Development of an Application for Expense Accounting | The obtained data is stored in a database which can infer the expenses made and can be  used to make a budget plan. |

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|  |  |  |  | This idea helps in finding out the sectors in which the expenses are made at the most and at the least providing an  understanding of the expenses |