

ABSTRACT

This project is based on an expense and income tracking system. This project aims to create an easy, faster and smooth tracking system between the expense and the income. This project also offers some opportunities that will help the user to sustain all financial activities like digital automated diary. So, for the better expense tracking system, we developed our project that will help the users a lot. Most of the people cannot track their expenses and income one way they face a money crisis, in this case daily expense tracker can help the people to track income-expense day to day and making life tension free.

Money is the most valuable portion of our daily life and without money we will not last one day on the earth. So, using the daily expense tracker application is important to load a happy family. Daily expense tracker helps the user to avoid unexpected expenses and bad financial situations. This Project will save time and provide a responsible lifestyle. This system is made and supervised by the experts and satisfying by the user. XML, JAVA, MySQL database, Eclipse IDE has been used to develop the system. The system is tested by over 5 users, and 80% of them found the system useful.

PROJECT DESCRIPTION

OBJECTIVE OF THE PROJECT

Online Expense Tracker is designed and developed for paperless and time- consuming efforts. Essentially, this system is structured for personal use. It will allow the user to connect to the database and can put their expense details by simply registering themselves. Users can view their expenses by directly uploading the expenses to the application. Users will have convenient access to all expenses and can also edit or delete them.

SCOPE OF THE PROJECT

This application plays a significant role for the users that have to track their expenses on monthly/ yearly as well as daily basis.

SYSTEM ANALYSIS

System analysis is the process of gathering and interpreting facts, diagnosing problems and using the information to recommend improvements on the system. System analysis is a problem-solving activity that requires intensive communication between the system users and system developers.

System analysis or study is an important phase of any system development process. The system is studied to the minutest detail and analyzed. The system analyst plays the role of an interrogator and dwells deep into the working of the present system. The system is viewed as a whole and the inputs to the system are identified. The outputs from the organization are traced through the various processing that the inputs phase through in the organization.

A detailed study of these processes must be made by various techniques like Interviews, Questionnaires etc. The data collected by these sources must be scrutinized to arrive to a conclusion. The conclusion is an understanding of how the system functions.

This system is called the existing system.

Now, the existing system is subjected to close study and the problem areas are identified. The designer now functions as a problem solver and tries to sort out the difficulties that the enterprise faces. The solutions are given as a proposal.

The proposal is then weighed with the existing system analytically and the best one is selected. The proposal is presented to the user for an endorsement by the user. The proposal is reviewed on user request and suitable changes are made.

SDLC APPROACH

The software development life cycle (SDLC) is the process based standard practice to develop any kind of software product. These processes are categorized as phases in SDLC and related to different activities. Different models are described in software engineering text books, but none is fully satisfied all the need of a software companies. Some SDLC models are Water Fall Model, Spiral Model, Prototype Model etc.

TOOLS AND TECHNOLOGIES USED

USER INTERFACE	XML, JSP
BACKEND AND DATABASE	JAVA AND MYSQL WORKBENCH 8.0 CE
I.D.E	ECLIPSE IDE

ABOUT JAVA

Java is a programming language originally developed by James Gosling at Sun Microsystems (which is now a subsidiary of Oracle Corporation) and released in 1995. This language derives much of its syntax from C and C++ but has a simpler object model and fewer low-level facilities. Java applications are typically compiled to byte code (class file) that can run on any Java Virtual Machine (JVM) regardless of computer architecture. Java is general-purpose, concurrent, class-based, and object-oriented, and is specifically designed to have as few implementation dependencies as possible. It is intended to let application developers "write once, run anywhere". Java is considered by many as one of the most influential programming languages of the 20th century, and widely used from application software to web application.

Platform Independence - Java compilers do not produce native object code for a particular platform but rather 'byte code' instructions for the Java Virtual Machine (JVM). Making Java code work on a particular platform is then simply a matter of writing a byte code interpreter to simulate a JVM. What this all means is that the same compiled byte code will run unmodified on any platform that supports Java.

Object Oriented - Java is a pure object-oriented language. This means that everything in a Java program is an object and everything is descended from a root object class.

Garbage Collection - Java does not require programmers to explicitly free dynamically allocated memory. This makes Java programs easier to write and less prone to memory errors. **Familiar C++ like Syntax** - One of the factors enabling the rapid adoption of Java is the similarity of the Java syntax to that of the popular C++ programming language.

Simple - Java was designed to be easy for the professional programmer to learn and use effectively.

Robust - The multiplatform environment of the Web Places extraordinary demands on a program, because the program must execute reliably in a variety of systems.

Dynamic - Java program carry with them substantial amounts of run-time type information that is used to verify and resolve across to objects at run time. This makes it possible to dynamically link code in a safe and expedient manner.

Multi-Threaded - Multithreading allows two parts of the same program to run concurrently. This article discusses how to pull off this performance-improving feat in Java. A good way to remember the difference between process-based multitasking and thread-based multitasking is to think of process-based as working with multiple programs and thread-based as working with parts of one program.

ABOUT HIBERNATE

Hibernate ORM (or simply **Hibernate**) is an object-relational mapping tool for the Java programming language. It provides a framework for mapping an object-oriented domain model to a relational database. Hibernate handles [object-relational impedance mismatch](#) problems by replacing direct, persistent database accesses with high-level object handling functions.

Hibernate's primary feature is mapping from Java classes to database tables, and mapping from Java data types to SQL data types. Hibernate also provides data query and retrieval facilities. It generates SQL calls and relieves the developer from the manual handling and object conversion of the result set.