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Experiment 1

Aim: To prepare a detailed statement of problem for the selected mini project and to identify a suitable software model for the same.

Problem Title: Daily Expense Tracker system.

Problem Statement:

Daily Expense Tracker System (DETS) aims to help everyone who are planning to know their expenses and save from it.
We are developing an Web application named as “Daily Expense Tracker System” and this application is used to manage the application user‘s daily expenses in a more efficient and manageable way.
In this application, user can provide his/her expense to calculate his/her total expenses per day and these results will stored for unique use.
User can also view many detailed reports which include day-wise, month-wise, year-wise and category-wise reports. This helps them to get an overall view of their expenses.
By using this application we can reduce the manual calculations for their daily expenses
and keep the track of the expenditure.
To help people become more organized, To boost productivity, To plan according to the budget, Boosting self motivation and self awareness.
These are some of our objectives for the Daily Expense Tracker System

Software model:
The software development model followed for this web app will be a waterfall software model or linear sequential life cycle model. The waterfall model is a breakdown of project activities into linear sequential phases, where each phase depends on the deliverables of the previous one and corresponds to a specialisation of tasks.
Waterfall model flow: Requirement -> Design -> Development -> Testing -> Deployment -> Maintenance

The sequential phases in Waterfall model are −
Requirement Gathering and analysis: All possible requirements of the system to be developed are captured in this phase and documented in a requirement specification document.

System Design: The requirement specifications from the first phase are studied in this phase and the system design is prepared. This system design helps in specifying hardware and system requirements and helps in defining the overall system architecture.

Implementation: With inputs from the system design, the system is first developed in small programs called units, which are integrated in the next phase. Each unit is developed and tested for its functionality, which is referred to as Unit Testing.

Integration and Testing: All the units developed in the implementation phase are integrated into a system after testing of each unit. Post integration the entire system is tested for any faults and failures.

Deployment of system: Once the functional and non-functional testing is done; the product is deployed in the customer environment or released into the market.

Maintenance: There are some issues which come up in the client environment. To fix those issues, patches are released. Also to enhance the product some better versions are released. Maintenance is done to deliver these changes in the customer environment.