Software Requirements Specification

for

EXPEN-SIEVE

Version 1.0 approved

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25th February, 2018

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1. Introduction

1.1 Purpose

The purpose of this document is to present a detailed description of the ERP System Expen-sieve for 'Shankar Textile'. It will explain the purpose and features of the system, the interfaces of the system, what the system will do, the constraints under which it must operate and how the system will react to external stimuli.

1.2 Document Conventions

The document follows the standard IEEE format. The priorities for higher-level requirements are assumed to be inherited by detailed requirements.

Admin/Owner	Owner of Shankar Textile

1.3 Intended Audience and Reading Suggestions

This project is developed for Shankar Textile and will be used solely by them. This document is intended for both the stakeholders and developers of the system.

1.4 Product Scope

This product will focus on managing the transactions, maintaining the inventory, billing and accounts of the company, information of suppliers and customers. This product will be used solely by the owner. This product will be time efficient, easily accessible, reduce paperwork and remove the need of traditional book keeping. It will help tracking the bills of customers from time to time.

1.5 References

IEEE Std 830-1998 Recommended Practice for Software Requirements specifications.
IEEE Computer Society, 1998.

2. Overall Description

2.1 Product Perspective

Expen-sieve is an ERP that helps an organization to manage its business effectively. It aims to integrate business processes and facilitate the flow of information within organization so business decisions can be data-driven.

The proposed software will be used by a firm called 'Shankar Textile' as an ERP to effectively maintain their business. It will help them in managing stock, bills, taxes, customers, products, vouchers etc. It will also help them in calculating the balance sheet and generating charts and reports based in historical data.

Expen-sieve is a web-based system to serves the needs of the firm. The stated system will be self-sufficient on its own and is not a sub part of any larger system, though that may not hold true in future development.

2.2 Product Functions

A summary of major functions that the system will perform:
1) A login facility for enabling authorized access to the system.
2) Manage (add, update or delete) customers, products, companies, accounts, stock, vouchers etc.
3) Generate invoice referring to a specific customer on a specific date for one or more products.
4) Create balance sheet keeping in consideration the profit and loss and final balances of all accounts.

2.3 User Classes and Characteristics

The only user of the system is the client himself, the software will be maintained by the owner of the firm. He will be responsible for managing the system. All the tasks such as managing products, stocks, customer etc. Generating vouchers, bills, balance sheet and taking decisions based on charts and reports will be done by him.

2.4 Operating Environment

2.4.1 Client Requirements

- Hardware requirements
    - Processor: Pentium or above
    - RAM: 512MB or above
- Software requirements
    - Operating System: Any graphical operating system.
    - Web browsers: JavaScript enabled, IE 9+, other browsers update automatically

2.4.2 Server Requirements

- 512MB RAM minimum

2.5 Tools and Technologies

- Server side: PHP
- Client side: Angular 5, HTML5, CSS3, Bootstrap.
- Database: MySQL

2.6 Assumptions and Dependencies

- The product is solely used by the owner of 'Shankar Textile' only.
- The server should always be in running state

3. System Features

3.1 Secure Login

The user should be logged in to access the ERP. User's id and password are critical information; hence they are made 128 bits secure. Once the user is successfully logged in, he is redirected to the dashboard.

3.2 Customer Management

The user can either add a new customer or edit existing one. User can also delete a customer. All the necessary information of the customer such as name, address, phone no, GST no is stored.

3.3 Invoice Management

Once a transaction is done, an invoice referring to a customer for a particular date with set of products and applied taxes is generated and saved in the database.

3.4 Inventory Management

The system will keep a track of inventory available in the stock. If the inventory is below the reorder level the admin/owner can be prompted to buy new products.

3.5 Voucher/Transaction Management

A voucher denotes a transaction, so a voucher entry includes details of a transaction such as amount, from whom the amount is sent and to whom, the date and cheque number etc. for each transaction in the system. User can add, update or delete a voucher transaction.

3.6 Company Management

The user can either add a new company or edit existing one. User can also delete a company. All the necessary information of the company like its name and description is stored.

3.7 Product Management

The user can either add a new product or edit existing one. User can also delete a product. All the necessary information of the product such as name, company, price, type, HSN code is stored.

3.8 Account Management

In traditional book keeping, everything be it a person or thing, asset or liability has an account in the books. E.g. Suspense a/c, Car a/c, Mr. Raj a/c etc. The user can either add a new account or edit existing one. User can also delete an account. All the necessary information of the account like its name, description, opening balance, date since etc. is stored.

3.9 Balance Sheet

Generate balance sheet keeping in consideration all the transactions and account balances.

3.10 Reports

Generate charts and graphs from historical data for accurate future prediction and decision making.

4. Other Nonfunctional Requirements

4.1 Performance Requirements

The server should be up and stable all the time and there should be an active internet connection for optimum utilization of the system.

4.2 Safety Requirements

If the server crashes, the data will be lost. So timely backup of the data needs to be taken in order to prevent the loss of data.

4.3 Security Requirements

User will be authenticated before using the system so that he has access to only those modules which he is authorized to use. Also, the passwords and other sensitive information will be encrypted.

4.4 Software Quality Attributes

The software will be easy to learn and use, for the owner and the employees. The UI will be minimalistic and easily understandable.