Project Title: Online Billing Software (WBS)

Category: Web-Application

WHY SRS:

This document is intended to outline the characteristics of WBS so that it can be used as a reference for developers and a software validation document for potential clients.

Purpose:

The purpose of this billing software is to reduce the overhead associated with manual calculation/computation of billing, at the same time maintaining and keeping track of bills in a convenient manner.

Intended Audience:

Stakeholders - admin, developers, target audience, funders, clients. **Users -** Businessmen, Enterprises, Shopkeepers, Vendors, Govt., officers.

Scope:

The application is made to keep track of data/bills from a wide range of businesses. Helps in getting rid of tedious manual work and overcoming issues of paper-work, security, storage in a robust and flexible manner. Thus improving the overall finance and accounting structure of the business management system.

INTRODUCTION

Existing System

The present system is a manual system which involves paper work in the form of maintaining various files/bills and manuals. Maintaining critical information in the files and manuals is full of risk and a tedious process.

A manual system has following disadvantages

- Searching, and reporting for particular information about the past bills takes a lot of time.
- In the manual system consumers need to wait a lot of time.
- Need to generate multiple copies for consumers as well as vendors.
- The manual system gives us less security for saving data, some data may be lost due to mismanagement.
- Transfer, maintenance, and storage of data is difficult.
- Fear of problems associated with physical contact.
- Inability to modify data.

Proposed System:

Overview:

Formerly, most establishments had wider crowds, with consumers having to wait up to an hour simply to collect a bill. The "Online Billing Software" is a web-based software that automates the billing and management of a network of department stores; with even the simplest of enterprises adjusting to new software and the conventional techniques of generating bills from scratch have fallen by the wayside.

This Web-based Billing Software (WBS) tool allows company owners to set up online bill management, consumers to read bills, and owners to save or download invoices for new businesses. It is developed on a network of department stores around the country.

In addition, the developer is creating an online billing webpage to handle invoices in the system and to assist clients in creating, updating, and calculating bills/invoices without having to manually list them. This software system will rely only on the internet to provide a user-friendly environment for both owners and customers.

Product Perspective:

This solution is designed for those who don't want to spend time manually maintaining bills/invoices or computing whole bill computations. Businessmen, Enterprises, Shopkeepers, Vendors, and Government Officers all utilize this.

Product Functions & advantages:

- 1. Reports are simple to implement, create, generate within no time.
- 2. No or very few paperwork.
- 3. Consistent and convenient user interface with built-in cost-cutting measures.
- 4. Easy transfer of data/bills through soft copies
- 5. Secured User Authentication and Validation.
- 6. Provides summary reports to owners monthly or weekly & yearly.
- 7. It Will Be Useful to Track and Manage Bills Efficiently.

User Needs:

User should be familiar terms like Login, Signup, Generate Bill, Print, Download invoice, Product shorthands, Logout, etc.

Principle Actors:

The two Principal Actors are Client (User) and Administrator (StakeHolder).

Assumptions and Dependencies:

WBS needs a steady, reliable online connection, and irregular updates might cause difficulties and issues when it comes to purchases and credits.

System Features and Requirements:

Functional Requirements:

The key consideration involved in functional requirements are the needs that the end user expresses as essential features that the software should provide.

This section gives a high-level summary of the system's requirements.

The system will be able to implement a variety of functional modules, including:

Signup / Registration:

If a client wishes to create an invoice or manage, download, or print a bill, he or she must first register. Unregistered users are unable to do the above tasks.

Login:

The user logs in to the online application using a valid user id and password that has been successfully validated in order to manage invoices.

Update Profile:

Logged in users can update their profiles at any point of time.

Bill Operations:

Every logged in user will be allowed to perform following functionalities:

- Generate bill
- Generate report(list bills within given time-range)
- View and delete bills
- Print/Download bills
- Mail bills
- Keep track of product count
- Get notified when product gty gets below a certain limit.

Product shorthand notations:

Every product has a shorthand representation of the entire product label. These shorthand notations can be found on user invoices, and users can search for them. We can add,edit or delete shorthand products in the list.

Logout:

Users can logout after doing the following required processes, and all session activities will be preserved in the database.

Non-functional Requirements:

In the insurance to the internet, the following Non-Functional Requirements will be present:

- (i) Secure access to a customer's personal information.
- (ii) Availability 24 hours a day, 7 days a week.
- (iii) Improved component design to improve peak performance.
- **(iv)** For future expansion, a flexible service-based architecture will be particularly desired.
- (v) System properties and limitations are defined by
 Non-Functional Requirements: Security, Reliability,
 Maintainability, Portability, Extensibility, Reusability,
 Compatibility, and Resource Utilization are some of the
 additional non-functional requirements.

Performance Requirements:

Since any number of users can use the system at any time, it is necessary to maintain an acceptable performance at the maximum number of uploads permitted from a single client. Also, connections to the servers will be dependent on the user's qualities, such as his bill calculations, and the servers will be available 24 hours a day, seven days a week.

SOFTWARE TOOLS, DEPLOYMENT, AND HARDWARE SPECIFICATIONS

S. No.	Tools / Technolo	Description and uses	Туре
1.	gy needed HTML5	Appearance of website	Front-end Software
2.	CSS3	Adding style and presentation to the web-pages	Front-end Software
3.	JavaScript	Adding interactive user behavior to web pages	Front-end Software
4	Bootstrap	front-end framework used for UI	Front-end Software
5	PHP	Server side programming and interactive with phpMyAdmin	Back-end Software
6	MySQL	For the purpose of a web database and logging application	Database Software
7.	phpMyAdmi n	Management of databases, tables, indexes, permissions	Database Software
8.	Lucidchart	a web-based proprietary platform to collaborate on drawing charts and diagrams	Design Tool Software
9.	Heroku	a container-based cloud Platform as a Service to deploy, manage, scale apps	Cloud Platform Software
10.	Visual Studio Code	a code editor redefined, optimized for building, debugging web apps	Desktop Software
11.	Chrome	a cross-platform web browser	Software
12.	Windows 10	an operating system for building apps	OS

13.	PC / Laptop	Intel based processor-run	Hardware
		computer system, which has keyboard and mouse as input devices.	

INFRASTRUCTURE REQUIREMENTS

Processor: Intel Core i5

RAM: 4GB

Hard Disk: 500 TB

DEPLOYMENT:

Operating System Server: Window 10, Linux, UNIX