

Invoice Management System

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Abstract--- It previews the whole system design while in the free demo session and clear your queries by experiencing Deluge Software digital dashboard. In the navigation system, we optimize the UI to be straightforward and comprehend for all sets of people so the employees grasp this entire operation. The Deluge Software has been developed with Semantic UI and Next JS Server. The system is efficient in generating reports, which will help in the maintenance of the hypermarket easily. This Deluge Software can store a lot of records in the database. It's a user-friendly software, which can be used for service, sales and report. It has an unlimited storage and application can be used in both online and offline. Reports for billing can be generated by data wise or pricewise. The software supports advanced features like encryption for secure communication and protection of user privacy. It offers cross-platform compatibility, allowing users to access and manage their torrents on different operating systems. Deluge also provides flexibility through its plugin system, enabling users to extend its functionality and integrate additional features. Various plugins are available, allowing users to add functionalities like RSS feed integration, remote access, automatic libelling, and more.

Keywords--- Invoice, Deluge Software, Encryption, Security.

I. INTRODUCTION

THE DELUGE SOFTWARE software can unlock many unlimited features that automatically reveal ways to attain peak performances on your sales via this billing system without any huge investments. This software is easy to use and gives affordable pricing by providing lifetime license for both online and doorstep service.

This project is ideal for the dealers and the customers. The Binary computer shop control panel can be accessed anywhere at any time. DELUGE SOFTWARE Software describes the complete process of billing the products to the customers from the binary computer shop. So, the main point of this scenario is recording the transactions to current asset. While executing the process, the dealers can manually maintain the transactions, which means, the product code or product name that are sell to the customers.

Deluge software is to provide a feature-rich and user-friendly BitTorrent client for downloading and managing torrent files. Deluge is designed to facilitate the peer-to-peer (P2P) file sharing protocol called BitTorrent, which allows users to distribute and download files from multiple sources simultaneously [1]. The existing system in Deluge software refers to the features and functionality that are already built into the Deluge BitTorrent client.

Deluge is an open-source, cross-platform BitTorrent client written in Python, and it provides a range of features for downloading and managing torrent files. Deluge software is primarily used for downloading and managing files through the BitTorrent protocol. The BitTorrent protocol is a popular peer-to-peer file sharing protocol that enables users to distribute and download large files efficiently by leveraging

the collective bandwidth of multiple peers.

Deluge allows users to download and share files using the BitTorrent protocol. It supports downloading files from various sources, including public trackers and private trackers. Users can search for and add torrent files or magnet links to Deluge to initiate the download process. Deluge is commonly used for distributing large files or files with a significant number of downloaders [2]. It excels at handling high-demand scenarios where many users want to download the same file simultaneously. By leveraging the P2P nature of BitTorrent, Deluge allows users to share the burden of hosting and distributing the file, resulting in faster and more efficient downloads.

Many open-source software projects and media organizations distribute their content using the BitTorrent protocol. Deluge enables users to download open-source software, such as Linux distributions or other large files, efficiently. By utilizing the P2P nature of BitTorrent, Deluge can significantly reduce the strain on servers when distributing large files [3]. Instead of relying solely on central servers for downloads, users share and download pieces of the file from multiple peers, reducing the bandwidth and infrastructure costs for content providers.

Deluge, like other BitTorrent clients, provides an additional layer of privacy and anonymity for users compared to traditional download methods [4]. With the decentralized nature of the BitTorrent protocol, it becomes difficult for third parties to track the activities and IP addresses of individual users. Deluge enables users to download files using the BitTorrent protocol. It supports the downloading of torrents from various sources, including public trackers and private trackers. Users can add torrent files or magnet links to Deluge

to initiate the downloading process.

Deluge provides tools and features for managing downloaded torrents. Users can prioritize and queue torrents, set download/upload speed limits, allocate bandwidth, and control the order in which files are downloaded within a torrent. It allows users to pause, resume, remove, and monitor the progress of individual torrents. Deluge offers a user-friendly interface that makes it easy to navigate, search for torrents, and manage downloads. It provides a visually appealing and intuitive design, allowing users to interact with the application effortlessly. Deluge supports customization options, allowing users to configure the interface according to their preferences.

Deluge is built with extensibility in mind. It supports a plugin system that allows users to enhance the functionality of the software. Various plugins are available, enabling users to integrate additional features such as RSS feed integration, remote access, automatic labelling, and more [5]. Deluge provides options for encryption and secure communication to protect user privacy and enhance the security of torrent downloads. Users can enable encryption for both peer-to-peer connections and communication between the client and the Deluge server.

Deluge is designed to work on multiple operating systems, including Windows, macOS, and Linux. It provides a consistent experience across different platforms, allowing users to access and manage their torrents regardless of the operating system they use. Deluge allows users to add, remove, pause, and resume torrent downloads. It provides a user-friendly interface for managing individual torrents, including options to prioritize specific files within a torrent, set download/upload limits, and manage trackers.

Deluge integrates with popular torrent search engines and websites, enabling users to search for and discover torrents directly from within the application. This feature simplifies the process of finding and adding new torrents to download. Deluge supports download scheduling, allowing users to specify time periods when downloads should be active or inactive. This feature is useful for optimizing bandwidth usage or ensuring downloads occur during off-peak hours.

Deluge enables users to prioritize and queue multiple torrents. Users can set the priority of individual torrents, control the order in which downloads are processed, and allocate bandwidth according to their preferences. Deluge provides options for managing bandwidth usage, including global and per-torrent upload/download speed limits. This allows users to control the impact of torrent downloads on their internet connection and ensures fair sharing of bandwidth. Deluge supports remote access, enabling users to control and monitor their torrent downloads from other devices or locations. Remote access can be achieved through a web-based interface or through third-party applications that integrate with the Deluge API.

Deluge offers a plugin system that allows users to extend its functionality and integrate additional features. Various plugins are available to enhance the capabilities of Deluge, such as RSS feed integration, automatic labelling, and

integration with third-party services. Deluge supports encryption for both peer-to-peer connections and the communication between the client and the Deluge server. This helps protect the privacy and security of torrent downloads. Deluge is a cross-platform client, available for Windows, macOS, and Linux operating systems. It provides a consistent experience across different platforms, allowing users to access and manage their torrents regardless of the operating system they use.

II. LITERATURE REVIEW

Alsudani et. al [6] Warehouse operations must be modified due to the complexity and variety of customer orders. Real-time and contextual data on small batch sizes and high diversity of highly customized orders are required. The timely fulfillment of orders is contingent upon the synchronization of purchase orders with production, given the frequent fluctuations in customer demands. Ineffective and inaccurate order selection has a negative impact on order fulfilment. An advanced data analysis methodology for Industry 4.0's smart logistics through global manufacturing is provided by the research using computational intelligence techniques. Computational intelligence approaches are used to develop advanced data analysis methods for Industry 4.0's smart logistics. On the other hand, based on information gathered from a case firm, IoT-SL can boost logistics productivity, picking accuracy, and efficiency. Included in the paper's smart logistics system are asset condition monitoring, smart contracts, and logistics planners. To illustrate accountability, traceability, and duty for asset management throughout the supply chain by various stakeholders taking part in a logistics scenario, a prototype solution is put into place.

Latifa et. al [7] This research aims to analyze the evolution of research findings regarding the performance, issues, and problems of e-tax invoicing in Indonesia; to ascertain the advantages of e-tax invoicing implementation for enhancing compliance; to ascertain the perceptions of users regarding the implementation of e-tax invoicing; and to ascertain the impact of e-tax invoicing performance in raising state revenue. In order to find and analyze journal articles that systematically address the research questions, this study employs the Systematic Literature Review method. The Google Scholar database was utilized to gather the articles, which were then sorted by year of publication from 2014 to 2022. The articles were then screened using quality assessment and limitations criteria, and the eligibility of the 28 remaining articles was examined. This process established the PRISMA protocol.

Abu-Qdais et. al [8] System dynamic modeling (SDM) was done for the two biggest municipalities in the nation, Greater Amman Municipality (GAM) and Greater Irbid Municipality (GIM), in order to assess the financial sustainability of the proposed policies by the NSWMS. In GAM and GIM, the cost of solid waste management accounts for 13.3% and 24%, respectively, of the total municipal budget. However, the cost of managing solid waste per ton in GAM is USD 85, while in GIM it is USD 50. In the SDM

analysis, both medium- and long-term scenarios were taken into account. The simulation showed that, using 2016 as a baseline, the cost recovery in GAM will increase to 82.5% during the midterm period (2022–2026), while in GIM it will remain at 54%. Furthermore, in 2028 and 2029, respectively, GAM and GIM will attain full cost recovery of the solid waste services over the long-term period (2027–2034) as a consequence of implementing circular economy options through recycling and composting. The effects of additional circular economy options, like waste to energy and extended producer responsibility (EPR), need to be further investigated.

Ben Hamadi and Fournès [9] With a constructivist approach to the theory of the diffusion of innovations, the goal of this paper is to comprehend the acceptance or rejection of management accounting innovations (MAIs) in the particular context of small and medium sociétés (SMEs). In order to gain insight into the perspectives of various stakeholders within the organization, the authors conducted 28 semi-structured interviews at three distinct points in time: the management controller's hiring, their introduction to the two MAIs, and the decision to accept or reject the innovations. Rogers' framework takes a constructivist approach in this instance. We can contextualize and qualitatively analyze the intrinsic perceived qualities of the innovations and organizational innovativeness thanks to the case study.

Faqihi and Miah [10] The aim of this research is to identify the new specifications needed to create a new AI-focused artifact that will effectively address talent management issues. Based primarily on a talent intelligent module, the design artefact is an intelligent HRM automation solution for talent career management. The main objective of this project is to strengthen the links between planning elements and professional assessment. Through the application of design science methodology, we examine the application of structured machine learning techniques. This method is the essential part of a comprehensive framework for AI solutions, which would be further informed by a moderation of the diffusion of innovation theory (DOI) with the technology-organization-environment (TOE) theory. This framework was developed to address issues pertaining to AI. The purpose of this framework was to address issues pertaining to AI. This study will offer suggestions for feasible methods that researchers can use to meet a company's unique needs for talent development in addition to the automated components found in talent management systems.

III. PROPOSED METHODOLOGY

3.1. Modules in the System

Administration

The administrative module is where users can generate their login credentials and register them for system access. To replace an existing password with a new one, use the "change password" button.

Register Entry

This module gives the information that windows

continually references during operation, such as profiles for each user like employee code, employee name, In/Out time.

Payrole Processing

All of the employees' data, including their salaries, is managed by this module. Daily wages and monthly salary are the two main components of the total compensation. The following pieces of information are stored in the employee record: name, address, phone number (including cell), email, date of birth, salary type (monthly or daily), and salary details. Employee salary distribution details are captured by this module on a monthly or daily basis.

Sales Bill

This module records the information about the bill number, Date and Time of the item purchased, party /customer name and the payment methods such as cash or credit or UPI payments.

Ledger

In this module all, the transactions are required on the basis of timing, where we can see the actual prise and MRP prise separately with the percentage of Tax. Basically, there are two types of ledger such as ledger book and multi ledger.

IV. SYSTEM SPECIFICATION

4.1. Software Environment

It is common practice to create a system requirements specification in reaction to a statement of requirements, such as a user requirements specification, and to utilise this document as the foundation for system design. In terms of both breadth and depth, the requirements expression differs from the system requirements specification. The latter may encompass the future system and its operating environment, but it may fail to hone many overarching ideas. Documents written in natural language have long served as the format for system needs and specifications.

4.2. Hardware Software

The required system configuration for the software development and software implementation is as follows. Hardware specification of the system that is used in this project are, DELUGE minimum requirements.

Table 1: Hardware Specification

Memory	256 MB.
Graphics card	ATI FireGL T2-128.
CPU	Intel PENTIUM 4 1.50GHz.
File Size	650 MB.
OS	Microsoft ® XP/Vista/7/8.

4.3. Software Specification

For an application, project use three basic software requirements the platform in which the project is developed, the front-end tool that provides the interaction with the users and the back- end tool that stores the data.

Table 2: Software Specification

Platform	Windows XP
Front end tool	SEMANTIC UI
Language	HTML, CSS
Backend tool	NEXT.JS

4.4. Overview of Front End

Semantic UI is a free and open-source framework for creating beautiful user interfaces with jQuery and CSS. You may make your website seem even better with its many useful features; it's basically the same as bootstrap. You can easily implement CDN semantic UI by simply searching for it on Google. Once you get the CDN link, simply insert it into your HTML head tag and you're good to go.

The core principle of semantic user interface design is that discrete interface elements, rather than HTML tags, are the fundamental building block of websites. Elements that structure and contextualise web content are known as interface elements. Some examples of these components are buttons, dropdown menus, and modals. When placed side by side on a page, they form the visual flow that is commonly associated with websites.

Create user-friendly interfaces with HTML, jQuery, and CSS with the help of the open-source Semantic UI framework. By providing Semantic themes in the form of a CSS stylesheet, the Semantic UI acts as a layer above the React components. Websites built with this front-end development framework provide total mobile responsiveness and quick, simple HTML. Semantic UI is a React-compatible framework similar to Bootstrap-React that does not require jQuery and provides a plethora of components for user interface design.

Similar to Bootstrap, Semantic UI employs a component design framework; however, it grants you finer control over the components. Semantic UI offers excellent support for theming and tends to include more modifying classes, so you can change up the styles and looks. A front-end programming framework with a themeing focus, Semantic UI is comparable to Bootstrap. It includes semantic components that are already developed, which makes it easier to use human-friendly HTML to build responsive layouts that look great.

A number of large-scale production systems have already used Semantic UI, an open-source project that is available for free. Semantic user interfaces are far from extinct. Some people in the neighbourhood are keen on keeping it going. In my opinion, an RFC repository would be a good place to talk about the project's future and how to put our decisions into action. When developing web apps, Semantic UI is an excellent framework to use.

Create a React application using components provided by Semantic UI React. The theming support provided by Semantic UI makes it easy to change the style of your components.

Semantic UI is a front-end development framework similar to bootstrap designed for theming. It contains pre-built semantic components that helps create beautiful and responsive layouts using human-friendly HTML. The framework utilizes concise HTML, intuitive JavaScript, and simplified debugging to make a front-end development a fun a

delightful experience. And it integrates with React, Angular, Meteor, Ember and many other frameworks to help organize UI layer alongside application logic.

Semantic UI is a framework that helps you build web applications. It provides a set of components for your application, tools to define responsive layouts, and flexible design support. Semantic UI uses Semantic UI React to provide integration with React. This library provides a React implementation of the component, so no additional JavaScript dependencies are required. Semantic UI uses Semantic UI themes, so you can reuse CSS style sheets to take advantage of Semantic UI themes.

Deluge is a popular open-source BitTorrent client that is written in Python. It is known for its lightweight nature and extensive feature set, making it a popular choice among users who want a powerful yet resource-friendly torrenting solution. Semantic UI is a front-end development framework that aims to provide a clean and intuitive user interface for web applications. It is built with a focus on simplicity and ease of use, offering a wide range of pre-designed components and styling options.

Semantic UI Version History

- The first pre-release appears on GitHub on September 2013, created by Jack Lukic.
- Semantic UI 1.x was first released in November 2014 with breaking changes to previous pre-releases.
- Semantic UI 2.x was first released in June 2015 and introduced new ui, several bug fixes, enhancements, and default theme improvements.

Semantic UI Browser Support

- Last 2 Versions FF, Chrome, Safari Mac
- IE 11+
- Android 4.4+, Chrome for Android 44+
- iOS Safari 7+
- Microsoft Edge 12+

Semantic Naming

Semantic UI uses descriptive class names to make it easier for developers to understand the purpose and functionality of each component.

Responsive Design

The framework provides built-in support for responsive design, allowing components to adapt to different screen sizes and devices.

Extensibility

Semantic UI is highly extensible, enabling developers to customize and modify components according to their needs. It provides theming options and allows easy integration with JavaScript libraries.

Comprehensive Documentation

Semantic UI offers comprehensive documentation with examples and guides, making it easier for developers to learn and implement its component.

Component Library

Semantic UI provides an extensive collection of ready-to-use UI components such as buttons, forms, menus, modals, grids, and more. These components can be easily integrated into Deluge's front-end to create a visually appealing and consistent user interface.

Responsive Design

Semantic UI offers built-in support for responsive design, allowing the interface to adapt seamlessly to different screen sizes and devices. This is particularly useful for Deluge as it ensures that the application remains accessible and user-friendly across various platforms.

Theming Capabilities

Semantic UI provides a theming system that allows developers to customize the appearance of the interface to match their specific needs. This feature enables Deluge to have its own unique visual style and branding, enhancing the overall user experience.

JavaScript Integration

Semantic UI offers JavaScript components and behaviours that can be used to add interactivity and dynamic functionality to the interface. This can be useful for implementing features like dropdown menus, tabbed navigation, and form validation in Deluge.

4.5. Overview of Back End

Next.js is a popular React framework used for building server-side rendered and static websites. It offers features that enhance the development experience and performance. Next.js is well-suited for building modern web applications and websites that require server-side rendering, static site generation, or a combination of both. It provides an efficient and streamlined development experience while maintaining performance and SEO benefits. Some key features of Next.js include:

Server-side Rendering

Next.js enables server-side rendering, which means that web pages are pre-rendered on the server and then sent to the client. This results in faster initial page loads and improved SEO.

Automatic Code Splitting

Next.js automatically splits JavaScript code into smaller chunks. Only the necessary code is loaded, enhancing the performance of the website.

API Routes

Next.js provides built-in API routes that allow developers to create serverless functions to handle backend operations. This simplifies the architecture by eliminating the need for a separate backend server.

Static Site Generation

Next.js supports static site generation, allowing developers to pre-generate HTML pages at build time. This

approach is useful for content-driven websites with little interactivity.

Routing

Next.js provides a simple and powerful routing system that allows for dynamic routing and nested routes.

Middleware Support

Next.js supports custom middleware, allowing developers to modify requests and responses in the server-side rendering process.

Automatic Code Splitting

Next.js optimizes performance by automatically splitting JavaScript code into smaller chunks and loading them asynchronously. This feature ensures that only the necessary code is loaded for each page, reducing initial loading times.

Next.js

Next.js, on the other hand, is a front-end framework built on top of React. It is used for developing server-side rendered (SSR) or static React applications. Next.js provides features like server-side rendering, automatic code splitting, routing, and serverless deployment, making it a powerful tool for building scalable and performant web applications.

Built-in TypeScript Support

Next.js has excellent support for TypeScript out of the box, making it easier to build type-safe applications and catch errors during development.

Extensible Plugin System

Next.js provides a plugin system that allows you to extend its capabilities. You can integrate third-party libraries, add custom server-side logic, modify the Webpack configuration, and more.

Deployment Options

Next.js applications can be deployed to various hosting platforms and environments. You can deploy to platforms like Vercel, Netlify, AWS, or run it as a Node.js server on your infrastructure.

Built-in TypeScript Support

Next.js has excellent support for TypeScript out of the box, making it easier to build type-safe applications and catch errors during development.

Hot Module Replacement (HMR)

During development, Next.js supports HMR, allowing you to see instant updates in the browser as you make changes to your code. This feature speeds up the development workflow.

Next.js

Is widely adopted by developers due to its ease of use, performance optimizations, and flexibility in handling different use cases. Whether you're building a small application or a large-scale website, Next.js provides a robust foundation for creating modern web experiences.

ADVANTAGES OF NEXT.JS

Simplified Server-side Rendering (SSR)

Next.js simplifies the process of server-side rendering by providing a built-in framework for SSR. This enables faster initial page loads, improved SEO, and a better user experience.

Improved Performance

Next.js optimizes performance through features like automatic code splitting and lazy loading. It only loads the necessary JavaScript code for each page, reducing initial load times and improving performance. Additionally, Next.js supports static site generation (SSG) and incremental static regeneration (ISR), which further enhance performance by serving pre-rendered static pages.

Developer-friendly File-based Routing

Next.js uses a file-based routing system, where each page is represented by a React component file in the /pages directory. This intuitive approach simplifies creating and organizing pages, making it easier for developers to navigate and understand the project structure.

Built-in API Routes

Next.js provides built-in API routes, allowing developers to create serverless functions to handle backend logic. This eliminates the need for setting up a separate server and simplifies the development process for server-side APIs.

CSS-in-JS Support

Next.js has built-in support for popular CSS-in-JS libraries like styled-components and Emotion. This makes it easy to write component-scoped styles, improving code organization and maintainability.

Automatic TypeScript Integration

Next.js has excellent support for TypeScript out of the box. It provides automatic TypeScript configuration and type checking, reducing development errors and making it easier to build type-safe applications.

Hot Module Replacement (HMR)

Next.js supports HMR during development, allowing developers to see instant updates in the browser as they make changes to their code. This speeds up the development workflow by eliminating the need for manual page refreshes.

Active Community and Ecosystem

Next.js has a vibrant and active community, which means developers can find ample resources, tutorials, and libraries to aid their development process. The community actively contributes to the framework's growth and ensures the availability of support and updates.

DISADVANTAGES OF NEXT.JS

Learning Curve

Next.js, like any framework, has its own learning curve. If you're new to React or server-side rendering concepts, there may be a learning curve associated with understanding Next.js

architecture, file-based routing, and server-side rendering concepts. However, if you're already familiar with React, the learning curve should be relatively manageable.

Complexity for Small Projects

Next.js is a feature-rich framework designed for building complex web applications. If you're working on a small, simple project with minimal dynamic content or interactivity, using Next.js might introduce unnecessary complexity and overhead.

Server-side Rendering Overhead

While server-side rendering offers benefits like improved SEO and initial page load time, it can introduce additional server-side processing overhead compared to client-side rendering. This can impact server performance and scalability, especially when dealing with high traffic or resource-intensive applications.

Build Time and Build Configuration Complexity

Next.js uses a build step to generate the final optimized bundle. For larger projects, the build process can take longer, impacting development turnaround time. Additionally, configuring the build process and managing advanced build setups, such as custom Webpack configurations, may require additional effort and expertise.

Limited Flexibility Compared to Custom Solutions

Next.js provides a structured and opinionated approach to building web applications. While this can be advantageous for most use cases, it may limit flexibility for highly customized or unique requirements. In such cases, building a custom solution might provide more control and flexibility.

Limited Support for Non-React Frameworks

Next.js is primarily focused on React-based applications. While it's possible to integrate other frameworks into a Next.js project, such as Angular or Vue.js, it may require additional effort and configuration. If your project heavily relies on a non-React framework, using Next.js may not be the most optimal choice.

V. RESEARCH AND DISCUSSION

5.1. Input Screen

Input Design converts the user-oriented inputs to computer-based formats. Inaccurate input data are the most common cause of errors in data processing. Error data entered by the data operator can be controlled by the input design. The goal of designing input is to make the data entry easy, logical and as free from errors as much as possible.

The proposed system is completely menu driven. It is a powerful tool for interactive design. It helps the user comprehend the range of alternatives available and also prevents them from making an invalid selection. All entry screens are interactive in nature. It has been designed taking into account all the constraints of the end-user.

- The form title clearly states the purpose of the form.
- Adequate space is given for data entry.
- Data validation is done for eliminating duplicate entries.

Input Form 1

Fig. 1 - Input Form 1

Fig 1, describes about the menu items that are listed in the home page of the proposed system. In order to enter into the home page of this Dealer Management System software, the dealer should use a username and password. The main

categories in this home page is master, sales, service, parts and lastly reports.

Input Form 2

Fig. 2 - Input Form 2

Fig 2, describes about the creation of a quick invoice where multiple options like add receipt, service activation, create vehicle invoice, save and cancel are available. This create quick invoice page can be opened by clicking the reports dropdown menu which is used to create a quick invoice report by the showroom dealer.

Input Form 3

The screenshot shows the 'New Invoice' form in the Zoho Books application. The 'Other Details' tab is active, displaying various fields for customer information and invoice settings. A dropdown menu for 'GST Treatment' is open, showing options for 'Registered Business - Regular', 'Registered Business - Composition', and 'Unregistered Business'. The form also includes fields for 'Customer Email', 'Customer Phone', 'Place of Supply', 'Tax Preference', 'Currency', 'Opening Balance', 'Payment Terms', 'Enable Portal', 'Portal Language', and 'Customer Owner'.

Fig. 3 - Input Form 3

Input Form 4

The screenshot shows the 'New Invoice' form in the Zoho Books application, with the 'Address' tab selected. It displays two main sections: 'BILLING ADDRESS' and 'SHIPPING ADDRESS'. Each section contains fields for 'Attention', 'Country / Region', 'Street 1', 'Street 2', 'City', 'State', 'Zip Code', 'Phone', and 'Fax'. A 'Copy Billing Address' button is located at the top right of the shipping address section. A note at the bottom states: 'You can add and manage additional addresses from contact details section. View and edit the address format of your transactions under Settings > Preferences > Customers and Vendors.'

Fig. 4 - Input Form 4

Input Form 5

The screenshot shows the 'New Invoice' form in the Zoho Books application, with the 'ITEM DETAILS' tab selected. It features a 'Salesperson' dropdown, a 'Finance Partner' dropdown, and a table for item details. The table has columns for 'ITEM DETAILS', 'QUANTITY', 'RATE', 'TAX', and 'AMOUNT'. A 'Bulk Update Line Items' button is located at the top right of the table. The table contains one row with a quantity of '1.00', a rate of '0.00', and a total amount of '0.00'. A 'Sub Total' section shows a total of '0.00' and a 'Discount' of '0.00'.

Fig. 5 - Input Form 5

5.2. Table Design

The general theme behind a database is to handle information in an integrated manner. There is none of the artificiality that is normally embedded in separate files or applications. A database is a collection of interrelated data stored with minimum redundancy to serve many users quickly and efficiently.

The general objective is to make information access easy, quick, inexpensive and flexible for the user. In a database environment, common data are available which several authorized users can use. The concept behind a database is an integrated collection of data and provides a centralized access to the data from the program. It makes it possible to treat data as a separate resource. While designing database, several objectives must be considered.

- Controlled redundancy
- Data Independence
- More information at low cost
- Accuracy and Integrity
- Recovery from failure
- Privacy and security
- Performance

Table 3: Login Details

FIELD NAME	Data Type	Constraints	Description
Username	varchar (10)	Not null	Username of the Admin
Password	varchar (10)	Not null	Password Information
Date	varchar (10)	Not null	Current Date

The Table 3 describes the login details. The table consists of the following attributes: username, password and date.

Table 4: Item Details

Field name	Data type	Constraints	Description
Item id	int (10)	Primary key	Id of The Item
Item description	Varchar (10)	Not Null	Items in the Store
Item price	Float (30)	Not Null	Price of The Item
Item quantity	int (20)	Not Null	Quantity of The Item

The Table 4 describes the store details of the proposed system. In the table Item id is the primary key. The table consist of the following attributes Item description, Item quantity, Item Price.

Table 5: Bill Details

Field name	Data type	Constraints	Description
Bill id	int (10)	Primary key	Bill Id
Bill description	varchar (20)	Not Null	Products Information in the Bill

The Table 5 describes about the bill details. In this table bill id is the primary key. The table includes the following attributes bill id, bill description.

Table 6: Customer Details

FIELD NAME	DATA TYPE	Constraints	Description
Customer Name	varchar (35)	Not Null	Name of the customer
Customer Address		Not null	Name of the address
Customer number		Not Null	Phone number of the customer

The Tables 6 describes about the customers details. In this table consist of the following Attributes customer name, customer address, customer phone number.

5.3. Output Design

Outputs are the most important and direct source of information to the customer and management. Intelligent output design will improve the system's relationship with the user and help in decision making. Outputs are used to make permanent hard copy of the results for later consultation. The output generated by the system is often regarded as the criteria for evaluating the performance of the system.

- Usefulness determining the various outputs to be printed to the system user.
- Differentiating between the outputs to be displayed and those to be printed.
- The format for the presentation of the output.

For the proposed system, it is necessary that the output should be compatible with the existing manual reports. The outputs have been formatted with this consideration in mind. The outputs are obtained after all the phase, from the system can be displayed or can be produced in the hard copy. The hard copy is highly preferred since it can be used by the controller section for future reference and it can be used for maintaining the record.

Output Form 1

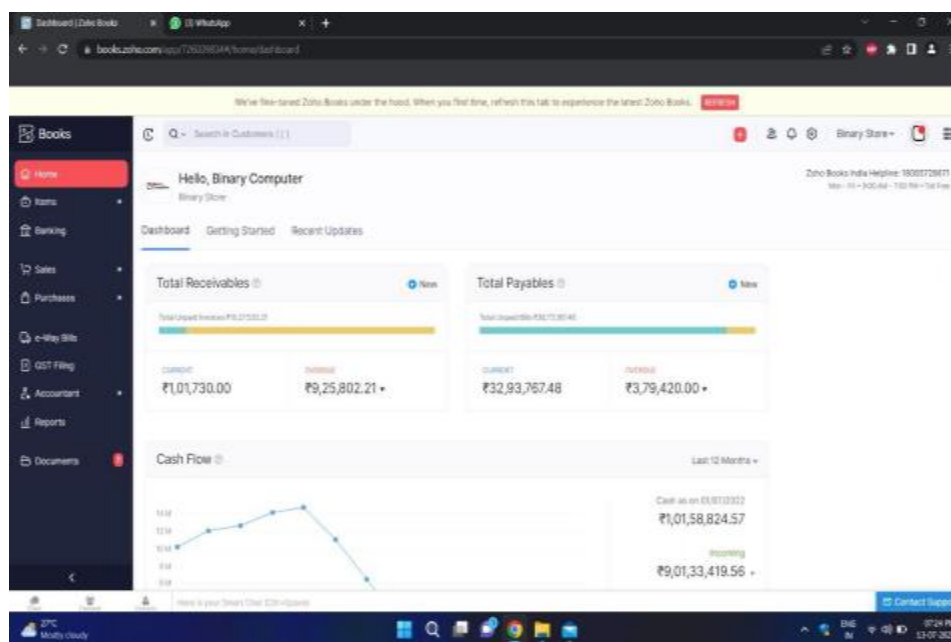


Fig. 6 - Output Form 1

Output Form 2

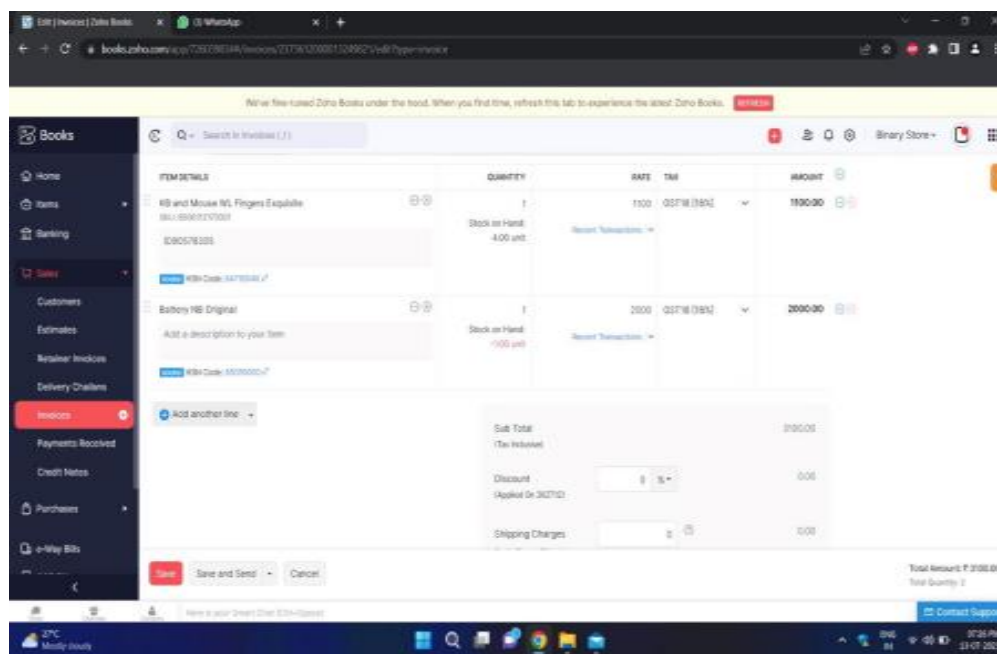


Fig. 7 - Output Form 2

VI. CONCLUSION

Deluge is a software is used by computer dealers and owners to effectively maintain the data regarding sales of vehicles and retrieve the available types in the store. This system has been designed in such a way that any future enhancement to it will not impact any existing data. Database is designed in such a way that it handles huge volume of data without database crash. Also, I learnt how the application works & its design in both backend and front end.

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