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GAN-CS155-2L/BM2

## Title: Marie's Printing Service Sales Management System

### *Project Description*

Marie's Printing Service Sales Management System is a stand-alone software application that intends to boost the overall efficiency and productivity rate of Marie's Printing Service and alleviate the business's concern regarding its ineffective sales monitoring strategies. In creating this software product, the developers will utilize Java and PHP programming languages. Java is used to develop the software application's user interface and core functionalities. Meanwhile, PHP is employed for queries in the system database in which all the information inputted into the software are stored and accessed. Moreover, the project will be designed for laptops and desktop computers with 1440 x 1024 resolutions.

The software generated in this venture is a single-user type, i.e., it exclusively accepts one account. The underlying reason behind creating an account is to guarantee information security. Furthermore, the software is connected only to a local database. In other words, the application is only connected to a database in a specific file directory. Moving the database to another location or attempting to access it from other computers is not advisable as remote computers do not have access to it, and relocating the database would cause the software to lose the database connection.

Function-wise, Marie's Printing Service Sales Management System allows the user to create an account that would grant entry to the software's features. It also entails a "reset password" feature in case the user forgets their account password. In addition, the software allows the user to add sales records. The application also enables the user to keep track of the gross sales, the total number of products sold, and the overall profit amassed. In addition, the software allows the user to view the sales, quantity sold, and profits procured by each marketed product.

Besides, it is not the user who computes the sales, the total quantity of items marketed, and profits earned. Instead, the system performs these calculations. The user merely needs to specify the product name, product type, and the number of items sold for the system to compute the individual and overall sales, quantity of products sold, and profit generated.

Furthermore, the system allows the user to delete records. This function is necessary as the user may erroneously add records to the database, thus compromising information integrity. Also, the system can keep track of the date when a record is added to the database. Furthermore, the system allows the user to create sales goals. Similarly, the system notifies the user when a particular sales goal is attained.

For the team, the software's usability, distinctiveness, innovativeness, and relevance comprise the project's good angles. In the context of usability, the software developed entails a user-friendly interface. To illustrate, the developers designed the user interface guaranteeing that the functions of each software component will be explicitly defined. Also, the team included guiding information in the interface to ensure the user's smooth experience.

Moving forward, the functionalities and features of Marie's Printing Service Sales Management System illustrate the project's distinctiveness and innovativeness. Typically, a sales management system software captures user input and displays it upon the user's command. It does not involve calculations.

However, in this project, the developers intend to devise a sales management system software that transcends the usual functions of a sales management system software. To expound, Marie's Printing Service Sales Management System entails mathematical abilities. Notably, it can perform calculations-based on user input. Additionally, it has a log-in system that grants information security.

These features accentuate the project's uniqueness and innovativeness. In terms of relevance, the project serves as a feasible solution to the concern of several companies regarding the lack of an effective sales management system. Furthermore, the project can aid in humanity's quest to maximize the potential of technology in uplifting the quality of human life. The project can contribute to the growing literature on software engineering in business.

## *Objectives*

Overall, the project intends to devise an automated sales management system for Marie's Printing Service that will substantially boost the business's productivity and efficiency. It also intends to provide a solution to the ineffective sales management methods of Marie's Printing Service. Specifically, the project aims to attain the following goals:

- Develop an automated sales management system software that can compute the total sales, the total number of items sold, and the gross income procured by the business.
- Create a sales management system software that can calculate individual product sales, items sold by each product, and profit amassed per product.
- Implement a sales management system software that allows the user to view overall sales, the number of products marketed, the gross profit earned by the business, the individual sales record of each product, and the date in which a record is added to the database.
- Design a sales management system that allows the user to create sales goals and notifies the user when a sales goal is reached.
- Implement a software application that allows the user to add, update, and remove sales records to the database.
- Design a software application that is safe, secure, reliable, and easily navigable.
- Resolve the old-fashioned sales tracking mechanism of Marie's Printing Service and replace it with an automated sales management system that is relatively more efficient and effective than the former method.

## *Scope*

This project exclusively focused on creating an effective sales management system software that resolves the current problem of Marie's Printing Service regarding its ineffective sales monitoring technique. From the data gathered by the developers from the client, the product developed by this undertaking only accepts a single user and is connected to a local database. It also allows its user to track the overall product sales, the total number of products marketed, the gross profit earned, the sales records of each

product, and the date in which a specific record is added. Also, the application should enable the user to The software's specifications will not go beyond these agreed terms.

The software application created in this undertaking solely utilized PHP and Java languages. Furthermore, the product generated in this undertaking is not intended for commercial purposes or public access. Instead, it is only devised for Marie's Printing Service and will be used as part of the group's accomplishment in their final project for the course Software Engineering II Laboratory (CS155-2L). The project is set to be completed during the 3rd term of S.Y. 2022 - 2023 in Mapua University-Makati Campus.

### *Significance*

The project devised an effective sales management system software for Marie's Printing Service. The software developed can monitor the business' sales status, both through the overall and product-specific lenses. Overall, the project can contribute to expanding knowledge of the applications of software in the business realm. Specifically, the project will be beneficial to the following stakeholders:

#### ***Marie's Printing Service***

Broadly, the venture will resolve Marie's Printing Service's concern regarding the ineffective and error-prone sales management system the company currently utilizes. Furthermore, the project will significantly boost the business' productivity and efficiency, especially in sales monitoring. Moreover, the project will aid Marie's Printing Service's business owner in creating sound business decisions and formulating effective business strategies, as the software will allow them to view the current status of the company's sales, both in the overall and product-specific views.

#### ***Software developers***

The project will aid software developers in advancing the use of software technologies in business. Moreover, the project may open opportunities for budding and professional software developers to enhance the capacities of sales management system software currently developed in the market.

#### ***The Public***

The project will help the public realize that software applications can be used to solve real-world concerns. In addition, the project will enhance the general audience's awareness of the capacity of technology to uplift the quality of human life.

#### *Functional Requirements*

<b>Name</b>	<b>Description</b>
Create New Account	<p>This function enables the user to register a new account into the system. The user must enter the necessary user information.</p> <p>Required Information:</p> <ul style="list-style-type: none"><li>- Username (at least 3 characters)</li><li>- Password (2x, at least 8 characters)</li></ul> <p>Optional Information:</p> <ul style="list-style-type: none"><li>- Mobile Number (11 digits)</li><li>- Email Address</li></ul>
User Login	<p>This function enables the user to login into the system. In performing this activity, the user must input the correct login credentials associated with their account.</p>
User Logout	<p>This function enables the user to log out of the system.</p>
Reset Password	<p>This function serves as an error-handling mechanism in the event that a user forgets their account password. It enables the user to reset their account password, provided that they entered the correct username. This function requires the user to input the necessary information to reset or recreate their account's password.</p> <p>Required Information:</p> <ul style="list-style-type: none"><li>- Username (for account verification)</li><li>- Password (2x)</li></ul>
Add New Record	<p>This function enables the user to create a new record of business transactions made within the day. This feature</p>

	<p>requires the user to input the product name, type of product, and the number of products sold by the business.</p> <p>Required Information:</p> <ul style="list-style-type: none"> <li>- Name of the Product/s sold</li> <li>- Type of the Product/s sold</li> <li>- Quantity of the Product/s sold</li> </ul>
View Summary of Records	<p>This function allows the user to access the records stored in the system database. The user has several options to view existing records:</p> <ul style="list-style-type: none"> <li>- Hovering over the component that contains the Product Name (presents the overall sales, quantity of items sold, and profit generated of the product)</li> <li>- Specific Details (presents the overall sales, amount of items sold, and profit generated of each type of product)</li> </ul>
View Database History	<p>This function allows the system to display all the records or transactions made by the user to the database with their corresponding dates.</p>
Delete an Existing Record	<p>This function enables the user to delete an existing record from the database.</p>
Compute for Overall Sales	<p>This function allows the system to compute the sales generated by the product.</p> <p>Required Information:</p> <ul style="list-style-type: none"> <li>- Name of the Product/s sold</li> <li>- Type of the Product/s sold</li> <li>- Quantity of the Product/s sold</li> </ul>
Compute for Overall Profit	<p>This function allows the system to compute the profit generated by the product.</p> <p>Required Information:</p> <ul style="list-style-type: none"> <li>- Name of the Product/s sold</li> <li>- Type of the Product/s sold</li> <li>- Quantity of the Product/s sold</li> </ul>

Compute for Total products sold	<p>This function computes the total amount of all the products sold.</p> <p>Required Information:</p> <ul style="list-style-type: none"> <li>- Name of the Product/s sold</li> <li>- Type of the Product/s sold</li> <li>- Quantity of the Product/s sold</li> </ul>
Compute for the Sales of a specific product type	<p>This function allows the system to compute the sales on a specified product type.</p> <p>Required Information:</p> <ul style="list-style-type: none"> <li>- Name of the Product/s sold</li> <li>- Type of the Product/s sold</li> <li>- Quantity of the Product/s sold</li> </ul>
Compute for the Number of Items Sold by a specific product type	<p>This function allows the system to compute the sales on a specified product type.</p> <p>Required Information:</p> <ul style="list-style-type: none"> <li>- Name of the Product/s sold</li> <li>- Type of the Product/s sold</li> <li>- Quantity of the Product/s sold</li> </ul>
Compute for the Sales of a specific product type	<p>This function allows the system to compute the sales on a specified product type.</p> <p>Required Information:</p> <ul style="list-style-type: none"> <li>- Name of the Product/s sold</li> <li>- Type of the Product/s sold</li> <li>- Quantity of the Product/s sold</li> </ul>
Create Sales Goal	<p>This function allows the user to set daily sales goal for the products, e.g., average profit in a specific period of time.</p> <p>Required Information:</p> <ul style="list-style-type: none"> <li>- Targeted Sales</li> </ul>
Notify user that a Sales Goal has been reached	<p>This function allows the system to notify the user when the current sales is greater than or equal to the targeted sales.</p> <p>Required Information:</p>



	<ul style="list-style-type: none"> <li>- Targeted Sales</li> <li>- Current Sales</li> </ul>
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## *Non-Functional Requirements*

### *a. Security*

The software implements a secure, simple log-in system that enables the user to create an account, access the software's features and functionalities, and sign out of the system. This ensures that all information entered by the user is secure. In addition, the log-in system guarantees that unauthorized users will not be easily granted access to the software's features. Furthermore, the local database to which the software is connected is only accessible to one local host, i.e., the computer to which the database is located. The local database also has a password, which further enhances the system's security.

### *b. Usability*

The software encompasses features that are operational and aligned to the user's needs. Also, it entails effective error-handling mechanisms. To expound, the software has a feature that allows the user to reset their password. Furthermore, the software displays prompt messages in case the user makes an invalid input. Also, the software has information integrated into the user interface as to how to navigate through the software.

### *c. Appearance*

The UI was created with straightforward navigation, concise labeling, and visually appealing graphics to make it easy for the user to understand and use the program's various features and functions. By designing the UI with the user's needs and preferences in mind, the program is more likely to be adopted and used effectively, leading to better business results and customer satisfaction.