Laundry Booking Management System.

Ansh Tyagi , Aradhy Tripathi , Ashok Singh

ABES Engineering College , Ghaziabad

ABSTRACT

We outline the development of a laundry booking management system (LBMS) for use in a laundry facility. Laundry companies frequently struggle to maintain accurate records of their customers' clothing; this minor issue, as it is perceived by the majority of laundry companies, is very discouraging because it leaves customers feeling disappointed as a result of problems like customer clothing mix-ups and tardy retrieval of clothes. This application's goal is to count the items that have been collected in relation to their owners, since doing so enables users to choose a date for the collection of their belongings. Additionally, client information is protected since each registration is given a unique ID to prevent the mixing of information.

(Keywords: customer satisfaction, database, HTML, laundry, management, SQL)

INTRODUCTION

Currently, crucial information is managed and maintained manually by laundry companies. With data repositories dispersed throughout the laundry management infrastructure, the existing method necessitates several paper forms. Information (on forms) is frequently inaccurate or does not adhere to management standards. Records frequently disappear in the course of calculation, necessitating a thorough auditing procedure to guarantee that no crucial data is lost. The washing firm's data has many copies of the same information, which might cause discrepancies in the data across different data storage.

Any laundry business's functioning includes a substantial amount of information gathering, administration, and prompt retrieval. Typically, this information includes custom

Personal data and garment record histories, user data, delivery and retrieval costs, user scheduling with regard to customer information and service interactions, and a waiting list for our packages are all included. In order to make the most use of the organization's resources, all of this information needs to be managed properly and economically.

Automating the operation of the laundry company with a laundry management system will increase its efficiency and eliminate errors. It aims to standardise data, consolidate data, ensure data integrity, and reduce inconsistencies through the use of a highly automated process that is stress-free, dependable, and quick for both users and the staff in charge of the registration and laundry management processes, using the asp.net computer programming language and SQL database application. While the SQL database will be at the back-end to manage the data storage process, HTML will be at the front-end and give the graphical user interface that interacts with the user.

EXISTING SYSTEM

Critical information is presently managed and maintained manually by the laundry company. Currently, the infrastructure for managing laundry firms is made up of several paper forms and data repositories. Information (on forms) is frequently inaccurate or does not adhere to management standards. Forms frequently disappear while being transported between departments, necessitating a thorough auditing procedure to guarantee that no crucial data is lost. Due to the number of opposing client information and the resulting data errors, the washing company's garments have been mixed up.

thus leads to delay in collecting the clothes back.

PROPOSED SYSTEM

Any laundry business may use the Laundry Booking Management System to replace their current manual, paper-based system. The new system controls client information, items, services, users, carts, and receipts through an electronic registration system. The objective is to reduce the time and resources now needed for operations like limiting clothing information to a certain consumer with a given ID by providing these services in an efficient, cost-effective manner. Since the current system relies on time-consuming administrative duties, a tonne of paper labour, and cumbersome administrative procedures, complete information cannot be obtained from busy clients.

The asp.net computer programming language and SQL database application are used in the laundry management system to provide users and staff members in charge of customer registration and laundry management processes with a stress-free, dependable, and quick computerised process. While the SQL database will be at the back-end to manage the data storage process, HTML will be at the front-end and give the graphical user interface that interacts with the user.

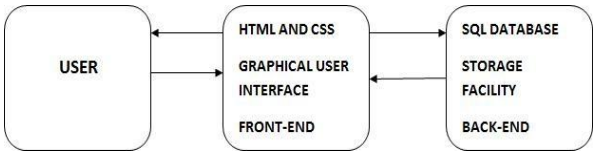

Figure 1: Diagram of the Front and Back End Relationship.

The goal of this work is to put in place a management system that will simplify the registration process, cut down on paperwork and administrative duties, and enhance the registration cycle process flow.

LITETRATURE REVIEW

This section takes critical review of existing system implemented, the success factors, challenges faced, technologies used and unresolved problems. This forms the basis for implementing later versions.

EXISTING SYSTEM OVER PROPOSED SYSTEM

The suggested system aims to make user operation simpler. If the registration procedure is to be quicker and more convenient, the number of steps must be cut down to the absolute minimum. The outdated method of registration that relies on paper-based procedures is costly and time-consuming. Customers may be guaranteed that their items will be available and secure when needed since information is safeguarded using a unique ID.

Increased client volume will inevitably result in additional paperwork and decreased efficiency of the current system. As a result, many laundry businesses consider the suggested approach to be a better and more practical solution to the drawbacks and inefficiencies of the current registration system. The suggested system for washing companies is crucial to the transition and, if it is successfully put into place, should be able to:

Reduce the amount of paperwork and duplication, which will increase productivity and bring down the cost of printing and acquiring registration materials each year. By enabling the user to quickly search for any client, it helps the administrative team manage customer data.

MATERIALS AND METHODS

System Analysis and Design

The process of disassembling a system into its component elements and studying how well each one functions and interacts with the others to achieve its goal is known as system analysis. It entails the steps of listing the current issues, weighing the costs and advantages of the suggested system, examining the needs of the system and its users, and taking into consideration potential alternatives.

The design of later systems benefits from system analysis. System design entails design processes that result in system specifications that meet the functional requirements.

requirements created throughout the system analysis procedure. System analysis is essentially structurally implemented through system design. Users of the proposed system just need to provide their customer information; this information is then loaded into a computer database. On registration, customers will receive a particular ID.

TOOLS

Graphical User Interface

The fundamental language used to create web pages and other content that can be seen in a web browser is called Hyper-Text Markup Language (HTML). A web browser's job is to read HTML files and combine them into visually or aurally appealing online pages. The HTML tags are used by the browser to decipher the page's meaning even if they are not shown.

Hyper-Text Markup Language

All websites are built using HTML components, which also enable the embedding of pictures and objects and the creation of interactive forms. By designating structural semantics for text like as headings, paragraphs, lists, links, quotations, and more, it offers a way to build organised texts. It can also incorporate programmes that modify how HTML web pages behave, such as JavaScript scripts.

Tags and their attributes, character-based data types, character references, and entity references are only a few of the essential parts of HTML. The document type declaration, which starts standards mode rendering, is a crucial element.

Cascading Style Sheets

When specifying the appearance and formatting of a document created in a markup language, CSS is employed. The language may be used to style any type of XML document, including plain XML, SVG, and XUL. However, it is most frequently used to style web pages and interfaces written in HTML and XHTML. The main purpose of CSS is to make it possible to separate document content from document appearance, including things like layout, typefaces and colours. By providing tableless web design, for example, this increases content accessibility, offers freedom and control in the definition of display features, allows numerous pages to share formatting, and lowers complexity and duplication in the structural content.

The same HTML page may be rendered using several rendering techniques, such as on-screen, in print, and on Braille-based tactile devices, by using CSS. If more than one style rule matches against a certain element, CSS defines a priority mechanism to determine which style rules should take precedence. In order to make the outcomes predictable, priorities are determined and given to rules.

Client-side Script(JAVASCRIPT)

A new programming language for WebPages is called JavaScript. Java script-created scripts may be integrated into your HTML sites. Java script gives you a lot of options for adding engaging components to your HTML page. You can simply reply to user-initiated events, for instance. Until recently, only CGI could achieve some of the effects that are now achievable with Java script. As a result, Java Script may be used to develop extremely complex web pages.

SQL(Structured Query Language)

You must employ a set of instructions and statements (a language) established by the DBMS programme in order to interact with the data in a database. Relational databases support a variety of languages, the most popular of which being SQL. Standards for SQL have been established by both the American National Standards Institute (ANSI) and the International Standards Organisation (ISO). The Entry Level of SQL-92, the most recent SQL standard (released in 1992), is supported by the majority of current DBMS solutions.

SQL Server Features

Microsoft SQL Server supports a set of features that result in the following benefits:

- **Ease of installation, deployment, and use:** SQL Server includes a set of administrative and development tools that improve your ability to

install, deploy, manage, and use SQL Server across several sites.

- **Scalability:** The same database engine can be used across platforms ranging from laptop computers running Microsoft Windows® 95/98 to large, multiprocessor servers running Microsoft Windows NT®, Enterprise Edition.

- **Data warehousing:** SQL Server includes tools for extracting and analyzing summary data for online analytical processing (OLAP). SQL Server also includes tools for visually designing databases and analyzing data using English-based questions.

- **System integration with other server software:** SQL Server integrates with e-mail, the Internet, and Windows.

System Requirement

System requirement is a description of the needs of a user for an information system. The unique requirements of a user are identified here.

User Requirements

To gain access to the laundry management system resources, the user would need:

- A personal computer
- A username
- A genuine password

User-Interface Requirements

User interfaces are the registration pages developed for the customers and users to register and manage the items brought. They consist of the following:

- login page (Username and password)
- Product page
- View customers
- View records
- Search for customers
- Register a new user
- Print Receipt

Modeling The System

The laundry application flow diagram is shown below:

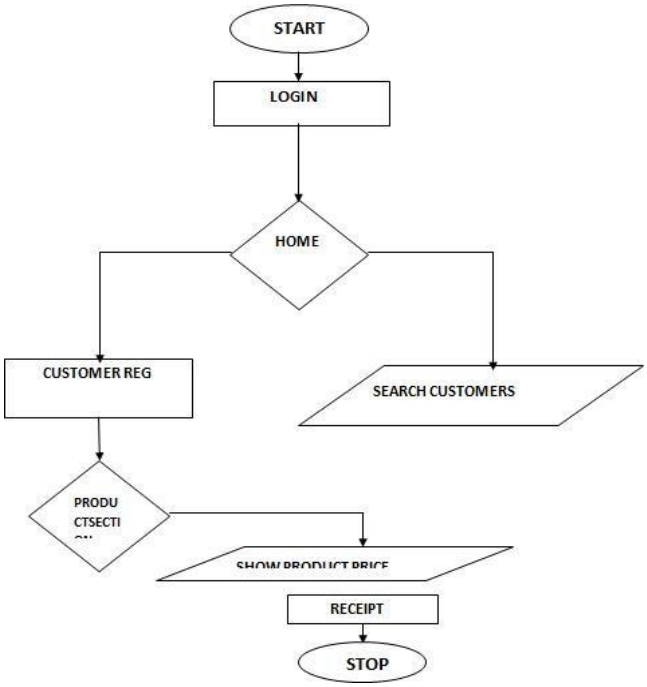

Figure 1: Flow Chart Diagram.

DATAFLOW DIAGRAM

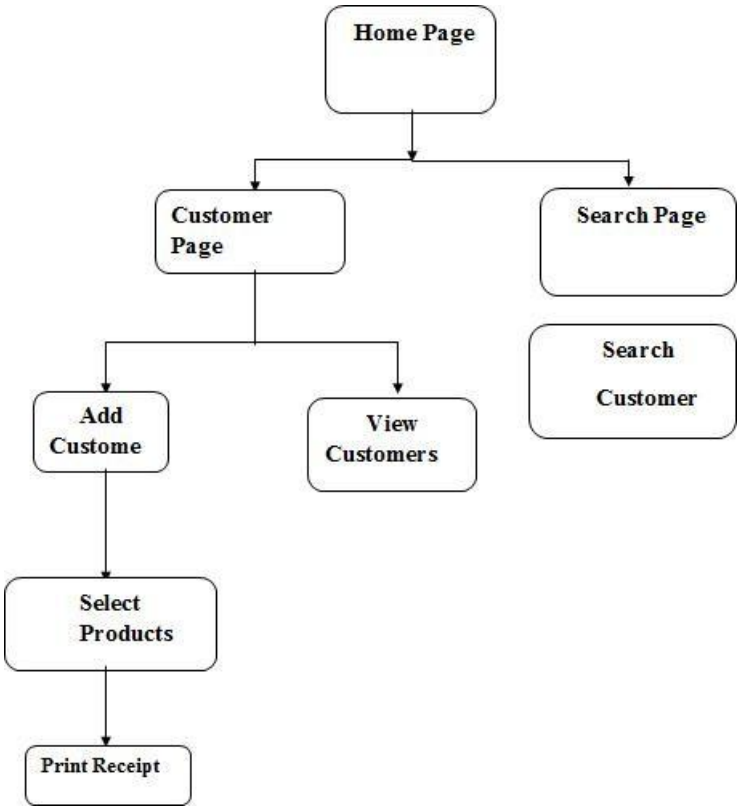

Figure 2: Laundry Application Flowchart.

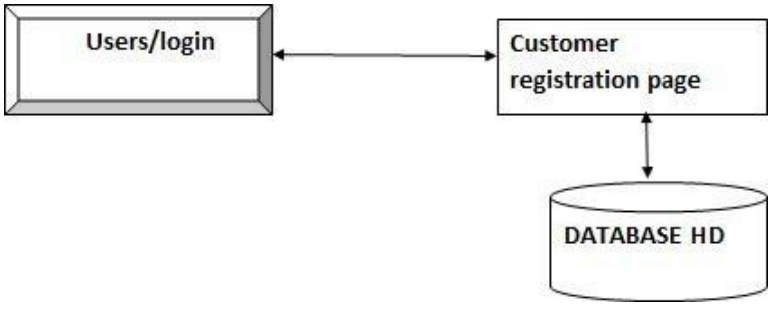

Figure 3: System Design and Architecture.

DESIGN IMPLEMENTATION AND RESULTS

Design implementation refers to the real live running of the designed program. This section consists of the program modules, showing what they do, and how the system can be deployed.

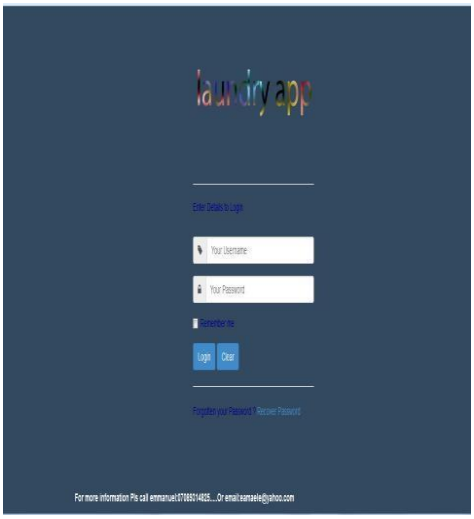

Figure 4: Login Page.

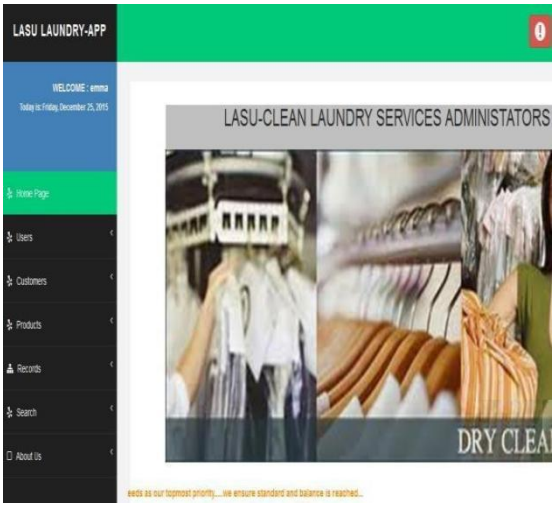

Figure 5: Homepage.

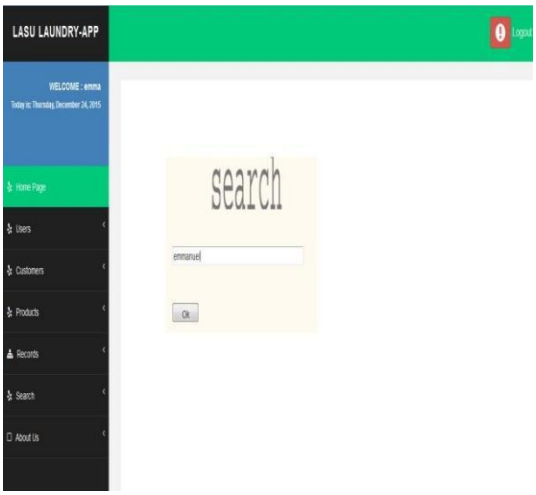

Figure 6: Search Customer Page.

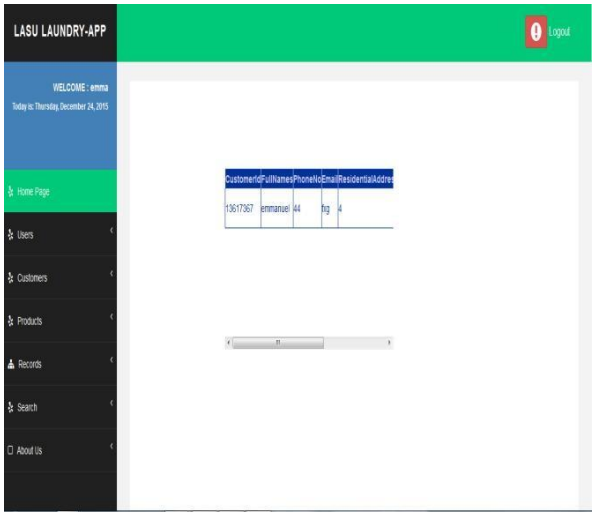

Figure 7: Searched Customer Page.

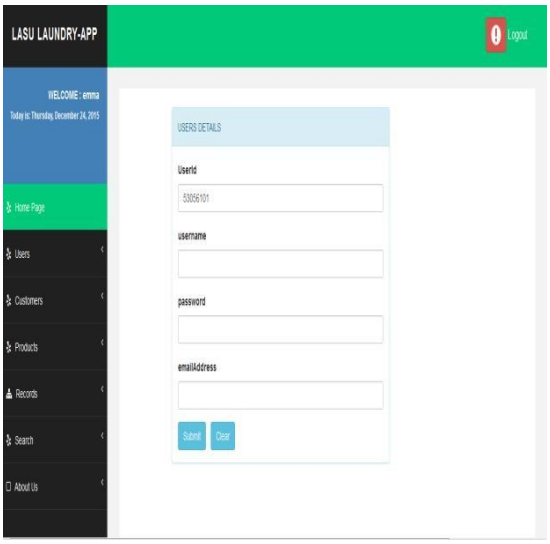

Figure 8: User Registration Page.

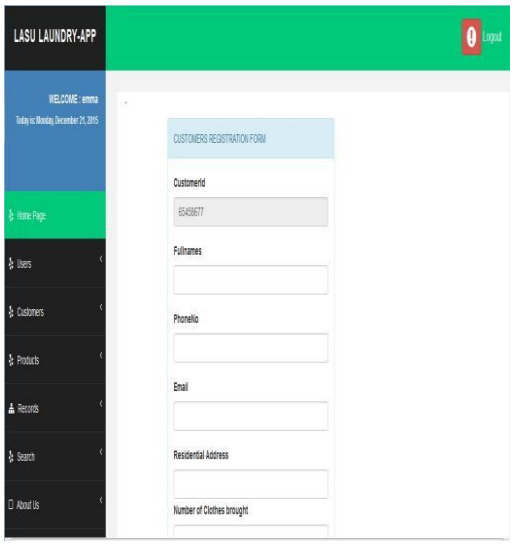

Figure 9: Customer Registration Page.

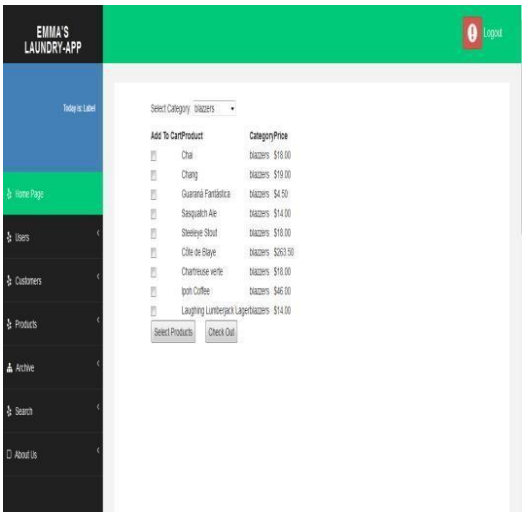

Figure 10: Products Page.

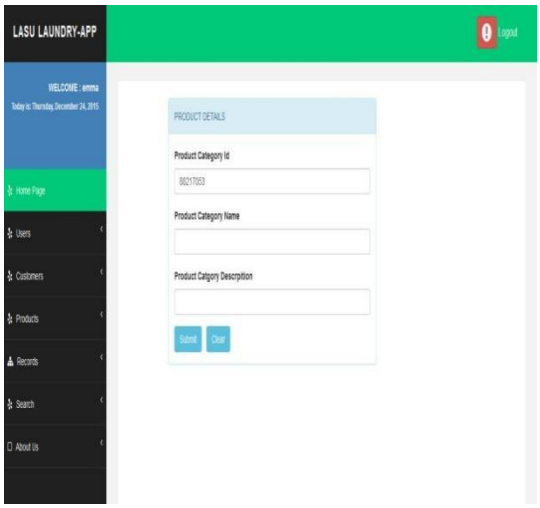

Figure 11: Product Registration Page.

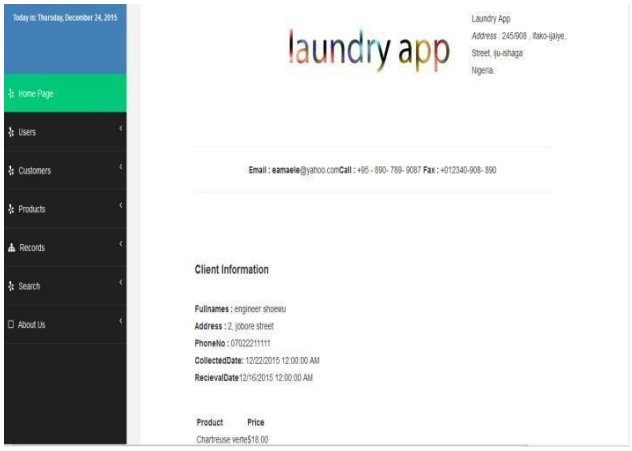

Figure 12: Receipt Page**.**

CONCLUSION

The package was created in a way that makes future changes simple. The project's evolution allows for the deduction of the following conclusion.

- Automation of the entire system improves the efficiency.
- It offers a user-friendly graphical user interface that is superior to the current system.
- When compared to the current system, it offers a user-friendly graphical interface that is superior.
- Depending on their permissions, it grants the authorised users the proper access.
- Updating of information becomes so easier.
- The System has adequate scope for modification in future if it is necessary.

REFERENCES

1. Lawrence, Corbitt, Fisher, and Tidwell. 2000. *Internet Commerce: Digital Models for Business.* Wiley: Sidney, Australia.
2. Phillips, P. 2003. *e-Business Strategy*. McGraw-Hill: London, UK.
3. Whitten, Bentley, and Dittman. 2004. *System Analysis and Design Methods (5th ed)*. New York, NY.
4. PerlScriptsJavaScripts.com. 2006. “SQL Tutorial, Database Commands, Beginners Guide, Perl, Program”. http://www.perlscriptsjavascripts.com/tutorials/sql/index.html, Accessed 3rd of February, 2006.
5. HTML Elements. W3schools. Retrieved 16 March, 2015. *Journals of science of technology*
6. CSS Introduction. W3schools. Retrieved 16 March, 2015.
7. XHTML.com. Retrieved on 16 May, 2012.
8. SQL: Project Summary. Black Duck Software. Retrieved 17 September, 2012. *Journals of Contemporary Mathematical Science.*
9. ASP Manual: www.asp.net
10. ASP for Windows: asp.net. Retrieved 29 October, 2013. https://wikipedia.org/wiki/ASP

SUGGESTED CITATION

Shoewu, O., N.T. Makanjuola, D.A. Phillips, and A. Emmanuel. 2016. “Design and Implementation of a Laundry Management System”. *Pacific Journal of Science and Technology*. 17(2):197-204.