**DC SCHOOL OF MANAGEMENT**

**AND TECHNOLOGY**

**PULLIKKANAM, VAGAMON**

**(Affiliated to Mahatma Gandhi University, Kottayam)**

**DEPARTEMENT OF COMPUTER APPLICATIONS**



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**SEMESTER-V**

**PROJECT REPORT ON  
 LAUNTECH**

**(LAUNDRY MANAGAMENT SYSTEM)**

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**PROJECT REPORT ON  
 LAUNTECH**

**(LAUNDRY MANAGAMENT SYSTEM)**

**Submitted in partial fulfilment of the requirements for the**

**award of the degree of**

**BACHELOR OF COMPUTER APPLICATION**

**Guided by: Pro.Renjitha R Submitted By:**

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**Certificate**

*This is to certify that the project entitled “LAUNTECH” submitted in partial fulfilment for the award of the degree of BACHELOR OF COMPUTER APPLICATION*

*is a bonafide report of the project done by* ***Adarsh E V*** *(Reg no:* ***210021092245****)*

*during the year 2022-23.*

**Internal Guide Head of the Department**

**Pro.Renjitha R Pro.Renjitha R**

**Examiner Collage Seal**

**DECLARATION**

*I hereby declare that this project work entitled “LAUNTECH” is a record of original work done by me under the guidance of Pro.Renjitha R, Associate Professor, Department of Computer Applications and the work has not formed the basis for the award of any degree or diploma or similar title to any candidate of any university subject.*

**Internal Guide Signature of Student**

**Pro.Renjitha R**

**ACKNOWLEDGEMET**

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I would like to express my sincere gratitude to everyone who contributed to the successful completion of this project.

This Laundry Management System, 'Launtech,' would not have been possible without the collaborative efforts and support of numerous individuals. First and foremost, I extend my heartfelt thanks to my project guide **Pro.Renjitha R**, whose guidance, expertise, and unwavering support were invaluable throughout this journey. Your mentorship and insightful feedback played a pivotal role in shaping the project into what it is today. I would like to thank my friends and family for their unwavering encouragement and understanding during the project's development phase.

I am also deeply appreciative of my fellow team members and colleagues who dedicated their time and expertise to this project. Your hard work, creativity, and dedication were instrumental in overcoming challenges and achieving our goals.

**: - Adarsh E V**

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**ABSTRACT**

## ABSTRACT

"Launtech" is a comprehensive Laundry Management System designed to efficiently and seamlessly manage laundry services across various branches while catering to three distinct user roles: admin, customer, and branch. This web-based platform has been meticulously developed using PHP for the front-end and MySQL for the back-end, addressing the challenges associated with manual laundry management and enhancing operational efficiency. At the core of the system is the admin role, with exclusive access to an intuitive admin dashboard that empowers administrators to oversee the entire laundry management process. Admins can efficiently manage customer accounts, gain insights into branch-specific operations, and generate reports to monitor system-wide performance. For customers, the system provides a user-friendly interface that allows them to register, access their accounts upon admin approval, and explore various service categories such as order history, pricing details, and delivery status. The system's ability to calculate laundry fees accurately simplifies the payment process, enabling secure online transactions via credit card, and customers can effortlessly download receipts for their records. Branch managers, on the other hand, benefit from branch-specific functionalities within the system, allowing them to efficiently manage orders, track inventory, and ensure timely service deliveries. This branch-level management capability enhances operational control while maintaining synchronization with the broader laundry management environment. In summary, " Launtech" offers an integrated, efficient, and controlled environment that replaces manual laundry management systems, meeting the diverse needs of today's laundry services across multiple branches, and catering to the distinct roles of admin, customer, and branch for a seamless and organized laundry management experience.:

As such, the 'Laundry Management System,' known as 'Launtech' has been developed to replace traditional methods and provide a superior, controlled, and efficient environment that meets the demands of modern laundry services.

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# **SYSTEM STUDY**

## 1. SYSTEM STUDY

### **1.1 EXISTING SYSTEM**

The study about the existing helps to know as much information as possible about the system. We can find many faults in the existing system. Before the implementation of 'Launtech' Laundry Management System, the laundry service industry relied on conventional, manual methods for managing laundry operations. These traditional systems were characterized by several limitations and inefficiencies. In the existing system, laundry management was predominantly paper-based, involving handwritten order forms, manual record-keeping, and physical invoices.

#### **1.1.1 Drawbacks of Existing System**

1. **Data storage:-** In manual system paper files require a huge amount of storage space and paper storage creates several problems like spoilage the deterioration by way of aging, humidity etc... Paper based systems are generally very bulky both to handle to store and office space are expensive.
2. **Speed of processing:-** The speed of execution of data is slow in the existing system. Processing is slower where large volumes of data need to be dealt with . Slower processing means that some information that could be provided if computerized systems were used will not be provided at all, because there is no time.

1. **Speed of retrieval of information:-** The speed of retrieval information is very slow in this system. Since all details are entered on registers, if we want to retrieve the information about an old user, we want to go through all the past records until we find the right one.
2. **Time and manpower consuming:-** A considerable amount of time is required for recording details into the system. Report generation of various areas is done manually using great amount of manpower and time. Erroneous records may lead to misleading information, which is more likely in manual system.
3. **Accuracy :-** In the existing system the error rate is high and it is difficult to locate the errors and correct them. Calculations made on papers often leads tocash mismatch and inaccurate results.
4. **Alternations:-** It is difficult to make corrections. If a manual document contains errors or need updating it is often necessary to recreate the whole document from scratch, rather than just a new version with the relevant details changed.
5. **Redundancy:-** If a customer gives different works at different time, each time the customer arrives, the administrator want to store the personnel details repeatedly with each work.
6. **User friendliness:-**In the existing system, the degree of user friendliness is considerably low. This system involves readability of the records and maintenance of different details. The technique used in the system is more complicated and there is a lack of technical background towards the system.
7. **Back up:-** Back up of data cannot be done easily since all data are in different registers and are written on paper.

### **1.1.2 System Analysis**

#### **1.1.2.1 Identifying Needs of System**

The work that was being carried out with the help of the manual system has to be transferred to that of an automated one for a variety of reasons,

1. The manual system is slowly being phased out and all the activities that are being carried out by the manual system could easily and efficiently been alone by the automated system.
2. There are many functions that demanded computerization, but were not being covered by the manual system.
3. The throughout time is high for processing.

1. As information is very voluminous and it is not possible to run systematically and accurately considering the time factor

The system also needs easy access with a computer system we can easily access any records in it. But when it is in manual systems it is difficult to find it using its serial numbers or something like that. So now a day the need of the automated system is important.

#### **1.1.2.2 Preliminary Investigation**

While designing any system preliminary investigation is very important. It is the essential part of the requirement analysis. The purpose of preliminary investigation is to clarify the problems in existing system and strengthening the analyst’s idea and background in the problem area. Here's an outline of the preliminary investigation for a laundry management system when there is no existing website for laundry services:

The preliminary investigation serves as the foundation for the subsequent phases of project planning, development, and implementation. It provides a clear understanding of the project's viability and helps stakeholders make informed decisions about moving forward with the creation of the laundry management system.

#### **1.2 PROPOSED SYSTEM**

The objective of the proposed system is to provide users with comprehensive information and facilitate efficient data management in the laundry service domain. Our system aims to enhance user experience by offering a menu-driven interface that is highly user-friendly, enabling users to interact with the platform conveniently and input error-free data. The primary goal is to streamline data storage and retrieval processes, ultimately assisting in informed decision-making.

In this menu-driven system, users can easily access essential laundry service information and carry out various tasks with ease. The user-friendly interface ensures a smooth experience for customers, laundry service providers, and administrators alike. It's designed to make data entry intuitive and error-free.

The system also includes robust features for data entry and report generation. Administrators have the ability to monitor data entered by all users and generate a wide range of reports. These reports offer valuable insights into the laundry service operations, helping administrators make informed decisions.

Overall, our laundry service platform is focused on efficiency, user-friendliness, and data management, with the ultimate goal of providing users with easy access to information and supporting decision-making processes.

##### **1.2.1 Advantages of proposed system**

**1. Efficient Order Handling:-** Makes managing laundry orders smoother and more organized.

**2. User-Friendly Interface:-** Easy for customers and laundry staff to use.

**3. Error Reduction:-** Minimizes mistakes in order processing and record-keeping.

**4. Accessible Service Information:-** Customers can quickly check order status and pricing.

**5. Simple Navigation:-** Easy-to-use menus for placing orders and checking details.

**6. Informed Decision-Making:-** Generates reports to help laundry owners make better business decisions.

**7. Enhanced Customer Service:-** Improves communication with customers, including order tracking.

**8. Space Savings:-** Eliminates the need for physical paper records and storage.

**9. Scalability:-** Can grow with the laundry business, accommodating more customers.

**10. Data Security:-** Keeps customer information safe and protected.

**11. Better Customer Experience:-** Provides a smoother, more convenient service.

**13. Competitive Advantage:-** Stands out in the laundry service market.

**14. Cost Efficiency:-** Reduces labour and administrative costs for laundry business owners.

**1.3 FEASIBILITY STUDY**

During the system analysis, a feasibility study was conducted to assess the viability of the proposed Laundry Management System. Given the absence of anexisting system to efficiently control and coordinate laundry services, theproposed system offers significant advantages and benefits to the organization. Evaluating the financial feasibility, it is evident that the implementation of thissystem does not result in any loss for the organization. Therefore, the proposedLaundry Management System is deemed financially feasible, representing avaluable investment for the organization.

The results of the feasibility study are:-

1. **Economic feasibility**
2. **Technical feasibility**
3. **Behavioural feasibility**

**1.3.1 Economic Feasibility**

Economic analysis stands as a pivotal method in evaluating the viability of the proposed Laundry Management System (Launtech). More commonly referred to as cost-benefit analysis, this approach entails a thorough examination of the expected benefits and cost savings associated with the new system, which are then juxtaposed with the expenses incurred by the existing manual system. If the benefits clearly outweigh the costs, it warrants the decision to proceed with the design and implementation of the system. In cases where costs exceed benefits, adjustments to the proposed system are considered. Upon closer examination, it is evident that the Laundry Management System offers substantial benefits while maintaining a cost structure lower than those of the current manual processes. Notably, the system is anticipated to reduce user workloads by half, further solidifying its economic feasibility and its potential to bring valuable efficiencies to the organization.

##### **1.3.2 Technical Feasibility**

Technical study is a study of hardware and software requirements. Technical feasibility concentrates on the organization to what extend it and support the proposed system. The question to be answered is whether the organization is technically capable to operate the system.

**1.3.2.1 Hardware Requirements:**

* Pentium IV
* 256MB RAM
* 500MB HDD

###### **1.3.2.2 Software Requirements**

* Windows 2000 or above
* Web browser with active Internet connectivity

##### **1.3.3 Behavioural Feasibility**

The developed system is completely driven and user friendly. Also the system is developed using HTML, CSS and JavaScript as front end, which is user interface. There is no need of skill for new user to open this Website and use it. Reports will be exactly as per our requirements.

### 

### **SYSTEM SPECIFICATION**

## 2. SYSTEM SPECIFICATION

**2.1 ABOUT THE FRONT END**

### **HTML**

HTML is a computer language devised to allow Website creation. These Websites can then be viewed by anyone else connected to the Internet. It is relatively easy to learn, with the basics being accessible to most people in one sitting; and quite powerful in what it allows you to create. It is constantly undergoing revision and evolution to meet the demands and requirements of the growing Internet audience under the direction of the W3C, the organization charged with designing and maintaining the language.

HTML consists of a series of short codes typed into a text-file by the site author these are the tags. The text is then saved as a HTML file, and viewed through a browser, like Internet Explorer. This browser reads the file and translates the text into a visible form, hopefully rendering the page as the author had intended. Writing your own HTML entails using tags correctly to create your vision. You can use anything from a rudimentary text editor to a powerful graphical editor to create HTML pages.

### **CSS**

Stands for "Cascading Style Sheet." Cascading style sheets are used to format the layout of Web pages. They can be used to define text styles, table sizes, and other aspects of Web pages that previously could only be defined in a page's HTML. CSS helps Web developers create a uniform look across several pages of a Web site. Instead of defining the style of each table and each block of text within a page's HTML, commonly used styles need to be defined only once in a CSS document. Once the style is defined in cascading style sheet, it can be used by any page that references the CSS file. Plus, CSS makes it easy to change styles across several pages at once. For example, a Web developer may want to increase the default text size from 10pt to 12pt for fifty pages of a Web site. If the pages all reference the same style sheet, the text size only needs to be changed on the style sheet and all the pages will show the larger text.

While CSS is great for creating text styles, it is helpful for formatting other aspects of Web page layout as well. For example, CSS can be used to define the cell padding of table cells, the style, thickness, and color of a table's border, and the padding around images or other objects. CSS gives Web developers more exact control over how Web pages will look than HTML does. This is why most Web pages today incorporate cascading style sheets.

#### **Ajax**

Ajax is a set of web development techniques using many web technologies on the client side to create asynchronous web applications. With Ajax, web applications can send and retrieve data from a server asynchronously (in the background) without interfering with the display and behaviour of the existing page. By decoupling the data interchange layer from the presentation layer, Ajax allows web pages and, by extension, web applications, to change content dynamically without the need to reload the entire page. In practice, modern implementations commonly utilize JSON instead of XML.

#### **jQuery**

jQuery is a JavaScript library designed to simplify HTML DOM tree traversal

and manipulation, as well as event handling, CSS animation, and Ajax. It is free, open source software using the permissive MIT License. As of May 2019, jQuery is used by 73% of the 10 million most popular websites. Web analysis indicates that it is the most widely deployed JavaScript library by a large margin, having 3 to 4 times more usage than any other JavaScript library.

#### **Bootstrap**

Bootstrap is a free and open-source CSS framework directed at responsive, mobile first front-end web development. It contains CSS- and (optionally) JavaScriptbased design templates for typography, forms, buttons, navigation and other interface components.

#### **JavaScript**

JavaScript is a dynamic computer programming language. It is lightweight and most commonly used as a part of Web pages, whose implementations allow client-side script to interact with the user and make dynamic pages. It is an interpreted programming language with object-oriented capabilities.

JavaScript was first known as LiveScript, but Netscape changed its name to JavaScript, possibly because of the excitement being generated by Java. JavaScript made its first appearance in Netscape 2.0 in 1995 with the name LiveScript. The general-purpose core of the language has been embedded in Netscape, Internet Explorer, and other Web browsers.

**2.2 ABOUT THE BACK END**

The system is created with PHP, MySQL and WAMPP Server as back end.

### **PHP**

PHP started out as a small open source project that evolved as more and more people found out how useful it was. Rasmus Lerdorf unleashed the first version of PHP way back in 1994.

PHP is a must for students and working professionals to become a great Software Engineer specially when they are working in Web Development Domain. The key advantages of learning PHP are:

PHP is a recursive acronym for "PHP: Hypertext Pre-processor". PHP is a server side scripting language that is embedded in HTML. It is used to manage dynamic content, databases, session tracking, even build entire e-commerce sites .It is integrated with a number of popular databases, including MySQL, PostgreSQL, Oracle, Sybase,

Informix, and Microsoft SQL Server .PHP is pleasingly zippy in its execution, especially when compiled as an Apache module on the Unix side. The MySQL server, once started, executes even very complex queries with huge result sets in record-setting time. PHP supports a large number of major protocols such as POP3, IMAP, and LDAP.PHP4 added support for Java and distributed object architectures (COM and CORBA), making n-tier development a possibility for the first time .PHP is forgiving:

PHP language tries to be as forgiving as possible. PHP Syntax is C-Like.

#### **MySQL**

MySQL is an open-source relational database management system (RDBMS).Its name is a combination of "My", the name of co-founder Michael Widenius's daughter and "SQL", the abbreviation for Structured Query Language. MySQL is free and opensource software under the terms of the GNU General Public License, and is also available under a variety of proprietary licenses. MySQL was owned and sponsored by the Swedish company MySQL AB, which was bought by Sun Microsystems (now Oracle Corporation). In 2010, when Oracle acquired Sun, Widenius forked the opensource MySQL project to create MariaDB. MySQL is a component of the LAMP web application software stack (and others), which is an acronym for Linux, Apache, MySQL, Perl/PHP/Python. MySQL is used by many database-driven web applications, including Drupal, Joomla, phpBB, and WordPress. MySQL is also used by many popular websites, including Facebook, Flickr, MediaWiki, Twitter, andYouTube.

#### **XAMP Server**

XAMP is an acronym that stands for Windows , Apache , MySQL and PHP. It’s is a software stack which means installing XAMP installs Apache , MySQL , and PHP on your operating system(Windows in the case of XAMP).Even though you can install them separately ,they are usually bundled up, and for a good reason too.

A database system is an overall collection of different database software components and database containing the part viz. Database application programs, frontend components, Database management systems and Database.

**A database system must provide the following features:**

* + A variety of user interfaces
  + Physical data independence
  + Logical data independence
  + Query optimization
  + Data integrity
  + Concurrency control
  + Backup and recovery
  + Security and authentication

When creating a database, the main concept is to know how the database is structured in SQL. SQL stands for Structured Query Language. It is a language that enables us to create and operate on relational database, which are sets of related information stored in tables. Because of its elegance and independence.

**2.3 ABOUT THE OS**

The OS used is Windows Operating System.

### **WINDOWS OS**

The hall mark software of Microsoft, which had created a new wave of graphical user interface in the industry, WINDOWS XP stands in the top of its popularity. The advent of Microsoft plus has cured whatever faults were there in the original WINDOWS XP version and made it and useful tool to work with the memory resident programs of it, make the reloading of WINDOWS XP easier, it plug and play connectivity for input output devices makes a new dimension towards the use of computer system. Connectivity to the information network slice Internet through modems makes it overstate software. Almost all new software have their windows version also. The programmer and file manager facilities of it had made a leap way towards giving a new dimension towards the operation of computer systems.

**SYSTEM ANALYSIS**

**AND**

**DESIGN**

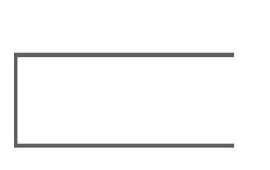
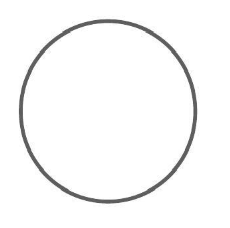
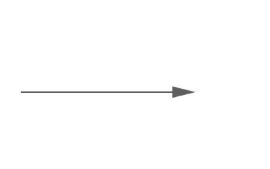
#### **3. SYSTEM ANALYSIS AND DESIGN**

System design’s main aim is to identify the modules that should be in the system, and the specifications of these modules and how they interact with each other to produce the desired results. At the end of the system design all the major data structures, file formats and the major modules in the system and their specification are decided.

##### **3.1 DATA FLOW DIAGRAM**

A DFD has the purpose of clarifying system requirements and identifying major transformations that will become programs in system design.

These symbols are used in the DFD.



Source or destination of data

Data Flow

Process that transforms data flow

Data store









#### **3.2 TABLE DESIGN**

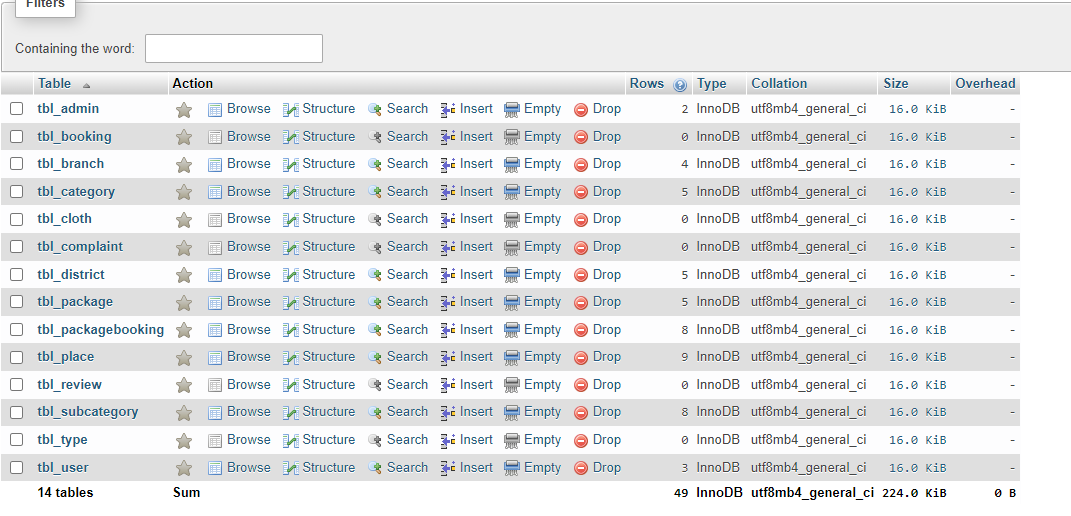
The general theme behind a database is to handle information as an integrated whole. A database is a collection of interrelated data stored with minimum redundancy to serve quick access and effective storage. The database is a collection of stored data organized in such a way that all the data requirements are satisfied by the database.

The aim of database design is to improve the existing system situation. A number of database files were designed to hold the data requirements for running their systems. Here we have 20 major tables, described below:

**DATABASE: db\_launtech**

**TABLE OVERVIEW**

|  |  |  |
| --- | --- | --- |
| **Sl**  **No** | **Table Name** | **Description** |
| 1 | tbl\_admin | To store admin details |
| 2 | tbl\_branch | To store branch details |
| 3 | tbl\_user | To store user details |
| 4 | tbl\_package | To store number of packages and package details |
| 5 | tbl\_booking | To store normal booking details |
| 6 | tbl\_packagebooking | To store the booking via package details |
| 7 | tbl\_cloth | To store cloth details |
| 8 | tbl\_category | To store the category of cloth |
| 9 | tbl\_subcategory | To store the subcategory of cloth |
| 10 | tbl\_type | To store the type of cloth |
| 11 | tbl\_district | To store user & branch district details |
| 12 | tbl\_place | To store user & branch place details |
| 13 | tbl\_complaint | To store user complaints against branches |
| 14 | tbl\_review | To store user review details |

****

**Detailed Table Review**

**Table No : 01**

Table Name : tbl\_admin

Description : To store admin details.

Primary Key : admin\_id

|  |  |  |  |
| --- | --- | --- | --- |
| Sl No | Field Name | DataType | Description |
| 1 | admin\_id | Int(30) | Admin Id |
| 2 | admin\_name | Varchar(100) | Admin Name |
| 3 | admin\_email | Varchar(50) | Admin Email |
| 4 | admin\_password | Varchar(50) | Admin Password |

**Table No : 02**

Table Name : tbl\_branch

Description : To store branch details.

Primary Key : branch\_id

|  |  |  |  |
| --- | --- | --- | --- |
| Sl No | Field Name | DataType | Description |
| 1 | branch\_id | Int(30) | Branch Id |
| 2 | branch\_name | Varchar(100) | Branch Name |
| 3 | branch\_email | Varchar(100) | Branch Email |
| 4 | branch\_contact | Varchar(100) | Branch Contact number |
| 5 | branch\_address | Varchar(100) | Branch Address |
| 6 | branch\_password | Varchar(100) | Branch Password |
| 7 | branch\_photo | Varchar(100) | Branch Images |
| 8 | place\_id | Int(30) | Place Id |

**Table No : 03**

Table Name : tbl\_user

Description : To store user details.

Primary Key : user\_id

|  |  |  |  |
| --- | --- | --- | --- |
| Sl No | Field Name | DataType | Description |
| 1 | user\_id | Int(30) | User Id |
| 2 | user\_name | Varchar(100) | User Name |
| 3 | user\_gender | Varchar(100) | User Gender |
| 4 | user \_contact | Varchar(100) | User Contact Number |
| 5 | user \_email | Varchar(100) | User Email |
| 6 | user \_password | Varchar(100) | User Password |
| 7 | user \_photo | Varchar(100) | User Photos |
| 8 | user \_address | Varchar(100) | User Address |
| 9 | place\_id | Int(100) | Place Id |

**Table No : 04**

Table Name : tbl\_user

Description : To store user details.

Primary Key : user\_id