



An Undergraduate Internship/Project on

“Online Pharmacy system”

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The degree of Bachelor of Science in

Computer Science

Department of Computer Science & Engineering

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Attestation

I, Usrah Saba, hereby certify that none of the work that has been done in this report is plagiarized or copied from anywhere. Any resources used are mentioned in the reference section of the report. No help was asked for during the completion of the report from a third-party organization except the one that I have worked for in the last 3 months as an intern.

For any information, my internship supervisor, Mahmud Rahman, at my company, JBL Drug Laboratories can be contacted on mahmudrahman@jbldruglaboratories.com

Sincerely

A handwritten signature in black ink, appearing to read 'Usrah', is written over a light blue horizontal line.

7th April 2021

Usrah Saba

Acknowledgement

First and foremost, I would like to thank Almighty Allah for his mercy in allowing me to complete my internship report on time.

I'd like to express my appreciation to the Faculty of the Department of Computer Science & Engineering for including internship credit in the curriculum of the graduation program and providing me with the opportunity to test the flavor of industry-oriented tasks and the field of work that interests me. I am grateful to the Faculty for providing me with the opportunity to select my own interested organization and complete an internship there.

I am also grateful to my organization's supervisor, Mahmud Rahman, Azizul Haq (team manager), Sadia Hossain (team member), Barkat Opu (team member), Tanvir ahmed (team member) and JBL Drug Laboratories from the bottom of my heart for their kind support, assistance, helpful, supervision, directions, and recommendations, as well as for encouraging me to complete my internship at JBL Drug Laboratories comfortably.

I feel proud and gratified that I was always under the supervision of the Web Development team and got advice directly from my organization supervisor. Here, daily reporting along with mental and professional support enhances my experience in the internship life.

I am also indebted to the employees of JBL Drug Laboratories who gave me immense support. Moreover, to prepare this report and other documentation regarding Internship.

Usrah Saba

Student ID: 1610262

August 2021

Dhaka, Bangladesh

Letter of Transmittal

15th May, 2021

Md. Fahad Monir

Internship Supervisor & Lecturer

Department of Computer Science and Engineering

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Subject: Submission of Internship Report on “Online Pharmacy Management System”.

Sir,

It gives me great pleasure to present my internship report on "Online Pharmacy Management System." This internship gave me the opportunity to gain hands-on experience in a variety of fields within the IT industry.

In this report, I attempted to summarize what I did and experienced during my internship at JBL Drug Laboratories as a member of the Web Development team. I was tasked with several Frontend design process. In addition, as a team member, I have had a significant amount of professional interaction on multiple levels, including assisting, advising, and providing feedback.

I am delighted to be a part of this internship program. I'd like to express my gratitude to you for providing me with the opportunity to do this internship.

Yours sincerely,

Usrah Saba

ID: 1610262

Student, SECS

Evaluation Committee

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Abstract

Because of the pandemic issue, the government has closed its doors in order to slow the spread of the virus. In addition, many of us are unable to walk outside and require emergency medical attention on occasion. There are certain persons who are physically handicapped and are unable to venture outside without help.

In this era of the Internet, everything is being done online. Because of this, we attempted to develop an online pharmacy system that would be beneficial in these instances. Consumers may obtain medications via their laptop or mobile device at any time, even in an emergency. As a result, our site offer OTC and prescription medications, as well as blood pressure kits, glucose meters, medical equipment, rehabilitation aids, and children's items. Additionally, consumers can get emergency assistance from an online specialist. The website will be easy to use and navigate and will accept payment in cash.

A total of eight chapters make up this report. My introduction to the project covered the initiative's origins, goals, and objectives in chapter one. During the second chapter, I demonstrated how this research was related to my undergraduate studies. The third chapter is devoted to our team, task management, estimated time and expenses, and other related topics. In the fourth chapter, I go through my working method and how I go about my day. It is in the fifth chapter that the project structure is discussed, and it covers the project's basic structure as well as system analysis, design specifications, input output, and the overall architectural style.

I've summarized the project's progress to this point, as well as the outcomes of the sixth chapter so far. The project's long-term sustainability, as well as its social and environmental consequences, are discussed in the seventh chapter. Finally, in the eighth chapter, we addressed potential future relevant work.

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Chapter 1

Introduction

1.1 Background of the Work

More people are using online pharmacies during the pandemic, and also governments are encouraging people to purchase products through online. The primary purpose of the project is to manage the pharmaceutical store's database. This is accomplished by compiling a database of the medications available in the store. The database is then linked to the main program via the MySQL program's interconnection. This software can be used by a variety of pharmaceutical companies. OTC medicines, Prescription Medicines, Blood Pressure Equipment, Glucose Meter, Durable Medical equipment, Rehabilitation Aids, and children's items are available in online, so user can interaction an online expert for emergency services.

Throughout this project, we are creating an online website framework using Hypertext Markup Language (HTML), Cascading Style Sheet (CSS), and JAVASCRIPT, as well as saving user information in the database, that will also actually require the use of a backend. As a result, we will connect it to a backend such as PHP Hypertext Preprocessor (PHP), Structured Query Language (SQL).

1.2 Objectives

Goal of this project is to design and implement an online pharmacy management system to improve interaction between pharmacy and users and make the purchasing of pharmaceuticals and other activities more convenient. This serves to achieve the following objectives-

- Chat Widget for Messaging
- Adaptive to all Devices
- Product Navigation
- Search Box
- Product Cart

- Payment Methods
- Security
- user friendly

1.3 Scopes

Our mission is to deliver the greatest and most convenient healthcare, as well as a convenient and secure pharmaceutical experience to all of our customers. When dealing with a pandemic or an emergency situation, we make every effort to supply items at extremely low costs while maintaining the best standards of delivery to our consumers.

Chapter 2

Literature Review

2.1 Relationship with Undergraduate Studies

This project is highly relevant to my undergraduate studies. As a computer science student, I've learned about various languages, website development tools, and project management. The project is connected to one of my major courses. CSC 401-Database Management has taught me how a database management system manages all viewpoints and perspectives of a database, such as manipulating data, authentication mechanisms, implanting or retrieving data, and performing backend project SQL.

CSC 405-System Analysis and Design taught me how to organize, analyze, design, and implement systems. CSC445-Software Engineering greatly helped me in determining how we will work or creating a project schedule. Finally, I'm capable of developing software with frontend and backend tools thanks to CSC455-Web Applications and Internet.

2.2 Related works

Several internet pharmacies are currently operational, and others are in the works. Arogga[4] is a website where users may enter prescriptions and buy them online. Furthermore, the E-pharma [2] website allows users to enter prescriptions and order medicines. Other similar websites include osudpotro, banglameds, and others.

Chapter 3

Project Management & Financing

3.1 Work Breakdown Structure (WBS)

Structure is critical in the breakdown of web development work. Typically, the project is divided into smaller components through a hierarchical framework into several building modules. The work breakdown structure (WBS) identifies tasks that are interdependent as well as those that are self-contained. This is important throughout the period of resource and time allocation, as well as responsibility assignment, in order to facilitate project measurement and control. The firm classified the components in the WBS section as activities, tasks, entries, and work packages, while others classified them by stage.

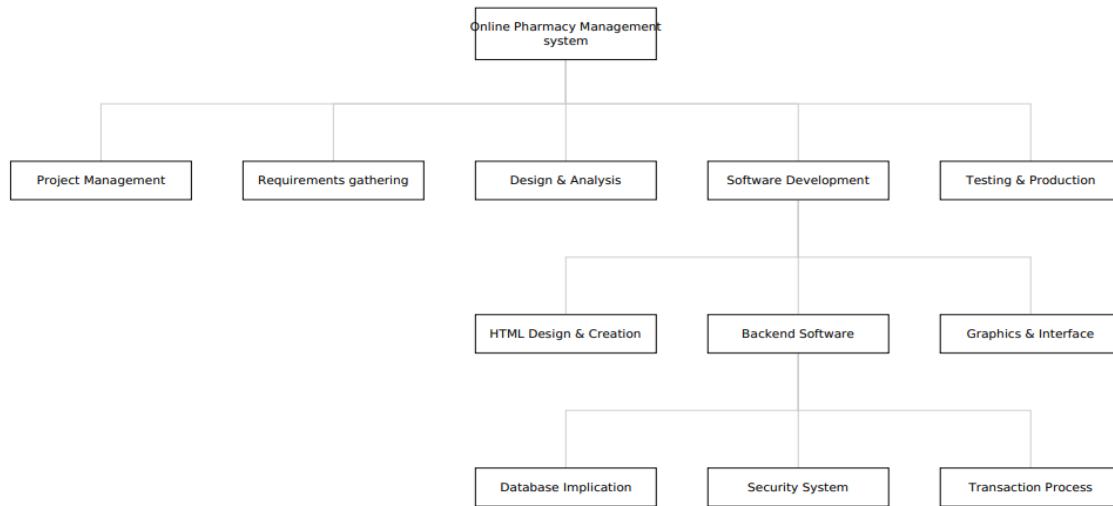


Figure 01- Work Breakdown Structure

3.2 Process/Activity wise Time Distribution

A time distribution is required for a hierarchical structured project. Here is a PERT (Program Evaluation and Review Technique) chart to demonstrate our time management. A PERT chart is a tool that depicts a project as a network diagram. It can graphically represent the main events of a project in both parallel and sequential ways. Events that occur one after the other demonstrate the dependency of the later event on the previous one.

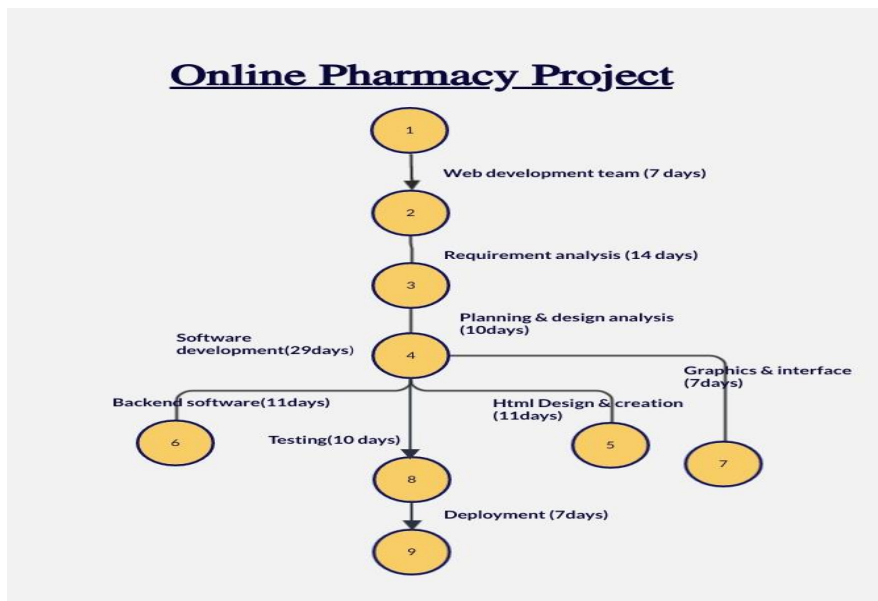


Figure 02- Activity wise Time Distribution

3.3 Gantt Chart

The project Gantt chart portrays the project timeline in terms of time periods. What the various functions seem to be, when each task starts and ends, how operations can continue is scheduled to last, where activities overlap with other activities, and by how much, the start and end date of the entire project can all be seen in a Gantt chart. Through our proposal, 30 days have passed, with 55 days remaining and a period of 3 months.

Online pharmacy project

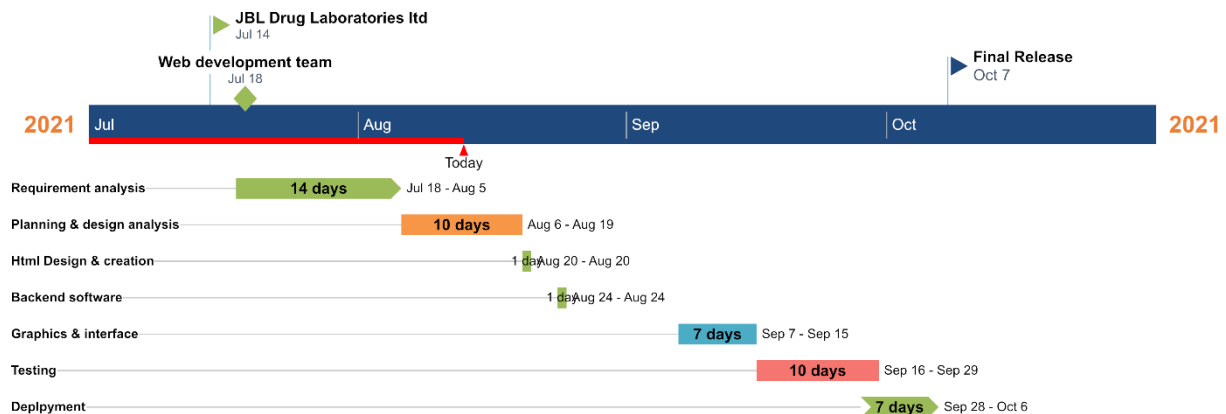


Figure 03- Gantt chart

3.4 Process/Activity wise Resource Allocation

Online pharmacy project is based on people who can get medicine, or online doctor help at any time. To make the project successful first we need to allocate the resources. Resource allocation is the process of assigning and scheduling resources to project tasks. The basic resources of this web development project are- stakeholders, my team members, the process, Computers, server etc.

- i. Project management- This project is just getting started. During this stage, the project leader created a project outline and chose us all as a team. This

phase is crucial because it is where the entire project is given a proper instructions.

- ii. Planning & requirement analysis- The project manager created a roadmap for the team during this phase. Here, the manager established goals and scopes, devised a work breakdown schedule, identified milestones, and designed communication strategies. Following that, we spent time on prerequisites such as device specifications, frontend-backend, and so on.
- iii. Design analysis- During this stage, the project manager delegated tasks to us. We hold meetings to discuss the project's perspective or contents, and we set up tracking systems. During this phase, the majority of the actual work is completed.
- iv. Software development- This phase has started along with the executing frontend of the project. Designing HTML, graphics-interface and the backend PHP, SQL all are included in this segment.
- v. Testing & production- During this phase, we must work on errors, bug fixes, and adjustments, among other things. It is way to finish the project once we have completed all of the milestones and handed over all of the deliverables. Scope verification is included in this phase. Furthermore, the project leader reviews the progress of the team and analyzes their attempt.

3.5 Estimated Costing

Due to the fact that we are attempting to create a sample version of the project, this is not a complete and final version, and our internship is unpaid. So the estimated costing includes-

Bill for electricity (3 months) - 4000 BDT

Internet Payment (3 months)-3000 BDT

Chapter 4

Methodology

We chose a waterfall methodology to keep the work flowing. Since the waterfall approach is a sequential (non-iterative) design process, the phases of perception, initiation, analysis, design, construction or scripting, checking, development, and maintenance are seen as flowing steadily downwards (like a waterfall).

A waterfall methodology benefits in the early detection of problems. Our requirements will be planned and will not be modified; because everything is recorded, a new team member can easily understand what needs to be done; implementers must abide to the design perfectly; our project goals are specific; and system progress can be measured. Even though the method is out of date, it is still a viable option when requirements are well interpreted. As a result, this is a very simplified model to put into practice.

4.1 Waterfall Methodology implementation

Waterfall Methodology for Online pharmacy Management system

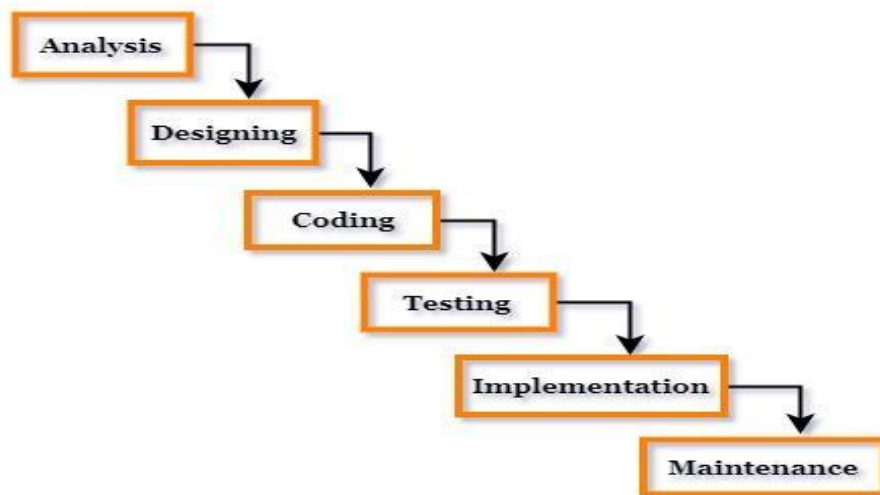


Figure 04- Methodology

Using the graphic, you can see that the project design is divided into six phases: analysis; designing; designing; coding; testing; and implementation and maintenance.

The proposed Pharmacy System will include an analysis to define the system's users, as well as the project's objectives and aims. The study will be carried out as part of the project. Following that, extensive study will be conducted in order to determine how to build a system that will be valuable to all parties involved.

The more technical parts of the project such as HTML, CSS, JAVASCRIPT&PHP, and SQL will be tackled once the requirements have been finalized....

As soon as that is completed, we will do the sample testing to establish whether or not there is any remaining stock. As soon as this phase is completed, the project will be ready for its final implementation and ongoing maintenance.

Chapter 5

Body of the Project

5.1 Work Description

The front-end of the application was my responsibility on the project's development team. The front end was built using HTML5, CSS3, and Bootstrap 4. The backend was built using JavaScript and the jQuery framework. MySQL was used to create the database. At the conclusion of each day, these tasks had to be done and properly accounted for.

5.2 System analysis

It is the investigation of interacting systems, such as computer systems. In this field of study, there are several parallels between requirements analysis and operations research. Furthermore, it is "an explicit formal inquiry carried out to assist someone in finding a better way to proceed and making a better decision than he might have otherwise made." System analysis employs systematic procedures to gather information about an existing system with the goal of either improving it or replacing it with a more efficient system within the constraints of the available resources.

After gathering information we have come to the conclusion that-

- System administrators have granted access to the system at all times.
- To ensure effective policing, provide statistics on drug stocks.
- The efficiency of the system can be increased by ensuring that services and activities are effectively monitored.
- Keeping track of all purchases

5.2.1 Overview of the System

As a result of this approach, current infrastructure needs are provided, and hardware and network solutions are recommended based on current and future user needs. All of these factors play a role while picking the best hardware solution. Interface design, operational processes, and a database management system make up the three-tiered framework (DBMS). There is a breakdown of the elements of the system, the activities they offer, and the way they interact in order to achieve the system's expected output.

As you can see in the figure below, the online pharmacy system has a UML Use Case Diagram.

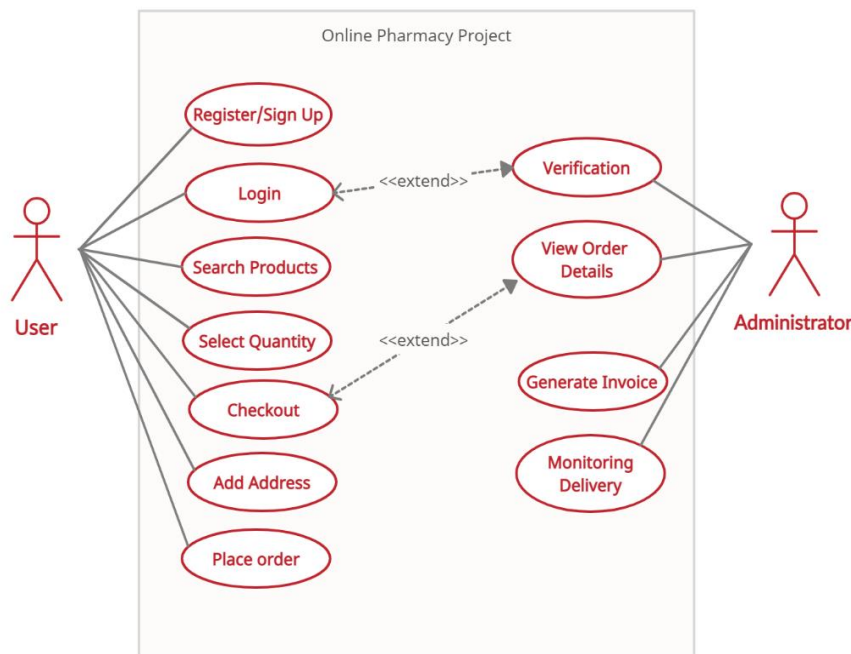


Figure 05- Use Case Diagram of the project

5.2.2 Six Element Analysis

Process	Human	Hardware	Software	Database	Communication
Sign up/Login	Users connects to Email & enter password	Mobile, Computer, mouse, Keyboard	Web applications	Storing users Login Information	Internet
Updating account	Users add/remove data	Mobile, Computer, mouse, Keyboard	Web applications	Stores Users updated Information	Internet
Search Products	Users search for medicines, medical equipment's	Mobile, Computer, mouse, Keyboard	Web applications	Data is retrieved based on search filters	Internet
Quantity	Users select the quantity of the product	Mobile, Computer, mouse, Keyboard	Web applications	Stores Data	Internet
Place order	Users add address & checkout or cancel the order	Mobile, Computer, mouse, Keyboard	Web applications	Stores the order data	Internet
Generate order	Admins execute the order & monitoring the delivery	Mobile, Computer, mouse, Keyboard	Web applications	Update Data	Internet

5.2.3 Feasibility Analysis

A feasibility analysis entails a detailed analysis of the requirements, value, and viability of a proposed new business, such as systems development. The process of establishing and implementing record-keeping systems has significant effects for a company's accountability and resources.

Feasibility can help with making informative and transparent decisions at important stages throughout the development process to establish whether a particular course of action is operationally, economically, and technically feasible.

The majority of feasibility studies are marked for both users and analysts. First, the research frequently expects that the analyst is in a position to evaluate solutions

when the feasibility paper is being written. Second, most studies disregard the uncertainty that comes with system creation - the limits and assumptions.

- Technical feasibility

The present computer system (hardware, software, etc.) and how well it can handle the proposed addition are at the heart of technical feasibility. Running another application, for example, if the existing machine is operating at 80% capacity — an arbitrary limit – could overload the system or necessitate new hardware.

This entails budget limitations in order to accommodate technological developments. The project is considered unfeasible if the budget is a constraining factor.

- Operational feasibility

People are unwilling to change by nature, and computers have been considered to assist in this process. The user company's likely response to the development of a computerized system should be considered. Computer installations are widely acknowledged to play a role in employee turnover, transfers, retraining, and job status changes. As a result, it's clear that creating a candidate system will require more effort in terms of educating, marketing, and training employees on new business activities.

- Economy Feasibility

A new system's economic feasibility is determined by the financial impact it will have on the company. If the financial benefits outweigh the accompanying costs, then the investment is acceptable. Total cost of system implementation, including software and hardware expenditures, should be taken into account. As we know, a full system examination can be conducted for an affordable price if the application as a whole is examined in its entirety. Personnel additions are not necessary. The suggested system is free to use and maintain.

5.2.4 Problem Solution Analysis

1. Sort of server-While building the software, we were unsure if the team should use a fully managed server (Digital Cloud) or a localhost server on the device.

All these servers might have functioned normally. However, since we were developing in isolation and the user's design phase was disrupted, we decided to run our development phases on the localhost server.

2. Determining type of program- There are several programs available for front-end and back-end development. Each person has a unique concept.

However, we ultimately chose HTML, CSS, and JavaScript for the front-end and PHP SQL for the back-end.

5.2.5 Effects and Constraints Analysis

As a result of project constraints, the quality, results achieved, and overall success of a project may be compromised time, scope, and cost being the primary constraints.

- **Constraint- Time**

Effect-Any project takes time to complete. As a result of the pandemic, many deadlines are missed and scope items are not completed.

- **Constraint -Scope**

Effect- One of the most terrifying words for a project manager is "project scope." The term emphasizes the project's common issues. Typically, the scope of the initiative is defined at the start of the initiative and signed off on by the supervisor. The plan is ready to finish the items in scope. Throughout the project's execution, we encountered various criteria that had to be generated in order for the project to be successful.

- **Constraint -Cost**

Effect- This constraint has a significant impact on how long the project can continue to be developed before reaching a conclusion. Due to pandemic situations, there was a least funding for this project.

5.3 System Design

This is the process of describing a system's architecture, as well as its components, modules, interfaces, and data, using system modeling to suit specific criteria. As a result, the use of a systems approach to generate advancement could be considered. This system will be straightforward to use. It designed to help users navigate the system's information rapidly. The structural implementation of system analysis is system design.

5.3.1 Rich Picture

To intervene and generate some improvement, we need to have a rich picture of the issue that shows the essential aspects and relationships. A combination of words, figures, and icons are being used to represent the scenario in a spectacular way.

User, Admin, and Manager are the three different user sets in the following rich picture. The only exception to this is the admin, who can delete or add a user from the group at his or her discretion and has all the authority. Users can look for and purchase medical supplies, pharmaceuticals using the software application when the admin appoints a manager to monitor orders and items. Databases are used to store purchasing details. Furthermore, all user information is recorded in a database. Cash on delivery will be used instead of a payment platform, and it will be administered by the manager or personnel.

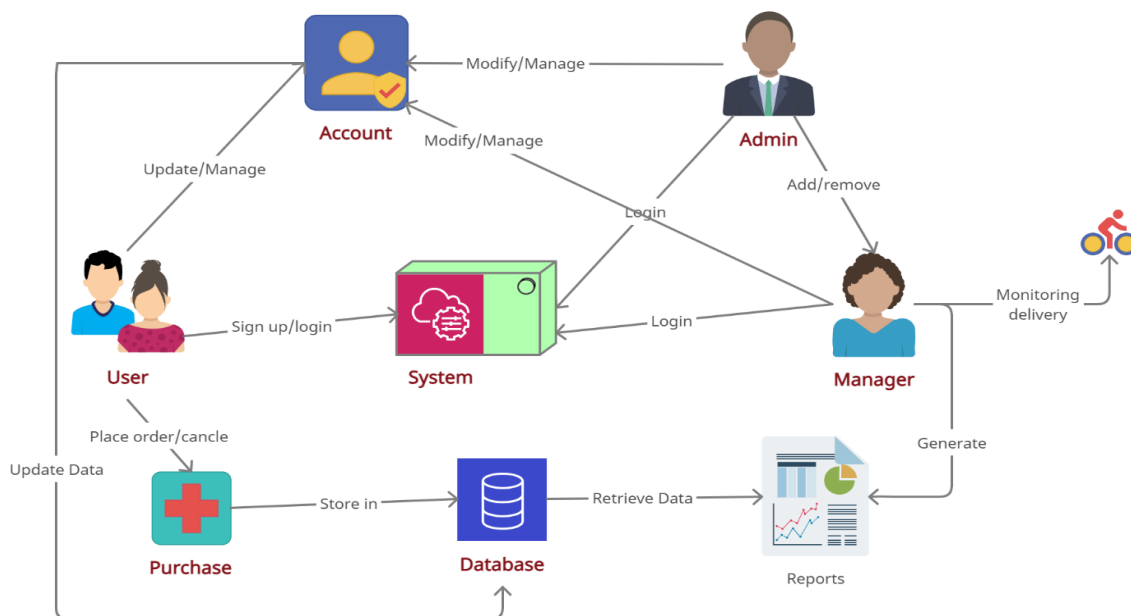


Figure 06- Rich Picture

5.3.2 UML Diagrams

UML diagrams are used to better understand, update, maintain, or document information about a system (Unified Modeling Language).

Web development is a difficult process that necessitates a high level of skill. It is, however, more complicated than composing a standard program. As a result, direct code development is not possible. The system must first and foremost be designed. UML makes system modeling easier. Later, the code can be written based on the UML diagrams that have been generated. UML diagrams come in a variety of shapes and sizes. An overview of basic diagrams is provided below.

- **Use Case Diagram**

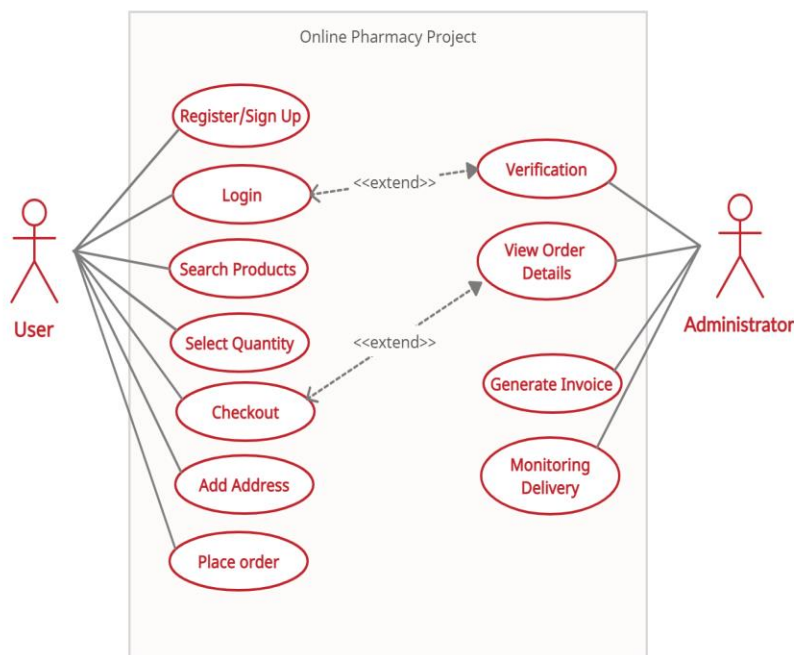


Figure 07- Use case diagram of the project

- **Use Case diagram of Admin:**

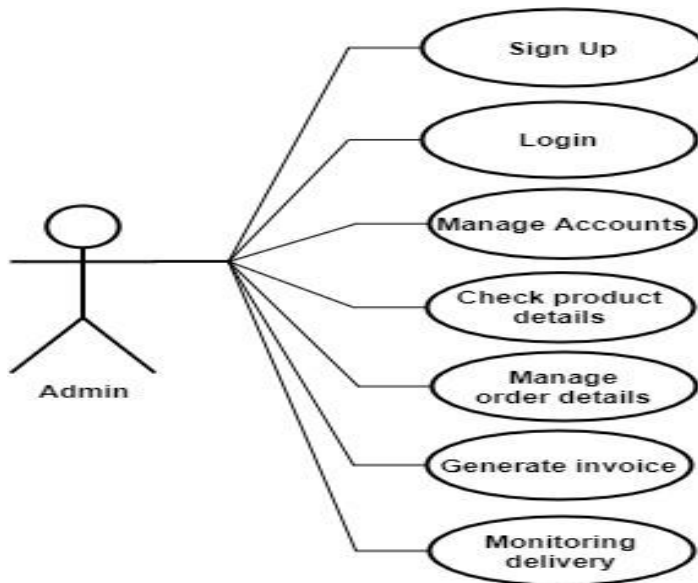


Figure 08- Use Case diagram of Admin

- **Use Case diagram of Users:**

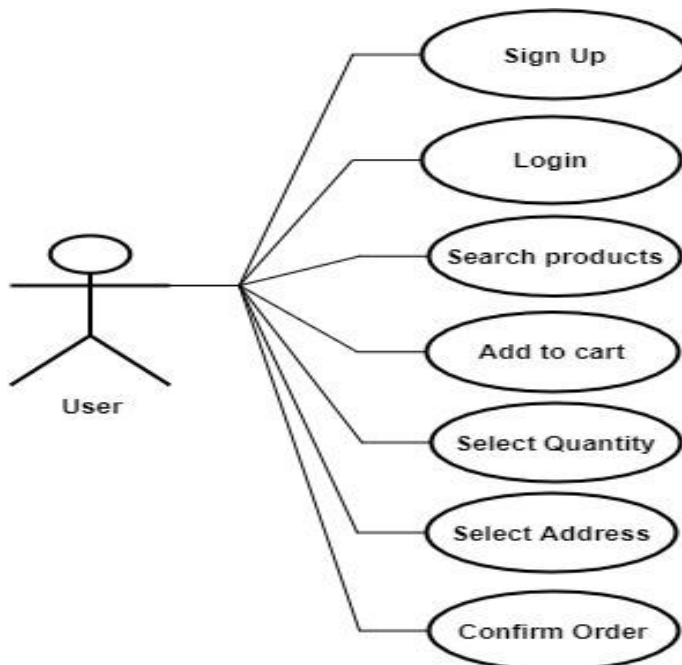


Figure 09- Use Case diagram of User

Activity Diagram

An activity diagram is essentially a diagrammatic representation that portrays the flow of data from one action to the next. The action can be considered of as a system operation. As an outcome, control flows through one activity to the next. Flows that are sequential, branching, or concurrent are all possibilities.

- **Activity Diagram for Administrator:**

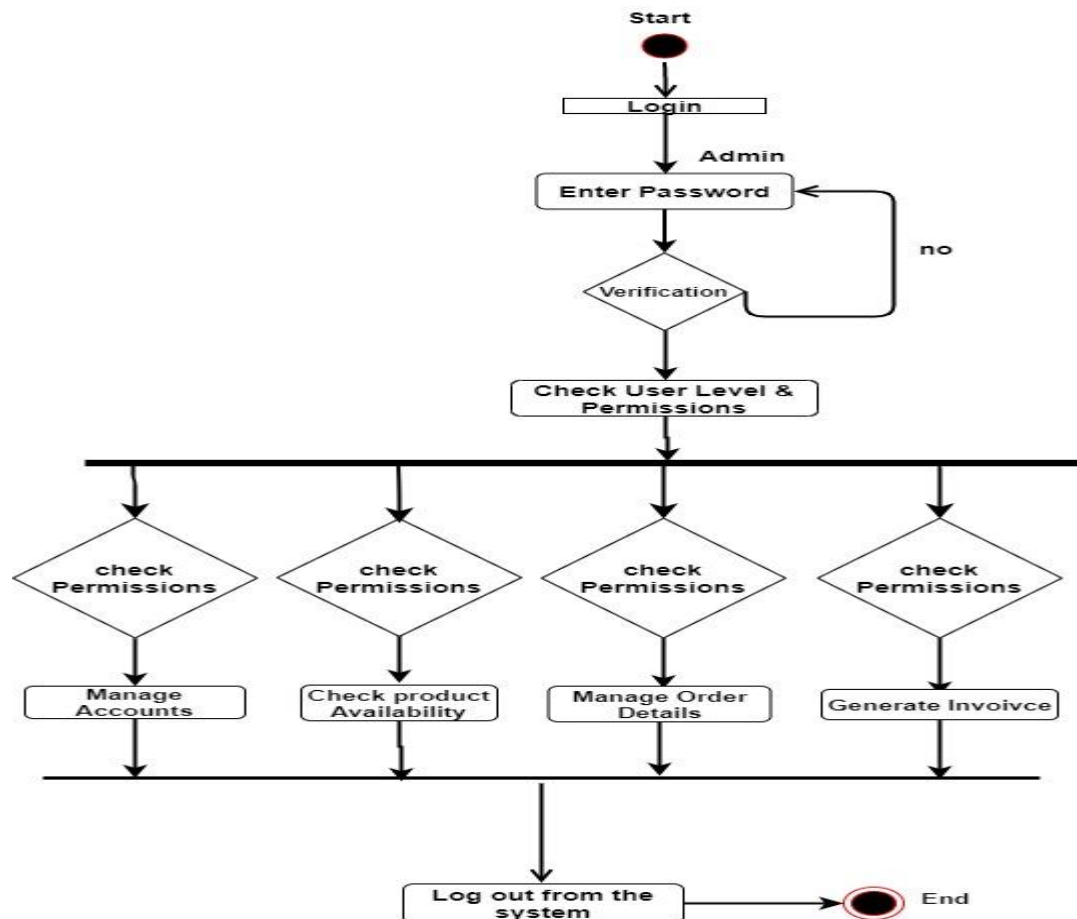


Figure 10- Activity Diagram for Administrator

- **Activity Diagram for Users:**

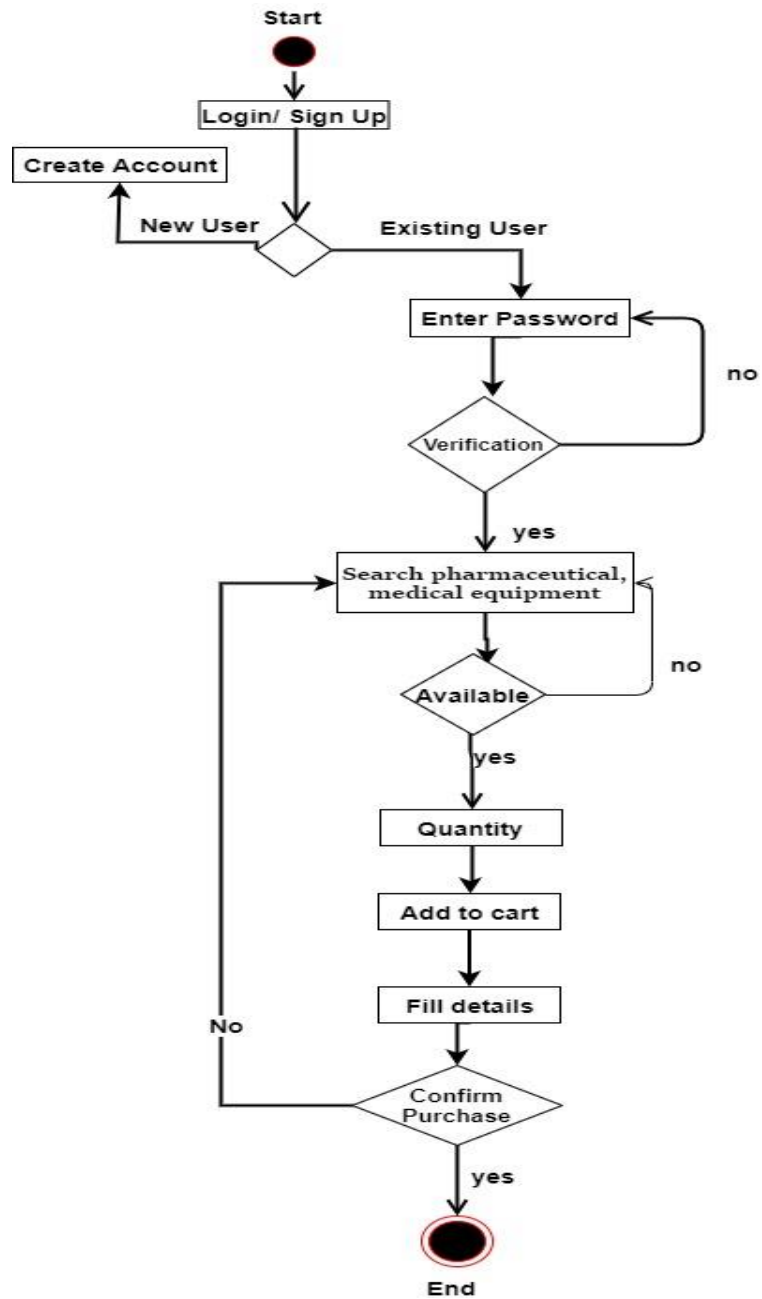


Figure 11- Activity Diagram for Administrator

- **ERD (Entity Relationship Diagram)**

The Entity Relationship Diagram (ERD) is the most effective approach.

The diagram graphically depict data communication. As a result, the diagram has been the most commonly used in companies to facilitate communication protocol.

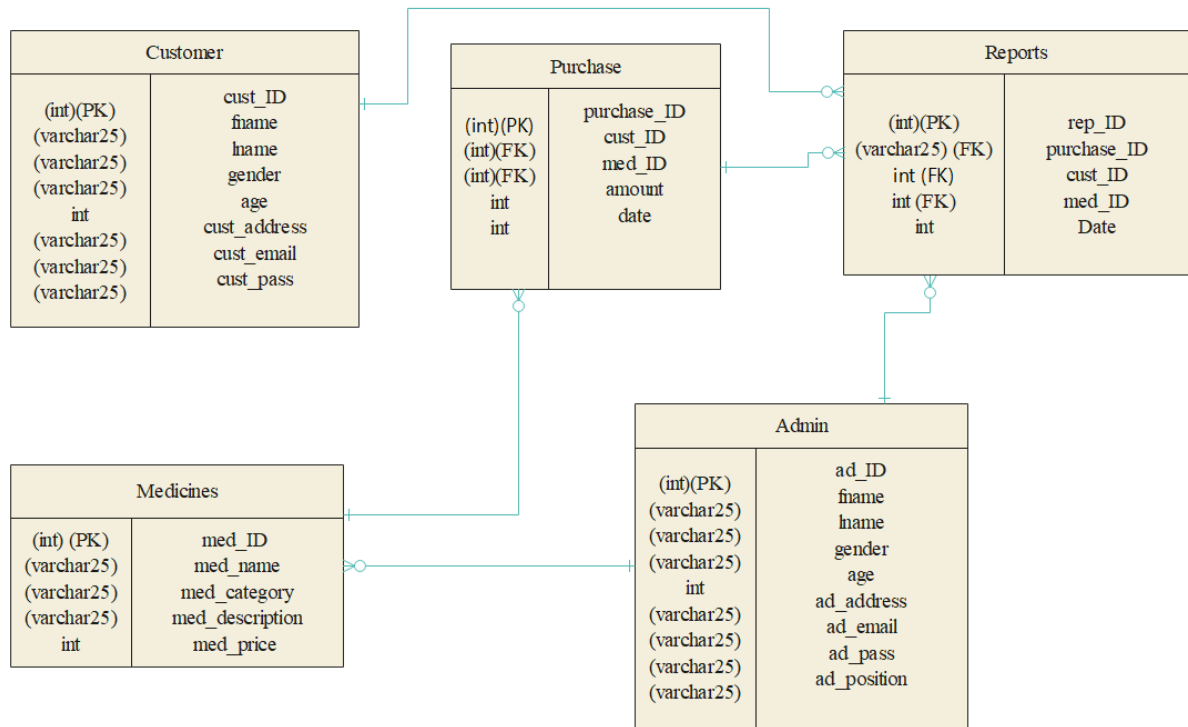


Figure 11- ERD (Entity Relationship Diagram)

5.3.3 Functional and Non-Functional Requirements:

Functional Requirements

This category includes requirements that are relevant to the operations of software.

These specify the software system's internal and external functions and functionality –

- The user has the ability to explore through a variety of files using the search tool.
- Any report should be able to be communicated to management.

- Users can be organized into groups, and each group can have its own set of permissions.
- Customer rules and management services must be followed.
- Application is designed with maximum compatibility in mind.

Non-Functional Requirements

This category includes requirements that aren't connected to the software's functionality. They are software's implicit or assumed qualities, which users take for granted.

Non-functional requirements include -

- Access control,
- monitoring,
- storing,
- configuration,
- productivity,
- affordability,
- compatibility,
- scalability,
- backup and recovery,
- and availability

5.4 Product Features

- Login and sign up: The most basic features of a web application are the user systems, login and registration. As soon as a legitimate registration is completed, the user is informed that the registration was successful.
- Accounts: Whenever a user wants, he/she can make changes to his/her account information and stay up-to-date with the system. The administrator can manage staff and customer accounts by editing or deleting them.
- Update products: According on their permission level, admins and staff can add or remove pharmaceutical and medical equipment from the homepage.
- Cart System: Every product will have its own cart in the system.

- Monitoring delivery- Only administrators and managers will be able to place orders; users must enter their addresses, and payment will be made only in cash upon delivery.
- Database: Inside the data repository, all of the data that has been entered into the system, whether it's a user's account or a purchasing, is stored.

5.4.1 Input

The table below lists the procedures and the input fields necessary for each phase.

Phase	Fields (Type)
Sign Up	Name – varchar Email – varchar Username – varchar Password - varchar
Log in	Email – varchar Username – varchar Password - varchar
Update Account	Name – varchar Email – varchar Phone - int Password – varchar Profile Picture – File Address- varchar
Search	Product name- varchar
Select product	Product Name – varchar Date – Date Time Time - Date Time Product Image – File Product Price- Double
Add quantity	Number of product- int
Confirm order	Add Address- varchar

5.4.2 Output

Phase	Fields (Type)
Sign Up	Success- the message "Registration Successful" is displayed. Failure-an error message will appear beneath the field's input.
Log in	Success- The user will be redirected to the main page.
Update Account	Success- The message "updated!" will be displayed after it has been successfully modified. Failure- an error message will appear beneath the field's input.
Search	Success- If the item is available, the product and similar items will be displayed. Failure- The message "apology! Item is not found" will be displayed.
Select product	Success- If the item is available, the user will click on it and be taken to the product page. Failure- The phrase "select Item!" will appear.
Add quantity	Success- If the user wants more of the same item, he or she can add more items or have only one item, and the page will be redirected to the order details page.
Confirm order	<u>Success</u> - The user must enter an address for delivery. After a successful purchase, the user will be redirected to the home page, and the information will be added to the user's account. Failure- "Address required!" will be displayed.

5.4.3 Architecture

Internet or intranet web-based applications are applications that may be accessed using a web browser over the internet or intranet. As a result of the browser's easy availability, web applications are extremely popular. A significant reason for their popularity is the ease with which web applications may be updated and maintained without having to distribute and install software on potentially thousands of computer systems.

- Front-end:

There are various types of programs that can be used to create a visually attractive front-end, but we used HTML, CSS, and JAVASCRIPT to beautify the project's front-end.

- Backend & Database:

PHP is used throughout the backend to ensure it is working smoothly. PHP (hypertext preprocessor) is a popular open-source overall JavaScript framework that is well-suited for web development and can be embedded in HTML. PHP differs from user JavaScript in that the code is executed on the server, resulting in HTML that is then delivered to the client. PHP is widely used during website development due to its simplicity and quality and reliability. We'll be using MySQL for our database.

Chapter 6

Results & Analysis

6.1 Overview

The ultimate work of the project began with the project planning stage. Because this was a demanding system in a pandemic situation, we focused on developing it as a standardized drug that could be further designed to meet the needs of each individual user. As a result, the developer team and the Chief operating officer met to discuss how we could effectively understand the idea we have been working on. As a result, we done an online survey to develop a greater understanding of the features and capabilities. Furthermore, the team of developers discussed the product's Graphical Interface in light of potential client requirements.

6.2 Research and meeting findings

We conducted an online survey. 62.5 percent of participants are between the ages of 18 and 28, 25% are between the ages of 29 and 39, and 12.5 percent are aged 40 and above. Approximately 87.5 percent of respondents believe that internet pharmacies are really beneficial to us. Around 87.5 percent believe it will be beneficial for a disabled person or in an emergency. Around 54.2

percent of respondents believe the major focus should be on quality, while 29.2 percent believe it should be on price. Around half believe a health counselor will be useful, while 45.8 percent are doubtful. Finally, all participants expressed a preference for cash - on - delivery.

6.3 Testing Result

Software testing is used to assess or quantify the quality of software. Testing is one of the core processes of Software Quality Assurance (SQA).

- **Component Testing**

Component test is a technique of testing in which each component of an application is tested separately.

Phase	Pass/Fail(P/F)	Result
Features		
The correct warning message from the properties document is displayed.	P	Error messages are showing up.
The values in the drop down boxes are correct.	P	All are accurate
Custom Menu's		
Have all of the items in all of the custom selections been tested?	P	All of the menus are active.
Coding Standards		
ensure that the stylesheet is used correctly	P	CSS have been used correctly
The code should be readable and simple to understand.	P	In each stage, all code is organized and feedback are added.

- **System testing**

Phase	Pass/Fail(P/F)	Result
Basic software testing		
Correctly handles posting features	P	All data are posted correctly
Is it accurate that every field has the correct representation of the data?	P	all areas are correctly labeled
Is website responsive?	P	responsive
Login validation	F	Not yet detecting incorrect passwords
Delete/Upload/Insert	F	Error loading
Print System testing		
Print to printers	P	responding
The code should be readable and simple to understand.	P	In each stage, all code is organized and feedback are added.

Chapter 7

Project as Engineering Problem Analysis

7.1 Sustainability of the Project/Work

Online pharmacy will be able to set up online operations and serve a larger customer base, or a network of pharmacies will be able to integrate to one platform and reach a larger customer base while combining supplies. This would reduce the need for working capital while also removing waste from the system. Customers would be able to order from pharmacies using their mobile phone or computer in a simple and efficient manner. Patients who are already acutely unwell and unable to locate a pharmacy will benefit greatly from this.

7.2 Social and Environmental Effects and Analysis

The online pharmacy will engage with other healthcare providers, specialists, and public bodies to alleviate the panic scenario for customers. As previously stated, Online Pharmacy contributes significantly to the health-care system because it is more efficient and reliable in pandemic situations when consumers are unable to leave their homes due to lockdown or safety concerns. It's also a program that's easy to use, thanks to price transparency, medication reminders, and a medical provider structure.

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7.3 Addressing Ethics and Ethical Issues

We want to include in this ethics Due to the categorization of certain prescription meds, the item will not be provided without a doctor's recommendation- the majority of authorized pharmacies that collaborate with Online Pharmacy have a drug verification framework in place. These companies either need a prescription from a personal physician or apply for medicine delivery once the patient completes a questionnaire about their health state. Before these surveys are delivered, they are verified by a professional.

Any person's life or reputation could be jeopardized if a customer's personal information is mismanaged or leaked. Because cybercriminals won't be able to break into the infrastructure, further levels of cryptographic protocols will be used to protect the data from being shared across the framework.

Chapter 8

Future Work & Conclusion

8.1 Future Work

It is necessary to collect detailed information. Without this, the software's goal will not be properly served. However, it has the potential to generate substantial earnings in the long run. Adopting the software involves a change in company procedures. The analysis company organizes all knowledge efficiently, allowing for easy analysis access and information extraction.

Additionally, we may integrate a BAR CODE facility in this project by utilizing a bar code reader to detect the expiration date and other pertinent information about the medications. Businesses who implement this software will always be able to plan ahead and be aware of their financial situation in the market.

As a result, business operations become streamlined. The implementation and maintenance expenditures are extremely high (about 2% to 3% of the business's profit.)

8.2 Conclusion

The online pharmacy system is essentially a piece of software that manages and stores vital data about a pharmacy's database and administration. This program will assist in the pharmaceutical store's successful management. It will give statistics on medicines or medications that are currently in stock, with the ability to update and change the data as needed. It will function according to the user's specifications and provide appropriate alternatives. Additionally, this program will enable receipt printing. Other functions will be accessible as well. The primary goal is to handle pharmaceutical data and management properly and easily.

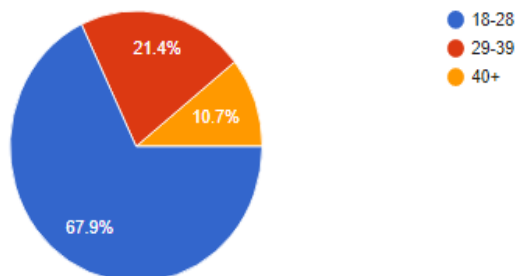
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Appendix A (Questionnaires for Survey)

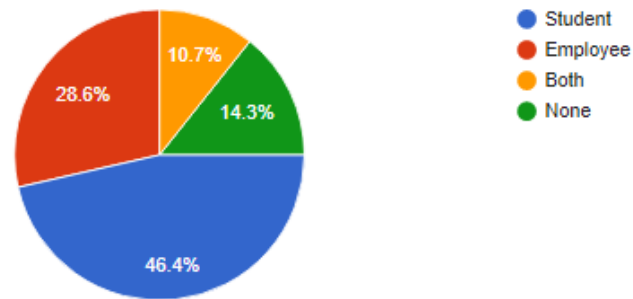
Age

28 responses



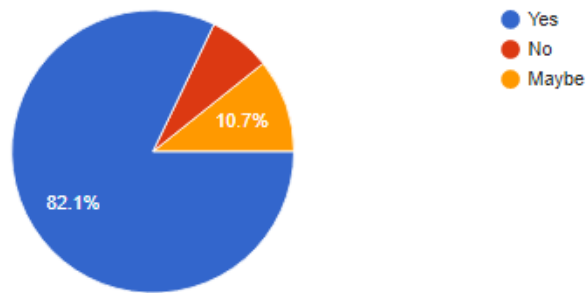
Are you a student or do you have a job?

28 responses



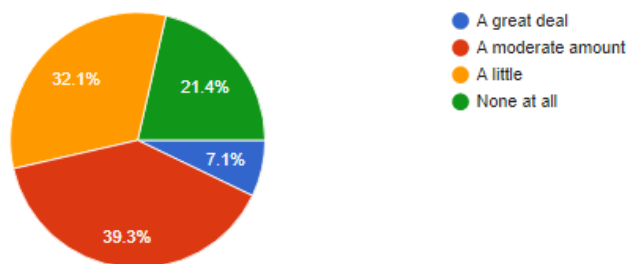
Do you believe that Online pharmacies are useful to us?

28 responses



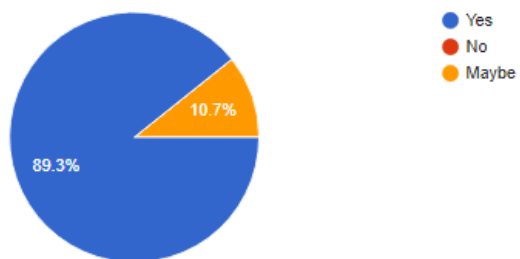
How often do you purchase medicines online?

28 responses



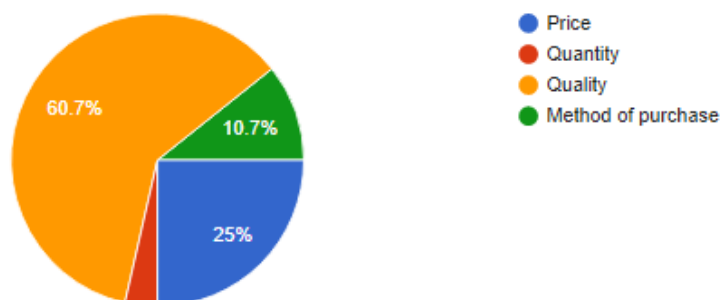
Do you feel it will be useful for a handicapped person or in an emergency situation?

28 responses



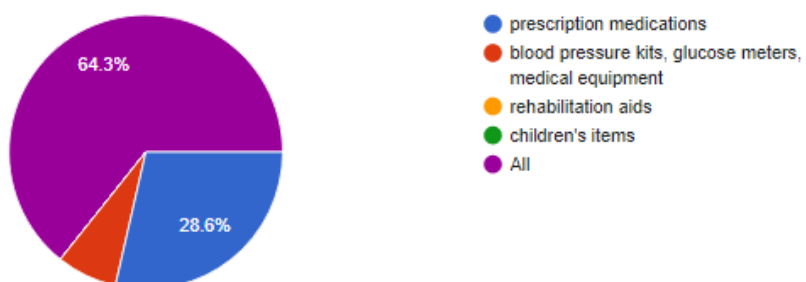
What will be the primary focus of your purchasing?

28 responses



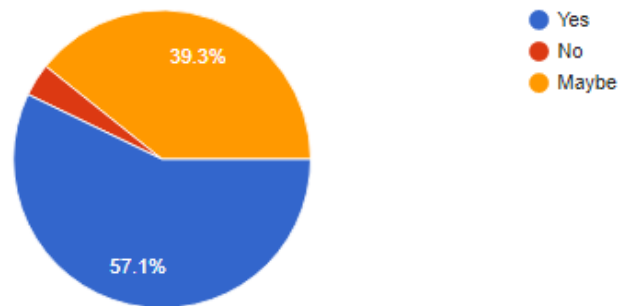
What are the most important components in your opinion?

28 responses



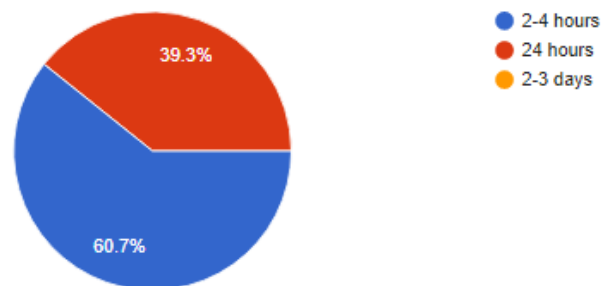
Do you think a healthcare counselor would be beneficial?

28 responses



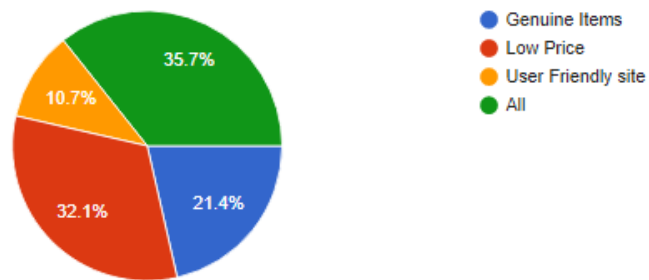
How fast would you expect your medicines to be delivered to you?

28 responses



What do you hope to get out of our service?

28 responses



Which would you rather have: cash on delivery or online payment?

26 responses

