

TRIBHUVAN UNIVERSITY
INSTITUTE OF SCIENCE AND TECHNOLOGY

INDRENI COLLEGE



Gahana Nepal

A report submitted for the partial fulfillment of requirements for the Bachelor of Science in Computer Science and Information Technology degree.

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Declaration

We hereby declare that the Report of the Project Work entitled “**Gahana Nepal**” which is being submitted to the **INDRENI COLLEGE**, Tribhuvan University, in partial fulfillment of the requirements for the award of the Degree of Bachelor of **COMPUTER SCIENCE AND INFORMATION TECHNOLOGY** in the Department of Computer Science and Information Technology, is a bona fide report of the work carried out by us.

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The project work report entitled “**Gahana Nepal**” Submitted by Mr. **Saswot Shrestha**, Mr. **Prashish Barali**, and Mr. **Basu Dev KC** of Indreni College, Bharatpur-11, Chitwan is prepared under my supervision as partial fulfillment of the requirements for the Bachelor’s Degree in Computer Science and Information Technology awarded by Tribhuvan University. I, therefore recommend the project work report for evaluation.

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LETTER OF APPROVAL

This is to certify that the project entitled “**Gahana Nepal: Online Jewellery Website**” prepared by Mr. **Saswot Shrestha**, Mr. **Prashish Barali**, and Mr. **Basu Dev KC** in partial fulfillment of the requirements for the four years Bachelor Degree in Bachelor of Science in Computer Science & Technology has been well studied. In our opinion, it is satisfactory in the scope and quality of a project for the required degree.

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Abstract

Gahana Nepal is an online platform that connects clients with original and certified gold products, providing a wide range of designs as well as accessories such as gold bracelets, gold rings, gold mangal sutra, and so on. This platform facilitates the virtual buying of gold in a secure manner, providing a convenient way for clients to receive gold products legally and securely from the comfort of their own houses. Additionally, the platform will even provide a softcopy of the VAT bill for the product as it will be easy for the customer if they want to sell the product in the future.

The aim of this project report is to provide an in-depth analysis of ***Gahana Nepal's*** features and its impact on the gold service industry. The report discusses the design and development of the platform, including the system analysis, requirements gathering, and the design and implementation process. The report also explores the platform's components, including its database design, forms, and report design, interface and dialogue design, and the object-oriented approach to its design.

Furthermore, the report analyzes the platform's algorithm details and discusses the different algorithms used in the platform, such as the product listing algorithm and the verification process for customers. The report also presents the testing and validation of the platform, including unit testing, system testing, and user acceptance testing.

This project report aims to provide a comprehensive overview of Gahana Nepal and its potential for growth and success in the gold services industry. The report concludes with a discussion of the limitations of the platform and potential areas for future research and development.

Table Of Content

CHAPTER 1: INTRODUCTION	1
1.1 INTRODUCTION	1
1.2 PROBLEM STATEMENT	1
1.3 OBJECTIVES	2
1.4 SCOPE AND LIMITATION	2
1.5 DEVELOPMENT METHODOLOGY	2,3
1.6 REPORT ORGANIZATION	4
CHAPTER 2: BACKGROUND STUDY & LITERATURE REVIEW	5
2.1 BACKGROUND STUDY	5
2.2 LITERATURE REVIEW	6
CHAPTER 3: SYSTEM ANALYSIS	7
3.1 SYSTEM ANALYSIS	7
3.1.1 REQUIREMENT ANALYSIS	7
3.1.1.1 FUNCTIONAL REQUIREMENT	7
3.1.1.2 NON-FUNCTIONAL REQUIREMENT	8
3.1.2 FEASIBILITY STUDY	8
3.1.2.1 TECHNICAL FEASIBILITY	8
3.1.2.2 OPERATIONAL FEASIBILITY	9
3.1.2.3 ECONOMIC FEASIBILITY	9
3.1.2.4 SCHEDULE FEASIBILITY	9
CHAPTER 4: SYSTEM DESIGN	11
4.1 SYSTEM ARCHITECTURE AND OVERVIEW	11

4.2 DATA MODELLING	12
4.3 PROCESS MODELLING	13
4.4 FLOWCHART DIAGRAM	14
4.5 USE CASE DIAGRAM	15
CHAPTER 5: IMPLEMENTATION & TESTING	16
5.1 IMPLEMENTATION	16
5.1.1 TOOLS USED	16
5.1.2 IMPLEMENTATION DETAILS OF MODULES	17
5.2 TESTING	17
5.2.1 UNIT TESTING	17,18,19
5.2.2 INTEGRATION TESTING	19,20
5.2.3 SYSTEM TESTING	21
CHAPTER 6: CONCLUSION & FUTURE RECOMENDATIONS	22
6.1 LESSON LEARNED	22
6.2 CONCLUSION	22
6.3 FUTURE RECOMMENDATIONS	22
REFERENCES	23
APPENDIX	24
A.1 USER INTERFACE	24,27
A.2 SOURCE CODE	28,33

LIST OF ABBREVIATION

CSS	:	Cascading Style Sheet
HTML	:	Hyper Text Markup Language
PHP	:	Hypertext Preprocessor
DFD	:	Data Flow Diagram
ER	:	Entity Relationship

LIST OF FIGURES

Figure 1	:	Waterfall Method
Figure 2	:	System Architecture
Figure 3	:	ER diagram
Figure 4	:	Context Diagram
Figure 5	:	Level 1 DFD Diagram
Figure 6	:	Flowchart
Figure 7	:	Use Case Diagram
Figure 8	:	System Testing

LIST OF TABLES

Table 1	:	Gantt Chart
Table 2	:	Unit Testing
Table 3	:	Integration Testing

CHAPTER 1: INTRODUCTION

1.1. Introduction

The Gahana Nepal is one of the latest services most shops in the Western world are adopting. With this method, gold products are ordered online and delivered to the customer. This is made possible through the use of an electronic payment system. Customers pay with their credit cards, although credit card customers can be served even before they make payment either through cash. So, the system designed in this project will enable customers to go online and place orders for their products. Due to the great increase in the awareness of the internet and the technologies associated with it, several opportunities are coming up on the web. So many businesses and companies now venture into their business with ease because of the internet. One such business that the Internet introduced is Gahana Nepal (A gold product-selling platform).

Until recently, most of these delivery orders were placed by physically going to the shop, but there are many disadvantages to this system. It is possible for anybody to order any goods via the Internet and have the goods delivered to his/her doorstep. But while trying to discuss the transfer method of the goods and services, attention is focused on the payment mode.

The system also greatly lightens the load on the shop's end, as the entire process of taking orders is automated. Once an order is placed on the platform that will be designed, it is placed into the database and then retrieved, in pretty much real-time, by a desktop application on the admin send. Within this application, all items in the order are displayed, along with their corresponding options and delivery details, in a concise and easy-to-read manner. This allows the admin employees to quickly go through the orders as they are placed and produce the necessary items with minimal delay and confusion. The greatest advantage of this system is its FLEXIBILITY.

1.2. Problem Statement

Physically visiting the gold shops while searching for the right product for an individual is quite mudding. So here are some of the disadvantages of the previous practice:

- Customers find difficulty in finding the right product for themselves with a pure quantity of gold.
- Physical visits to the stores can be time-consuming and inconvenient for the customers.
- The verification process for pure gold can be time-consuming and translucent to customers.
- Lack of transparency in gold marketing and more amount of fake gold is circulating throughout the stores.

1.3. Objectives

The main objectives behind the development of the system are:

- To improve the buying of gold products convenient to the customers.
- To increment the revenues of the business.
- To target the enhancement of regular gold shop services
- To eliminate recurring costs by physically opening a shop.

1.4. Scope and Limitation

The scope of this project in the coming days will be more popular than imagined because this project will help customers.

- It has a built-in database that stores all the product, customer, and order records.
- After placing the order customer can check the status of their product online via tracking code.
- In this application, all the products are listed as per the customer's requirement to have convenient searches.

Some of the Limitations are:

- Fear of customers in terms of security and products.
- Inconvenient Internet service in Nepal.
- Not all customers use them.
- Sometimes delivery may delay because of underdeveloped transportation infrastructure.

1.5. Development Methodology

A methodology is a development system of methods that are used to plan, structure, and control the process of developing an information system. A wide variety of published development methodologies have evolved over the years, each with its own recognized strength and weakness. Different types of system project use available methodologies that best suits a specific project based on the project's various technical development process.

The development methodology selected for this project is Waterfall Development. This methodology was chosen because it shows the flow of the project process in a logical form. Each phase must be completed before the next phase can begin. It is mostly used in the process of creating software and it is easy to understand. One of the advantages that will benefit this project is the waterfall works for projects where requirements are very well understood. Waterfall

development allows departmentalization and control. The cost of the project can be estimated once all requirements are gathered and defined.

The waterfall methodology typically includes the following phases:

- **Requirements Gathering:** In this phase, the requirements of the system are identified, and the software requirements specification (SRS) document is created.
- **Design:** In this phase, the software architecture and detailed design of the system are created based on the requirements identified in the requirements gathering phase.
- **Implementation:** In this phase, the software is developed based on the design specifications.
- **Testing:** In this phase, the software is tested to ensure that it meets the functional and non-functional requirements.
- **Deployment:** In this phase, the software is deployed and made available for use.
- **Maintenance:** In this phase, the software is monitored and updated to ensure that it continues to meet the needs of the stakeholders.

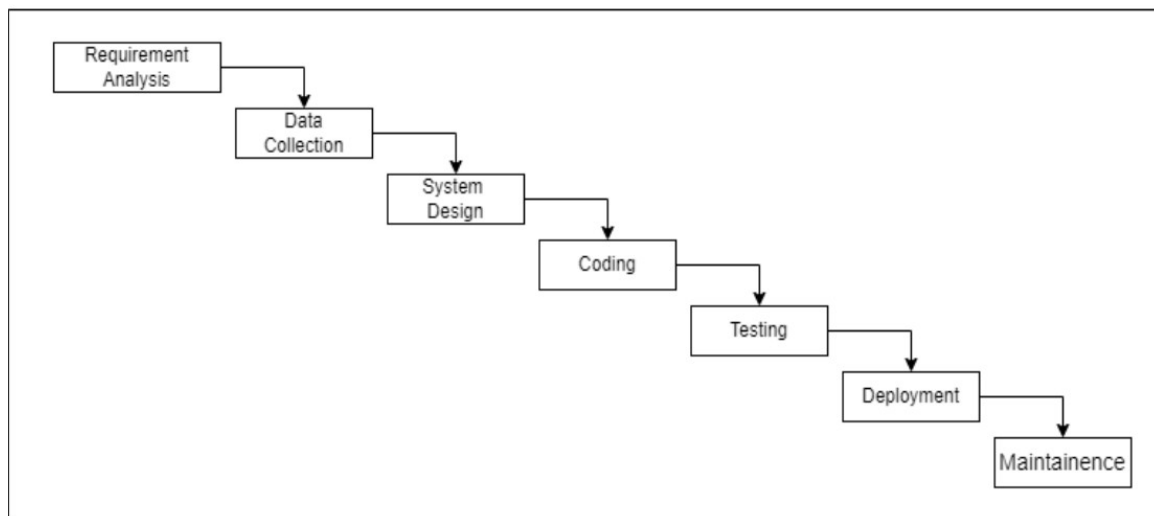


Fig 1: Waterfall Method

1.6. Report Organization

The chapter plan regarding our project is structured as specified in the format below:

Chapter 1: Introduction

This chapter consists of a brief introduction to our Project. This chapter also discusses the problem definition, the objectives of the project, its scope, and its limitation.

Chapter 2: Background Study & Literature Overview

This chapter includes a review of the area being researched, current information surrounding the issue, previous studies on the issue, and relevant history on the issue. This chapter focuses on the study of existing systems and Projects from various sources such as internet blogs, websites, project work reports, books, and journals.

Chapter 3: System Analysis

This chapter includes studying a procedure or business in order to identify its goals. And purposes and create systems and procedures that will achieve them in an efficient way. It also explains the requirements specification and feasibility study conducted during the project initiation.

Chapter 4: System Design

This chapter consists of Data Flow Diagram (DFD), Database Schema, Flow chart, and Sequence Diagram.

Chapter 5: Implementation and Testing

This chapter focuses on the Software, Tools, and protocols that have been utilized for the initiation and completion of our Project. Also, it defines various testing of the System.

Chapter 6: Conclusion and Future Recommendations

This section depicts the overall conclusion of the project and future upgrades that will be provided to the clients.

References

This section lists references to journals, conferences, books, websites, and other sources that have been cited throughout the project.

Appendix

This section comprises a collection of various screenshots, source codes, and configuration files that provide a detailed insight into the working mechanism of our project. The screenshots help illustrate the various stages and functionalities of the project.

CHAPTER 2: BACKGROUND STUDY & LITERATURE REVIEW

2.1. Background Study

The gold services industry is a vital component of modern times, providing citizens with access to less time-consuming and secure services of buying gold online. In recent years, there has been an increasing trend towards digitization of product buying and selling online in many countries around the world, including Nepal. However, despite advancements in technology, the process of finding a design and ordering remains fearful among people as the thought of insecurity among their gold products and inconvenient for many people. This has led to the development of alternative gold services platforms, such as Gahana Nepal, that aim to address these issues.

In Nepal, like many other countries, the traditional model of buying gold involves physical visits to stores, which can be time-consuming and inconvenient for customers. No matter of time, people are still going for the traditional method of buying and selling gold just because they have a mindset that buying or selling gold in online is risky and is more likely to be fraud.

The platform's verification process for the products will help ensure that only qualified and real gold products are available to customers. The platform's admin panel will provide an additional layer of management and oversight, helping to ensure the smooth operation of the platform. By providing these features, Gahana Nepal seeks to position itself as a leading provider of gold-selling services in Nepal and to contribute to the modernization and improvement of the gold-selling services industry in the country.

Overall, the Gahana Nepal platform is part of a global trend toward the digitization of gold-selling services, and it seeks to bring these advancements to the gold-selling services industry in Nepal. By offering a convenient, secure, and reliable platform for customers to connect with vendors, Gahana Nepal aims to make the process of finding and placing orders more efficient and accessible for all.

2.2. Literature Review

The trend toward digitization of gold-selling services has been the subject of much research and analysis in recent years. Many studies have explored the potential benefits of online gold-selling services platforms, including increased accessibility and convenience for customers, improved transparency and security in the gold-selling industry, and reduced costs for customers.

One study found that the use of online platforms for gold-selling services has the potential to increase access to safe for individuals who may not otherwise have the time for gold shopping.

Another study explored the potential impact of online gold services on the gold industry itself, finding that these platforms can provide new opportunities for shops to grow their practices and reach new customers. At the same time, the study also noted that online platforms may also pose challenges to traditional gold services providers, including increased competition and potential changes to the business model of the gold industry.

A literature review of the gold services industry in Nepal found that the industry is facing significant challenges, including a lack of security, accountability, and access to gold services for many citizens. The use of technology and digital platforms has the potential to address these challenges and improve access to gold services in Nepal.

In conclusion, the literature review indicates that the use of technology and digital platforms in the gold services industry has the potential to bring significant benefits for customers, vendors, and the industry as a whole. However, there are also potential challenges and limitations that need to be considered as the industry continues to evolve and adopt new technologies.

CHAPTER 3: SYSTEM ANALYSIS

3.1. System Analysis

It includes collecting and interpreting facts, identifying the problems, and decomposition of a system into its components. System analysis is conducted for the purpose of studying a system or its parts in order to identify its objectives. It is a problem-solving technique that improves the system and ensures that all the components of the system work efficiently to accomplish their purpose. It consists of a requirement analysis and a feasibility study for the system.

3.1.1. Requirement Analysis

Requirement Analysis, also known as Requirement Engineering, includes defining user expectations for a new software being built or modified. In software engineering, it is sometimes referred to loosely by names such as requirements gathering or requirements capturing. It includes functional and non-functional requirements for the system.

3.1.1.1. Functional Requirements

In order to ensure that the Gahana Nepal platform meets the needs and expectations of its users, a comprehensive set of functional requirements were identified and developed. These requirements were informed by the results of the system analysis, as well as feedback from potential users and stakeholders.

The functional requirements for the Gahana Nepal platform can be grouped into several key areas, including user account management, appointment scheduling, video call and chat functionality, payment processing, and administrative capabilities.

1. **User Account Management:** The platform must allow for the creation and management of customers, with customer accounts not requiring verification while the products should be verified before being listed in the platform. The platform must also include the ability to sign up using a Google account.
2. **Administrative Capabilities:** The platform must include a robust administrative system that allows for the verification of products and management of the platform as a whole. This includes the ability to send notifications to customers and provide robust reporting and analytics capabilities to help better understand usage patterns and user behavior.

In order to ensure the Gahana Nepal platform meets the needs of its users and provides a comprehensive solution for connecting customers, these functional requirements were carefully developed and will serve as the basis for the design and development of the platform.

3.1.1.2. Non-Functional Requirements

There are a number of non-functional requirements that must be met in order for the Gahana Nepal platform to be successful. These non-functional requirements relate to the overall performance, reliability, and usability of the platform, and are essential for ensuring that users have a positive experience when using the platform.

1. **Performance:** The platform must be fast and responsive, with minimal lag or delay when accessing or using any of its features.
2. **Reliability:** The platform must be highly reliable, with a high degree of uptime and minimal downtime. The platform should also be able to handle a high volume of traffic without slowing down or crashing.
3. **Scalability:** The platform must be designed with scalability in mind, and should be able to accommodate growth and increased usage over time.
4. **Security:** The platform must include robust security measures to protect user data and ensure the confidentiality and privacy of user information.
5. **Usability:** The platform must be easy to use and navigate, with a user-friendly interface that makes it simple for users to find and access the information and features they need.
6. **Accessibility:** The platform must be accessible to users with a range of abilities and disabilities, including those with visual, auditory, and motor impairments.

In order to ensure the success of the Gahana Nepal platform, these non-functional requirements were identified and will be incorporated into the design and development of the platform, to ensure that users have a positive and seamless experience when using the platform.

3.1.2. Feasibility Study

A feasibility study is a crucial part of the project planning process for Gahana Nepal, as it helps to determine if the platform is viable and practical to develop.

1. Technical Feasibility

This project of Gahana Nepal was determined through the evaluation of its proposed technology stack, which includes JS as the frontend framework, Node JS for the backend, and Firebase for database integration. The use of these cutting-edge technologies ensures that the system will be highly performant, scalable, and secure, allowing it to meet the functional and non-functional requirements of the project. Additionally, we have extensive experience in developing web applications, further increasing the feasibility of the project from a technical perspective.

Software requirements Operating system:

Windows XP / Windows 7

Server: Apache 2.4.4

Front-end: PHP 5.4.19 (Framework: Bootstrap)

Back-end: MySQL 5.5.32(using phpMyAdmin 4.0.6)

We have used XAMPP which is a free and Open-Source Cross-Platform Web Server Solution Stack. It comes with Apache Web Server, MySQL Database, and PHP. 8

Hardware requirements Processor:

Intel dual-core or above

Processor Speed: 1.0GHZ or above

RAM: 1 GB RAM or above

Hard Disk: 20 GB hard disk or above

2. Operational Feasibility

This project of Gahana Nepal was evaluated by considering factors such as user acceptance, ease of use, compatibility with current systems and processes, and resource availability. We conducted surveys and focus groups with products and customers gather feedback on the proposed system and understand their needs and requirements. Based on the results of these assessments, it was determined that Gahana Nepal will be well-received by its target users as it provides a convenient and efficient way for vendors and customers to communicate and collaborate. Furthermore, Gahana Nepal simple and user-friendly interface, coupled with its seamless integration with existing systems and processes, makes it an ideal solution for customers. The operational feasibility of the project is therefore considered to be high.

3. Economic Feasibility

We conducted a thorough cost-benefit analysis to determine the potential financial impact of the project. This analysis included factors such as development costs, ongoing maintenance costs, potential revenue streams, and any other costs associated with the implementation of Gahana Nepal. The results of this analysis indicated that the economic feasibility of Gahana Nepal is high, with the potential to provide significant cost savings and revenue opportunities for customers. With its innovative approach to connecting customers, Gahana Nepal is poised to play an important role in the legal industry, providing a valuable and cost-effective solution to the challenges faced by both parties.

4. Schedule Feasibility

This project of Gahana Nepal analysis accumulated to be of 12 weeks to completion of the project. Multiple milestones and minutes were created to keep track of time. The following Gantt Chart shows the time allocated for the design completion.

Table 1: Gantt Chart

Time	Week 01	Week 02	Week 03	Week 04	Week 05	Week 06	Week 07	Week 08	Week 09	Week 10	Week 11	Week 12
Phases												
Study and Analysis	2W											
Data fetching & Scrapping				1W								
Implementation & Coding			3W									
Testing				3W								
Documentation		9W										
Review											2W	
Presentation								1W				

CHAPTER 4: SYSTEM DESIGN

4.1. System Architecture and Overview

Systems Architecture is a generic discipline to handle objects (existing or to be created) called "systems", in a way that supports reasoning about the structural properties of these objects. Systems Architecture is a response to the conceptual and practical difficulties of the description and the design of complex systems.

We have developed a system that makes use of the computer peripherals. This system is supported by different devices that have browsers. The system architecture is clearly defined by the following figure:

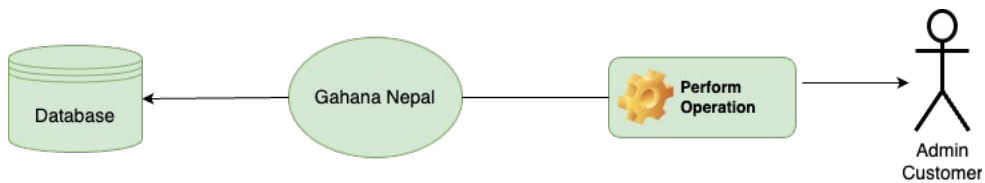


Fig 2: System Architecture

4.2. Data Modelling

Entity Relationship Diagram of Gahana Nepal

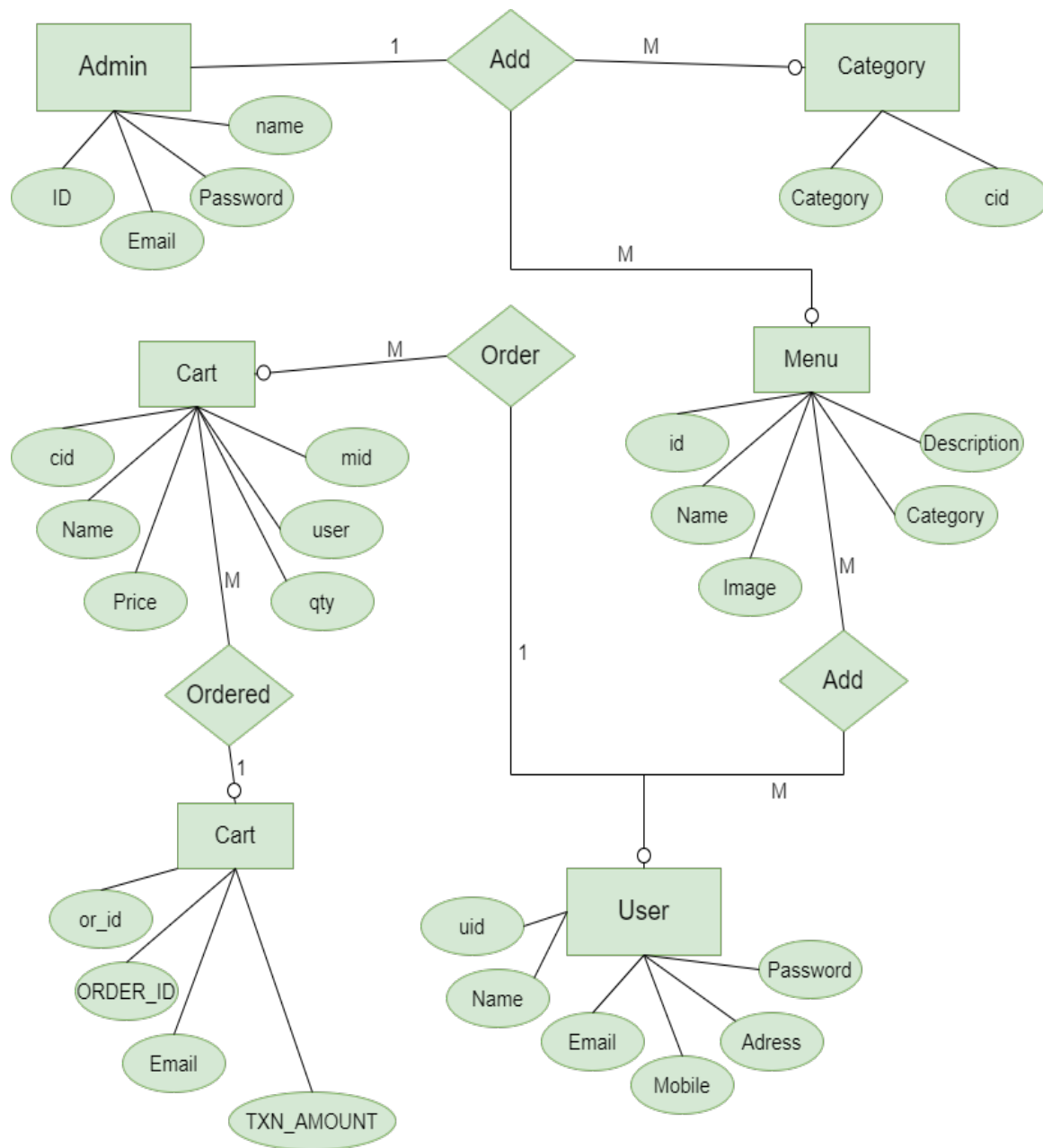


Fig 3: ER Diagram

4.3. Process Modelling

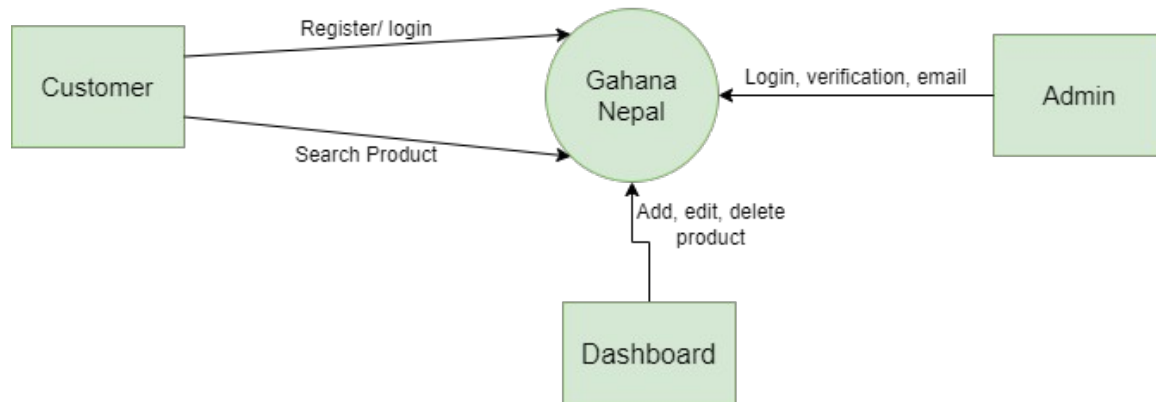


Fig 4: Context Diagram

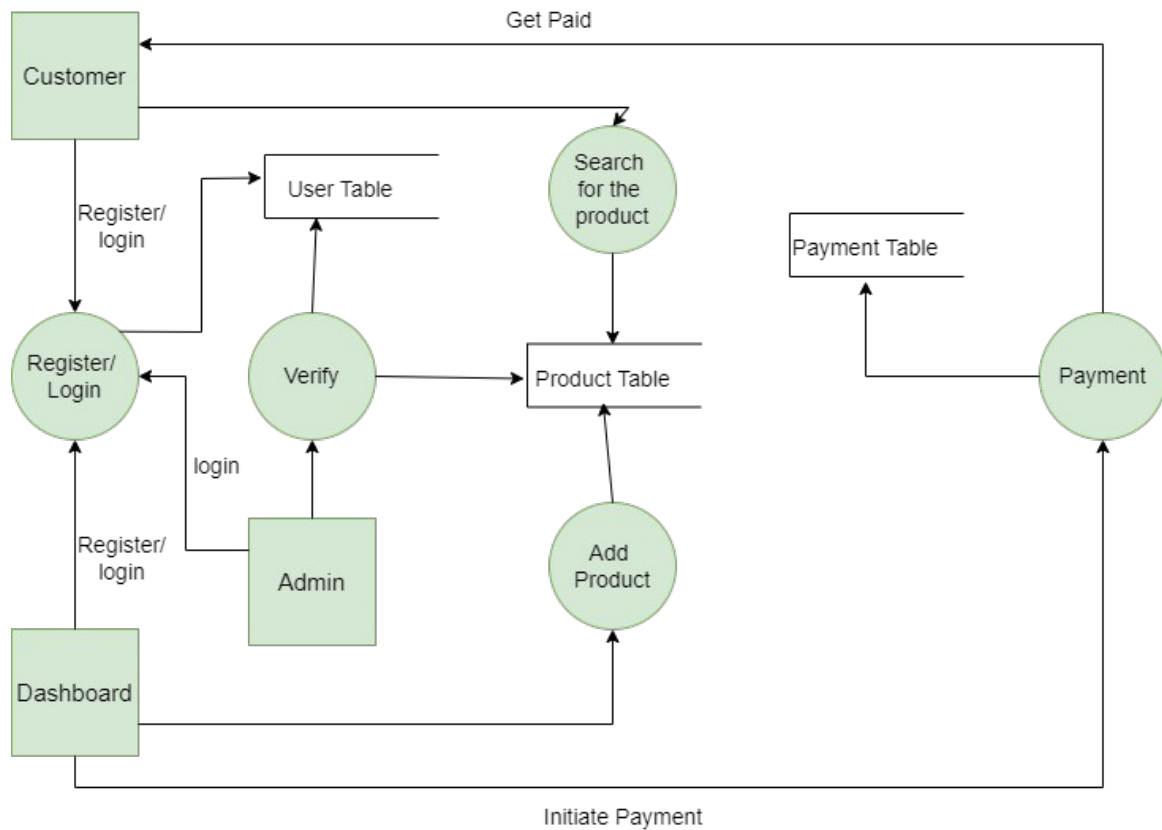


Fig 5: Context Diagram or Level 1 DFD

4.4. Flowchart Diagram

A flowchart is a type of diagram that represents a workflow or process. A flowchart can also be defined as a diagrammatic representation of an algorithm, a step-by-step approach to solving a task. The flowchart shows the steps as boxes of various kinds, and their order by connecting the boxes with arrows. This diagrammatic representation illustrates a solution model to a given problem. Flowcharts are used in analyzing, designing, documenting, or managing a process or program in various fields.

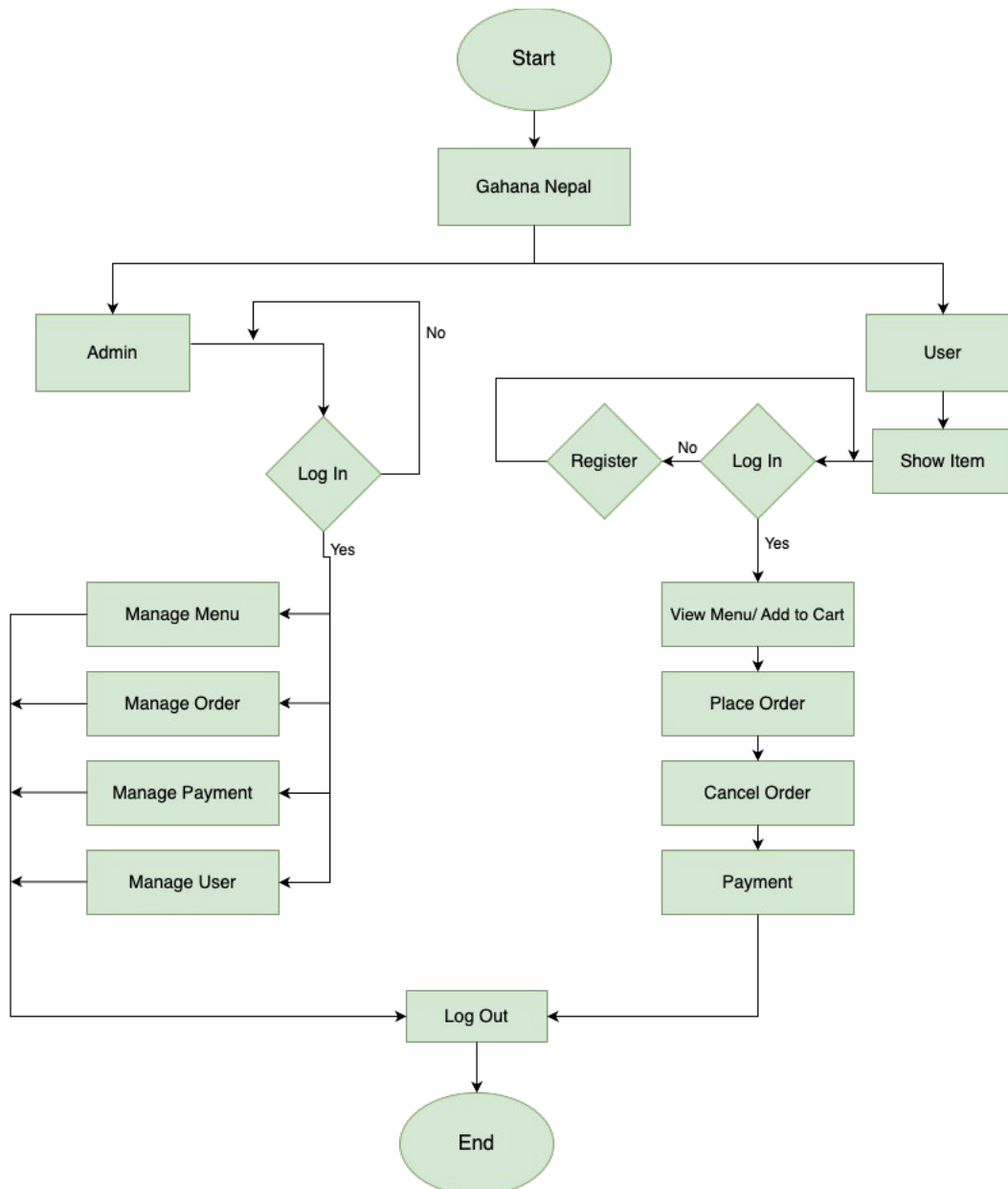


Fig 6: Flowchart of Gahana Nepal

4.5.

Use Case Diagram

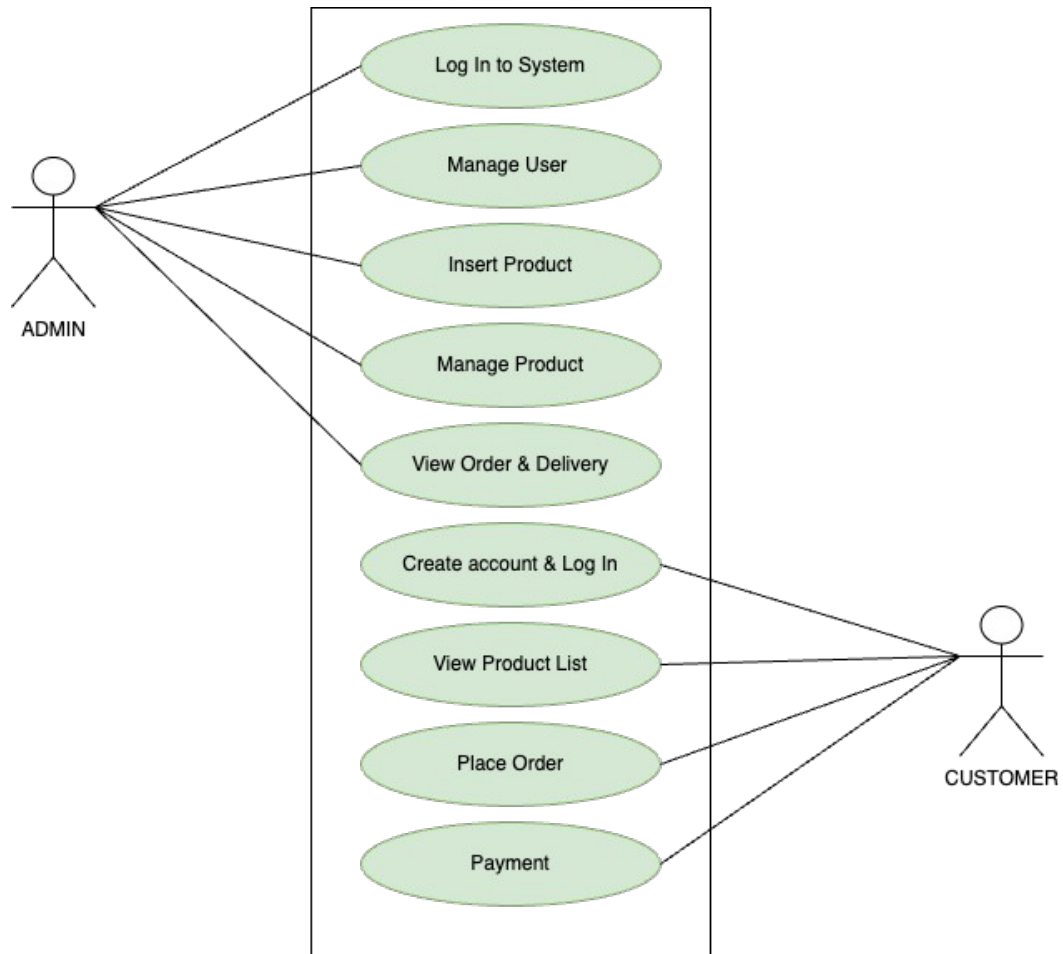


Fig 7: Use Case Diagram

CHAPTER 5: IMPLEMENTATION AND TESTING

5.1. Implementation

5.1.1. Tools Used

Coding Tools

Coding tools are tools for software developers to create, debug, maintain, or otherwise support other programs and applications. The term usually refers to relatively simple programs, that can be combined together to accomplish a task, much as one might use multiple hands to fix a physical object. Different front-end and back-end tools were used in this project.

Front End

Front-end tools are the tools to build attractive website layouts and apps with ease. The front end is the part the users interact with. React, Material UI, Visual Studio code, etc. were used in the front end. Front-end tools are used in converting data to a graphical interface, through the use of HTML, CSS, and Javascript, so that users can view and interact with that data.

Visual Studio Code

Visual Studio Code (VS Code) is a free and open-source code editor developed by Microsoft. It is widely used by developers for its intuitive interface, fast performance, and powerful features. VS Code supports multiple programming languages and provides a range of tools for code development, such as debugging, code highlighting, embedded Git, and IntelliSense (code completion). In addition to its features, VS Code has a vast library of extensions that can be installed to add more functionalities.

GitHub

GitHub is a web-based platform that provides hosting for software development and version control. It enables developers to store and manage their code, collaborate with others, and track changes to their projects. GitHub makes it easy for developers to work together on the same codebase, even from different locations. By using GitHub, it is possible to keep track of changes to the project and collaborate effectively. Additionally, GitHub provided a centralized platform for storing and managing the project's code, which made it easy to access and update the code as needed.

Back End

Back End means the server, application, and database that work behind the scenes to deliver information to the user, and the tools that are used in this process are called back-end tools. With Firebase, the Socket.io and Simple-peer library (node.js style API for WebRTC) was used in the back end to handle the database.

Laravel

Laravel is an open-source PHP framework, which is robust and easy to understand. It follows a model-view-controller design pattern. Laravel reuses the existing components of different frameworks which helps in creating a web application. The web application thus designed is more structured and pragmatic.

5.1.2. Implementation Details of Modules

The implementation details of the modules in the Gahana Nepal platform are as follows:

User Authentication Module: This module handles user authentication and authorization on the platform. It uses a combination of email and password authentication and social media logins such as Google to authenticate users.

Review and Rating Module: This module enables customers to rate and review their experience with our products on the platform. It includes a feedback form that covers aspects such as quality of service.

Admin Panel Module: This module provides administrators with access to the platform's management tools, including user management, product verification, and notification management. It includes features such as user roles and permissions, data analytics, and reporting.

These modules are developed using various technologies such as HTML, CSS, JavaScript, and Firebases.

5.2. Testing

5.2.1. Unit Testing

Unit testing is a software development process in which the smallest testable parts of an application, called units, are individually and independently scrutinized for proper operation. Unit testing is often automated but it can be done manually. Unit testing must be done with an awareness that it may be not possible to test a unit for every input scenario that will occur when the program is run in a real-world environment. In the inventory management system, Unit testing was done in the following forms:

Table 2: Unit Testing

T. C ID	Test Scenario	Test Case	Test Steps	Expected Result	Actual Result	Pass/Fail
1	Check Login Functionality	Check response on entering valid username and password	1 Launch App 2 Click Get Started button 3 Click Already have on account button 3 Enter username and password 4 Click Signin button	Login must be successful	Login Successful	Pass
2	Check Registration Functionality for customer	Check response on creating new valid username and password	1 Launch App 2 Click Get Started button 3 Enter new username and password 4 Enter Signup button	Registration must be successful	Registered Successful	Pass
3	Check create Profile Functionality for customer	Check response on creating profile	1 Login as customer 2 Fill the data	Creating profile must be successful	Created Successful	Pass

			3 Click Update button			
4	Check Dashboard Functionality	Check response on all options of Dashboard	1 Login 3 Click on all options available on navbar of Dashboard	Using all Dashboard features must be successful	Working Successful	Pass
5	Search and place an order	Check response on searching product and placing an order	1 Login as Client 2 Click on shop 3 Search product 4 Click on SEE MORE of product 5 Click place an order	Searching and placing an order	Working Successful	Pass
7	Test Logout	Check Logout	1. Login 2. Logout	Must be logout of the system	Logged out Successful	Pass

5.2.2. Integration Testing

Integration testing is done to test the modules/components when integrated to verify that they work as expected i.e. to test the modules which are working fine individually and do not have issues when integrated. Suppose an application has three modules A, B, and C, then testing done

by combining modules A & B or module B & C or module A& C is known as Integration testing.

Table 3: Integration Testing

T. C ID	Test Scenario	Test Case	Test Steps	Expected Result	Actual Result	Pass/Fail
1	Check Login, Register and logout Functionality	Check response on login, register and logout	1 Launch App 2 Click Get Started button 3 Enter username and password 4 Click Signin button 5 Click logout	Login must be successful	Logged in, Register and Logged out Successful	Pass
2	Check create Profile Functionality for Customer	Check response on creating profile	1 Login as customer 2 Fill the data 3 Click Update button	Creating profile must be successful	Created Successful	Pass
3	Check Dashboard Functionality	Check response on all options of Dashboard	1 Login 2 Click on all options available on	Using all Dashboard features must be successful	Working Successful	Pass

			navbar Dashboard	of			
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5.2.3. System Testing

System Testing means testing the system as a whole. All the modules/components are integrated in order to verify if the system works as expected or not. System testing is done after integration testing. The system testing part of a testing methodology involves testing the entire system for errors and bugs. No errors or bugs were found during system testing.

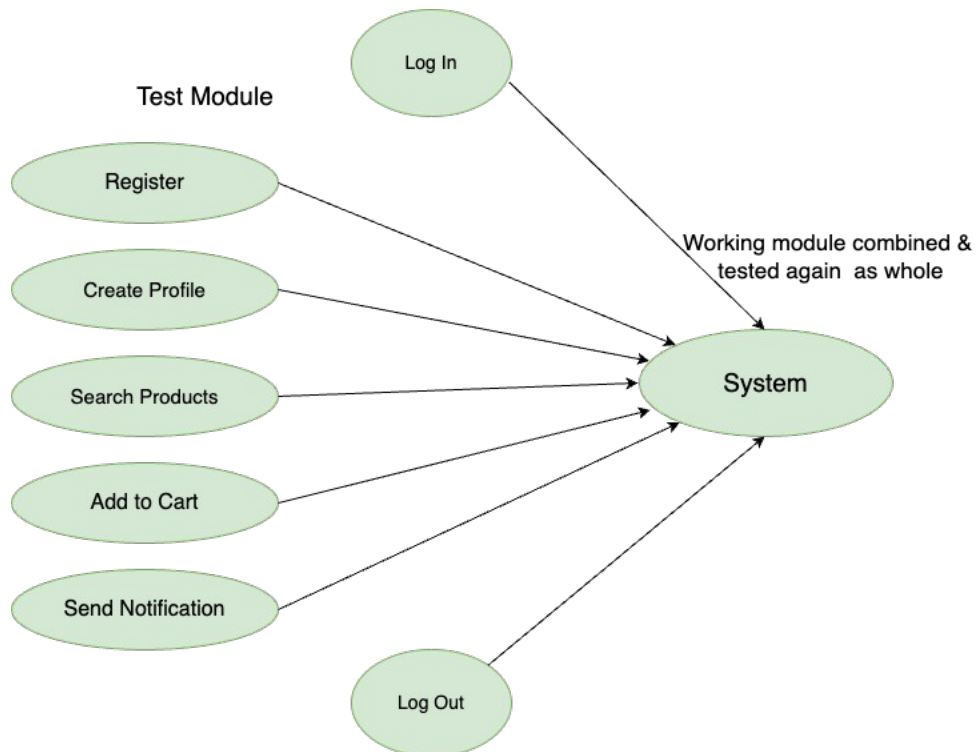


Fig 8: System Testing

CHAPTER 6: CONCLUSION AND FUTURE RECOMMENDATIONS

6.1. Lesson learned

Doing something for long time periods always gives good lessons. Some of the things that our team learned are listed below:

- i. Basically we learned to work in a team.
- ii. Learnt about the Web app platform.
- iii. Learnt about the front end, backend technology & report documentation.
- iv. Learned to manage the database.

6.2. Conclusion

The development of Gahana Nepal project has been a successful effort to provide a platform for customers to connect and engage in gold-buying services through the Internet. The project was designed with the goal of making gold-buying services more accessible and convenient for customers while providing shops with a platform to showcase their services and connect with potential customers. The project was implemented using the latest technologies, including JS, Firebase, and GitHub. The technical feasibility, operational feasibility, and economic feasibility of the project were analyzed, and all aspects of the project were tested and refined to ensure a seamless user experience. Lessons were learned throughout the development process and will be used to improve future projects. In the end, the development of Gahana Nepal project demonstrates the potential of technology to transform traditional industries and make services more accessible to people everywhere.

6.3. Future Recommendations

Some of the future enhancements that can be enhanced are as follows:

1. Adding new features to the platform such as secure payment options.
2. Improving the user interface and overall user experience
3. Integrating advanced technologies such as artificial intelligence and machine learning

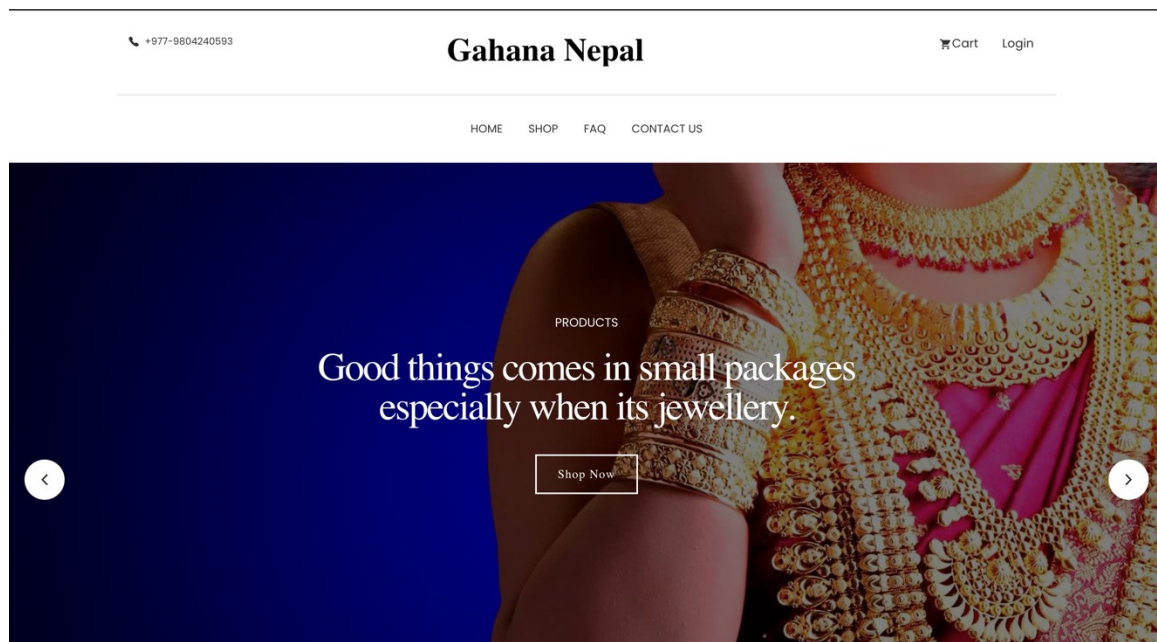
4. Providing better support and maintenance services to users.

References

1. Adam Trachtenberg, PHP Cook Book, 2003
2. Michael Morrison, Head First PHP and MYSQL, 2008
3. Shwera S. T., Priyanka R. S., Madhura M. J. (2013). Gold Ordering Digitalization with Real-Time Customer Feedback, International Journal of Advanced Research in Computer Science and Software Engineering, 3(2): 220-225.
4. Ting-Peng L., Chen-Wei H., Yi- Hsuan Y. (2007). Adoption of mobile technology in business – an inviability model. Industrial Management & Data Systems, 107: 1154-1169.
5. O. I. Mike and A. Simon, “Towards the Digitalization of Marketing in Nigeria: The Design Perspective”, vol. 7, no. 3, pp. 1176-1179, 2017.

Appendix

A.1 User Interface



Homepage

Shop

[Home](#) / [shop](#)



Earing



Sano Mangalsutra



Sirbandi





Shop

[HOME](#) [SHOP](#) [FAQ](#) [CONTACT US](#)

Cart

[Home](#) / [cart](#)

Item Name	Item Quantity	Item Weight	Item Wage	Actions
 Sano Mangalsutra	1	2 Gram	Rs.200	Remove
 Bracelet	1	2 Gram	Rs.700	Remove

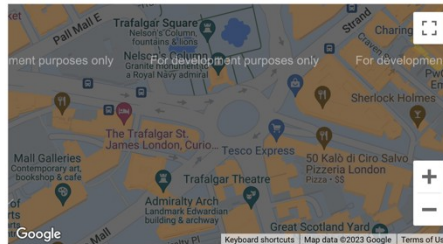
CHECKOUT

Cart

Contact Us

[Home](#) / [contact](#)

SUBMIT



CHITWANBHANA PA-3
Phone: +977-9804240593
Email: fitpro05@gmail.com



Contact Us

phpMyAdmin

Server: localhost - Database: collegeproject_7thsem - Table: users

Recent Favorite phpMyAdmin documentation

Showing rows 0 - 0 (1 total, Query took 0.0002 seconds.)

SELECT * FROM `users`

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 | Filter rows: Search this table

Extra options

	id	name	email	email_verified_at	password	remember_token	created_at
<input type="checkbox"/>	1	Saswot Shrestha	saswotcretha7@gmail.com	NULL	\$2y\$10\$KJk6NNvQ3UZ6m4mt4AVtuSgiw6zccS1WLb4niloAu...	NULL	2023-03-09 10:02:52

Check all | With selected: Edit Copy Delete Export

Show all | Number of rows: 25 | Filter rows: Search this table

Query results operations

Print Copy to clipboard Export Display chart Create view

Bookmark this SQL query

Label: ☐ Let every user access this bookmark

Bookmark this SQL query

localhost/phpmyadmin/doc/html/index.html Console

Admin Structure

Table	Action	Rows	Type	Collation	Size	Overhead
carts	✱ Browse Structure Search Insert Empty Drop	2	InnoDB	utf8mb4_unicode_ci	64.0 KiB	-
customers	✱ Browse Structure Search Insert Empty Drop	1	InnoDB	utf8mb4_unicode_ci	48.0 KiB	-
failed_jobs	✱ Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	32.0 KiB	-
migrations	✱ Browse Structure Search Insert Empty Drop	11	InnoDB	utf8mb4_unicode_ci	16.0 KiB	-
orders	✱ Browse Structure Search Insert Empty Drop	5	InnoDB	utf8mb4_unicode_ci	64.0 KiB	-
password_resets	✱ Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	32.0 KiB	-
personal_access_tokens	✱ Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	48.0 KiB	-
products	✱ Browse Structure Search Insert Empty Drop	12	InnoDB	utf8mb4_unicode_ci	16.0 KiB	-
product_images	✱ Browse Structure Search Insert Empty Drop	14	InnoDB	utf8mb4_unicode_ci	32.0 KiB	-
todayprices	✱ Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	16.0 KiB	-
users	✱ Browse Structure Search Insert Empty Drop	1	InnoDB	utf8mb4_unicode_ci	32.0 KiB	-
11 tables	Sum	46	InnoDB	utf8mb4_general_ci	400.0 KiB	0 B

Category Structure

	id	name	type	priceType	price	quantity	description	deleted_at	created_at	updated_at
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	1	Earing	Gold	Rs.	600	10	Pure Gold Earrings	NULL	2023-03-09 10:03:48	2023-03-09 14:56:24
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	2	Sano Mangalsutra	Gold	Rs.	200	21	Pure Gold Mangalsutra	NULL	2023-03-09 10:15:43	2023-03-13 03:06:10
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	3	Sirbandi	Gold	Rs.	800	15	Pure Gold Sirbandi	NULL	2023-03-09 10:52:45	2023-03-09 14:57:03
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	4	Ranihar	Gold	Rs.	4500	25	Pure Gold Ranihar	NULL	2023-03-09 14:58:31	2023-03-09 14:58:31
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	5	Chadke Tihari	Gold	Rs.	100	30	Pure Gold Chadke Tihari	NULL	2023-03-09 14:59:10	2023-03-09 14:59:10
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	6	Bracelet	Gold	Rs.	700	29	Pure Gold Bracelet	NULL	2023-03-09 15:00:19	2023-03-13 03:07:06
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	7	Chain	Gold	Rs.	500	25	Pure Gold Chain	NULL	2023-03-09 15:00:56	2023-03-09 15:00:56
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	8	Chura	Gold	Rs.	1500	15	Pure Gold Chura	NULL	2023-03-09 15:01:22	2023-03-13 02:57:27
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	9	Fuli	Gold	Rs.	600	20	Pure Gold Fuli	NULL	2023-03-09 15:05:35	2023-03-09 15:05:35
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	10	Mangalsutra	Gold	Rs.	2000	15	Pure Gold mangalsutra	NULL	2023-03-09 15:07:34	2023-03-09 15:07:34
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	11	Necklace	Gold	Rs.	2000	30	Pure Gold Necklace	NULL	2023-03-09 15:08:17	2023-03-09 15:08:17
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	12	Pauju	Gold	Rs.	500	25	Pure Gold Pauju	NULL	2023-03-09 15:08:41	2023-03-09 15:08:41

Product Structure

phpMyAdmin

Server: localhost - Database: collegeproject_7thsem - Table: customers

Showing rows 0 - 0 (1 total, Query took 0.0002 seconds.)

SELECT * FROM `customers`

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 | Filter rows: Search this table

Extra options

	id	name	address	email	phone	zipcode	country	city	deleted_at	created_at	updated_at
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	1	rajesh shrestha	Ratnanagar	henry12iglesis@gmail.com	+977-9845770706	40042	Nepal	Chitwan	NULL	2023-03-09 10:28:22	2023-03-09 10:28:22

Check all | With selected: Edit Copy Delete Export

Show all | Number of rows: 25 | Filter rows: Search this table

Query results operations

Print Copy to clipboard Export Display chart Create view

Bookmark this SQL query

Label: ☐ Let every user access this bookmark

Bookmark this SQL query

Console

Customer Structure

A.2 Source Code

Main.blade.php

```
@extends('dashboard.layouts.app')
@section('content')
<div class="container-fluid px-4">
  <h1 class="mt-4">Dashboard</h1>
  <ol class="breadcrumb mb-4">
    <li class="breadcrumb-item active">Dashboard</li>
  </ol>
  <div class="row">
    <div class="col-xl-3 col-md-6">
      <div class="card bg-primary text-white mb-4">
        <div class="card-body">Product</div>
        <div class="card-footer d-flex align-items-center justify-content-between">
          <a class="small text-white stretched-link" href="{{route('product.index')}}"></a>
          <div class="small text-white">{{ $total_products }}</div>
        </div>
      </div>
    </div>
    <div class="col-xl-3 col-md-6">
      <div class="card bg-warning text-white mb-4">
        <div class="card-body">Customers</div>
        <div class="card-footer d-flex align-items-center justify-content-between">
          <a class="small text-white stretched-link" href="#"></a>
          <div class="small text-white">{{ $total_customer }}</div>
        </div>
      </div>
    </div>
    <div class="col-xl-3 col-md-6">
      <div class="card bg-success text-white mb-4">
        <div class="card-body">Orders</div>
        <div class="card-footer d-flex align-items-center justify-content-between">
          <a class="small text-white stretched-link" href="{{route('order.index')}}"></a>
          <div class="text-white">{{ $total_order }}</div>
        </div>
      </div>
    </div>
    <div class="col-xl-3 col-md-6">
```



```

<div class="card bg-danger text-white mb-4">
  <div class="card-body">Carts</div>
  <div class="card-footer d-flex align-items-center justify-content-between">
    <a class="small text-white stretched-link" href="{{route('cart.index')}}"></a>
    <div class="small text-white">{{ $total_cart }}</div>
  </div>
</div>
</div>
</div>
<!-- <div class="row">
  <div class="col-xl-6">
    <div class="card mb-4">
      <div class="card-header">
        <i class="fas fa-chart-area me-1"></i>
        Area Chart Example
      </div>
      <div class="card-body"><canvas id="myAreaChart" width="100%"
height="40"></canvas></div>
    </div>
  </div>
  <div class="col-xl-6">
    <div class="card mb-4">
      <div class="card-header">
        <i class="fas fa-chart-bar me-1"></i>
        Bar Chart Example
      </div>
      <div class="card-body"><canvas id="myBarChart" width="100%"
height="40"></canvas></div>
    </div>
  </div>
</div> -->
<div class="card mb-4">
  <div class="card-header">
    <i class="fas fa-table me-1"></i>
    Today Order Lists
  </div>
  <div class="table-responsive">
    <table class="table table-striped table-bordered no-wrap" id="">
      <thead>
        <tr>
          <th>SN</th>

```

```

        <th>Customer Name</th>
        <th>Image</th>
        <th>Product Name</th>
        <th>Type</th>
        <th>Quantity</th>
        <th>Weight</th>
        <th>Total Price</th>
    </tr>
</thead>
<tbody>
    @if (count($orders)>0)
    @foreach ($orders as $order)
    <tr>
        <td>{{ $loop->iteration }}</td>
        <td>{{ $order->customer->name }}</td>
        <td>
            @if ($order->product->images)
            <?php
                $productimage = $order->product->images->first();
                $url = $productimage->url . '/' . $productimage->image;
            ?>
            product->name }}-{{ $productimage->image }}"
height="100" width="100" class="img-fluid">
            @else
            
            @endif
        </td>
        <td>{{ $order->product->name }}</td>
        <td>{{ $order->product->type }}</td>
        <td>{{ $order->quantity }}</td>
        <td>{{ $order->gram*1000 }} Gram</td>
        <?php
            $total = $order->quantity * $order->product_price;
        ?>
        <td>{{ $order->product->priceType }} {{ round($total,2) }}</td>
    </tr>
    @endforeach
    @else
    <tr>
        <td colspan="9" class="text-center">No data</td>
    </tr>
    </tbody>
</table>

```

```

        </tr>
    @endif
</tbody>
</table>
</div>
</div>
<div class="float-right">
    {{ $orders->links() }}
</div>
</div>

```

@endsection

List.blade.php

```

@extends('dashboard.layouts.app')
@section('content')
<div class="container-fluid px-4">
    <h1 class="mt-4">Product</h1>
    <ol class="breadcrumb mb-4">
        <li class="breadcrumb-item active">List</li>
    </ol>
    <div class="card mb-4">
        <div class="card-header">
            <i class="fas fa-table me-1"></i>
            Product Lists
        </div>
        <div class="table-responsive">
            <table class="table table-striped table-bordered no-wrap" id="">
                <thead>
                    <tr>
                        <th>SN</th>
                        <th>Image</th>
                        <th>Name</th>
                        <th>Type</th>
                        <th>Quantity</th>
                        <th>Wage</th>
                        <th>Total Price</th>
                        <th>Description</th>
                        <th>Action</th>
                    </tr>
                </thead>
                <tbody>

```

```

@if (count($products)>0)
@foreach ($products as $product)
<tr>
<td>{{ $loop->iteration}}</td>
<td>
@if ($product->images)
<?php
$productimage = $product->images->first();
$url = $productimage->url . '/' . $productimage->image;
?>
name }} - {{ $productimage->image }}"
height="100" width="100" class="img-fluid">
@else

@endif
</td>
<td>{{ $product->name }}</td>
<td>{{ $product->type }}</td>
<td>{{ $product->quantity }}</td>
<td>{{ $product->priceType }} {{ $product->price }}</td>
<?php
$total = $product->quantity * $product->price;
?>
<td>{{ $product->priceType }} {{ round($total,2) }}</td>
<td>{{ $product->description }}</td>
<td>
<a href="{{ route('product.show', $product->id) }}" class="btn btn-info">Show</a>
<a href="{{ route('product.edit', $product->id) }}" class="btn btn-warning
m-2">Edit</a>
</td>
</tr>
@endforeach
@else
<tr>
<td colspan="9" class="text-center">No data</td>
</tr>
@endif
</tbody>
</table>
</div>

```

```
</div>
<div class="float-right">
  {{ $products->links() }}
</div>
</div>
@endsection
```