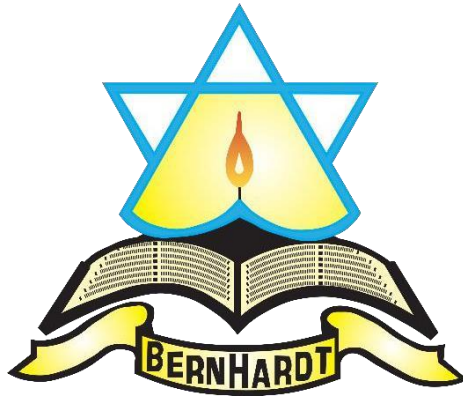


# **Kathmandu BernHardt College**



## **A REPORT ON COMPLAINT MANAGEMENT SYSTEM**

**Submitted to**

**Department of CSIT**

Kathmandu BernHardt College

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## **ABSTRACT**

The e-revolution and widespread usage of ICTs in business produced a world of e-business. Today, the e-Government represents the world's most industrialized countries, and the issue is capturing the interest of people all over the world. There has been great progress in Nepal's ICT sector and the government has established a variety of ICT-related e-services. The increase in the usage of mobile technology and smartphones in recent years has made the nation's residents increasingly willing to utilize e-services, making e-Governance a hot cake subject.

The usage of the internet and social media is rising quickly in Nepal, prompting the government to implement and adapt the e-Governance model and services to improve people's everyday lives. To execute the e-Governance system in Nepal, a good vision, strategy, and planning must be developed, and the key problems impeding the system must be neutralized to create an atmosphere conducive to the effective implementation of e-Governance in Nepal.

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# CHAPTER 1: INTRODUCTION

## 1.1 Introduction

We are a group of 3 students namely, Rojesh Bhattarai, Rakshya Dangol and Sandip Tamang. we have prepared full documentation on the ‘**Complaint Management System**’ for ‘**Complaint Management**’. In an online complaint management system, we can avoid the difficulty to maintain the physical papers relating to the different complaints. An efficient complaint management system can provide the required facilities for registering a complaint online reducing the tedious task of going to the ward office to register the complaint.

## 1.2 Problem Definition

E-governance has been increasing in recent years at a rapid pace, and it has helped the general public to do many of their governmental tasks through online media. The main problem was “Which office to visit for registering a complaint?”, “Is this the correct office to post a complaint?”. These are a few of the problems that a citizen might face. Registering complaints using a web portal greatly saves time and effort. The people who might not know which government office to visit for registering a complaint. Online complaint management with less complexity makes life easier.

## 1.3 Objectives

The objectives of this case study are:

- To study and analyze the adopted system of complaint system.
- To design a system for registering a complaint online.
- To suggest improvements that can be made to make the system more effective and efficient.

## **1.4 Scope And Limitations**

The scope of the project is an efficient method of registering complaints through online media. The scope of this research is to find out the major barriers to E-Governance implementation in Nepal and to find out the major critical success factors that support its implementation soon. This research aims towards analyzing the non-technical factors that influence the acceptance of the EG system in the context of Nepal, technological factors such as hardware, software as well as networking equipment are excluded in this research. Some of the Limitations are:

1. Students with no prior expertise in this discipline carried out the analysis.
2. Due to their intricacy, some processes are described theoretically rather than practically.
3. Some details of the case study remain confidential because it was conducted for educational purposes rather than for profit.

## **1.5 Introduction To The System**

This case study is concerned with an online complaint management system that will be used by the government. The purpose of this system is to manage all data derived for the government to maintain their complaints through the system rather than recording the data manually which possesses more risk to the business to maintain and avoid any loss of data. Online Complaint Management System is a system that consists of data entry, retrieval, and monitoring of the complaints of different categories of different sectors and providing an appropriate response. This system checks whether the complaint has been received from the general public and what response has been provided to the complaint. From the citizen's point of view, this system registers the complaint of the citizen of the



respective cities. The administrator views the data of all the complaints. The main idea behind this system is to ensure citizen satisfaction.

## **1.6 Brief History Of E-Governance**

The field of e-Gov (also known as Electronic Government, Digital Government, Electronic Governance, and other variations) arose in the late 1990s. It has now spawned a slew of scientific conferences and journals. Increased government adoption of information technology in the late 1990s laid the groundwork for global e-Governance. People began to utilize the internet and mobile phones in huge numbers with the introduction of the World Wide Web (w.w.w). They have begun to anticipate an increasing amount of information and services online from governments and business entities to further their civic, professional, and personal lives. As a result, there is an abundance of evidence indicating the new 'citizenship' is gaining hold. In 2002, The UN addressing on e-Governance and signifies a few categories for measuring progress toward e-Governance [1].

Around the late 1990s, IT projects connected to governance began to create a name for themselves in the United States. As part of the President's Management Agenda, the USA

(United States of America) Government launched the process of 'Expanding Electronic Government' in July 2001. The goal was to leverage information technology to cut governmental bureaucracy, remove wasted federal spending, and enhance government response time to citizens. The e-Government Act of 2002 focused on improving online functionality and customer service. The transformative government powered by technology plan, launched in November 2005, established the objective of national e-government development. The implementation of e-Governance initiatives in poor nations assists citizens in gaining access to government programs. The Government of Myanmar established the Yangon City Development Committee (YCDC) in 2003 to provide easy

access between the government and the city's citizens via the internet, to reduce paper usage, reduce the city budget, build the city's fiber ring, provide timely public information, to store public data, and so on.

## **1.7 Elements Of E-Governance**

E-governance refers to the use of information and communication technology (ICT) to deliver government services, exchange information communication transactions, and integrate various stand-alone systems and services between government-to-customer (G2C), government-to-business (G2B), and government-to-government (G2G), as well as backoffice processes and interactions within the overall governance framework.

E-Governance components include:

1. Awareness and Communication
2. Assessment
3. Capacity Building
4. Common Service Centre
5. Infrastructure and Technical
6. Monitoring & Evaluation
7. Research and Development
8. Project and Financial Appraisal

## **1.8 Brief History Of E-Governance In Nepal**

The GON's(Government Of Nepal) first IT policy was created in 2000. The IT Policy 2000 was amended and changed multiple times until it became the IT Policy 2015. The main issue with the execution of IT strategy 2000 was political and societal instability

(Lawoti, 2003) [2]. The eGMP was launched by several infrastructures and organizations, including HLCIT, NITC, MoEST, MoIC, MoGA, and MoF. KIPA then drafted the report (KIPA, 2006). The ETA 2008, which was regarded as Nepal's remarkable performance in IT legislation, was critical for the adoption of EG. The Right to Information Act of 2007 aided in the adoption of EG (Karki, 2007) [3]. With the aid of KOICA, the foundation of GIDC under NITC was made feasible (KIPA, 2006). The establishment of an IT Park at Banepa, adjacent to the capital, became an extra institution founded under this concept, however, the idea was not very effective (MartinChautari, 2014).

The 2015 IT policy is still the most recent in use. The policy was intended to serve as the cornerstone for Digital Nepal's goal (Ministry of Information and Communications, 2015).

## **1.9 Status Of E-Governance In Nepal**

Nepal IT Policy 2000 seeks to connect all ministries, departments, and offices of the GoN to the internet to deliver services online. KIPA's eGMP Consulting Report was ranked with the most viable government programs. The report's objective was to deliver value-added quality services using ICT. (KIPA, 2006) Furthermore, the strategy emphasized the use of ecommerce and distance education, with EG serving as the government's facilitator [2].

ADB strengthened its "transformation" initiative, which targeted twenty-two services such as NID, driving license, LRMS, and rural e-community (Illawara Technology, 2007). According to Bekkers, EG is the key action plan to strengthen Nepal's weak government. Because the consequences of ICT use in public organizations are situational and particular, there is a strong need for documenting evidence of certain experimental EG program implementations for future reference. Bekkers (2007).

The availability of up-to-date and reliable information on government websites (Rani and Kautish, 2018) (Kaur & Kautish, 2019) is severely lacking. The creative tactics in the EG projects, therefore, ensure that government services are not harmed by inadequate delivery services, which is accomplished by equipping surveillance equipment with personal and private information about residents.

## **CHAPTER 2: SYSTEM ANALYSIS**

### **2.1 Requirement Analysis**

The requirement definition is the consequence of the end of the analytical work. Establishing a complete information description, a thorough functional and behavioral description, an indication of performance demands and design restrictions, and appropriate validation criteria allows for the refining of the function and performance requirement analysis. The firm was visited numerous times, and each time, various questions were posed to the administration and personnel. Following the visits, the following requirement analysis was performed:

#### **2.1.1 Functional Requirements**

In software and system engineering, a functional requirement defines a function of a system or its components, where a function is described as a specification of behavior between outputs and inputs.

There are many factors or functional requirement for complaint registration, some of them are given below;

##### **1. Registration**

If a people want to drop a complaint, then he/she must be registered, an unregistered user can't complaint the related problem. Only authentic user must have the access to the system.

##### **2. Login**

People logins to the system by entering valid user id and password for drop complaint.

##### **3. Drop complain**

Now, authenticated user or people can register their problem.

#### 4. Logout

After the register complain, the people will log out.

#### 5. Edit and remove complain

The system shall have a feature for admin to edit complain detail (description, categories etc.) and remove complaints.

#### 6. Notice

The team takes action by sending a notice to the responsible staff and telling him to resolve the problem or take appropriate action.

### **2.1.2 Non-Functional Requirements**

There are several software requirements specifications contained in the non-functional requirements of the Online Mobile Sales System, which includes many processes, such as

#### **1. Security**

- Any client that uses the system must have a Login ID and password.
- In all transactions involving private client information, the system employs SSL
- After a period of inactivity, the system must automatically log out all customers.
- The system should not leave any cookies revealing the user's password on the customer's machine.
- Only authorized administrators should have access to the system's back-end servers.

Before being delivered across unsecured links like the internet, sensitive data will be encrypted.

## **2. Performance:**

- Initial loading of the product will take some time, depending on the speed of the internet connection and the media source.
- The client's or customer's hardware components will determine performance.

## **3. Maintainability:**

- Back-Up: The system offers efficiency for data back-up.
- Errors: The system will track every mistake as well as keep a log of it.

## **4. Reliability:**

- The dependability of the individual components determines the reliability of the program as a whole.
- The database backup, which is regularly updated to reflect the most current changes, is the primary tenet of the system's dependability.

## **5. Availability:**

- A substitute page will be displayed in the event of a hardware failure or database corruption.
- In addition, in the event of a hardware failure or database corruption, the administrator should obtain database backups from the server and store them before restarting the service.

## **6. Portability:**

- The end-user portion is completely portable, thus any device running any web browser should be able to utilize the system's functionality, including any current or upcoming hardware platform.

- Any OS, including Windows and Linux, may be used by an end user to access this system. The system must function on PCs, laptops, PDAs, and other devices.

## **7. Accessibility:**

- The system will function as a web-based application and be accessed using a web browser.

## **2.2 System Analysis**

Creating a complaint management software for Nepal requires a nuanced approach that considers factors such as varying connectivity accessibility, the importance of Nepali language integration, and the need for culturally sensitive communication. The software should offer diverse channels for complaint submission, accommodate distinct user roles with appropriate permissions, and provide real-time tracking features. Furthermore, the system's reporting and analytics functionalities are vital for recognizing complaint trends, evaluating agent efficiency, and driving continuous improvement. By addressing these aspects, the software can effectively enhance customer experience and satisfaction, aligning with the evolving customer-centric landscape in Nepal.

### **2.2.1 Feasibility Study**

A feasibility study for a complaint management software in Nepal indicates a favorable scenario. The growing emphasis on customer satisfaction and digitalization aligns with the software's purpose. Internet connectivity improvements address potential hurdles. The software can incorporate Nepali language and cultural sensitivities effectively. With established technology infrastructure, development and implementation are viable. The potential for enhanced complaint resolution, data-driven insights, and regulatory compliance supports the software's feasibility and positive impact on customer service in Nepal. The many feasibility studies undertaken on this project are detailed as follows:



### **i. Operational feasibility**

Implementing the complaint management software in Nepal is operationally feasible due to its alignment with the growing customer-centric approach adopted by businesses. The software's user-friendly interfaces and customization options make integration into existing workflows smooth, benefiting customer service agents and customers alike. Real-time tracking and automation capabilities streamline complaint handling, while its reporting features offer data-driven insights for continuous improvement. Proper training for customer service teams will ensure efficient software utilization, contributing to enhanced complaint resolution and improved customer experience.

### **ii. Technical feasibility**

Developing the complaint management software in Nepal is technically feasible. The country's improving IT infrastructure, expanding internet connectivity, and availability of skilled developers support software creation. Designing web and mobile interfaces can cater to different user needs. However, considering potential connectivity limitations in certain areas, optimizing the software's performance in low-bandwidth conditions is essential. Utilizing secure and scalable cloud technologies ensures efficient storage and processing of complaint data. Compatibility with diverse devices and browsers should be ensured, making the software accessible to a wide range of users across Nepal.

### **iii. Economic feasibility**

Creating the complaint management software in Nepal holds strong economic feasibility. The country's growing adoption of technology and increasing customer-centric business practices align with the software's objectives. By enhancing complaint resolution efficiency, the software can lead to cost savings through streamlined operations and reduced resource allocation. Additionally, its potential to improve customer satisfaction contributes to increased customer retention and loyalty, translating into long-term financial

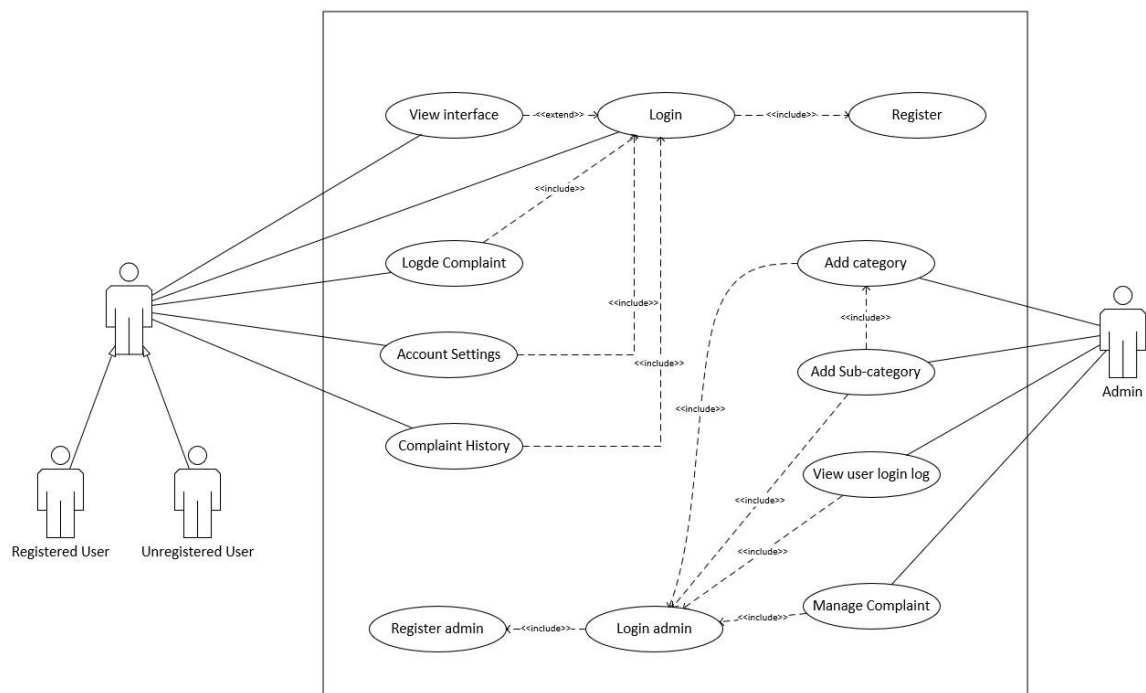
benefits. The initial investment in software development and implementation is justified by the prospect of improved service quality, leading to competitive advantage and potential revenue growth. As businesses in Nepal recognize the value of enhancing customer experiences, the software's positive impact on brand reputation and market positioning adds to its economic viability.

## CHAPTER 3: SYSTEM DESIGN

We created an effective new system for the "Online Mobile Sales System." For this, we create the system's logical design.

### 3.1 Logical Design

#### 3.1.1 Use Case Diagram



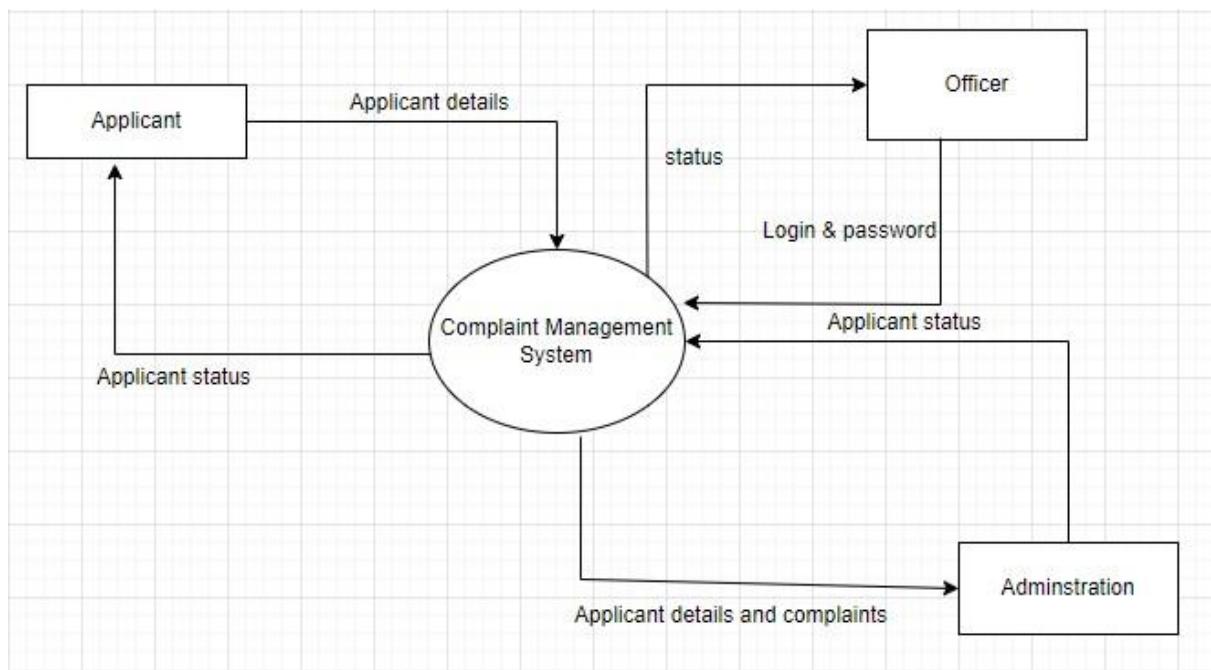
**Figure 1: Use Case Diagram**

A graphical representation of a user's potential interactions with a system is called a use case diagram. A use case diagram, which is frequently complemented by other types of diagrams, displays the numerous use cases and user types the system has. Either circles or ellipses are used to depict the use cases. Most use case diagrams are straightforward. It simply briefly describes some of the connections between use cases, actors, and systems; it does not depict the specifics of the use cases. Use case diagrams are used to compile a system's requirements, taking into account both internal and external factors. Most of these needs are for the design.

## 3.2 Data Flow Diagram

A data flow diagram (DFD) depicts the information flow for any process or system. It shows data inputs, outputs, storage sites, and the pathways between each destination using predetermined symbols such as rectangles, circles, and arrows, as well as brief text labels. Data flowcharts can range from simple, even hand-drawn, process overviews to detailed, multi-level DFDs that delve progressively deeper into how data is processed. They can be used to simulate an existing system or to examine an existing one. A DFD, like all the greatest diagrams and charts, can frequently graphically "express" things that are difficult to describe in words, and they work for both technical and non-technical audiences, from developers to CEO.

### 3.2.1 Context Free Diagram

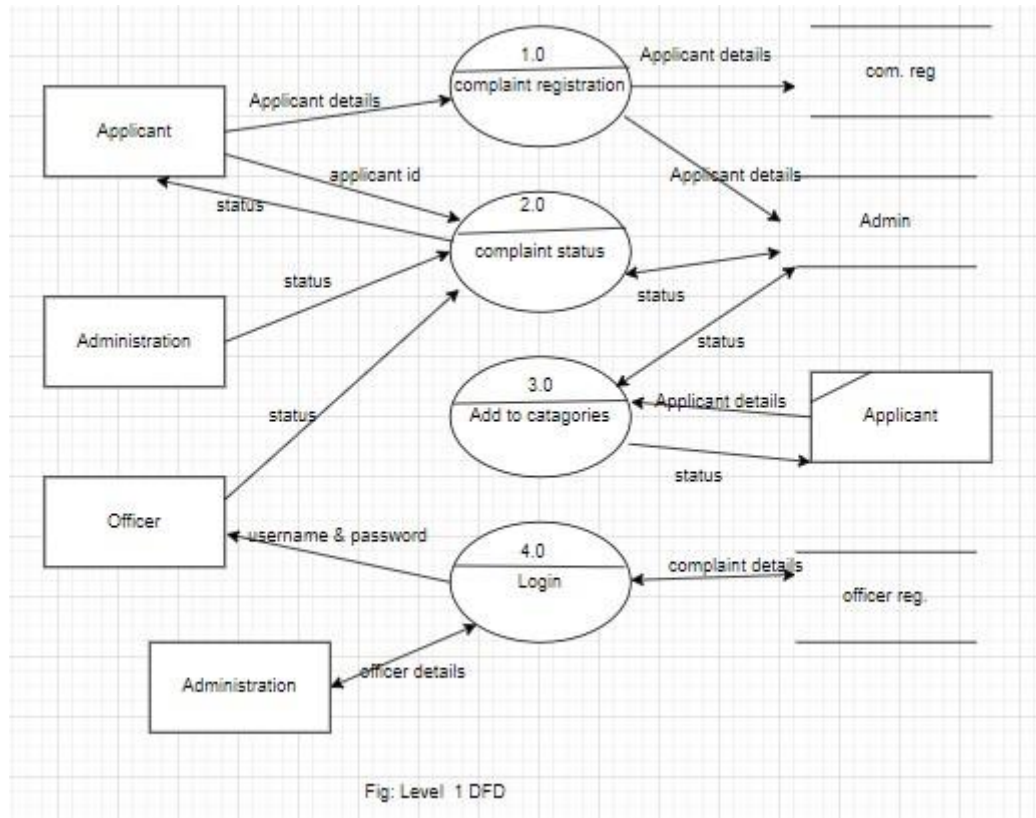


**Figure 2: Level 0 DFD**

DFD Level 0 is called a Context Diagram. It provides a high-level perspective of the entire system or process being evaluated or modeled. It is intended to provide an overview of the system as a single high-level process with its relationships to external entities.

### 3.2.2 Level 1 DFD

DFD Level 1 gives a more complete breakdown of Context Level Diagram components. As you break down the high-level process of the Context Diagram into its subprocesses, you will emphasize the system's essential functions.



**Figure 3: Level 1 DFD**

The context diagram is split into numerous bubbles/processes in 1-level DFD. At this level, we emphasize the system's essential functions and divide the high-level process of 0level DFD into subprocesses.

In the above level 1 DFD we can see different entities namely the Sales manager, user, and admin. The different modules or processes are also displayed such that the interaction between different entities or the database is depicted clearly. The different processes are given for the different interactions. Level 1 DFDs continue to provide a basic overview, but they go into greater detail than a context diagram.

## CHAPTER 4: SYSTEM DEVELOPMENT

### 4.1 System Development

Systems development is the process of conceiving, creating, testing, and implementing a new software application or program. Three important systems development strategies have been employed to tackle system challenges: SDLC (Systems Development Life Process), JAD (Joint Application Development), and RAD are system advancement techniques (Quick Application Development).

#### i. Tools

*Database:* MySQL    *Backend:* JavaScript, PHP

*Frontend:* HTML, CSS, Bootstrap

#### ii. Development Method

During the system's development, we picked the spiral development technique. The Spiral Model is a hybrid of the waterfall and iterative models. Each phase in the spiral model begins with a design goal and concludes with the client assessing the progress. We began with a limited set of criteria and worked through each development process for those needs. The team-built functionality for the extra demand in ever increasing spirals until the program was fully completed.

This approach is used for the following reasons:

- i. Later on, further features or adjustments might be included.
- ii. Because the prototype is built in small pieces, cost estimating becomes simple.
- iii. The development process is quick, and features are introduced systematically.
- iv. There is always room for client input.

## CHAPTER 5: SYSTEM TESTING

**System Testing** is a level of testing that validates the complete and fully integrated software product. The purpose of a system test is to evaluate the end-to-end system specifications. Usually, the software is only one element of a larger computer-based system. Ultimately, the software is interfaced with other software/hardware systems. System Testing is defined as a series of different tests whose sole purpose is to exercise the full computer based system. Before actually implementing the new system into operation, a test run of the system has been done for removing the bugs. It is an important phase of a successful system. After codifying the whole program of the system, a test plan should be developed and run on a given set of test data. The output of the test run should match the expected results.

### 5.1 Test Case Report

#### Test ID: 1.1

Module Name: Login Page

Test Title: Verify the login with a valid username and password

Description: The user will enter a username and password. If it matches the data in the database then the user should be able to log in to the complaint management system. Else login is denied. The test case is shown by taking dummy data and registering it to the database and attempting a login.

#### Test case 1.1:

Step	Test steps	Data	Expected Result	Actual Result	Pass/Fail
1	Navigate to login		Should be able to log in.	Successful Login	Pass
2	Provide valid email	Dangolrakshya49@gmail.com			
3	Provide password	Test@123			
4	Click login				

**Test case 1.2:**

Step	Test steps	Data	Expected Result	Actual Result	Pass/Fail
1	Navigate to login		Should not be able to login.	Login denied	Pass
2	Provide valid email	Dangolrakshya49@gmail.com			
3	Provide password	Test@123			
4	Click login				

**Test case 1.3:**

Step	Test steps	Data	Expected Result	Actual Result	Pass/Fail
1	Navigate to login		Should be able to login.	Successful Login	Pass
2	Provide valid username	Sandip.tamang01@gmail.com			
3	Provide password	Test@123			
4	Click login				

**Test ID: 2**

Module Name: User Registration

Test Title: Verify if details are stored properly

Description: When a new user registers, all his/her details are entered into a database. If the required data is not entered into the input fields then an error message is to be generated.

The user cannot register till all the required data fields have been added. If the input fields



are valid and all the data fields have been filled, the user should be able to register and the user data is stored in the database.

**Test case: 2.1**

Step	Test Steps	Test Data	Expected Result	Actual result	Pass/Fail
1	Navigate To the user Registration Page		Data should be added to the database.	All the data is added to the database.	Pass
2	Provide Full Name	Rakshya Dangol			
5	Provide Contact Number	9818526565			
6	Provide Email	Dangolrakshya49@gmail.com			
7	Provide Password	Test@123			
9	Click Continue				

**Test case: 2.2**

Step	Test Steps	Test Data	Expected Result	Actual result	Pass/Fail
1	Navigate To the user Registration Page		Data should not be added to the database.	Error: Enter a Password.	Pass
2	Provide Name	Rojesh Bhattarai			
5	Provide Mobile Number	9808990827			
6	Provide Email	rojshbhatt@gmail.com			
7	Provide Password				
9	Click Continue				

**Test ID: 3**

Module Name: Lodge Complaint.

Test Title: Complaint should be well added.

Description: Whenever a customer wants to add a complaint in any category with correct data it must be added. If the category and the subcategory are not selected, then the user will not be able to register.

**Test Case 3.1:**

Step	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
1	Category	Road Problem	The complaint should be successfully submitted.	The complaint was submitted successfully and added to the database.	Pass
2	Sub Category	Road			
3	Complaint Type	Complaint			
4	State	Bagmati			
5	Complaint Details(Max 2000 words)	The road in my area are damaged Repair them			
6	Nature of Complaint	Important			
7	Complaint Related doc	-			
8	Try to submit it now				

### Test Case 3.2:

Step	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
1	Category	Water Problem	Complaint should not be submitted.	Complaint is not submitted and is not added to database.	Pass
2	Sub Category	New Supply			
3	Complaint Type	General Query			
4	State	Bagmati			
5	Complaint Details(Max 2000words)	I need to add new water supply.			
6	Nature of Complaint	General			
7	Complaint Related doc	-			
8	Try to submit it now				

**Test ID: 4**

Module Name: Manage Complaint

Test Title: Complaint management of the Citizen

Description: Not Process Complaint should be solved and Respective Action should be taken.

**Test Case: 4.1**

Steps	Test Steps	Test data	Expected result	Actual Result	Pass/Fail
1	Navigate to Take action		Action Should be successfully	Action is Successful	Pass
2	Select Status	In process			
3	Remarks	Will be solved by 4 PM today 06/19/2023.	updated in the database.	and database is updated.	
4	Enter Submit				

**Test ID: 5**

Module Name: Add Category and Subcategory

Test Title: Category and Subcategory should be added.

Description: Expansion of E-governance complaint management by category and subcategory.

**Test Case: 5.1**

Steps	Test Steps	Test data	Expected Result	Actual Result	Pass/Fail
1	Navigate category		The category should be added to the database	Added Successfully.	Pass
2	Category Name	Urgent			
3	Description	Must be solved as soon as possible			
4	Create				

Steps	Test Steps	Test data	Expected Result	Actual Result	Pass/Fail
1	Navigate Subcategory		The category should be added to database	Added Successfully.	Pass
2	Select Category	Urgent			
3	Sub Category name	New Road			
4	Create				

# **CHAPTER 6: SYSTEM INSTALLATION AND MAINTENANCE**

## **6.1 System Installation**

This is the phase in which the system analyst evaluated the changeover strategy that should be employed to transition from the existing manual system to the newly built computerized system. After careful consideration, the analyst determined that the parallel changeover approach was the best fit for the system. Parallel conversion is the process of operating the old and new systems concurrently. When the same results can be obtained over time, the new system is implemented and the old one is decommissioned. One advantage of operating both systems concurrently is the ability to compare new data to old data to detect problems in processing in the new system.

The biggest drawbacks are the costs of running two systems at the same time, as well as the pressure on the staff to almost double their workload during conversion. The following are the reasons for using parallel processing:

1. It is feasible to fix any loading difficulties without interrupting hotel transactions because the manual system will still be in place to carry out hotel activities smoothly.
2. Allows staff to learn and adapt to the new system.
3. Reduces the risk to management in the event of a technical glitch or breakdown since the manual method will remain in place while the analyst solves the technological glitch.

## 6.2 System Maintenance

System maintenance is a continuous operation that includes eliminating program and design flaws, updating documentation and test data, and upgrading user support. For the sake of convenience, maintenance may be divided into three categories:

1. **Corrective Maintenance:** This sort of maintenance is correcting faults from a program that may have snuck into the system as a result of defective design or incorrect assumptions. Thus, processing or performance faults are rectified during corrective maintenance.
2. **Adaptive Maintenance:** Adaptive maintenance involves changing program functions to allow the information system to meet the user's information demands. This form of maintenance may be required as a result of organizational changes such as:
  - a. Modifications to organizational processes;
  - b. Modifications to organizational objectives, aims, policies, and so on.
  - c. Formal changes;
  - d. Managers' information needs to change.
  - e. Modifications to system controls and security requirements, etc.
3. **Perfective Maintenance:** Perfective maintenance means adding new programs or modifying existing programs to enhance the performance of the information system. This type of maintenance is undertaken to respond to users' additional needs which may be due to changes within or outside of the organization. Outside changes are primarily environmental changes, which may in the absence of system



maintenance, render the information system ineffective and inefficient. These environmental changes include:

- i. Modifications to governmental regulations, legislation, etc.
- ii. Economic and competitive circumstances, as well as
- iii. Innovative technology.

The assessment process outcomes assist the company in determining whether or not its information systems are successful and efficient. Organizations should create suitable change management standards and processes to guarantee alerts do not interrupt operations or impair a system's functionality or security. Routine adjustments are less complicated than big changes and can typically be made during the normal course of business. Procedures for requesting, reviewing, authorizing, testing, installing, and documenting software modifications should be included in routine change controls. Keeping accurate, up-to-date inventories of hardware and software is a vital component of any change management procedures. To guarantee accurate system inventories, management should meticulously document any alterations. Management should use an oversight committee to coordinate all technological developments and delegate responsibility for software patch management programs to the relevant party.

## **CHAPTER 7: CONCLUSION**

The spread of ICT is reaching new heights throughout the world, particularly with the widespread usage of smartphones and modern communication technology. With greater access to the internet and social media, Nepal has experienced ample development and improvement in mobile communications. Social media platforms such as Facebook, YouTube, and TikTok are the most widely utilized applications in Nepal, and people are gradually becoming aware of and educated by the usage of these programs and technology. The government has implemented a few e-based services in the country, and the public is utilizing such services with ease thanks to the system being available through their touch screens. Nepal is on the verge of digitally adopting EG in the near future.

Despite the fact that Nepal's worldwide ranking has incremental values, the outcome in terms of e-service implementation is less than satisfying, since the country is still in its early stages of embracing EG. E-services are increasingly being used in government. This project focuses on the development and implementation of a web-based complaint management system. Online complaint management with less complexity makes life easier.

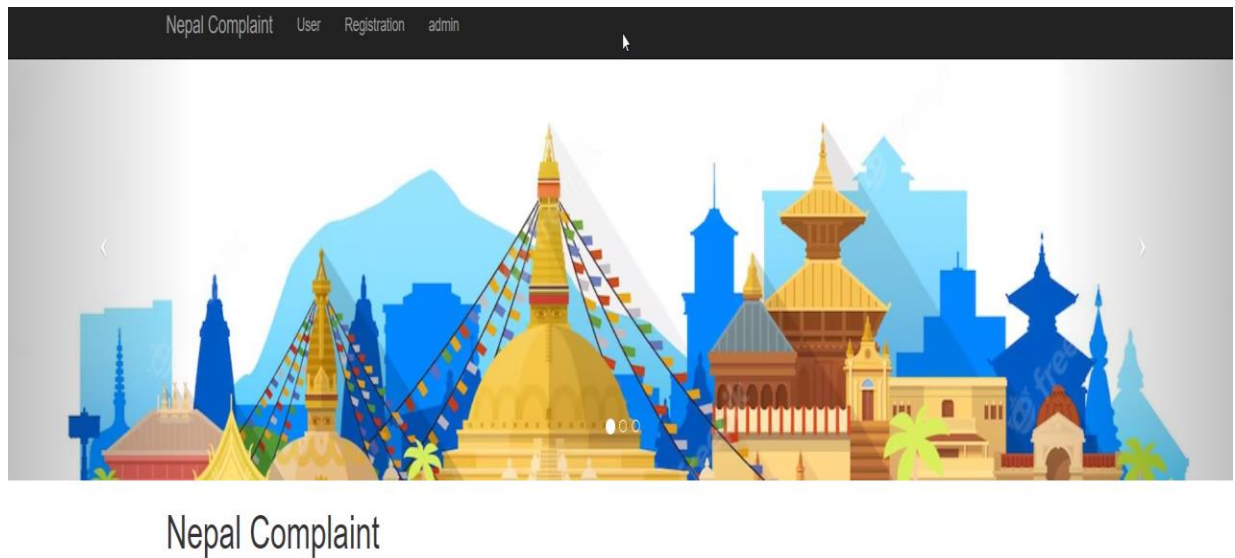
## References

- [1] H. J. S. a. E. W. Theresa A. Pardo, "E-government as a global phenomenon: The state of research and trends," *International Journal of Information Management*, vol. 32, no. 3, pp. 228-237, 2012.
- [2] M. Lawoti, "The failure of IT-led development in Nepal: A critique of the IT policy 2000," *Information Technology for Development*, vol. 11, no. 3, pp. 221-237, 2003.
- [3] A. Karki, "Good governance and e-governance in Nepal," *Journal of Public Administration and Governance*, vol. 7, no. 1, pp. 1-18, 2007.

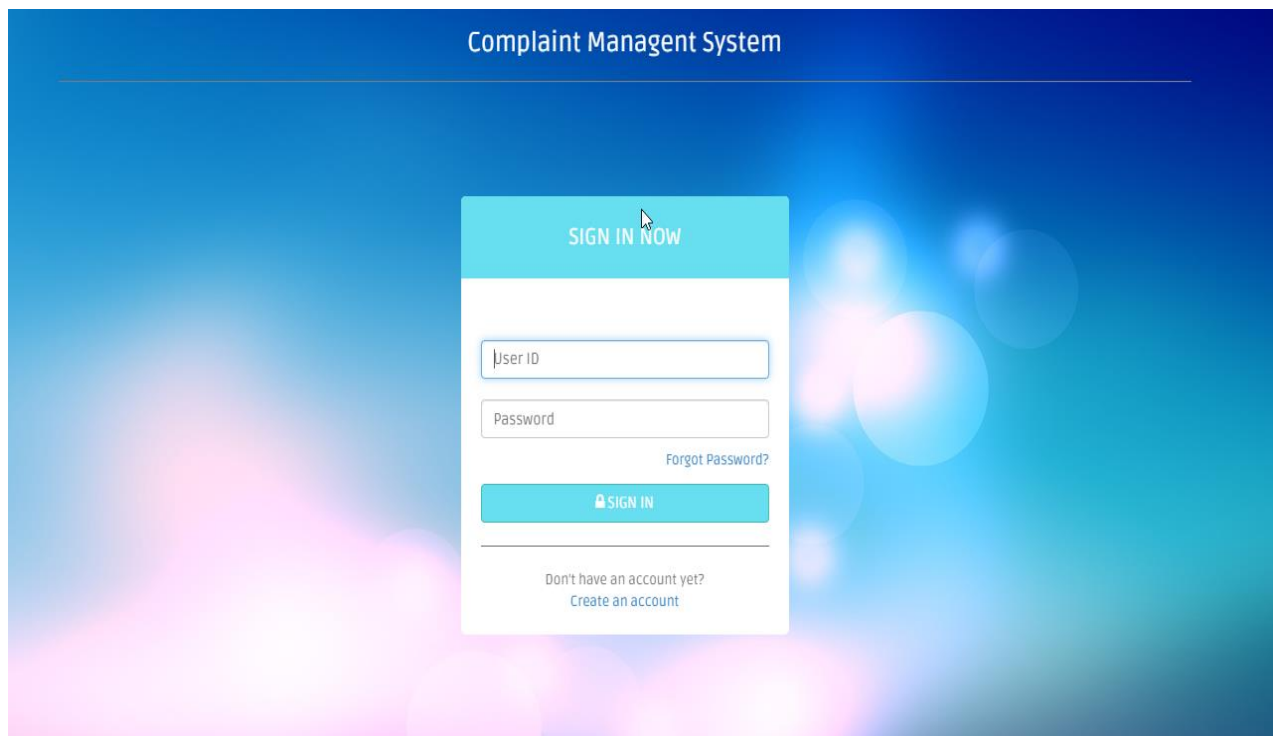
# APPENDIX

## Customer Interface:

### Home Page:



### Login page:



### Registration Page:

Complaint Managent System

USER REGISTRATION

Rakshya Dangol

dangolrakshya49@gmail.com

Email available for Registration .

\*\*\*\*\*

9818526565


Register

Already Registered  
Sign in

## User dashboard:

COMPLAINT MANAGEMENT SYSTEM

Logout




Rakshya Dangol

Dashboard


Account Setting

Lodge Complaint


Complaint History



0



0




0

2023 CMS

## Lodge Complaint:

COMPLAINT MANAGEMENT SYSTEM

Logout



Rakshya Dangol

Dashboard

Account Setting

Lodge Complaint

Complaint History

> Register Complaint

Category

Road Problem

Sub Category

new Road

Complaint Type

Complaint

State

Bagmati

Nature of Complaint

Important

Complaint Details (max 2000 words)

The road in my area are damaged .Repair them

Complaint Related Doc(if any)

Choose File No file chosen

Submit

## Admin Interface:

## Login Page:

CMS | Admin


Back to Portal

Sign In

admin

\*\*\*\*\*

Login



Home Page:

CMS | Admin

Admin

Manage Complaint

Manage users

Add Category

Add Sub-Category

Add State

User Login Log

Logout

Admin Change Password

Current Password

Enter your current Password

New Password

Enter your new current Password

Current Password

Enter your new Password again

Submit

Take action in Complaint:

CMS | Admin

Admin

Manage Complaint

Manage users

Add Category

Add Sub-Category

Add State

User Login Log

Logout

Complaint Details

Complaint Number	25	Complainant Name	Rojesh Bhattarai	Reg Date	2023-08-29 17:08:52
Category	Road Problem	SubCategory	Road	Complaint Type	Complaint
State	Bagmati	Nature of Complaint	Important		
Complaint Details	The road in my area is damaged .Repair them				
File(if any)	File NA				
Final Status	Not Process Yet				
Action	Take Action		View User Details		



**Complaint Number** 25

**Status**


In Process ▾


**Remark**


The construction team has been send. To check all the road condition


Submit


Close this window


 Manage Complaint ▾


 Manage users

 Add Category

 Add Sub-Category

 Add State

 User Login Log

 Logout

### Complaint Details

Complaint Number	25	Complainant Name	Rojesh Bhattarai	Reg Date	2023-08-29 17:08:52			
Category	Road Problem	SubCategory	Road	Complaint Type	Complaint			
State	Bagmati	Nature of Complaint	Important					
Complaint Details	The road in my area is damaged .Repair them							
File(if any)	File NA							
Final Status	in process							
Remark	The construction team has been send. To check all the road condition Remark Date :2023-08-29 17:19:06							
Status	in process							
Action	<div>Take ActionView User Details</div>							



## Add Category:

CMS | AdminAdmin

Manage Complaint

Manage users

Add Category

Add Sub-Category

Add State

User Login Log

Logout

Category

Category Name

Enter category Name

Description

Create

Manage Categories

Show

10

entries

Search:

#	Category	Description	Creation date	Last Updated	Action
1	Road Problem	Road Problem	2023-03-28 12:55:55	2023-08-29 17:02:34	<a href="#">Edit</a> <a href="#">Delete</a>
2	Water Problem	Water Problem	2023-06-11 16:39:06	2023-08-29 17:02:51	<a href="#">Edit</a> <a href="#">Delete</a>
3	Corruption	corruption	2023-08-27 19:41:17		<a href="#">Edit</a> <a href="#">Delete</a>
4	General		2023-08-29 17:08:42		<a href="#">Edit</a> <a href="#">Delete</a>

## Add Sub Category:

CMS | AdminAdmin

Manage Complaint

Manage users

Add Category

Add Sub-Category

Add State

User Login Log

Logout

Sub Category

Category

Select Category

SubCategory Name

Enter SubCategory Name

Create

Sub Category

Show

10

entries

Search:

#	Category	Description	Creation date	Last Updated	Action
1	Road Problem	new Road	2023-03-28 12:56:07	2023-08-27 19:42:04	<a href="#">Edit</a> <a href="#">Delete</a>
2	Road Problem	Damaged Road	2023-03-28 12:56:20	2023-08-27 19:42:44	<a href="#">Edit</a> <a href="#">Delete</a>
3	Road Problem	Road	2023-08-29 17:06:46		<a href="#">Edit</a> <a href="#">Delete</a>
4	Water Problem	New Supply	2023-06-24 12:51:44	2023-08-27 19:43:04	<a href="#">Edit</a> <a href="#">Delete</a>

Showing 1 to 4 of 4 entries