**CHAPTER II**

**REVIEW OF RELATED STUDIES AND SYSTEMS**

**Technical Background**

An effective complaint management system does more than just help handle feedback from unhappy customers. A modern system also provides proper documentation for the investigation process and allows companies to link complaints to corrective actions, supplier quality, and provides the ability to re-assess risk. It’s important to handle complaints quickly and effectively. Complaints can quickly pile up and be an unnecessary burden that wastes time and resources (Finn, 2018).

Millions of businesses use the web application as a cost-effective communications channel. It lets them exchange information with their target market and makes fast, secure transactions. Web applications use a combination of server-side scripts to handle the storage and retrieval of the information (Gibb, 2016).

Alongside with web application, a complaint management system will now help people across the web, and phone to help receive and respond to feedback, and report dissatisfaction with the organization online.

**Program Specifications**

**Hardware Specifications**

* Laptop/Desktop Processor: Intel (R) core (TM) i3 7100U 2.50 GHz, Ram: 4 GB.
* Internet Connection Mobile data, WiFi, or wireless 5Mbps.

**Software Specifications**

* **VScode Version 1.50** - a source code editor that the proponent used to develop the proposed system.
* **Photoshop**– A photo editing software that the proponent used to layout the user interface of the system.
* **Git** – a software used for version control for maintaining the stability of the system.
* **Bootstrap -** Is used for designing and responsiveness of the UI.
* **Python 3.10.xx - Python** v3.10 and above is required to use its full accessibility.
* **Django -** Is used as a backend for the UI, requires Python 3.10 and above version.
* **MySQL -** Is the database used for storing and collecting data generated from users.

**Programming Environment**

The proposed study uses the following application: MySQL, Django for the backend, and Bootstrap for maintaining the UI of the system. MySQL is a relational database that stores data in separate tables rather than putting all the data in one big storeroom. The database structures are organized into physical files optimized for speed for faster retrieving/storing of data submitted by the users. Django is a framework of Python used for building a web application for simplicity, flexibility, reliability, and scalability. For the front-end, Bootstrap is responsible for the responsive design of the system.

The proponents chose the software mentioned above to ensure the security of the system, as well as stability and maintenance to the developer.

From the software mentioned above, the proposed web-based system will ensure that it will be accessible to its users anytime and anywhere as long as there’s an internet connection.

**Related Studies**

**Foreign**

A study by Parashar G., et al*,* (2010), entitled “Complaint Management System”, is a system that provides quality customer service. It helps to measure customer satisfaction and is a useful source of information and feedback for improving services. Often customers are the first to identify when things are not working properly.

According to Chaudhary S., et al., (2015) in their study Online Complaint Management System. It is a system that provides an online way of solving the problems faced by the public by saving time and eradicating corruption. The objective of the complaints management system is to make complaints easier to coordinate, monitor, track and resolve, and to provide a company with an effective tool to identify and target problem areas, monitor complaints handling performance and make business improvements.

According to Siripen Pongpaichet, *et al., (2015) in their* study *Customer Relationship Management (CRM*). The system for customer complaint service has the responsibility to take care of a customer, listen to customer’ s opinion, and receive the customer complaint. Your customers may be contacting you on a range of different platforms including phone, email, or social media — asking questions, following up on orders, or contacting you about an issue.

**Local**

“Katarungang Pambarangay” a handbook of Maricel Vigo et al., (2004) stated that the Katarungang Pambarangay or Barangay Justice System is a community-based dispute settlement mechanism that is administered by the basic political unit of the country, the barangay. As a community-based mechanism for dispute resolution, it covers disputes between members of the same community (generally, the same city/municipality) and involves the Punong Barangay and other members of the communities (the Lupon members) as intermediaries (mediators, conciliators, and, sometimes, arbitrators).

A capstone project by Ledesma B.G., et al., (2013) entitled “Crime Intelligence System”. It is a systematic study on police monitoring to promote better police governance. The test bed for this study is for the Philippine National Police (San Juan Police Station). This systematic study intends to break new grounds in an attempt to assist the Philippine National Police to improve their services through the use of technology.

A study by Claire Ong Carpio (2020) entitled, “Barangay Management System”. It is a Barangay Management System or e - barangay that is a web - based management system which shall reinvent barangay management from a traditional and centrally dependent unit towards a more inclusive and citizens-oriented scheme. It essentially aims to streamline existing administrative processes in terms of requesting documents, filing complaints, and generating apt and accurate local statistics.

With all the ideas mentioned above, the proponent has come up with the idea of developing a website that helps the residents of Poblacion, Guipos in filing a complaint online as well as the Municipal officials of Guipos to handle complaints with ease.