

**POLICE CLEARANCE ISSUANCE MANAGEMENT
SYSTEM FOR STA. MARIA POLICE STATION**

**ROBERTO GARCIA JR.
JOY MAE BALMATERO
JULIE ANN AQUINO
SHELLA MAE DATU**

**A CAPSTONE PROJECT PRESENTED TO THE FACULTY OF
ILOCOS SUR POLYTECHNIC STATE COLLEGE
INSTITUTE OF COMPUTING STUDIES
STA. MARIA, ILOCOS SUR**

**IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS
FOR THE DEGREE**

**BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY
(Web Development)**

JUNE 2018

**TABLE OF CONTENTS**

Preliminaries	Page
TITLE	i
APPROVAL SHEET	ii
EXECUTIVE SUMMARY	iii
TABLE OF CONTENTS	iv
LIST OF TABLES	vi
LIST OF FIGURES	vii
LIST OF APPENDICES	viii

CHAPTER**I****INTRODUCTION**

Project Context	1
Problem	1
Purpose and Description	4
Literature	5
Objectives	8
Scope and Limitations	8

II**METHODOLOGY**

Development Model	10	v
Project Plan	12	



Chapter I

INTRODUCTION

Project Context

People nowadays are into modernization. Computer is one of the greatest inventions of humanity, and it doesn't end there. Right now, developers keep on adding something new to computers and make them more efficient than those before. As status quo, we live in an age known as the "modern age" or as we can see it the "techie-age". Everything we do is connected with technology. It constantly seems to seep its way into our daily routines. Without technology, life would be more difficult than it already is. Things would be limited and more difficult to achieve.

The task of technology is to create a better and easier way of living for ourselves and for the world. Computers and technology are now part of our daily lives. We've come upon to depend on them to function and to live. It is a fact that jobs performed manually are prone to errors and are much slower in processing than jobs performed with the aid of computers. Thus, by adopting the manual system, there is no assurance that the output produced is accurate or of quality.

A service management system is an all-encompassing management system meant to bring together all aspects of organization management such as planning, strategies, policies, objectives, documents, processes. It is also the main resources for the design and development as well as the



transition into a service-oriented organization that meets its business needs proficiently.

The police keep their records on paper and this does not help their efficiency as it does not provide accurate, reliable and comprehensive data round the clock. In recent times, with economic hardship the country is going through, it is not uncommon for the police to complain about lack of stationeries in cases which they may wish to record (Kawai & Samson, 2011). The crime records management system beats the methods of paper work adopted here in Nigeria. On this platform, all records are computerized, thus eliminating loss of data through rough handling by police department, and this makes investigation of future crimes relatively easier.

A Records management is systematic administration of records and documented information for its entire life cycle, from creation/receipt, classification, use, filing, retention, storage, to final disposition. Records are recorded information, regardless of medium or characteristics, made or received by an organization in pursuance of legal obligations or in the transaction of business. There is consensus within the organization regarding how a record is distinguished from other non-record material, such as a convenience file or draft. The Police Clearance Issuance Management System was developed by a team of talented programmers including several individuals with security and law enforcement backgrounds. They recognized the need for accurate and systematic



control of records so they designed our police clearance issuance management system software to be highly efficient as well as user-friendly and it is a combination of powerful performance.

The Clearance Police Non-Commissioned Officer (PNCO) of Santa Maria Police Station uses the manual procedure in giving a record clearance, which unfortunately leads to many occurring errors. This is also one of the main problems of Clearance PNCO besides the time and effort allotted on encoding such files and documents with the use of Microsoft Word. With this, the researchers came up with an idea to have an organized, manageable and easier way of giving a record clearance. The researchers propose a Police Clearance System; a system that may be used to produce a police clearance. The system will help the police department have a centralized database thereby making application speedy, data accessible, secure and reliable.

"Police Clearance Issuance Management System for Sta. Maria, Ilocos Sur" is a system which basically facilitates the maintenance of records regarding criminal and civil cases as well as records of clearances issued by a client LGU's police agency. It organizes records in a way that makes it easily retrievable and allows for cross-checking both in the clearance and revenue collection function. Police Clearance Certificate will certify that the individual does not have or does have any criminal convictions. It can also be called a certificate of good conduct, arrest record, rap sheet,



judicial record extracts, arrest sheet, etc. Police clearance differs between countries and is issued by police authorities or government departments.

The purpose and description of Police Clearance Issuance Management System for Sta. Maria, Ilocos Sur is to manage and maintain the condition of the Police Clearance Issuance through a system. This system will make it easy for issuing officers to verify the records of an applicant before issuing the proper Police Clearance. It further improves the process and accuracy in giving a police clearance, lessen the time and effort on encoding information using the manual procedure (Microsoft word) and reduce an allocation for data records and the system should store data and database.

Police Coordinators. The System would help the coordinators to save files secure and faster to save records. The system would also provide the coordinators easy access of any information needed for the Police services. And the ability of providing many of reports on the system, and add to facilitate the process of submitting a services. Services management System is used to view information on the different services to determining criminal records.

Proponents. The proponents applied the knowledge and skills they learned. It also enhances their skills, ideas, and knowledge on how to design, analyse, program, and develop a system for the good of the college.



Researchers and future Researcher. The result of this study serves as basis for another researcher in developing and conducting for better outputs and future reference for researchers who have the interest in the same related project.

Literature

According to World Bank definition, "E-government refers to the use by government agencies of information technologies like wide area network, the internet and mobile computing that have the ability to transform relations with citizens, businesses and other arms of government". It contributes to public security. The police personnel would also be able to identify any criminal. This is possible if a database is available for any citizens including criminals' and innocent information. For the public safety there would be record about the issuance of police clearance, issuance report of the police' history, wanted cars, stolen cars, cases, news and events, contact details, recommendation and so on.

The objectives of this work are free access of the citizens for their queries and complaints, establishing database for citizens and police personnel. The normal public in India are afraid to give a service in police station because they are filled with a false fear about the police department. The services registering system will solve the fears of public and will also help the police department in catching criminals. A web-based solution is very useful as the solution is inherently distributive. E-



police is intended to provide total computerized information system support for the work of the police. Its primary activities are not transparency-related, but help provide police officers with information on criminal cases and on. (Online: October, 2011] World Bank's Website, Definition of E-government) As studied by Shiva Prasad (November 22, 2016), Police Information System is a system in which all the paperwork of the station is maintained in a single system and it makes handling of record easier. Here we can maintain, add and retrieve records like that of criminals, victims record cases. The following are the content of a single database system.

This system is developed to maintain the paperwork of the police station in a single system. Criminal record and user record can be maintained easily. Security level is maintained so as to ensure that only authorized users have access to confidential information. It has features for monitoring, form and reports, query, design and security features.

Records of criminals and civil cases by affiliated courts are kept and monitored and later used as basis in the issuance of clearances applied for by client LGU residents. Issuance of clearance includes cross-checking with the existing records of offenders and make it easy for issuing officers to verify the records of an applicant before issuing the proper clearance. The system also prepares various list (filed cases according to records maintained by local courts, offenders, blotters and other cases) and reports such as statistics regarding local crimes, and revenue collections



generated from issue of clearances or other cases. User-friendly query feature enable easy searching of records depending on chosen parameters (e.g. by kind of permit and/ or certification issued, by tdate of issuance of permit/ certification, by client-name). The system complies with national crime information system guidelines. Design and security features such as user-friendly design using easily-comprehensible menus which facilitates utilization of application features. Flexible system makes it customizable depending on the needs and requirements of client barangay. Employs a back-up and recovery utility for file integrity and security.

Usability of the website plays a central role in establishing a healthy communication between the university and its stakeholders. The healthy communication between the university management and the stakeholders can undoubtedly contribute to well governance of the university. (Yusofet. Al, 2010).

Website Analysis Measurement Inventory (WAMMI) is one of the most popular evaluation tool for websites. It was developed by Human Factors Research Group (HFRG) in 1999. WAMMI is based on a questionnaire filled by visitors of a website, and gives a measure of how useful and easy it is to use the visitors found the site (Claridge and Kirakowski, 2011). WAMMI questionnaire is employed for the research. The WAMMI questionnaire is composed of three parts and has a total of 22 questions. The questionnaire assesses website usability by asking



participants to compare their expectations against what they actually find on the website.

Objectives

The main objective of this study is to enhance the services of Sta. Maria Police Services Management System by developing an organized and significant system based on the services they need. It aimed to:

1. To determine the current system used in the Santa Maria Police Station.
2. To design and develop a Services Management System for the Santa Maria Police Station.
3. To test the usability of the developed system for the Santa Maria Police Station.

Scope and Limitations

This study was conducted from August 2017 to April 2018 at Sta. Maria Police Station, Sta. Maria, Ilocos Sur. This system focused on the design and development of Police Clearance Issuance Management System for Sta. Maria, Ilocos Sur that could help improve the processes in the police clearance issuance through a more organized and faster system. This System covers the major processes in the Sta. Maria Police Station namely viewing the services details, maintenance and adding or update of records regarding criminal and civil cases, this system has an ability to



tell if there are criminal cases recorded against the person and sufficient and accurate police clearance. The respondent of the proposed study is the Police Department of Sta. Maria, Ilocos Sur.

This project work is intended only for Sta. Maria Police Station. The developed system will not include collection of payments of the client. Other documents requested by clients from the Police Station are not included.



Chapter II

METHODOLOGY

RAD Model

Rapid Application Development (RAD) Model is similar to incremental model and waterfall model. In RAD Model, Development should be done in specified time frame. RAD Model is suitable for the small project where all the requirement are gathered before starting the development of the project and no any concrete plan required. Development starts as soon as the requirements are gathered and delivered initial working prototype to the client to get the feedback.

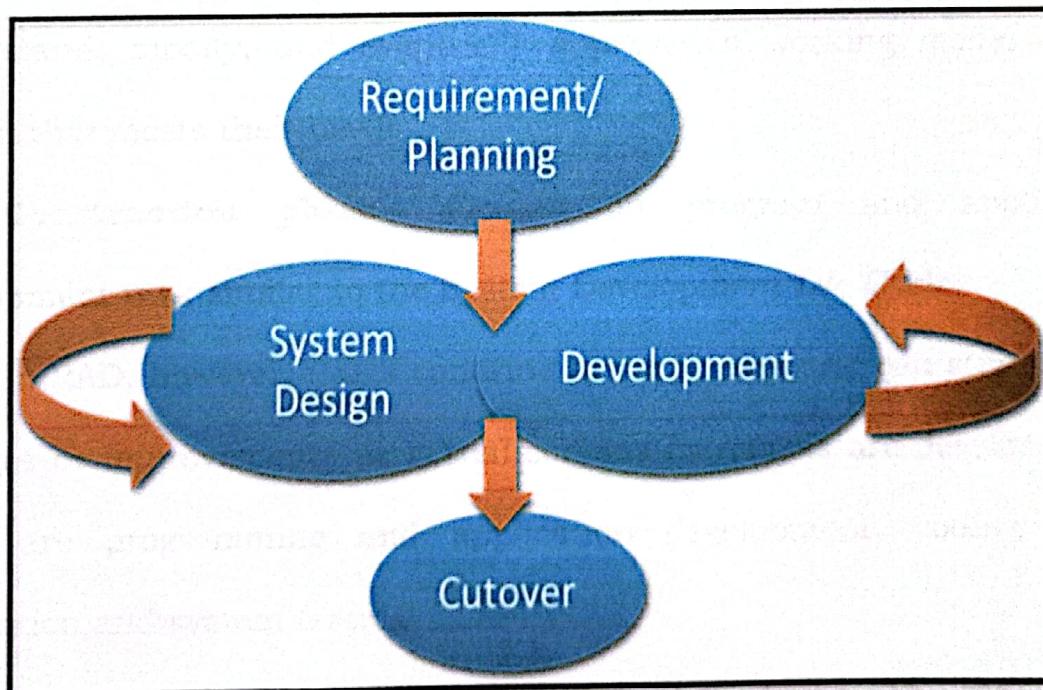


Figure 1.Rapid Application Development Model

Requirements planning phase – In this phase, development planning should be designed based on the information available from



different activities. Before the development starts there should be a complete modules of functional activities processes. It ends when the team agrees on the key issues and obtains management authorization to continue.

User design phase – during this phase, users interact with systems analysis and developed models and prototypes that represent all system processes, inputs, and outputs. The RAD groups or subgroups typically used a combination of Joint Application Development (JAD) techniques and CASE tools to translate user needs into working models. *User Design* is a continuous interactive process that allows users to understand, modify, and eventually approved a working model of the system that meets their needs.

Construction phase – focuses on program and application development task similar to the System Development Life Cycle.

In RAD, however, users continue to participate and can still suggest changes or improvements as actual screens or reports are developed. Its tasks are programming and application development, coding, unit-integration and system testing.

Cutover phase – resembles the final tasks in the SDLC implementation phase, including data conversion, testing, changeover to the new system, and user training. Compared with traditional methods, the entire process is compressed.



As a result, the new system is built, delivered, and placed in operation much sooner.

Project Plan

In this chapter, the proponents decided to do some test for the created system Police Clearance Issuance Management in order to determine expected results.

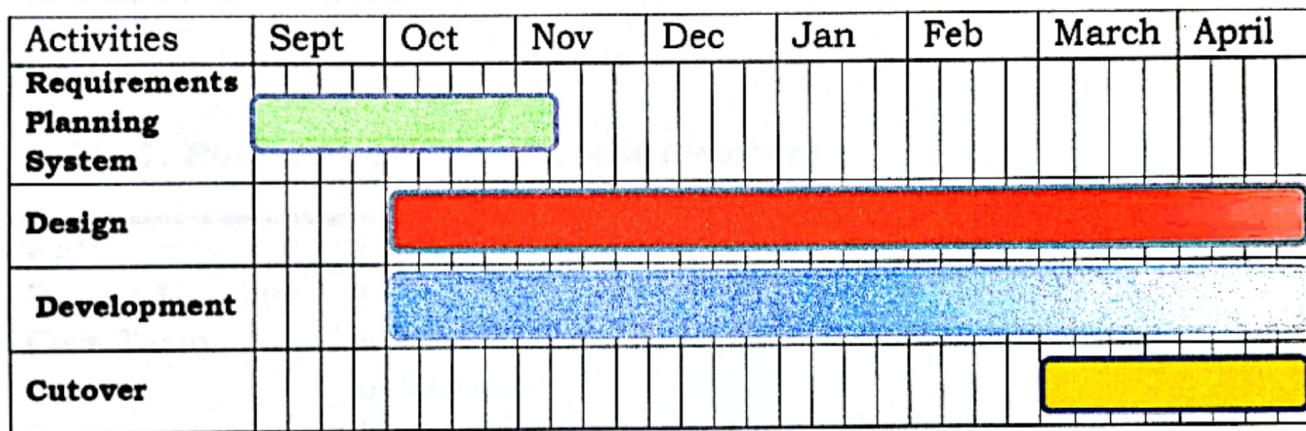


Figure 2. Gantt Chart Activities

The figure shows the activities which were undertaken by the proponents. The proponents started the project 3rd week of August. User design and construction takes the longest weeks because in user design the user who will employ the proposed system, will analyze how the data affect the operations from the system and how the data was used. User design is one of the toughest part in creating a system because the researchers and designers must create and design a system that can use by the Police Station and client. Next is the construction. In this phase the system was executed for developing and testing so that the developer will



know what to do the system system is functioning or not. It completes the construction of the physical application system develop users aid and build the conversation system. After completing the development of the system, it was tested for errors and determine if the processing operation is accurate and the outputs are correct. The shortest week takes the system in the cutover because this is the point new software has been finalized and installed.

Project Staff

Table 1. Role Assignment of Team members

Role	Responsibility	Name
Project Manager	Lead team	Roberto Garcia, Jr.
Core Team	Report status and review deliverable	Joy Mae Balmatero
Documenter	Encode and analyze the content	Roberto Garcia, Jr. Shella Mae Datu
System	Design and establish the content	Joy Mae Baltamero
Programmer	Establish and the system	Shella Mae Datu Roberto Garcia Jr
Plan Developer	Document results	Roberto Garcia Jr Joy Mae Balmatero Julie Ann Aquino
Review Team		Roberto Garcia Jr. Joy Mae Balmatero Shella Mae Datu

The project manager is the one who leads the group for the conduct and improvement of the research study. The system programmer is responsible in writing programs with instructions that computers can follow. Programmers use computer languages to build programs based on



designs and workflow charts of software developers and engineers, as well as meeting with software developers to talk about program design. The system analyst is the one with the needed ideas, concepts and information prior to the preparation of the system. And the documenter and technical writer is the one who writes and edits the documentation of the system.

Data Gathering Procedure

Data were obtained from the Sta. Maria Police Station office where the proposed system will be offered. The personnel and the head of the said office was the person whose experience was credible enough.

Different methods of data gathering procedures were employed in the project undertaking to secure the data necessary and to come up with factual information.

Interview. The proponents conducted an interview to the Sta. Maria Police Station at sta. Maria, Ilocos Sur. An interview guide was created to the person in charge of the project to gather an important information as evidence for the development of this project.

Observation. Based on our observations, the records were prepared manually using forms to be submitted to higher concerned authorities. It will be also concluded that the practice of preparing and submitting reports are time consuming.

Internet Searching. The researcher used and explored the internet to gather an important for the library management system.



Survey. The WAMMI Questionnaire was used by the proponents to test the usability of the system. The proponents also used questionnaire to gather accurate information from Sta. Maria Police Station which served as bases to develop a system. Sta. Maria Police Station located at Poblacion, Sta. Maria, Ilocos Sur, Philippines.

Chief Joel Gacello. This police station is located at Plaza General Luna, Sta. Maria, Ilocos Sur, Philippines.

Data Categorization.

Below is the data categorization as the scale, statistical range and descriptive rating.

Table 2. Data Categorization

Scale	Statistical Range	Description Rating
5	4.21-5.00	Strongly Agree
4	3.41-4.20	Moderately Agree
3	2.61-3.40	Neither Agree nor Disagree
2	1.81-2.60	Moderately Agree
1	1.00-1.80	Strongly Agree



REFERENCES

WAMMI

ERD. (n.d.). Retrieved from <https://www.edrawsoft.com/er-diagram-examples.php>

wammi. (n.d.). Retrieved from <http://www.wammi.com/questionnaire.html>

PNP

ERD. (n.d.). Retrieved from <https://www.edrawsoft.com/er-diagram-examples.php>

pnp. (n.d.). Retrieved from <https://pnp-dprm.com/index.php/divisions-and-their-services/record-management-division>

wammi. (n.d.). Retrieved from <http://www.wammi.com/questionnaire.html>

RAD Model

ERD. (n.d.). Retrieved from <https://www.edrawsoft.com/er-diagram-examples.php>

pnp. (n.d.). Retrieved from <https://pnp-dprm.com/index.php/divisions-and-their-services/record-management-division>

Rapid Application Development. (n.d.). Retrieved from <https://pnp-dprm.com/index.php/divisions-and-their-services/record-management-division>

wammi. (n.d.). Retrieved from <http://www.wammi.com/questionnaire.html>