**“PDL Management System”**

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**Section**

**BSIT – 2B**

**Chapter 1**

**Introduction**

In the digital age, technology has transformed correctional facilities by improving operations, transparency, and outcomes for incarcerated individuals. Digital tools streamline processes, optimize resource allocation, enhance security, and support rehabilitation programs within correctional systems. Republic Act No. 10575, the "Bureau of Corrections Act of 2013," is a key law that sets policies and standards for correctional services in the Philippines. It reflects the State's commitment to promoting PDL (Person Deprived of Liberty) welfare, focusing on reformation, social reintegration, and international standards compliance. The development of a comprehensive PDL Management System aligns with RA 10575's objectives, fostering a rehabilitative environment and ensuring humane treatment of PDLs.

The PDL Management System is a new way of managing correctional facilities, using technology to improve efficiency and overcome challenges. This system includes digital tools for handling PDL records, scheduling visitor visits, and monitoring of facilities. By centralizing and automating these important tasks, the system improves transparency, accountability, and the effectiveness of rehabilitation efforts in correctional facilities. This document explores the features and importance of the PDL Management System in supporting the principles of RA 10575 and promoting the goals of reforming and reintegrating Persons Deprived of Liberty back into society.

**REPUBLIC ACT NO. 10575, also known as THE BUREAU OF CORRECTIONS ACT OF 2013 Section 2. Declaration of Policy. It is the policy of the State to promote the general welfare and safeguard the basic rights of every prisoner incarcerated in our national penitentiary by promoting and ensuring their reformation and social reintegration, creating an environment conducive to rehabilitation and**

**compliant with the United Nations Standard Minimum Rules for Treatment of Prisoners (UNSMRTP). It also recognizes the responsibility of the State to strengthen government capability aimed towards the institutionalization of highly efficient and competent correctional services.**

**Project Context**

Effective management of PDL information and visitation schedules is critical for correctional facilities. Current systems often face challenges with inefficiency and inaccuracies, which can compromise security and operational effectiveness. The PDL Management System is designed to solve these problems by automating the recording and management of detailed PDL data and scheduling visits more efficiently. This project will introduce a digital solution to streamline these processes, ensuring that records are accurate and up-to-date, enhancing security, and improving overall facility operations. The goal is to modernize the administration of correctional facilities, thereby supporting safer and more efficient management practices.

The PDL Management System is a tool that helps efficiently record and manage pdl information. This system is important because it simplifies the tracking of pdl details, including their personal information and visitation schedules. It aids in safer and more organized operations within detention facilities, facilitating faster and smoother visitation processes.

To develop this system, the utilization of tools like Microsoft Visual Studio, Visual Studio Code, Figma, and XAMPP enables us to create a robust and user-friendly platform that supports modern correctional facility management practices.

By replacing manual workflows with digital solutions, we aim to improve the overall efficiency and effectiveness of correctional facilities, ultimately contributing to the reformation and social reintegration goals outlined in Republic Act No. 10575.

**Purpose and Description**

The main purpose of developing the PDL Management System is to address the challenges and inefficiencies associated with manual correctional management processes. By automating key workflows such as PDL(Person Deprived of Liberty) record updates, visitor scheduling, and reporting, the system aims to improve data accuracy, compliance with regulatory standards, and operational efficiency.

The PDL Management System offers significant benefits to various stakeholders within correctional facilities. Administrators benefit from streamlined processes in PDL record management, visitation scheduling, and reporting, reducing manual effort, minimizing errors, and ensuring accurate data management. Users, particularly visitors scheduling visits to Persons Deprived of Liberty (PDLs), benefit from streamlined visitation processes and enhanced transparency. The system provides a user-friendly interface for scheduling appointments, receiving automated confirmations, and accessing visitation guidelines, enhancing the overall visitor experience and ensuring efficient visitation management. Correctional facilities benefit from optimized resource allocation and improved operational transparency through the PDL Management System. It enables efficient PDL record management, visitation scheduling, and facility oversight, ultimately enhancing correctional facility operations and compliance with legal and regulatory requirements.

**Objectives**

The project developers intend to develop a PDL (Persons Deprived of Liberty) Management System, focusing on automating PDL record management and optimizing visitation scheduling within correctional facilities.

Specifically, the goal of this project is to:

1. Develop a system to automate PDL record management, encompassing personal details, crime records, status, and cell block information for accuracy and efficiency.
2. Implement an intuitive interface for visitors to schedule appointments with PDLs, ensuring ease of use and seamless visitation processes.
3. Create a dynamic dashboard displaying key metrics of the correctional facility, including active PDLs, released PDLs, total visits, and comprehensive cell block information.
4. Enable administrators to manage and configure cell blocks within the facility, allowing precise modification of cell block numbers, capacities, and gender units.
5. Implement features for tracking visitor interactions, maintaining visitation histories, and managing visitor records to facilitate efficient visitation processes.

**Scope and Delimitation**

The PDL (Persons Deprived of Liberty) Management System is developed to offer correctional facilities a comprehensive solution for PDL record management and visitation scheduling. This system aims to streamline PDL record processes by automating the creation, updating, and retrieval of PDL records, encompassing personal information, crime records and status. Additionally, the system facilitates efficient visitation scheduling for PDLs, allowing visitors to access available dates and times, make appointments, and receive confirmations. With a user-friendly interface designed for both correctional facility administrators and visitors, the system provides accessibility and ease of use.

However, certain limitations and constraints are inherent in the design and implementation of the PDL Management System. The system's performance may be influenced by hardware dependencies, including specific memory and processing requirements. Regulatory compliance is essential, requiring adherence to legal and regulatory policies governing data privacy, security, and information handling practices within correctional facilities. Language accessibility may pose limitations for users preferring alternative linguistic interfaces despite efforts to ensure a user-friendly experience.

**Technical Background**

The technical implementation of the PDL (Persons Deprived of Liberty) Management System leverages a suite of essential applications and programming languages to ensure robust functionality and user-friendly interfaces. Microsoft Visual Studio 2022 serves as the primary development environment for creating the graphical user interface (GUI) and administrative functionalities tailored to correctional facility administrators. This platform enables the design and implementation of intuitive tools for managing PDL records, visitation scheduling, and overall facility operations. Visual Studio Code complements the system by facilitating the development of the web-based component dedicated to scheduling appointment visits. Through HTML, CSS, JavaScript and PHP coding, Visual Studio Code enables the creation of dynamic web pages, optimizing user interaction and experience.

For design and prototyping, Figma is utilized to visualize and iterate the system's GUI layout and website design, ensuring a cohesive and user-friendly interface. Additionally, database integration is facilitated by XAMPP, which establishes secure connections to MySQL databases. XAMPP enables efficient creation, storage, and updating of essential information, including PDL records, visitation schedules, and administrative data. The combination of Visual Basic (VB.NET) and HTML/CSS/JavaScript/PHP programming languages empowers the development team to implement core functionalities, structure, and graphical elements for both the administrative GUI and the web-based appointment scheduling interface.

The Entity-Relationship Diagram (ERD) illustrates the connections among various entities in developed system. The LibertyLink: PDL Management System system comprises six (6) major entities: Admin, Cell Clocks, PDL Information, Visitors, Visitation Schedule, and Reports, all linked through the Manage relationship. The Admin entity, containing ADMIN\_ID, USERNAME, and PASSWORD attributes, is crucial for overall system management for modifying cell clocks and managing reports and PDL information. The Cell Clocks entity includes CELL\_MEMBER\_LIST, GENDER\_UNIT, CELL\_UNIT, and CELL\_CAPACITY attributes, which are modified by the Admin entity to track and manage PDL information within different cell units.

The PDL Information entity includes attributes such as NAME, SENTENCE\_OF\_YRS, CRIME, GENDER, BIRTHDATE, CELL\_BLOCK, STATUS, CASE, CELL UNIT, and VISITED\_BY, providing detailed information about each Person Deprived of Liberty (PDL). The Visitors entity, with NAME, CONTACT, USERNAME, PASSWORD, and EMAIL attributes, facilitates setting up appointments through the Visitation Schedule entity, which manages visit scheduling with DATE and TIME attributes. The Reports entity, managed by the Admin, contains PDL\_NAME, DETAILS, and DATE attributes, documenting all activities and changes related to PDLs. The Manage relationship connects the Admin entity with the Reports and PDL Information entities, highlighting the Admin's control over these critical components.

The system incorporates Create, Read, Update, and Delete (CRUD) functionalities to manage the information effectively. These CRUD operations enable the Admin to create new entries, read existing data, update records, and delete outdated or incorrect information, ensuring the database remains accurate and up-to-date. This ERD provides a structured overview of the LibertyLink: PDL Management System, emphasizing the central role of the Admin in modifying and managing system elements, the detailed data held within the PDL Information entity, and the facilitation of visitor scheduling through interconnected entities.

In Data Flow Diagram (DFD) the Level 0, provides an overview of the LibertyLink: PDL (Person Deprived of Liberty) Management System and its interactions with external entities. The diagram features four (4) primary entities: Admin, Cell Block List, Visitor List, and User Visitor. The Admin entity inputs PDL information, while the Cell Block List supplies cell block details for aligning PDL’s gender with the appropriate cell block number. The Visitor List receives visitor information and schedules from the system, and the User Visitor inputs the PDL name for appointment information and identity verification.

The Visual Basic Data Flow Diagram (Level 1) breaks down the PDL Management System into detailed processes. It includes processes for receiving input PDL information from the Admin, managing and aligning this information with the cell block list, and aligning the PDL’s gender with the available cell block number. The Website Data Flow Diagram (Level 1) outlines the web-based interactions. It includes processes for verifying the PDL name inputted by the User Visitor, allowing the user to input appointment schedules, and managing visitor information based on these schedules. This ensures smooth data flow between the entities and the system for accurate and efficient PDL and visitor management.

In The flowchart of the PDL Management System provides a structured description of the system's functionalities and workflows designed for correctional facility administrators. At its core, the system begins with the main dashboard, acting as a central hub where administrators can access vital metrics and features, including total active PDLs, released PDLs, scheduled visits for the day, and the count of facility cell blocks. Within this framework, administrators can seamlessly navigate to specific modules designed to optimize correctional management. The PDL Record Management module streamlines the creation, update, and retrieval of detailed PDL records, encompassing personal data, crime records, and cell block assignments, ensuring data accuracy and regulatory compliance.

The Visitor List module plays a crucial role in managing and organizing visitor appointments, allowing to view visitors schedule, and confirmations for each appointment. This intuitive interface improves the visitor's experience and facilitates efficient coordination for visitation. The Cell Block Management module enables administrators to efficiently oversee and adjust cell block configurations, including cell block number assignments, cell capacities, and gender unit allocations, optimizing facility resource utilization.

For visitors, seeking to schedule appointments with their related PDLs, the PDL Management System offers an intuitive and accessible interface. The system includes a dedicated website component designed for appointment scheduling. Visitors can access the website to view available visitation dates and times, schedule appointments with PDLs, and receive confirmation display. The website's user-friendly design simplifies the appointment scheduling process, ensuring a smooth and efficient experience for visitors. Through this system, visitors can easily visitation processes in accordance with facility regulations and guidelines.