## Introduction

This technical manual provides an overview of the Police System, a web-based application developed in PHP with a MySQL database. The system facilitates various functionalities for police officers and administrators, including incident reporting, vehicle and people search, and user management.

Index:http://localhost/login.php Main:http://localhost/main.php

## Installation

The system assumes the presence of a **MySQL** database and a **PHP-enabled** web server. The primary configuration file **db.inc.php** contains database connection settings. Ensure this file is correctly configured with your database credentials.**Ensure all the php files**, **db.inc.php** and **background images** in the same directory.

## **System Structure and Design Rationale**

The system is structured into several PHP scripts, each serving a specific function within the application. Key components include:

db.inc.php: Contains database connection settings

style.css:This file is integral to the system, providing a consistent and user-friendly interface across different modules.

main.php: The main interface for users after login, providing links to various functionalities. login.php: Handles user authentication and redirects to main.php upon successful login. search.php, search\_vehicle.php: Enable searching for people and vehicles in the database. add\_vehicle.php: Allows adding new vehicles and associating them with people in the database.

file\_report.php,handle\_report.php,add\_people\_vehicle.php: Used for filing new incident reports.Furthermore allows user to add new people and new vehicle and accociate them with new incident.

create\_police\_officer.php: Admin-exclusive functionality to create new police officer accounts.

associate\_fines.php: Enables administrators to associate fines with incident reports. audit.php: Allows searching of audit logs for database modifications.

## **Key Codes Introduction**

```
// 记录搜索操作到 AuditLog 表
$auditUsername = $_SESSION['username']; // 获取当前登录的用户名
$action = 'Search';
$description = 'Searched for: ' . $search;
$auditStmt = $conn->prepare("INSERT INTO AuditLog (Username, Action, Description) VALUES (?, ?, ?)")
$auditStmt->bind_param("sss", $auditUsername, $action, $description);
$auditStmt->execute();
$auditStmt->close();
```

This code records a user's search action into an AuditLog table in the database. It begins by retrieving the current user's username from the session (\$\_SESSION['username']). This ensures that the log entry is associated with the specific user who performed the search.

This code is the most frequently used piece of all codes, because this code needs to appear when all kinds of changes are made to the database and be recorded so that users can use it in the audit function.