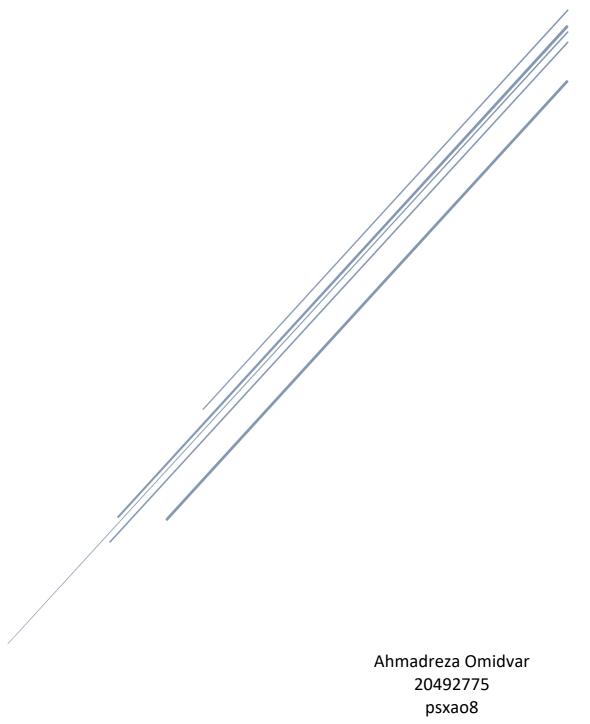
# **Technical Manual**

# **POLICE STATION**

DATABASES, INTERFACES AND SOFTWARE DESIGN PRINCIPLES (COMP4039 UNUK)



# **Table of Contents**

Technical Manual	
Introduction	3
Database	3
Structure	4
How it works	4
Login:	4
Main Page:	4
Search:	4
Edit:	4
Add:	5
Password Change:	5
Audit:	5
Files:	6

## Introduction

UK traffic police is a website that helps police to keep records of people and vehicles that have come to their attention, with information such as vehicles, people, offences and reports.

# **Database**

The database used includes several types of many-one and many-many tables, as per the ER Diagram Figure 1.

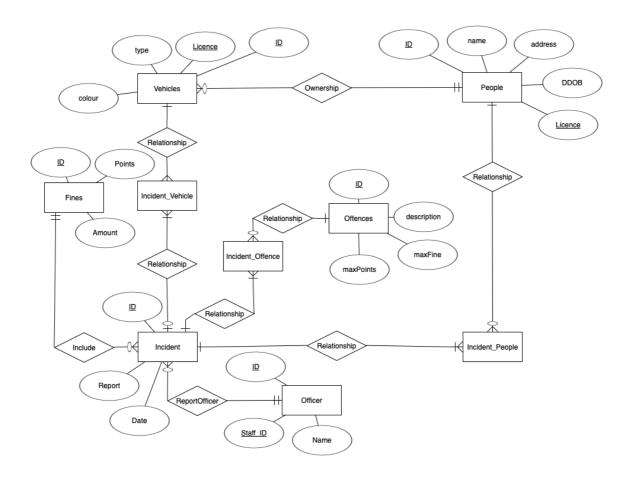


Figure 1 - Database Diagram

There are two SQL files related to this database. <u>Psxao8.sql</u> includes the CREATE and INSERT queries to build the database. The other one is <u>trigger.sql</u> which includes queries required to make the database and triggers for auditing purposes.

There is another admin table in which the details of system admins and usernames are recorded there. The superadmin flag specifies superadmins to have extra access to the functions.

#### Structure

The structure of the design is as per Figure 2. There is a total of 37 PHP files available.

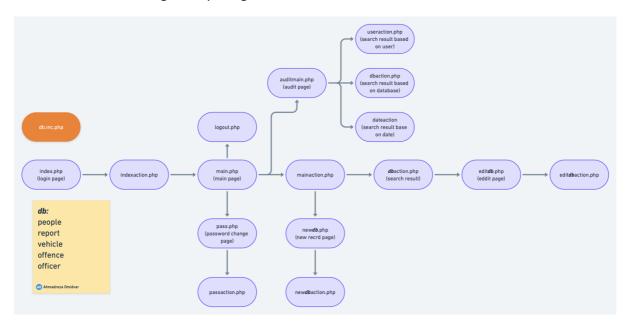


Figure 2 - Design Structure

## How it works

#### Login:

The system starts on the login page, where the <u>POST</u> method sends the username and password to <u>indexaction.php</u>. At this stage, a connection to the database will be created using the information provided by <u>config/db.in.php</u>. If the case username and password match the admin database, the user will be redirected to the <u>main.php</u> page.

#### Main Page:

On the main page, two main actions can be done. **Search** and **Add New**. Both of them use the POST Method to POST information to the related pages. Superadmin users have access to the officer and offence database too.

db would be: people, report, vehicle, offence and officer

#### Search:

Search words will be sent to the <u>mainaction.php</u> file, and based on the requested search, the variable will be stored in \_SESSION to transfer to **db**acction.php. The result using the SELECT statement will be shown on this page.

#### Edit:

Each result can be edited, and the data will be POST to be shown in <u>editdb.php</u> and using <u>edit**db**action.php</u>, data can be edited using the UPDATE query.

#### Add:

In case of adding a new record, <u>newdb.php</u> is used to insert the required record. Using the POST method, data will be transferred to <u>newdbaction.php</u> using SELECT and INSERT and UPDATE statements, and the new records will be created.

#### Password Change:

Password can be changed using <u>pass.php</u> page and in case filled passwords are matched, data will be updated in the admin database, and the password will be changed.

#### Audit:

The audit page is available for superadmin users in <u>auditmain.php</u>. Users can search based on user, database or date and search results will be shown in <u>useraction.php</u>, <u>dbaction.php</u> and <u>dateaction.php</u>. SELECT statement will be used to retrieve data updated at <u>db</u> at, in which any changes are recorded by triggers related to each database. Triggers are made for CREATE and UPDATE statements.

# Files:

Following Figure 3 shows the structure of files used.



Figure 3 - Files Structure