

Technical Manual

First install MySQL, PHP and VScode on the computer. Programming is mainly done in VScode. Pay attention to the version of MYSQL, which should be lower than version 8.0. There are six tables in my database, namely people, vehicle, offence, passwords, fines and incident. In the table of people, the people ID, people's name, address and owner's license number are included. In the vehicle table, it includes the vehicle ID, vehicle type, vehicle color and license number. A person can have multiple cars or no cars, so there is a one-to-many relationship between people and cars. Of course, there will be situations where the owner of a car is not in the record. The incident table contains the incident ID, incident date, incident information, and the corresponding vehicle, driver and offence. A report has only one person, one car, and one offer, but one person, one car or one offence can correspond to multiple reports, and all are in a one-to-many relationship. The fine form contains fine ID, fine amount and deducted points. There is a one-to-one relationship between fines and incidents, but the police are only responsible for recording incidents. Judges and administrators will make specific fines and deductions for offence. Therefore, fines are dependent on offence to a certain extent, which does not meet 3NF of database design. So I will use the two tables apart. The 'passwords' table contains the user name and password, which also contains the administrator's user name and password. When the user logs in, the consistency of the account and password in the verification form is used to determine whether to enter the system and whether to enter the user system or the administrator system.

About how each of your SQL queries work, php establishes a connection with the database through the mysql servername, username, password and dbname. After the connection is successful, you can perform related operations on the database through mysqli_query. After the operation is successful, use mysqli_fetch_array to extract the data in the database for display.

Regarding how php works, I divided some functional php files into two parts, one is responsible for front-end display (there is 0 after the file name), and the other is responsible for back-end processing, so that the back-end will not be executed immediately after jumping to certain pages Operation, but first display a static page to reduce some bugs and implement some specific functions. I set up the session function, except for the login page, other pages can only be opened when the user logs in. In the php document, the statement to connect to mysql is set, and the content in the database can be queried. If the connection is not successful, there will be a corresponding prompt. Page jumps through hyperlinks in the system. Then when the police perform inquiries, additions, etc., the system is operated through the sql language. It also includes JavaScript language to prompt some information.

Files list:

- coursework2

 - administrator

 - car.php

 - car0.php

 - changepassword.php

 - changepassword0.php

 - logout.php

 - officeradd.php

 - officeradd0.php

 - owner.php

 - owner0.php

 - police.ico

reowneradd.php

report.php

report0.php

reportadd.php

revehicleadd.php

vehicleadd.php

veowneradd.php

img

police2.jpg

officer

car.php

car0.php

changepassword.php

changepassword0.php

login.css

login.html

login.php

logout.php

owner.php

owner0.php

reowneradd.php

report.php

report0.php

reportadd.php

revehicleadd.php

vehicleadd.php

veowneradd.php