CS 434 Project 6 LA Crime Web Application

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Schema sent via Email. I typed this report on a Linux machine which cannot open Visio files.

Design:

We developed a PHP web application to utilize our database. The main page is a master search utility that allows users to search for any piece of information in the database. The other pages include an insert, delete, update and three specific search utilities. The insert, delete and update utilities were chosen as what a user would most likely utilize such as adding a new criminal incident, deleting a criminal incident and updating a status report. The three specific search utilities also provide data a user would probably find useful. The navigation bar at the top allows for easy navigation between pages. The use of abbreviation in the navigation bar was due to space constrains. If the titles were not abbreviated, they would have taken up to much space at the top of the page. A better solution to abbreviating the titles would have been to use a different navigation system, however due to time constraints, that would have not been a feasible solution. When a user queries the database, the query string is display to them, even tough it may confuse many users, this was intentionally done for debug and troubleshooting purposes.

Limitations:

Due to time constraints, the main search utility is not very user friendly. Also, the overall application offers limited user input in regards to adding data. This was also due to time constraints. We were only able to implement the bare minimum in regards to insert, update and delete transaction support. Some of the error messages returned from the database might also not be clear to the user as we did not have time to write a clear error message for every possible error returned. If something we did not account for occurs, the user will just be notified that an error occurred.

Error Checking:

Integer values are tested to make sure they are integers and they fall within a valid range. For example, precinct numbers are tested if they fall within 1 and 21 and badge numbers are tested if they fall within 1 and 1000. The main search page tests all integers to make sure they are valid. Also, errors are returned from the database to the web application. If the user enters an invalid value, the database will return an error to the web app, which will then be displayed to the user with a simple error message. Such error messages include the value already existing in the database. Depending on the error, the web application may abort execution or continue. If the user enters an invalid value, the web application will abort execution.

Screenshots:

Home | New CI | Remove CI | Update Report | Nbr Rpts Filed Officer | Nbr Rpts Filed in Prcnct | Rpts Filed in Prcnct

Record Types to Query

- [ ] Crime Reports
- [ ] Criminal Incidents
- [ ] Records Indicating Criminal Incidents Being Defined By Statutes
- [ ] Records Indicating Crime Reports Filed By Police Officers
- [ ] Records Indicating Police Officers Being Members Of Police Departments
- [ ] Police Departments
- [x] Police Officers
- [ ] Records Indicating Criminal Incidents Being Reported Through Crime Reports
- [ ] Status Updates
- [ ] Statutes

Fields to Extract From Records

Date Graduated | First Name | | | | |

Search Criteria

First Name	Bob	Integer Value
		Integer Value
		Integer Value

Submit

WHERE segment: WHERE FirstName LIKE "%Bob%";

Full Query: SELECT DateGraduated, FirstName FROM PoliceOfficer WHERE FirstName LIKE "%Bob%";

ENTERED DATA

For checkboxes: FALSE, FALSE, FALSE, FALSE, FALSE, FALSE, TRUE, FALSE, FALSE, FALSE.

For Field Select-boxes: DateGraduated, FirstName, , , , .

For Constraint Select-boxes: FirstName, , .

For Constraint Text-boxes: Bob, empty_empty, empty_empty.

Connected successfully

Temporarily vomiting query results:
1
The value of numSelect is 2.

DateGraduated	FirstName

Go Back

https://lacrime.hauptj.com/insert.php

Home | New CI | Remove CI | Update Report | Nbr Rpts Filed Officer | Nbr Rpts Filed in Prcnct | Rpts Filed in Prcnct

New Criminal Incident

Data Format

Time: 2030

Date: 2016-11-02

Incident Number: 111
Time Occurred: 2031
Date Occurred: 2016-11-02
Address: 23 zdydsgfs street
Submit

Home | New CI | Remove CI | Update Report | Nbr Rpts Filed Officer | Nbr Rpts Filed in Prcnct | Rpts Filed in Prcnct

Connected successfully

Given Data

Incident Number: 111
Time Occurred: 2031
Date Occurred:
2016-11-02
Address: 23 zdydsgfs street

Your entered data as seen in the database

Incident Number	Time Occurred	Date Occurred	Address
111	2031	2016-11-02	23 zdydsgfs street

‘

https://lacrime.hauptj.com/delete.php

Home | New CI | Remove CI | Update Report | Nbr Rpts Filed Officer | Nbr Rpts Filed in Prcnct | Rpts Filed in Prcnct

Delete Criminal Incident

Data Format

Time: 2030

Date: 2016-11-02

Incident Number: 111
Time Occurred:
Date Occurred:
Address:
Submit

https://lacrime.hauptj.com/deleteResults.php

Home | New CI | Remove CI | Update Report | Nbr Rpts Filed Officer | Nbr Rpts Filed in Prcnct | Rpts Filed in Prcnct

Connected successfully

Given Data

Incident Number: 111
Time Occurred:
Date Occurred:

Address:

Your entered data as seen in the database

Incident Number	Time Occurred	Date Occurred	Address

https://lacrime.hauptj.com/update.php

Home | New CI | Remove CI | Update Report | Nbr Rpts Filed Officer | Nbr Rpts Filed in Prcnct | Rpts Filed in Prcnct

Update Status Report

Data Format

Time: 2030

Date: 2016-11-02

Report Number: 418
Revision Number: 5
Submit

https://lacrime.hauptj.com/updateResults.php

Home | New CI | Remove CI | Update Report | Nbr Rpts Filed Officer | Nbr Rpts Filed in Prcnct | Rpts Filed in Prcnct

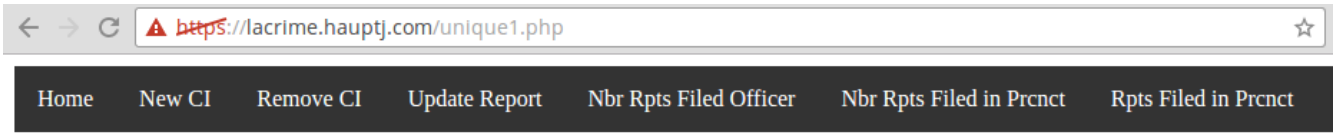
Connected successfully

Given Data

Report Number: 418
Revision Number: 5

Your entered data as seen in the database

Report Number	Revision Number
418	5



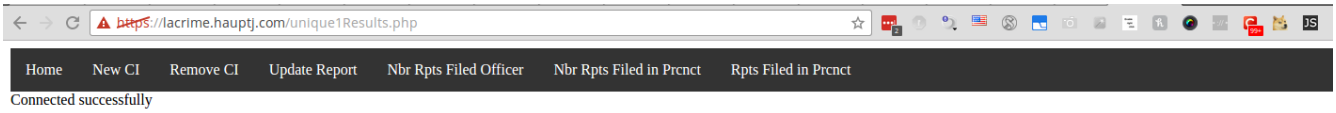
Number of Reports filed by an Officer

Data Format

Enter a badge number as an integer between 1 and 1000.

BadgeNumber: 669

Submit



Connected successfully

Given Data

Badge Number: 669

Number of Reports filed by an Officer

SELECT COUNT(File_ReportNumber), FirstName, LastName FROM PoliceOfficer, FiledBy WHERE File_DateGraduated = DateGraduated AND File_BadgeNumber = 669 GROUP BY FirstName, LastName;

Number of Reports	Firstname	Lastname
408	'Walton'	'Ulsana'

https://lacrime.hauptj.com/unique2.php

Home | New CI | Remove CI | Update Report | Nbr Rpts Filed Officer | Nbr Rpts Filed in Prcnct | Rpts Filed in Prcnct

Number of Reports Filed in a Precinct

Data Format:

Enter a Precinct number as an integer from 1 to 21.

Precinct Number: 1

Submit

https://lacrime.hauptj.com/unique2Results.php

Home | New CI | Remove CI | Update Report | Nbr Rpts Filed Officer | Nbr Rpts Filed in Prcnct | Rpts Filed in Prcnct

Connected successfully

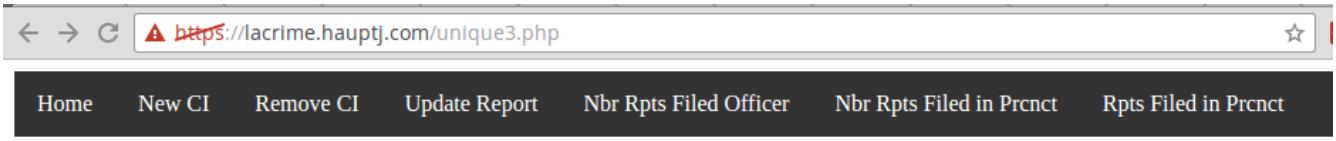
Given Data

Precinct Number: 1

Number of Reports filed by an Officer

SELECT COUNT(DateGraduated), DateGraduated FROM PoliceOfficer NATURAL JOIN PoliceDepartment WHERE PrecinctNumber = 1 GROUP BY BadgeNumber;

Number of Number of Officers	Date Graduated
1	0000-00-00
1	2000-07-01
1	1992-05-05
1	1992-05-03
1	1998-08-07
1	1989-01-07
1	1991-02-09
1	2000-01-09
1	1992-05-01
1	1999-08-07
1	1997-08-04
1	1998-04-01
1	1999-08-06
1	1991-02-07
1	1997-01-08
1	1997-09-07
1	1997-09-08
1	1989-04-04
1	2000-01-05
1	1997-09-09
1	1995-10-05



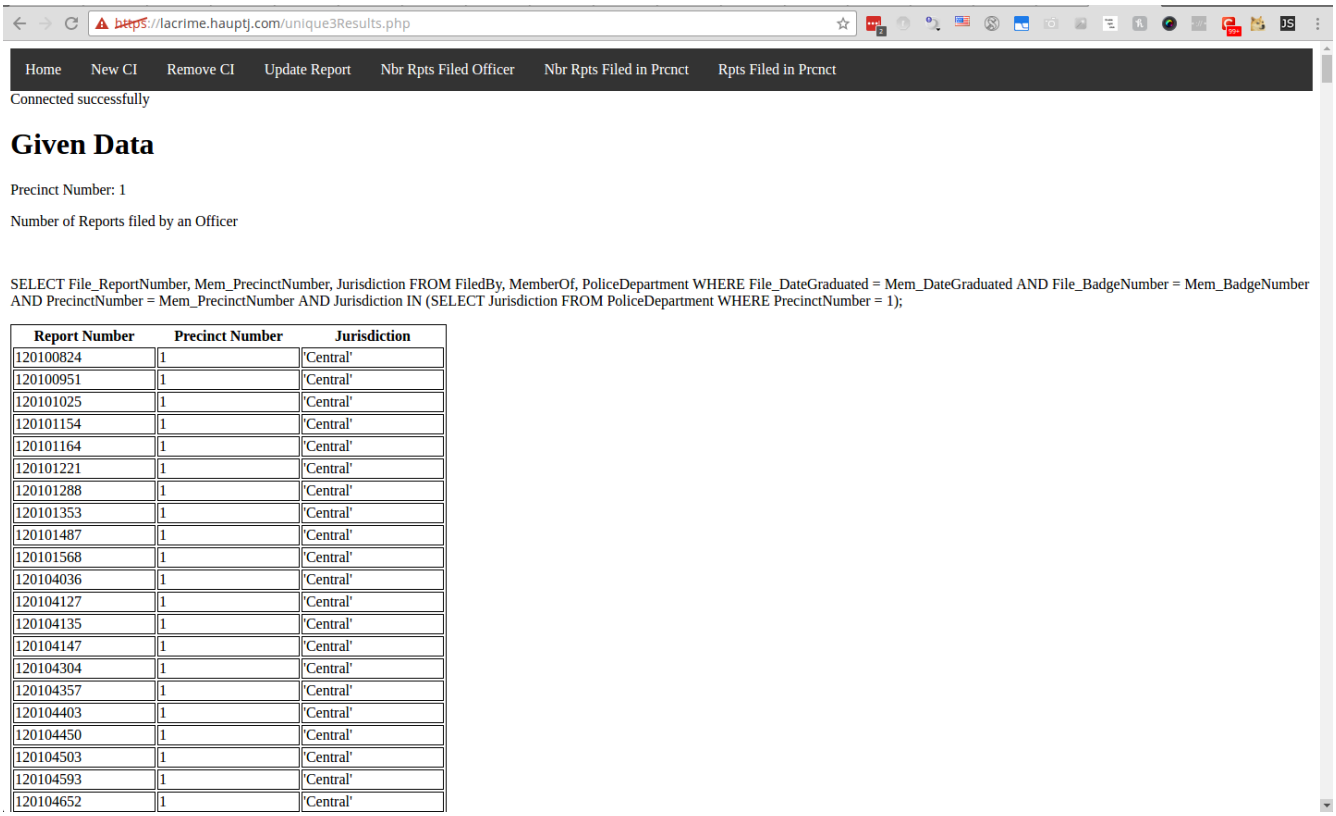
Reports Filed in a Precinct

Data Format:

Enter a Precinct number as an integer from 1 to 21.

Precinct Number: 1

Submit



Connected successfully

Given Data

Precinct Number: 1

Number of Reports filed by an Officer

SELECT File_ReportNumber, Mem_PrecinctNumber, Jurisdiction FROM FiledBy, MemberOf, PoliceDepartment WHERE File_DateGraduated = Mem_DateGraduated AND File_BadgeNumber = Mem_BadgeNumber AND PrecinctNumber = Mem_PrecinctNumber AND Jurisdiction IN (SELECT Jurisdiction FROM PoliceDepartment WHERE PrecinctNumber = 1);

Report Number	Precinct Number	Jurisdiction
120100824	1	'Central'
120100951	1	'Central'
120101025	1	'Central'
120101154	1	'Central'
120101164	1	'Central'
120101221	1	'Central'
120101288	1	'Central'
120101353	1	'Central'
120101487	1	'Central'
120101568	1	'Central'
120104036	1	'Central'
120104127	1	'Central'
120104135	1	'Central'
120104147	1	'Central'
120104304	1	'Central'
120104357	1	'Central'
120104403	1	'Central'
120104450	1	'Central'
120104503	1	'Central'
120104593	1	'Central'
120104652	1	'Central'