

**Architecture and User Interface Design**

**Traffic Citation and Reporting System**

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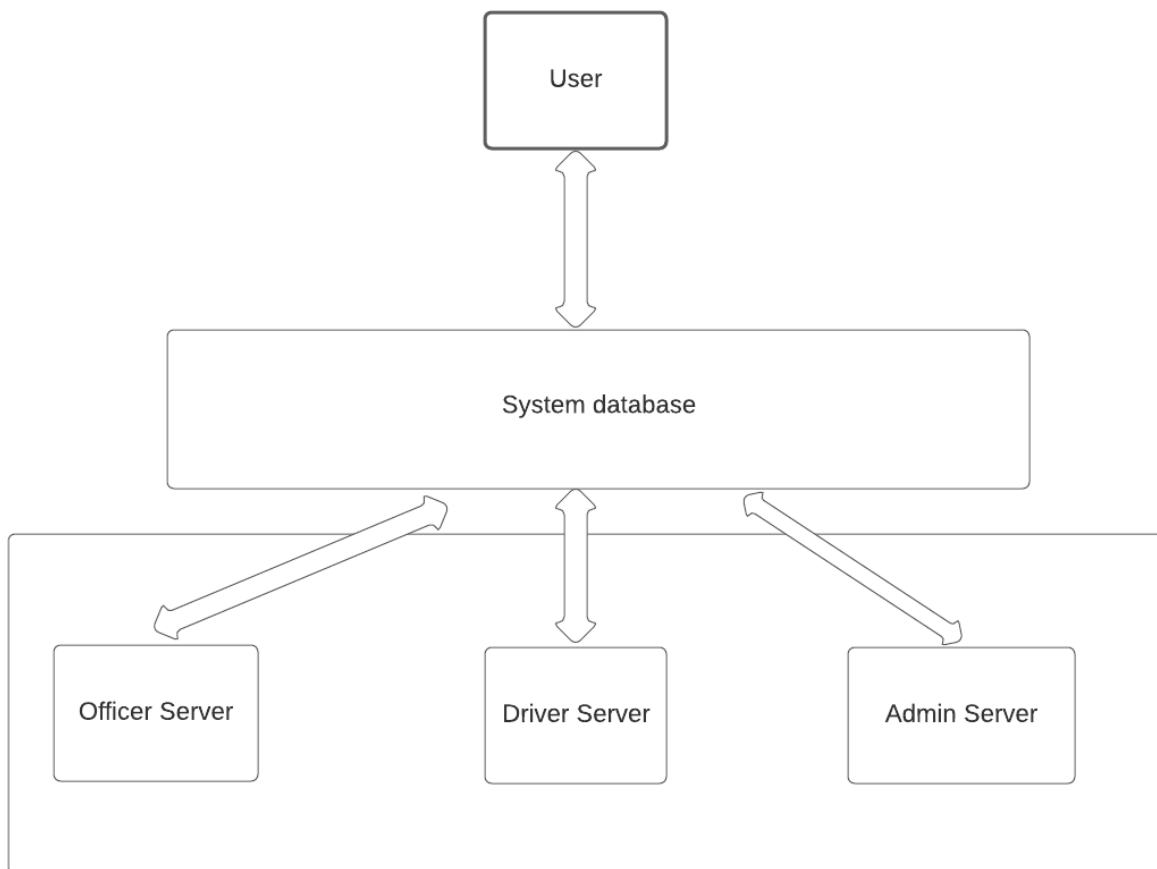
**COSC/ITEC 3506N Software Engineering**

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## Software Architecture

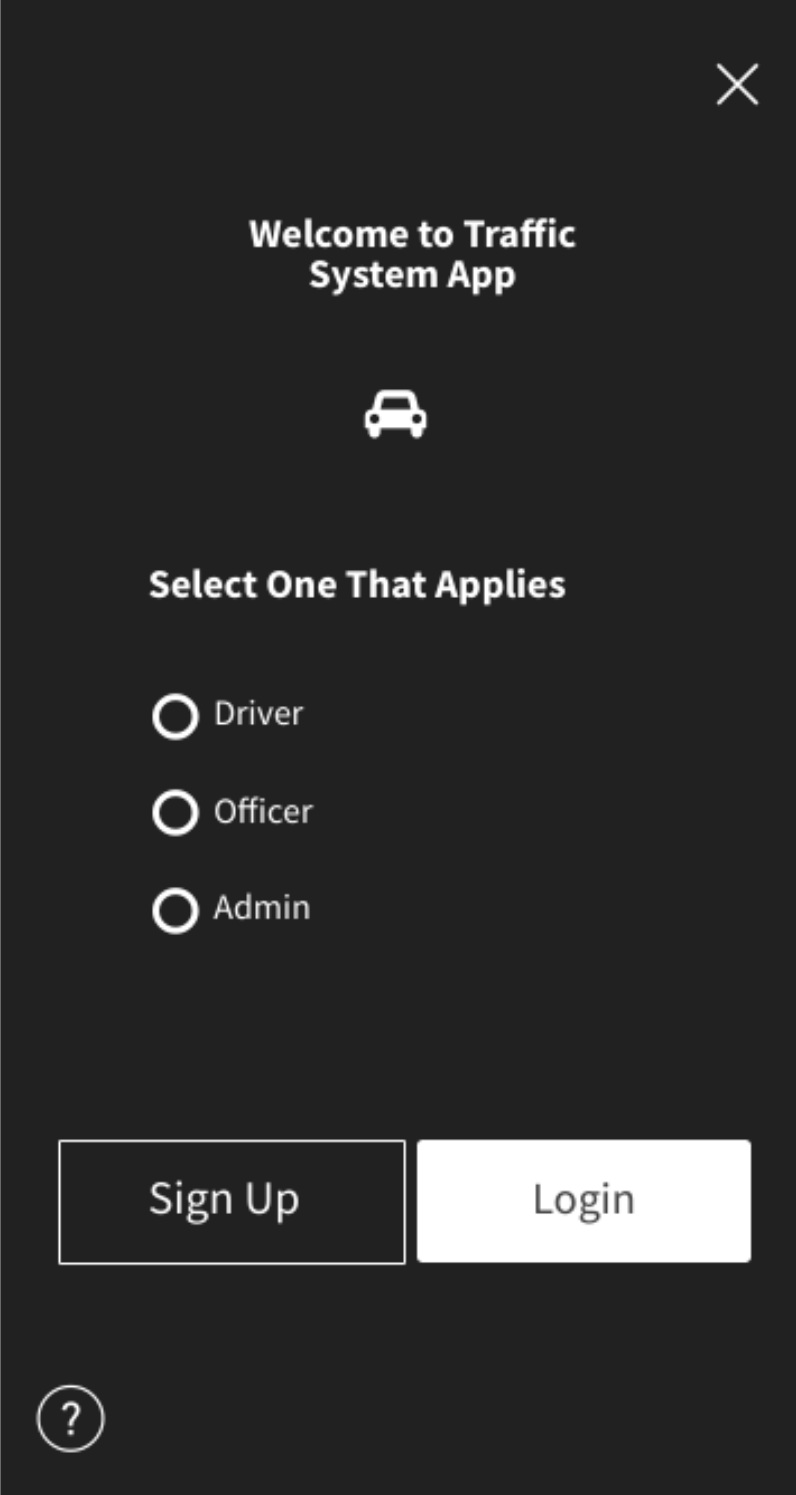
For this application, we find the broker pattern fits the best with our program's logic. The system database is the broker of our program, all the steps including log in, sign up, check received tickets, etc. all go through the system database. For example, when a driver logs into the application, the system database compares the account and password provided by the driver, if it matches the system database will give all the driver's accesses to this account.



Software Architecture Diagram

## User Interface Design


### Front page



A dark-themed mobile app interface for a traffic system. At the top right is a white 'X' icon. The main heading is 'Welcome to Traffic System App' in white, centered. Below it is a white car icon. The instruction 'Select One That Applies' is centered. Three radio button options are listed: 'Driver', 'Officer', and 'Admin'. At the bottom are two buttons: 'Sign Up' (white text on a dark background) and 'Login' (black text on a light background). A help icon (a question mark in a circle) is in the bottom left corner.

✕

Welcome to Traffic  
System App



Select One That Applies


☐ Driver

☐ Officer

☐ Admin

Sign Up


Login



## Login page

Welcome!



 User login

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Account


Password

 Login

## Sign up page

Welcome!



 Driver sign up

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First name

Last name

License No.

Email address







Create password

▶ Sign up







Ticket history page

History of tickets			
<div><div></div><div>Search by tickets number</div></div>			
(Listview)			Details
(Listview)			Details
(Listview)			Details
<div><div></div><div>Tickets history</div></div>	<div><div>\$</div><div>Paying tickets</div></div>	<div><div></div><div>Add money</div></div>	<div><div></div><div>Profile</div></div>

## Paying tickets page


<div> (Name)</div>			
<div>Account Balance (\$200.05)</div>			
<div>Ticket 2/12/22 Parking Infraction \$135.05</div>		<div>Ticket 8/11/19 Speeding Ticket \$35.00</div>	
<div>Ticket 3/7/19 Speeding Ticket Paid</div>		<div>Ticket 5/5//16 Speeding Ticket Overdue</div>	
<div> Return</div>		<div>Pay Now</div>	
<div> Ticket History</div>	<div> Paying Tickets</div>	<div> Add Money</div>	<div> Profile</div>

## Add money page

 <b>(Name)</b>			
<h2>Select Your Bank</h2>			
<div>RBC</div>		Once selected you will be redirected to your bank login	
<div>CIBC</div>		Go to pay Bill	
<div>ScotiaBank</div>		For Payee Enter TRCS	
<div>TD Canada Trust</div>		For Account Number/ID enter "#####"	
<div> <b>Return</b></div>			
 Ticket History	 Paying Tickets	 Add Money	 Profile



Profile page



(Name)

User Details


Full Name

License

Data of birth

Car Model


Balance




Tickets history

\$

Paying tickets



Add money



Profile