Car Service Finder: Final Project Documentation

Title Page

Project Name: Car Service Finder
Group Name: Team Innovators
Team Members:

- Jonathan Hernandez
- Shreya Jayas

GitHub Repository: https://github.com/jhernande7/CSC340Project

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1. Introduction

Car Service Finder is a web-based application designed to connect customers with local car service providers. It streamlines the process of finding, reviewing, and managing car services. The system supports three types of users: Customers, Providers. Key features include user authentication, service management, and administrative tools for system oversight.

2. Use Cases Implemented

Customer Use Cases

- **Login and Signup**: Customers can register and log into the system to access personalized services.

- **Search and View Services**: Customers can browse available car services by location and type. (hard coded)
- **Write Reviews**: Customers can write and submit reviews for services they have used.

Provider Use Cases

- **Service Management**: Providers can create, modify, and delete services, specifying details such as service type, description, and price.
- **Profile Management**: Providers can edit their profiles to update contact information and business details.

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3. Third-Party APIs Used

- **Google Maps API**: Used to enable location-based service searches.
- For booking page (Vehicle Page Specifically): https://vpic.nhtsa.dot.gov/api/vehicles/GetMakesForVehicleType/car?format=json

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4. Data Persistence

Database Schema

- **Tables:**
  - Users (ID, Name, Role, Email, Password)
  - Services (ID, ProviderID, Name, Type, Description, Price)
  - Reviews (ID, ServiceID, CustomerID, Rating, ReviewText)
  - AdminActions (ID, ActionType, Timestamp)

Data is stored in a MySQL database and accessed using Spring Boot’s JPA repository. Relationships between entities are mapped using Hibernate annotations.

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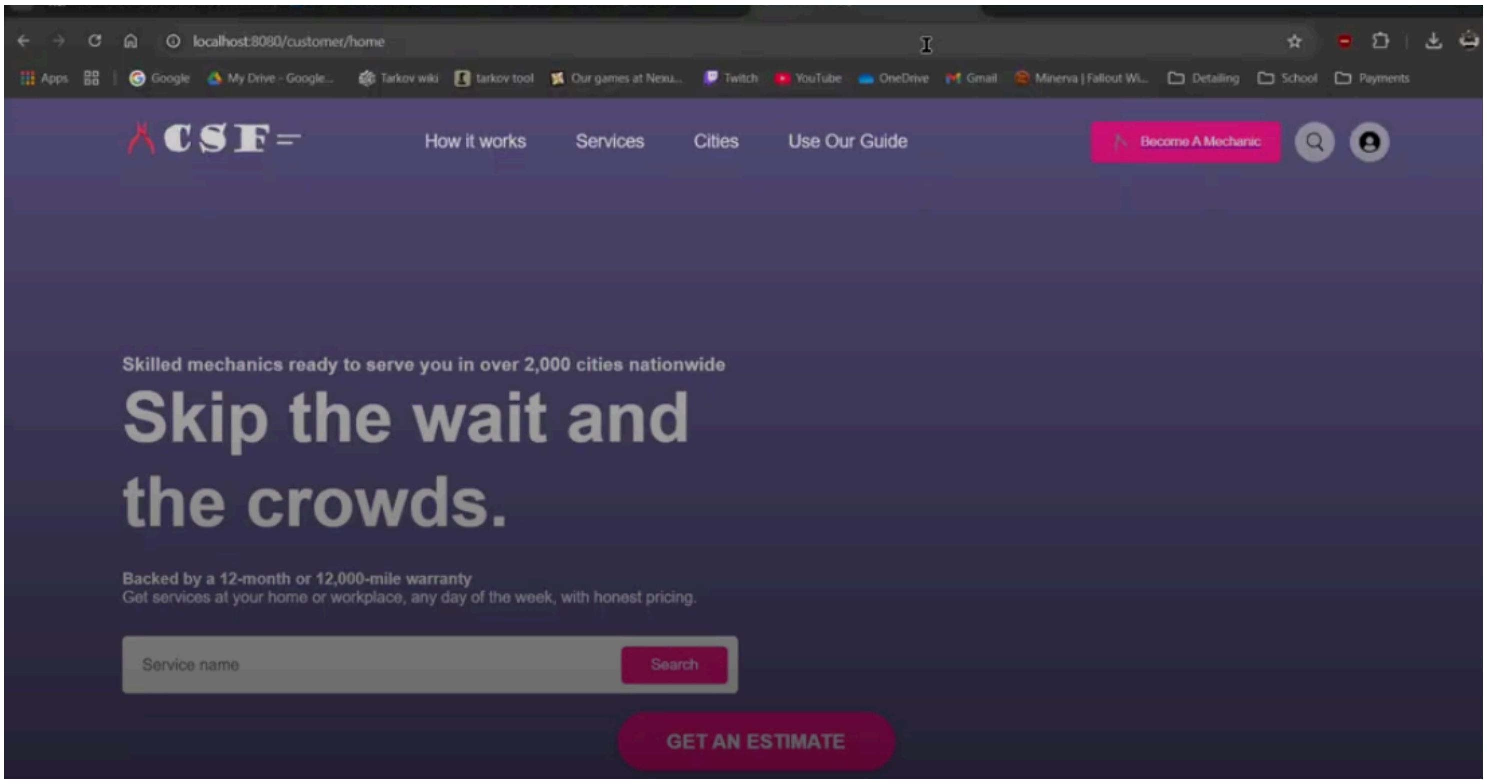
5. Scenarios with Screenshots

Scenario 1: Customer Use Case - Write Reviews

1. A customer logs in and navigates to a service page.
2. The customer fills out the review form, including a star rating and text review.
3. The review is submitted, stored in the database, and displayed under the service.

Screenshot:

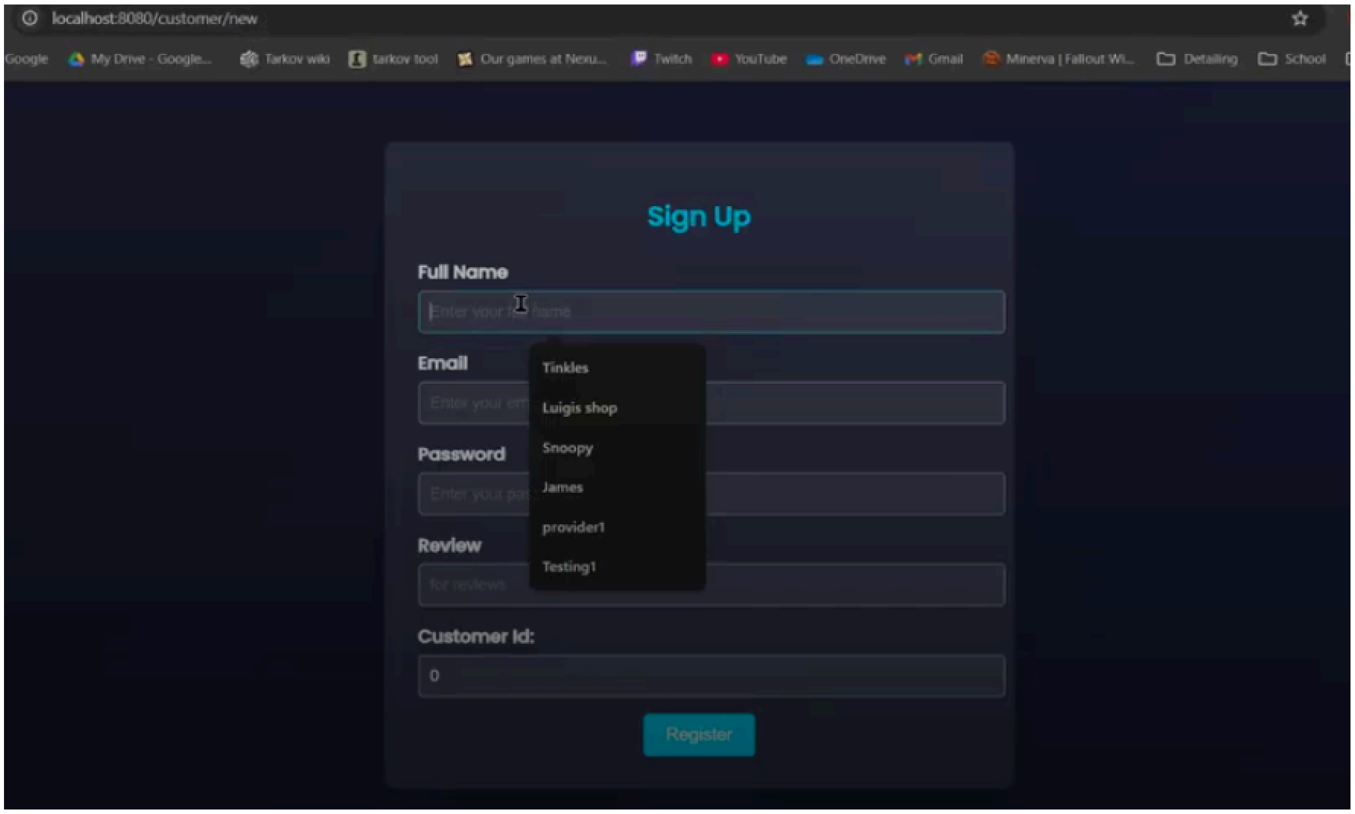
Check Next Page:---



Skilled mechanics ready to serve you in over 2,000 cities nationwide

Skip the wait and the crowds.

Backed by a 12-month or 12,000-mile warranty
Get services at your home or workplace, any day of the week, with honest pricing.



Sign Up

Full Name

Enter your full name

Email

Enter your em

Password

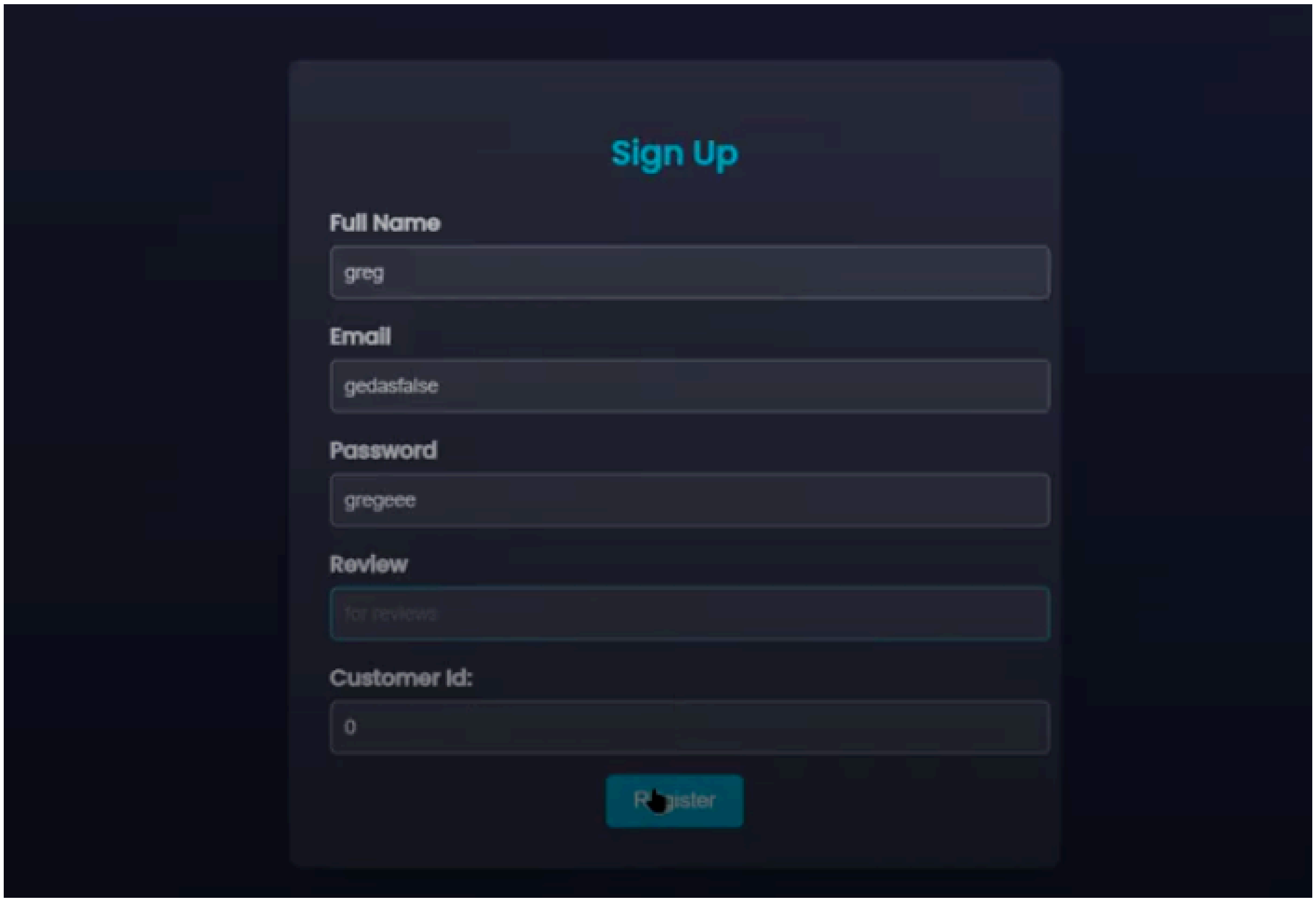
Enter your pas

Review

for reviews

Customer Id:

0


Sign Up

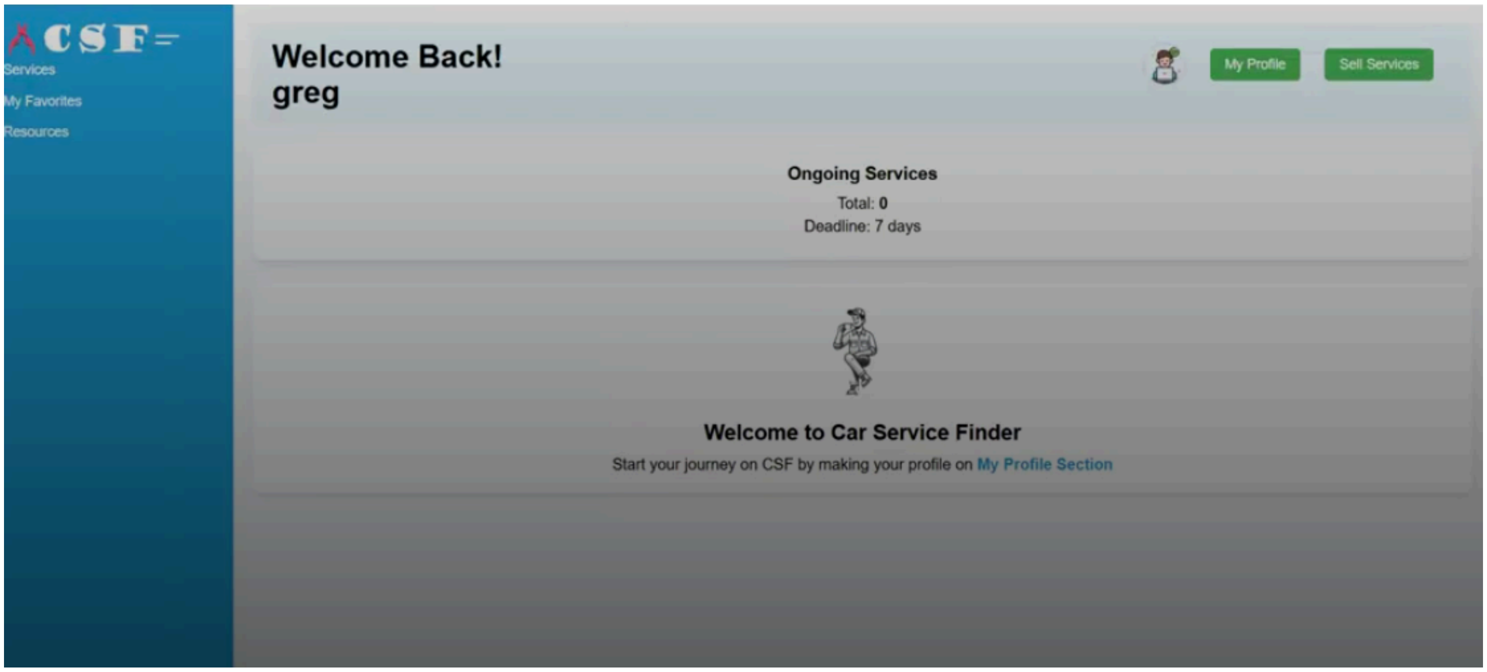
Full Name
greg

Email
gedasfalse

Password
gregeee

Review
for reviews

Customer Id:
0

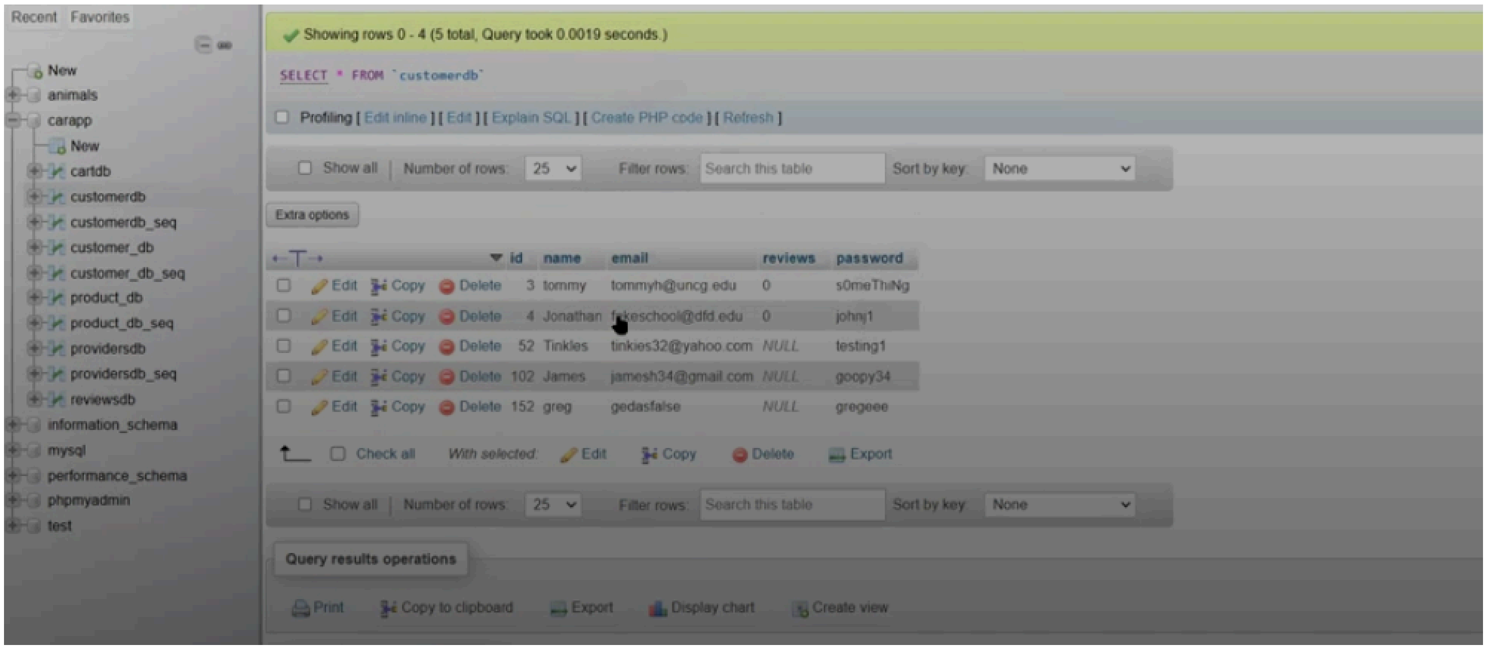


Welcome Back!
greg

Ongoing Services
Total: **0**
Deadline: 7 days

Welcome to Car Service Finder
Start your journey on CSF by making your profile on My Profile Section

Data updating in AdminMyPhp:--



Showing rows 0 - 4 (5 total, Query took 0.0019 seconds.)

```
SELECT * FROM `customerdb`
```

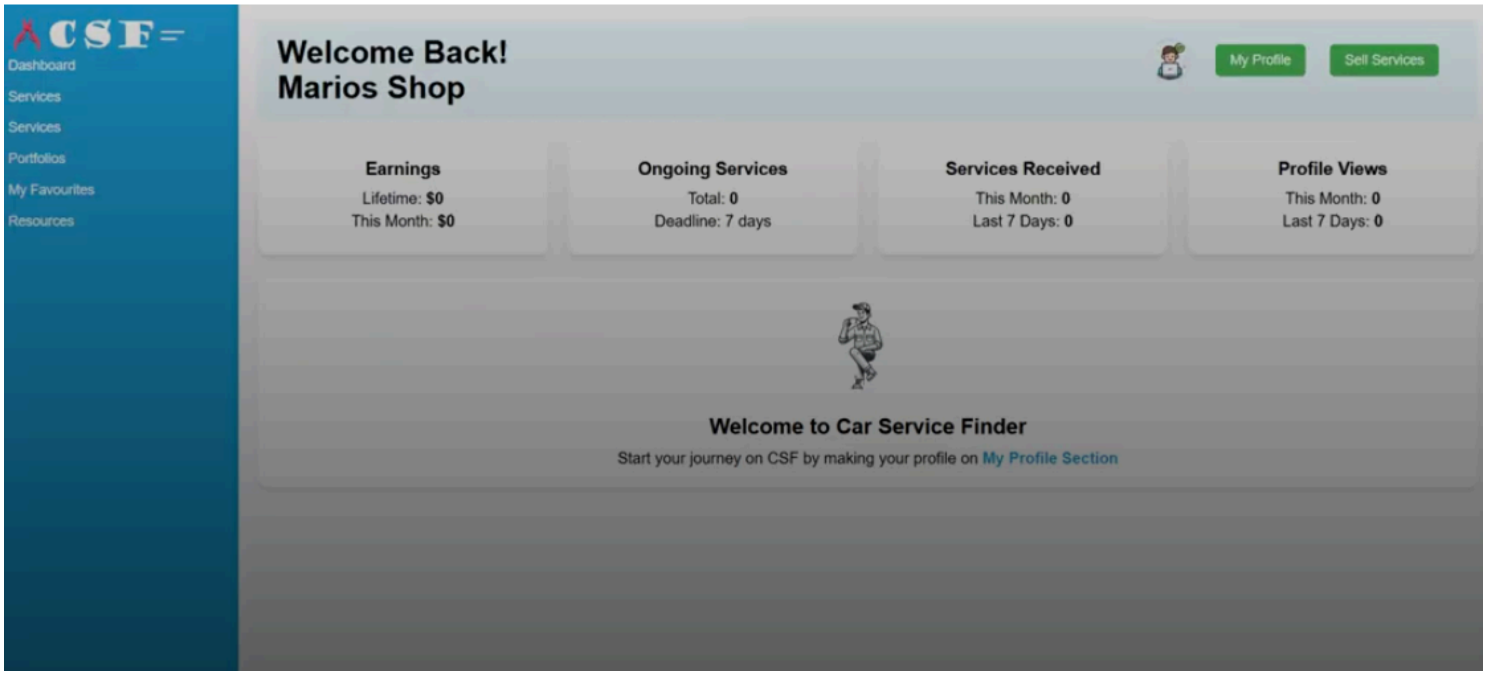
	id	name	email	reviews	password
Edit Copy Delete	3	tommy	tommyh@uncg.edu	0	s0meThiNg
Edit Copy Delete	4	Jonathan	fakeschool@dfd.edu	0	johnj1
Edit Copy Delete	52	Tinkles	tinkies32@yahoo.com	NULL	testing1
Edit Copy Delete	102	James	jamesh34@gmail.com	NULL	goopy34
Edit Copy Delete	152	greg	gedasfalse	NULL	gregeee

Recent
Favorites
New
animals
carapp
New
cartdb
customerdb
customerdb_seq
customer_db
customer_db_seq
product_db
product_db_seq
providersdb
providersdb_seq
reviewsdb
information_schema
mysql
performance_schema
phpmyadmin
test
Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]
Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None
Extra options
Check all With selected: Edit Copy Delete Export
Query results operations
Print Copy to clipboard Export Display chart Create view

Scenario 2: Provider Use Case - Create Service

1. A provider logs into the dashboard.
2. The provider fills out the service creation form with details such as name, type, and price.
3. The service is added to the database and listed in the provider's services.

Screenshot:

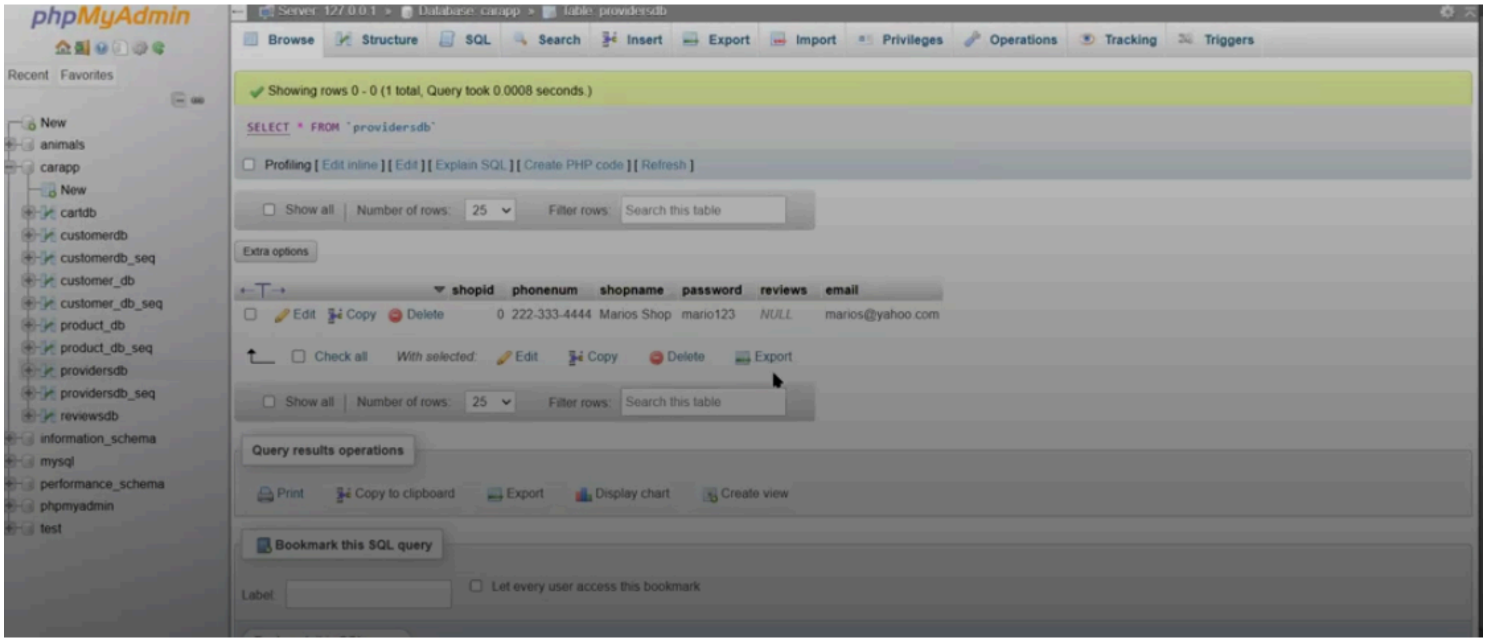


Welcome Back!
Marios Shop

Earnings	Ongoing Services	Services Received	Profile Views
Lifetime: $0	Total: 0	This Month: 0	This Month: 0
This Month: $0	Deadline: 7 days	Last 7 Days: 0	Last 7 Days: 0

Welcome to Car Service Finder

Start your journey on CSF by making your profile on My Profile Section



Showing rows 0 - 0 (1 total, Query took 0.0008 seconds.)

```
SELECT * FROM `providersdb`
```

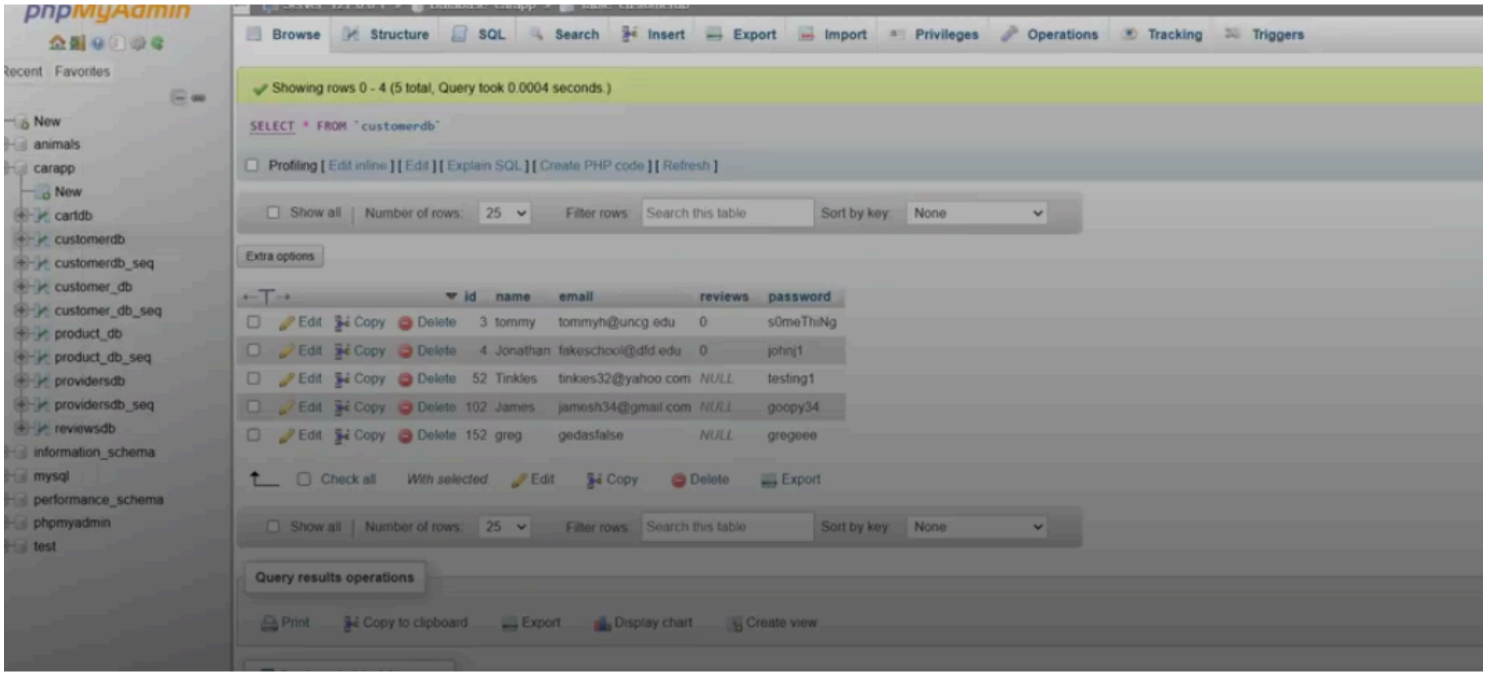
shopid	phonenum	shopname	password	reviews	email
0	222-333-4444	Marios Shop	mario123	NULL	marios@yahoo.com

Scenario 3: Users Can edit their Profile

Screenshot:

Img 1: Showing the data in database (Status: Info not chaged)

Before:

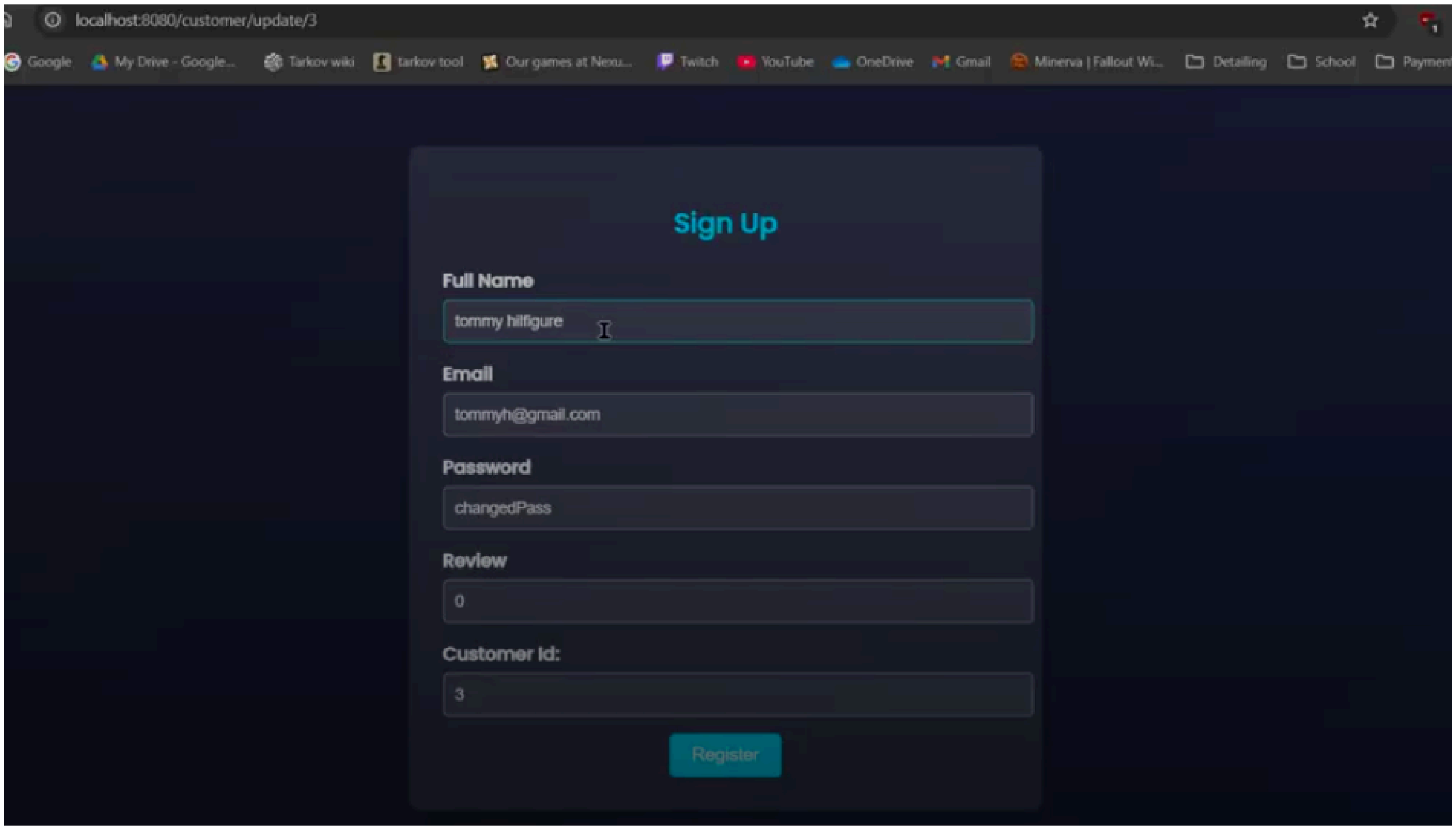


Showing rows 0 - 4 (5 total, Query took 0.0004 seconds.)

```
SELECT * FROM `customerdb`
```

id	name	email	reviews	password
3	tommy	tommyh@uncg.edu	0	s0meThiNg
4	Jonathan	fakeschool@dfd.edu	0	johnj1
52	Tinkles	tinkies32@yahoo.com	NULL	testing1
102	James	jamesh34@gmail.com	NULL	goopy34
152	greg	gedasfalse	NULL	gregeee

Img 2: Updating data in Customer form (localhost:8080/customer/update/3)



Sign Up

Full Name: tommy hilfigure

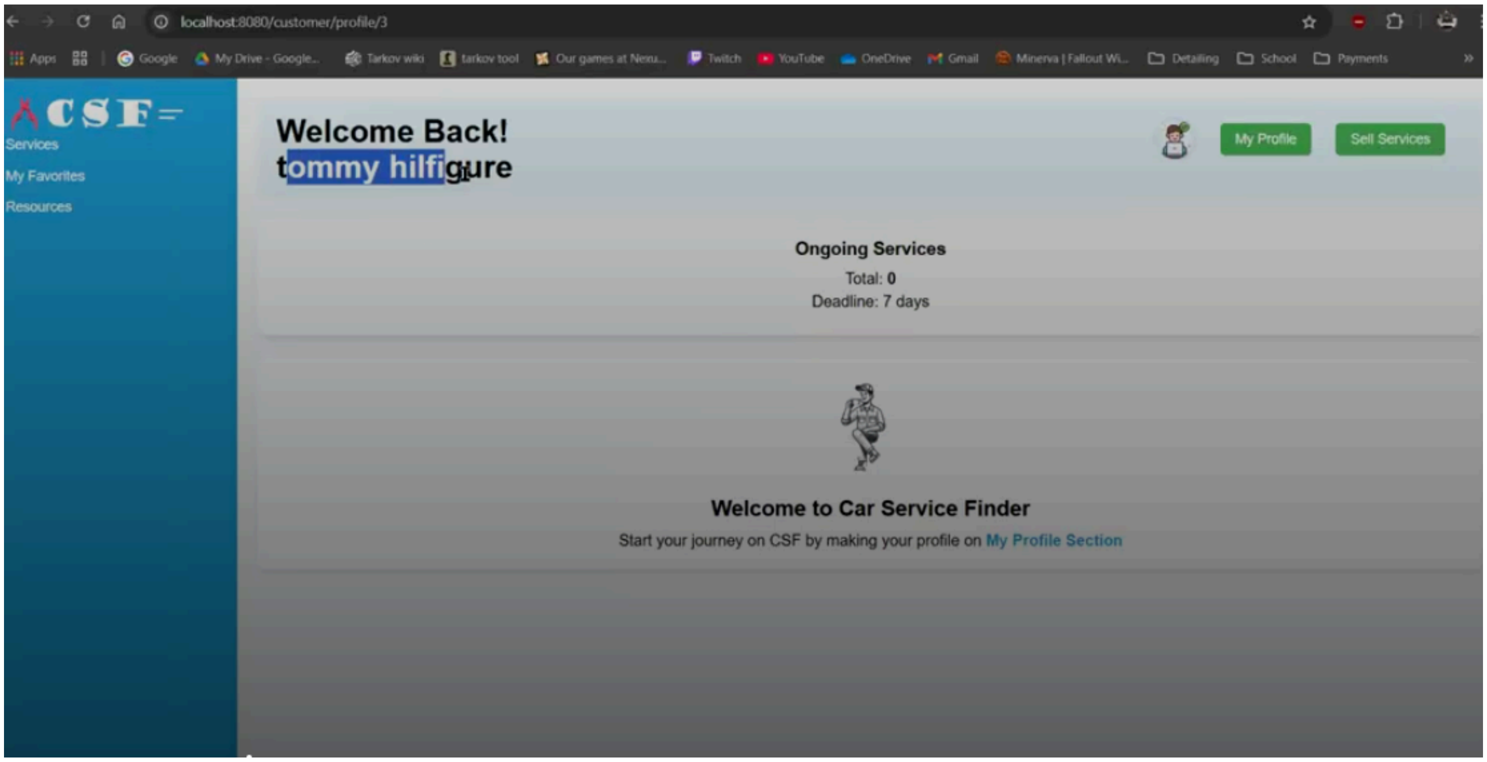
Email: tommyh@gmail.com

Password: changedPass

Review: 0

Customer Id: 3

Status: Info Updated

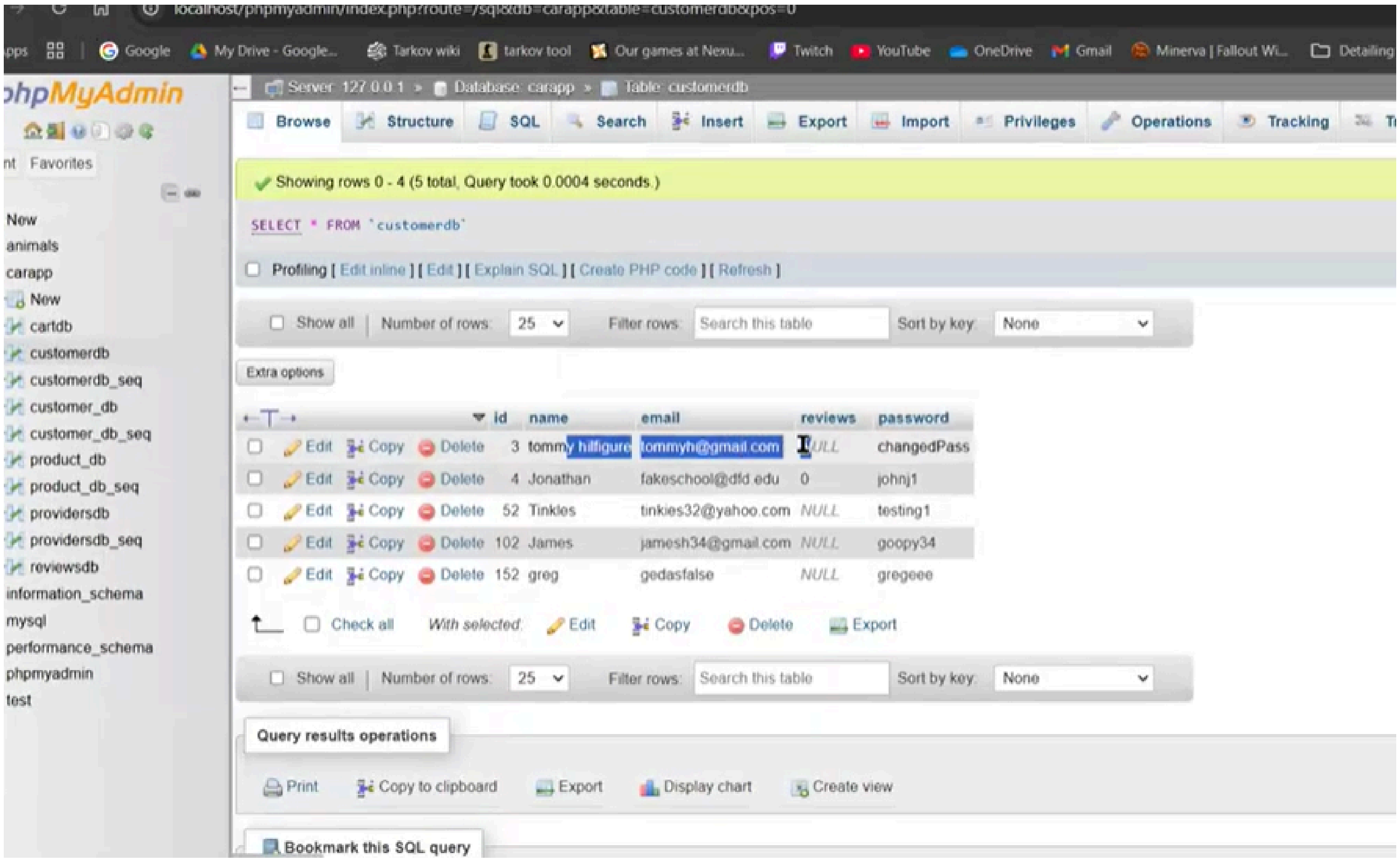


Welcome Back!
tommy hilfigure

Ongoing Services
Total: **0**
Deadline: 7 days

Welcome to Car Service Finder
Start your journey on CSF by making your profile on My Profile Section

Database Status: Updated, uncg.edu changed to gmail.com, The last name added followed by a space



Showing rows 0 - 4 (5 total, Query took 0.0004 seconds.)

```
SELECT * FROM `customerdb`
```

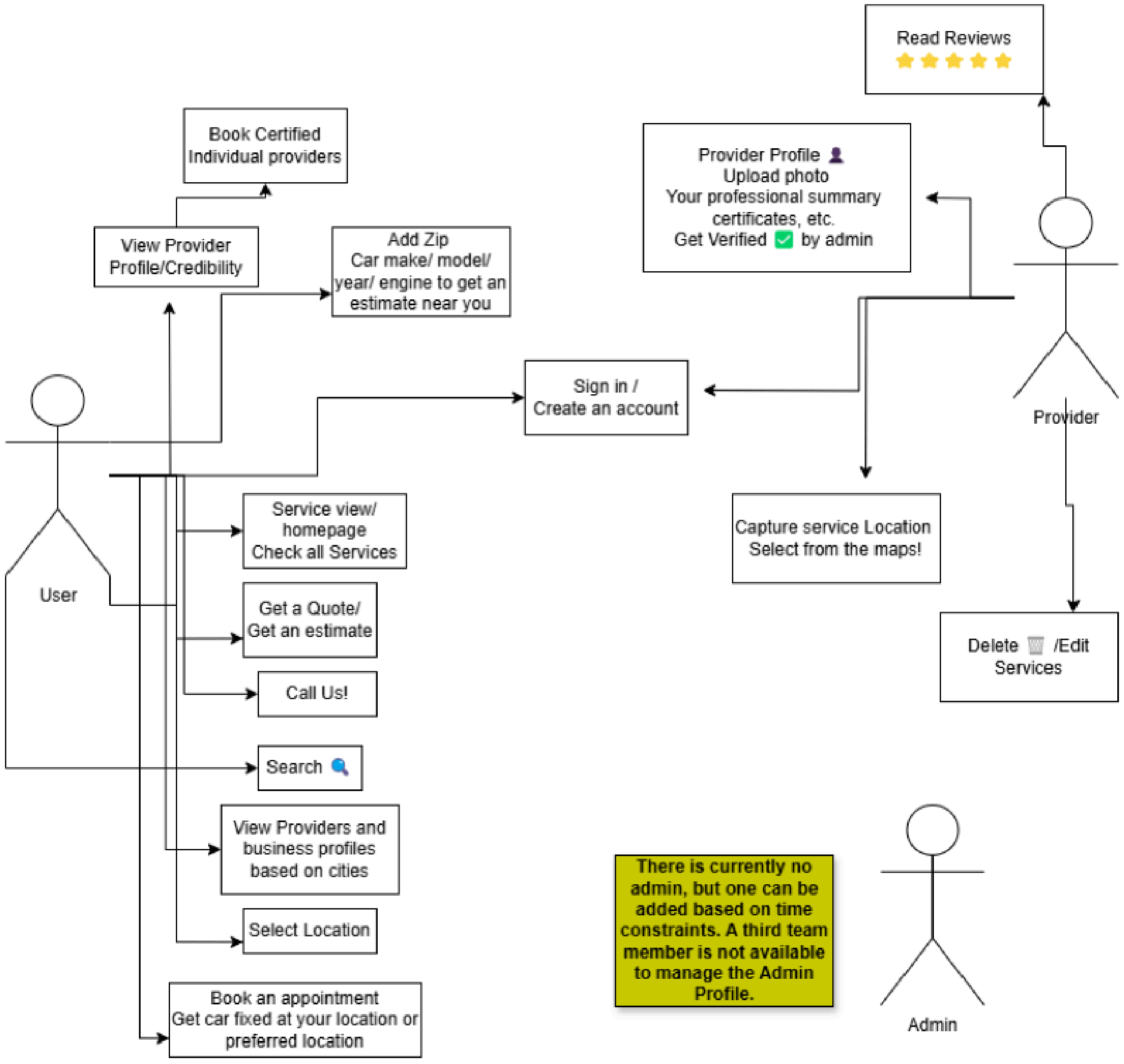
	id	name	email	reviews	password
Edit Copy Delete	3	tommy hilfigure	tommyh@gmail.com	NULL	changedPass
Edit Copy Delete	4	Jonathan	fakeschool@dfd.edu	0	johnj1
Edit Copy Delete	52	Tinkles	tinkies32@yahoo.com	NULL	testing1
Edit Copy Delete	102	James	jamesh34@gmail.com	NULL	goopy34
Edit Copy Delete	152	greg	gedasfalse	NULL	gregeee

6. Group Contributions

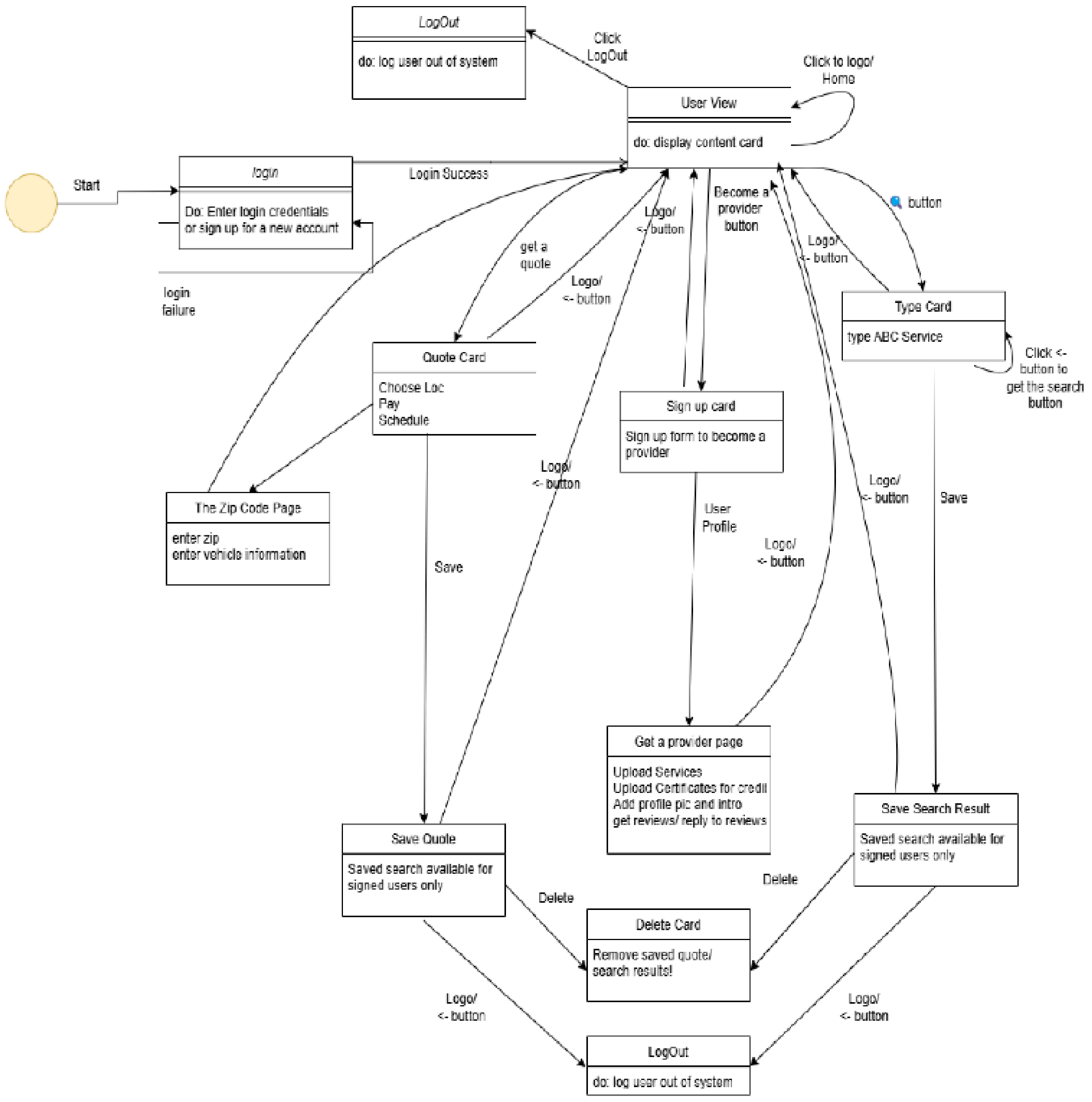
- **Jonathan Hernandez**: Customer use cases, including login, signup, reviews and more.
- **Shreya Jayas**: System testing, front-end design, and more.

7. UML Models

Use Case Diagram

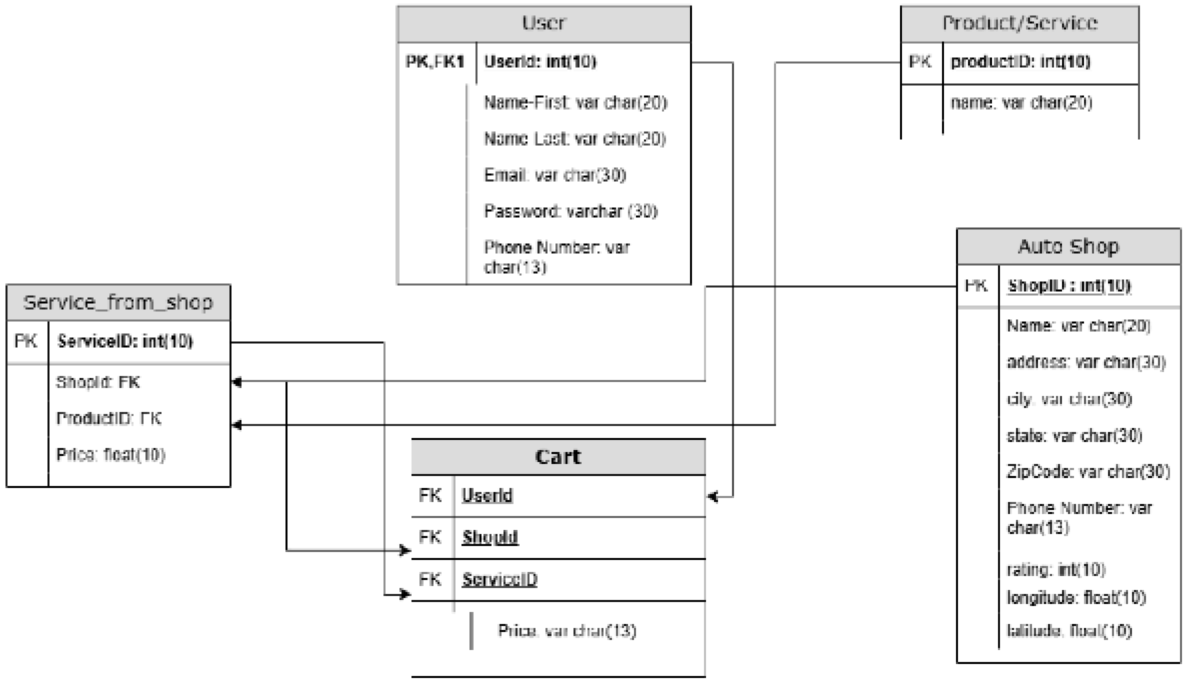

Read Reviews
⭐⭐⭐⭐⭐
Book Certified Individual providers
Provider Profile
Upload photo
Your professional summary certificates, etc.
Get Verified ✅ by admin
View Provider Profile/Credibility
Add Zip
Car make/ model/ year/ engine to get an estimate near you
Sign in / Create an account
Provider
User
Service view/ homepage
Check all Services
Capture service Location
Select from the maps!
Get a Quote/ Get an estimate
Call Us!
Delete /Edit Services
Search
View Providers and business profiles based on cities
Select Location
Book an appointment
Get car fixed at your location or preferred location
There is currently no admin, but one can be added based on time constraints. A third team member is not available to manage the Admin Profile.
Admin

Class Diagram



LogOut
do: log user out of system
Click LogOut
User View
do: display content card
Click to logo/ Home
Start
login
Do: Enter login credentials or sign up for a new account
Login Success
login failure
get a quote
Logo/ <- button
Become a provider button
🔍 button
Type Card
type ABC Service
Click <- button to get the search button
Quote Card
Choose Loc
Pay
Schedule
Sign up card
Sign up form to become a provider
The Zip Code Page
enter zip
enter vehicle information
Save
User Profile
Get a provider page
Upload Services
Upload Certificates for credit
Add profile pic and intro
get reviews/ reply to reviews
Save Search Result
Saved search available for signed users only
Save Quote
Saved search available for signed users only
Delete
Delete Card
Remove saved quote/ search results!
LogOut
do: log user out of system

Database Schema



8. Design Document

The design document outlines the system architecture, data flow, and key modules. Feedback from the initial submission has been incorporated to address performance and usability improvements.