AMERICAN INTERNATIONAL UNIVERSITY–BANGLADESH (AIUB)

Dept. of Computer Science
Faculty of Science and Technology

CSC2210: OBJECT ORIENTED PROGRAMMING 2

Spring 2024-2025

Section: [*U*]

Group No: 03

Project Report On

*Project Name [**Insurance Management System**]*

Supervised By

Jahid Hassan

Submitted By:

Name	ID
1. RAISA TASRIN RIDI	**23-53888-3**
2. JANNATUL FERDOSI AYSHE	**23-53629-3**
3. EYA ZAMUE HAQUE JISAN	**23-53895-3**

CO2: Display and verify the mean of a real-life Project using the concepts of C# Graphical User Interface based environment with database integration to depict a desktop-based application.

Assessment Criteria	Not Attended/ Incorrect (0)	Inadequate (1-2)	Average (3)	Good (4)	Excellent (5)
Evaluation Criteria	**Evaluation Definition**				**Total =**
Requirement fulfillment	Properly demonstrate a real-life scenario-based project with proper functional requirement identification for the Object-Oriented Programming project development activities.				
Validation	Ensuring the ability of students' proper demonstration on validation forms in their system in terms of dealing with the data.				
Verification	Identifying if the students can verify the system data along with proper functional requirements in terms of data flow.				

Table of Contents: Page no.

1. Chapter :01 (Introduction)---------- 03
2. Chapter :02(User Story)---------- 03
3. Chapter :03 (ER Diagram)---------- 05
4. Chapter :03 (SQL Queries)---------- 06
5. Chapter:04 (Screenshots) ---------- 09

. Chapter : 01 (Introduction)

Insurance Management System is a simple software application made to help manage insurance packages and users in an organized way. It makes things easier for both the Admin and the Users. With this system, admins can create different insurance packages, set prices, and keep track of everything. Users can view the packages, buy them, and even leave feedback.

Here's what the system can do:

- **User Management**: Admins and users can log in with their own accounts and access different parts of the system based on their roles. Users can sign up if they don't have an account, and then log in to access their dashboard. Admins and users have different access based on their roles.
- **Package Management**: Admins can add new insurance packages, edit details, or delete them if needed.
- **Package Pricing**: Each package has its own price which users can see before buying.
- **Buy Packages**: Users can choose and purchase the insurance package they want.
- **Feedback System**: Users can give feedback after buying a package, and Admins can view that feedback.
- **Insurance Info Management**: Admins can see all the information related to purchased insurance and manage it easily.

The system uses SQL Server to store and manage all the data properly. It keeps everything safe, organized, and easy to find. This project helps reduce paperwork and makes the whole insurance process faster and smoother for everyone.

Chapter : 02(User Story)

As a User,

I want to sign up and log in,
So that I can access the system with my own account.

- The system checks for valid user credentials.
- New user details are saved in the user table.

As a User,

I want to view available insurance packages,
So that I can choose the right one for me.

- The system shows all active packages from the package table.
- Package details include coverage, duration, and price.

As a User,

I want to purchase an insurance package,
So that I can get coverage as per my need.

- The selected package is recorded in the purchase table.
- Payment details are saved to the purchase record.

As a User,

I want to give feedback after buying a package,
So that I can share my experience.

- My feedback is saved in the feedback table.
- Admins can view my feedback.

As an Admin,

I want to log in securely,
So that only authorized personnel can manage the system.

- The system checks admin credentials before giving access.

As an Admin,

I want to add, update, or delete insurance packages,
So that I can manage what users can buy.

- Package details are saved or updated in the package table.
- Deleted packages are no longer visible to users.

As an Admin,

I want to view all purchased packages,
So that I can track who bought what and when.

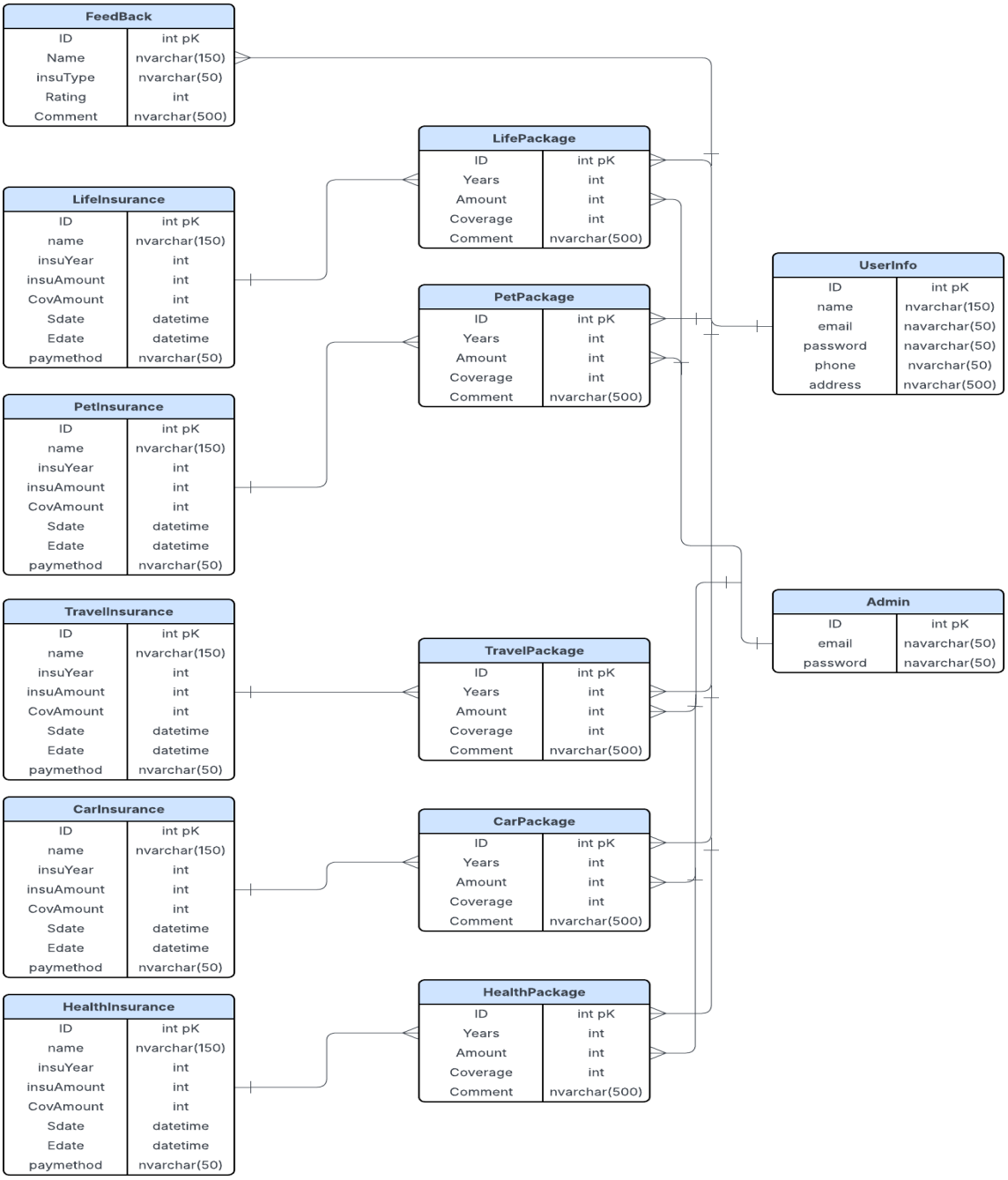
- The system displays purchase records with user details.

As an Admin,

I want to see user feedback,
So that I can understand user satisfaction and improve services.

- Feedbacks are displayed with related user and package info.

Chapter : 03
(ER Diagram)

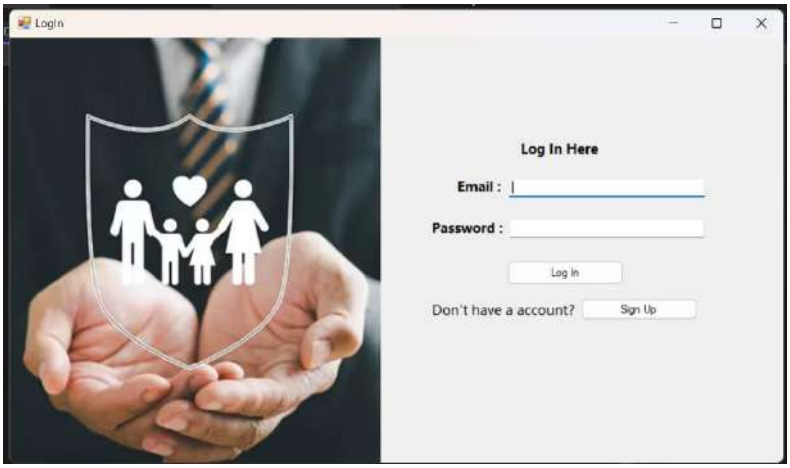


(SQL Queries)

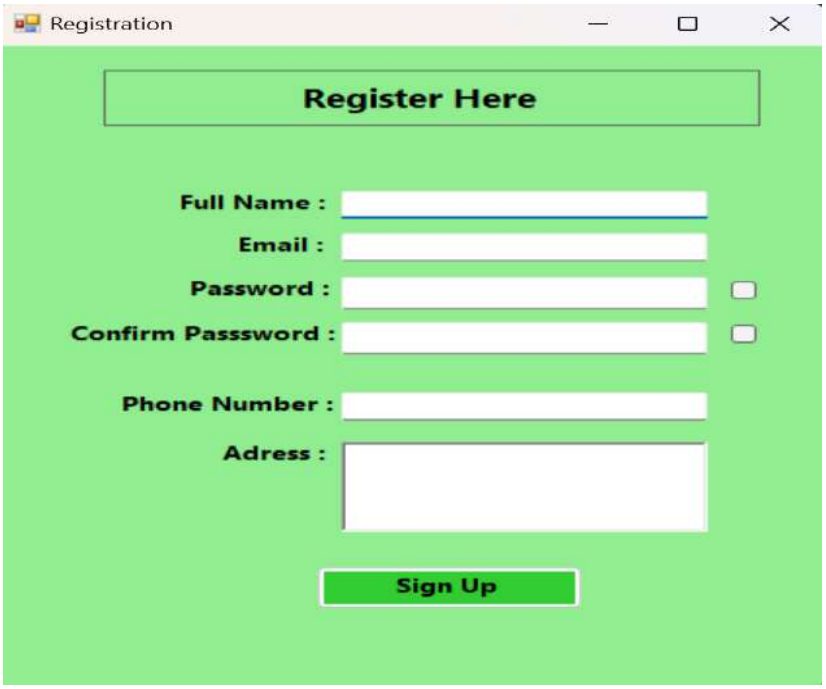
1. $"SELECT COUNT(*) FROM Admin WHERE Email = '{email}' AND Password = '{password}'";
2. $"SELECT COUNT(*) FROM UserInfo WHERE Email = '{email}' AND Password = '{password}'";
3. $"SELECT Name FROM UserInfo WHERE Email = '{email}' AND Password = '{password}'";
4. string query = $"insert into UserInfo values ('{name}','{email}','{password}','{phone}','{adress}')";
5. $"select * from LifeInsurance";
6. $"INSERT INTO LifeInsurance VALUES ('{name}', '{insuYear}', '{insuAmount}', '{CovAmount}', '{Sdate}', '{Edate}', '{paymethod}')";
7. $"UPDATE LifeInsurance SET Name = '{name}', InsuYear = '{insuYear}', InsuAmount = '{insuAmount}', CovAmount = '{CovAmount}', Sdate = '{Sdate}', Edate = '{Edate}', PayMethod = '{paymethod}' WHERE ID = {ID}";
8. $"select * from HealthInsurance";
9. $"INSERT INTO HealthInsurance VALUES ('{name}', '{insuYear}', '{insuAmount}', '{CovAmount}', '{Sdate}', '{Edate}', '{paymethod}')";
10. $"UPDATE HealthInsurance SET Name = '{name}', InsuYear = '{insuYear}', InsuAmount = '{insuAmount}', CovAmount = '{CovAmount}', Sdate = '{Sdate}', Edate = '{Edate}', PayMethod = '{paymethod}' WHERE ID = {ID}";
11. $"INSERT INTO CarInsurance VALUES ('{name}', '{insuYear}', '{insuAmount}', '{CovAmount}', '{Sdate}', '{Edate}', '{paymethod}')";
12. $"UPDATE CarInsurance SET Name = '{name}', InsuYear = '{insuYear}', InsuAmount = '{insuAmount}', CovAmount = '{CovAmount}', Sdate = '{Sdate}', Edate = '{Edate}', PayMethod = '{paymethod}' WHERE ID = {ID}";
13. $"select * from PetInsurance";
14. $"INSERT INTO PetInsurance VALUES ('{name}', '{insuYear}', '{insuAmount}', '{CovAmount}', '{Sdate}', '{Edate}', '{paymethod}')";
15. $"UPDATE PetInsurance SET Name = '{name}', InsuYear = '{insuYear}', InsuAmount = '{insuAmount}', CovAmount = '{CovAmount}', Sdate = '{Sdate}', Edate = '{Edate}', PayMethod = '{paymethod}' WHERE ID = {ID}";
16. $"select * from TravelInsurance";
17. $"INSERT INTO TravelInsurance VALUES ('{name}', '{insuYear}', '{insuAmount}', '{CovAmount}', '{Sdate}', '{Edate}', '{paymethod}')";
18. $"UPDATE TravelInsurance SET Name = '{name}', InsuYear = '{insuYear}', InsuAmount = '{insuAmount}', CovAmount = '{CovAmount}', Sdate = '{Sdate}', Edate = '{Edate}', PayMethod = '{paymethod}' WHERE ID = {ID}";
19. $"select Years,Amount,Coverage,Comment from HealthPackages";
20. $"DELETE FROM HealthPackages WHERE ID = {ID}";
21. $"INSERT INTO HealthPackages VALUES ('{Years}', '{Amount}','{Coverage}','{Comment}')";
22. $"UPDATE HealthPackages SET Years = '{Years}', Amount = '{Amount}', Coverage = '{Coverage}', Comment = '{Comment}' WHERE ID = {ID}";
23. $"select * from LifePackages";
24. $"DELETE FROM LifePackages WHERE ID = {ID}";

25. $"INSERT INTO LifePackages VALUES ('{Years}', '{Amount}','{Coverage}','{Comment}')";
26. $"UPDATE LifePackages SET Years = '{Years}', Amount = '{Amount}', Coverage = '{Coverage}', Comment = '{Comment}' WHERE ID = {ID}";
27. $"select * from PetPackages";
28. $"DELETE FROM PetPackages WHERE ID = {ID}";
29. $"INSERT INTO PetPackages VALUES ('{Years}', '{Amount}','{Coverage}','{Comment}')";
30. $"UPDATE PetPackages SET Years = '{Years}', Amount = '{Amount}', Coverage = '{Coverage}', Comment = '{Comment}' WHERE ID = {ID}";
31. $"select * from TravelPackages";
32. $"DELETE FROM TravelPackages WHERE ID = {ID}";
33. $"INSERT INTO TravelPackages VALUES ('{Years}', '{Amount}','{Coverage}','{Comment}')";
34. $"UPDATE TravelPackages SET Years = '{Years}', Amount = '{Amount}', Coverage = '{Coverage}', Comment = '{Comment}' WHERE ID = {ID}";
35. $"SELECT 'LifeInsurance' AS InsuranceType, * FROM LifeInsurance WHERE Name = '{name}' " +
    $"UNION ALL SELECT 'HealthInsurance', * FROM HealthInsurance WHERE Name = '{name}' " +
    $"UNION ALL SELECT 'CarInsurance', * FROM CarInsurance WHERE Name = '{name}' " +
    $"UNION ALL SELECT 'PetInsurance', * FROM PetInsurance WHERE Name = '{name}' " +
    $"UNION ALL SELECT 'TravelInsurance', * FROM TravelInsurance WHERE Name = '{name}'";
36. $"select * from UserInfo";
37. $"DELETE FROM UserInfo WHERE ID = {ID}";
38. $"INSERT INTO UserInfo VALUES ('{name}', '{email}', '{password}', '{phone}', '{adress}')";
39. $"UPDATE UserInfo SET name = '{name}', email = '{email}', password = '{password}', phone = '{phone}', adress = '{adress}' WHERE ID = {ID}";
40. $"INSERT INTO FeedbackTable VALUES ('{Name}', '{InsuType}', {Rating}, '{Comment}')";
41. $"select * from CarPackages";
42. $"DELETE FROM CarPackages WHERE ID = {ID}";
43. $"INSERT INTO CarPackages VALUES ('{Years}', '{Amount}','{Coverage}','{Comment}')";
44. $"UPDATE CarPackages SET Years = '{Years}', Amount = '{Amount}', Coverage = '{Coverage}', Comment = '{Comment}' WHERE ID = {ID}";
45. $"insert into CarInsurance values ('{name}','{insuYear}','{insuAmount}','{CovAmount}','{Sdate}','{Edate}','{paymethod}')";
46. $"select * from Admin";
47. $"DELETE FROM Admin WHERE ID = {ID}";
48. $"INSERT INTO Admin VALUES ('{email}', '{password}')";
49. $"UPDATE Admin SET email = '{email}', password = '{password}' WHERE ID = {ID}";
50. $"select * from FeedbackTable";

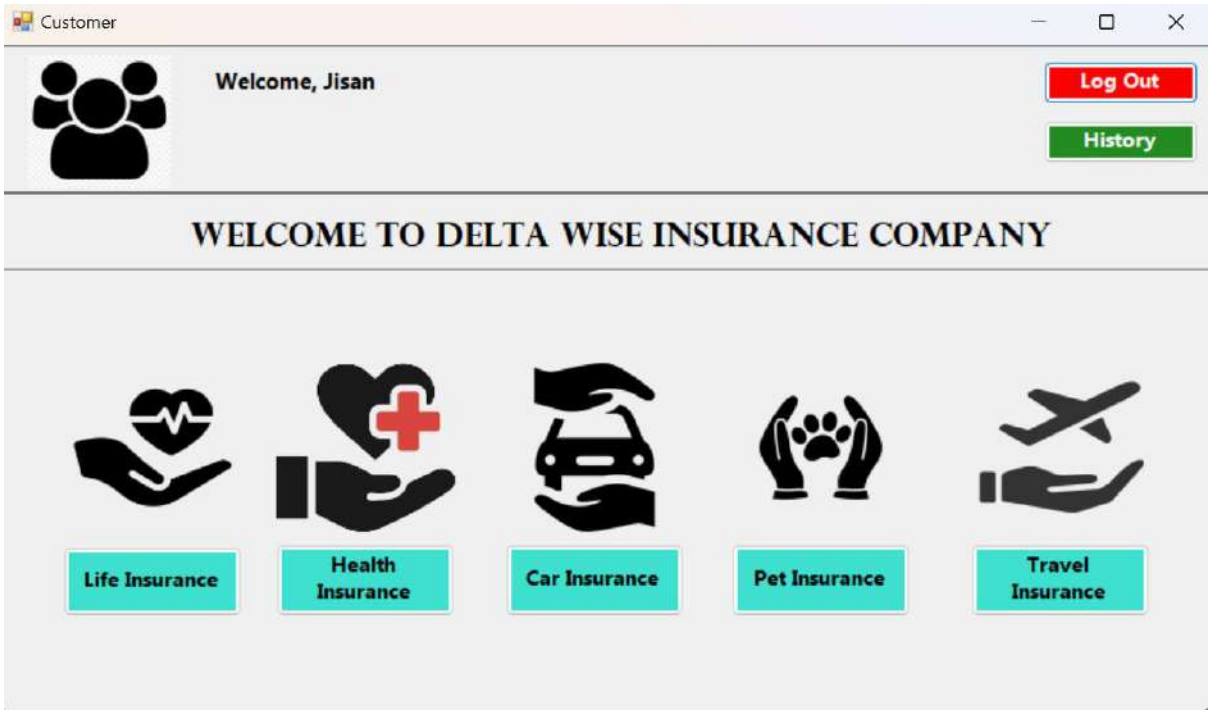
Chapter: 04 (Screenshots)



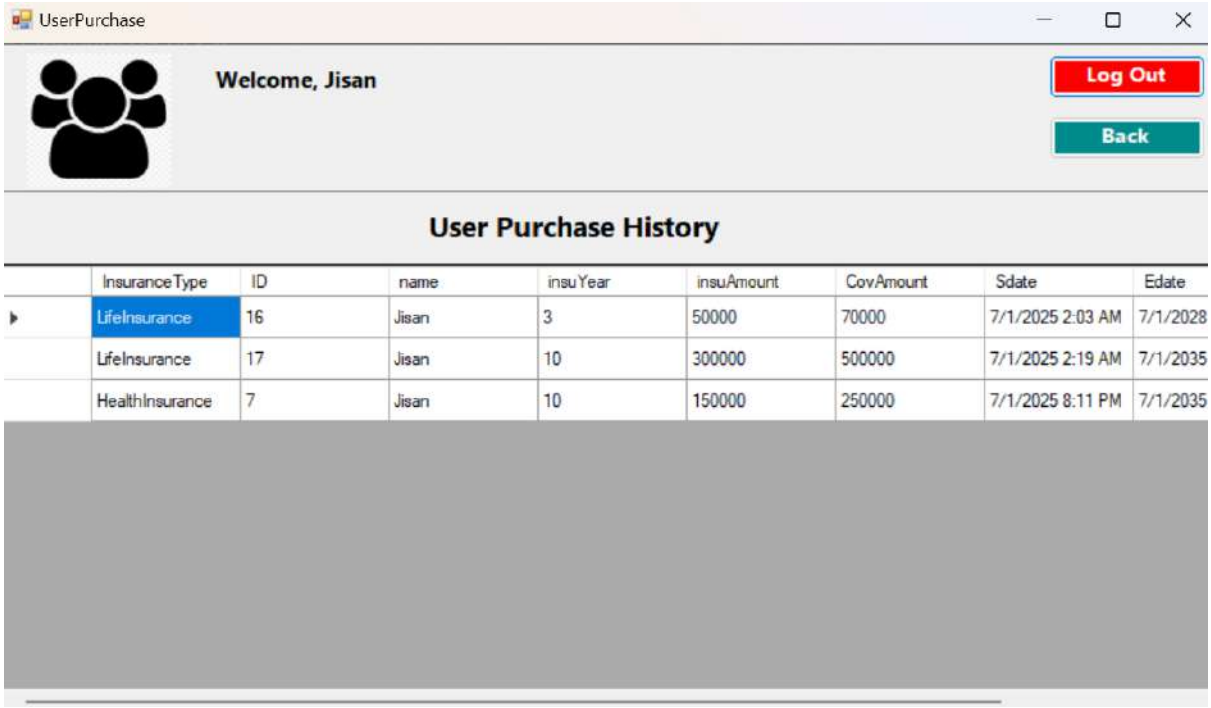
Log In Form



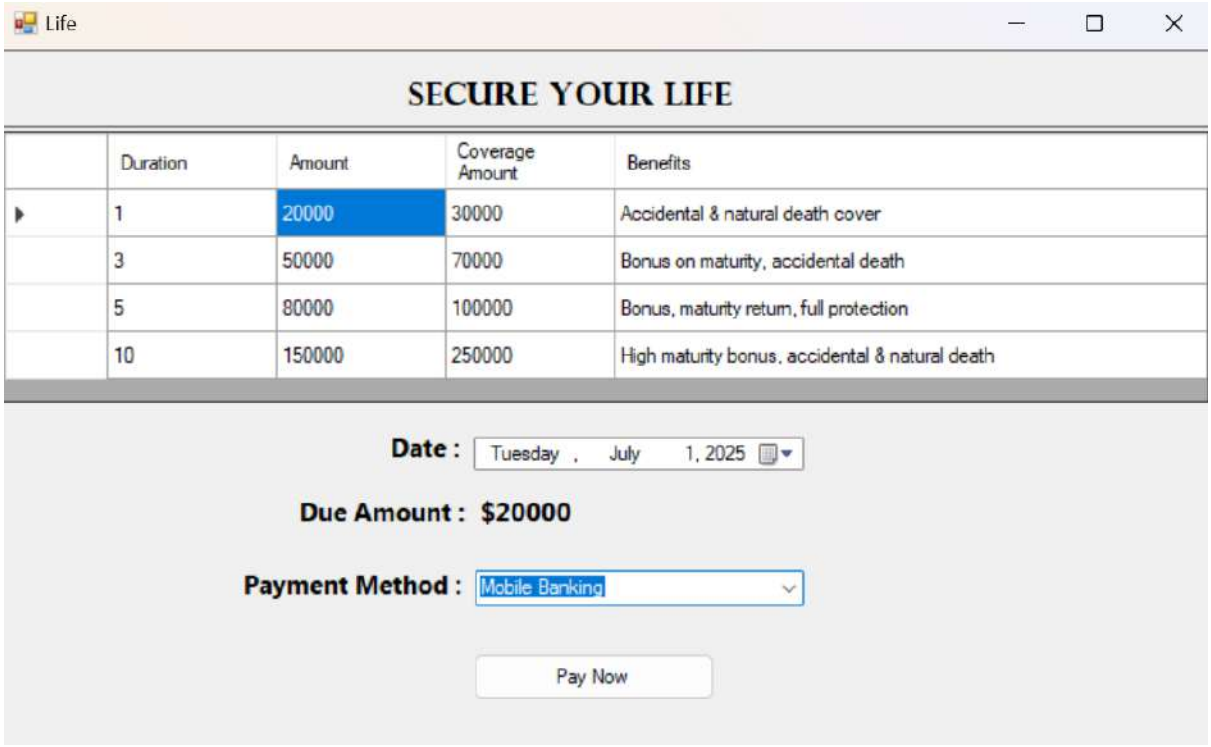
Registration Form



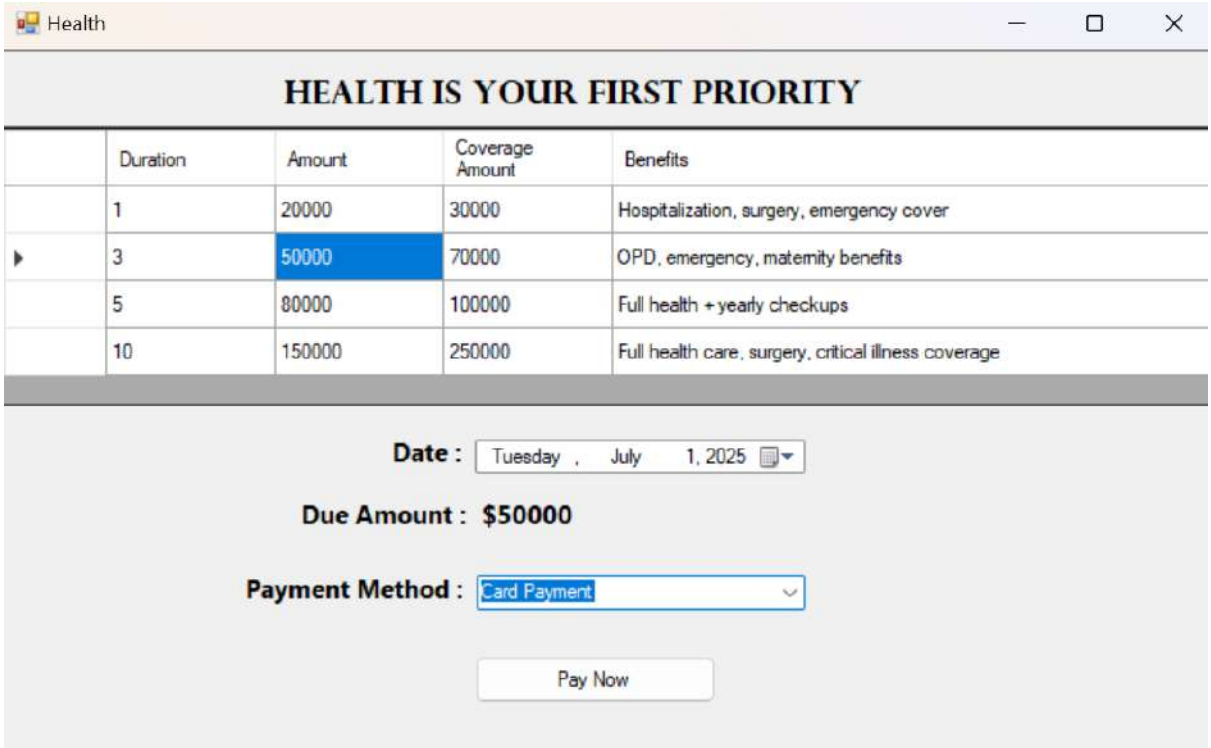
User Interface



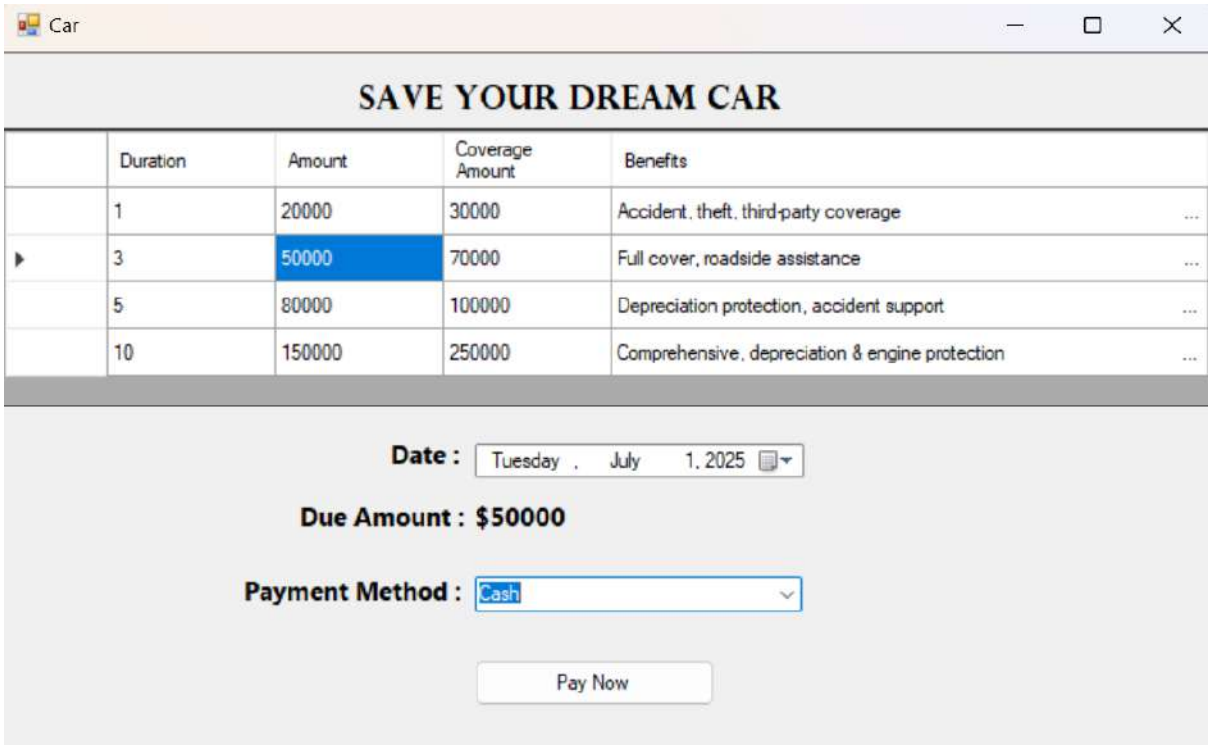
Purchase History Form



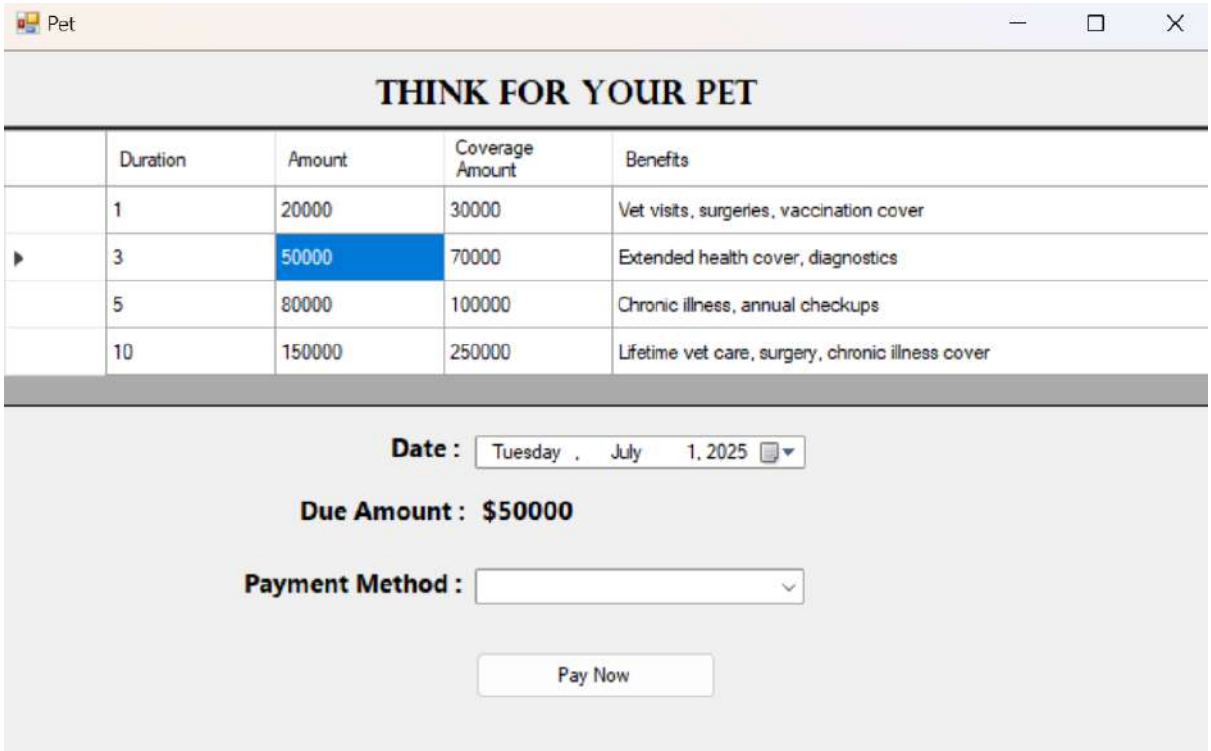
Life Insurance Packages



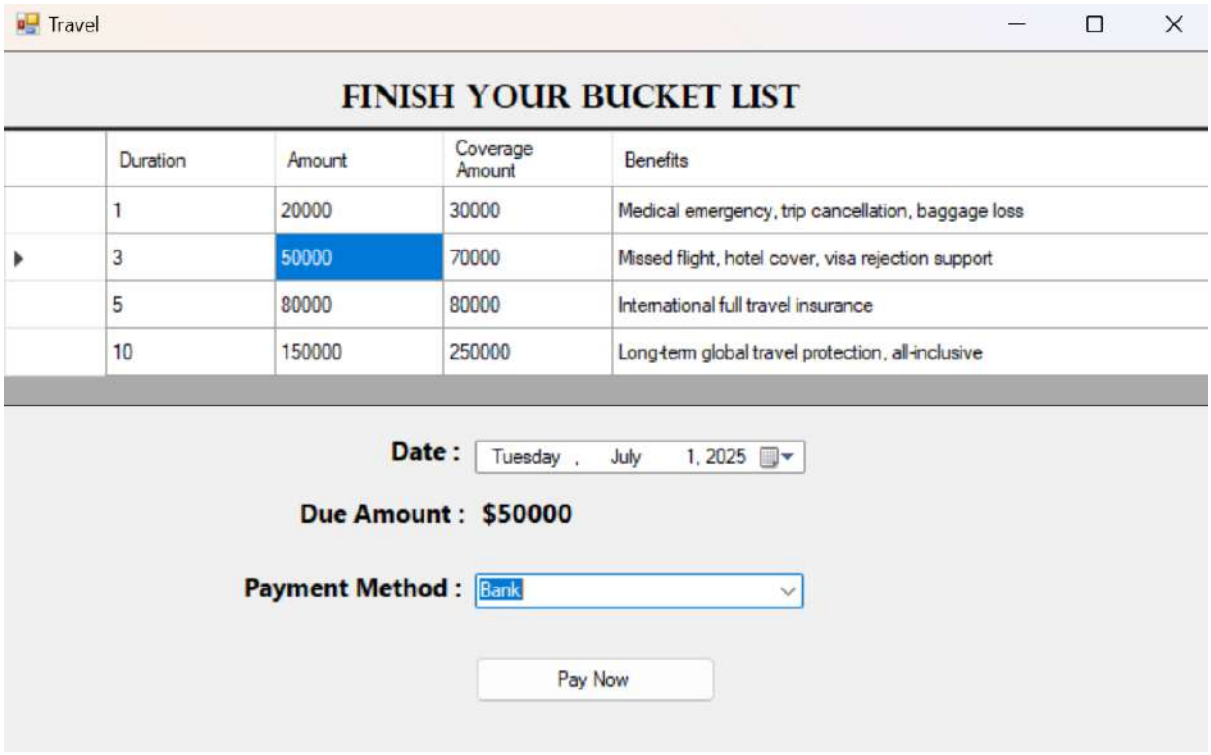
Health Insurance Packages



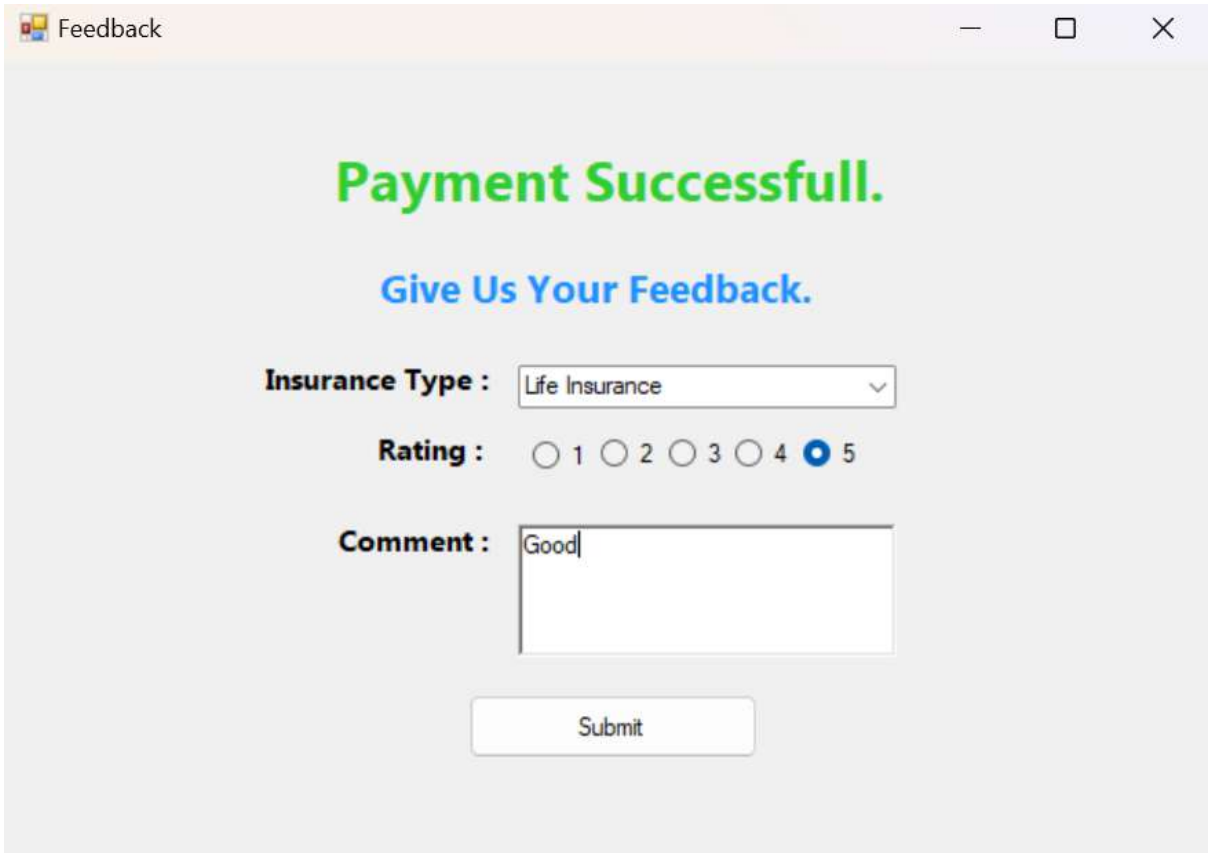
Car Insurance Packages



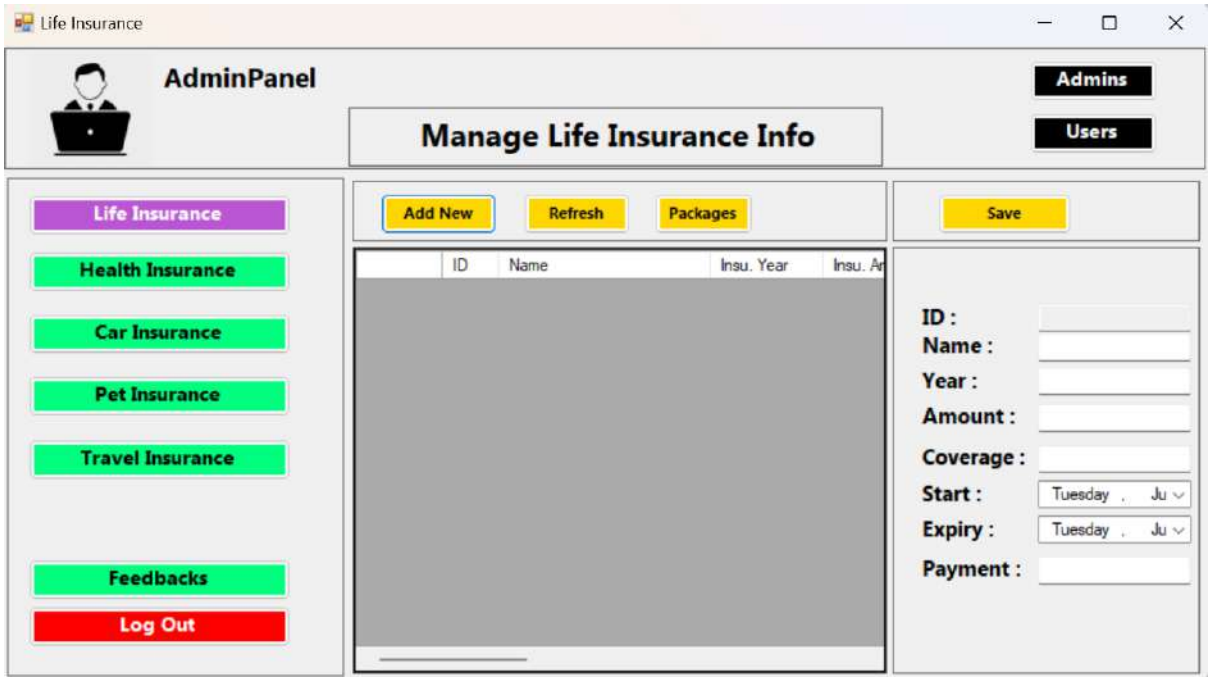
Pet Insurance Packages



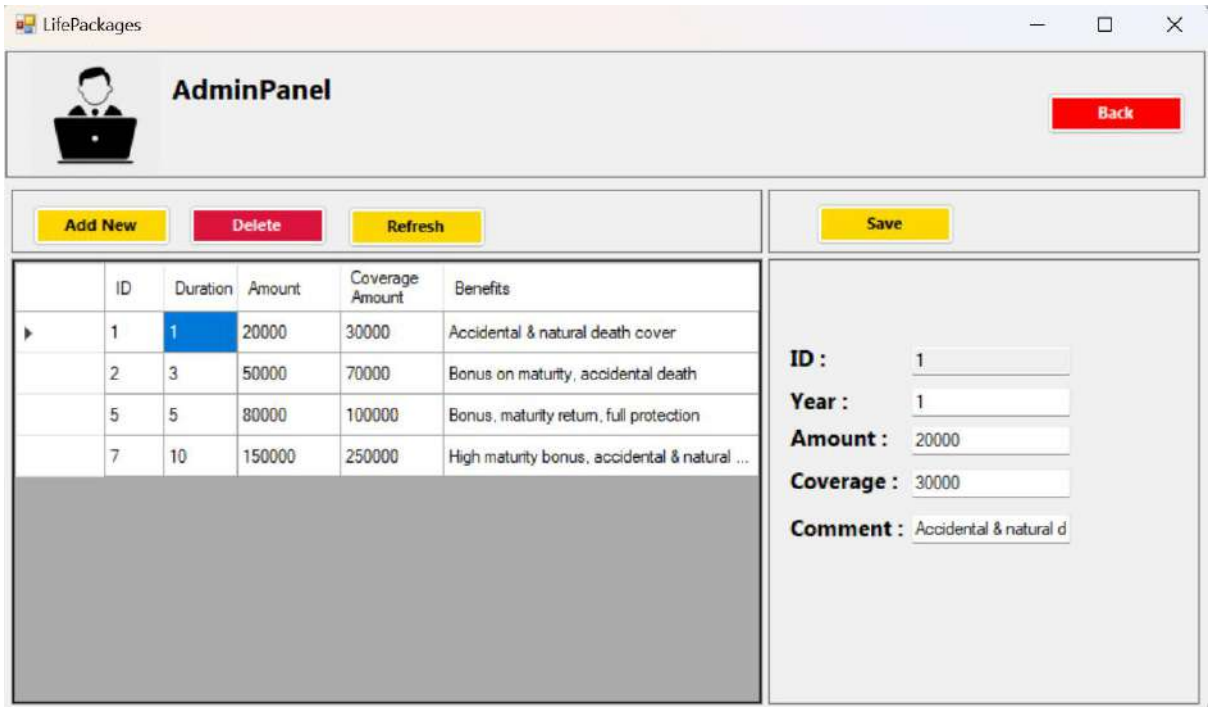
Travel Insurance Packages



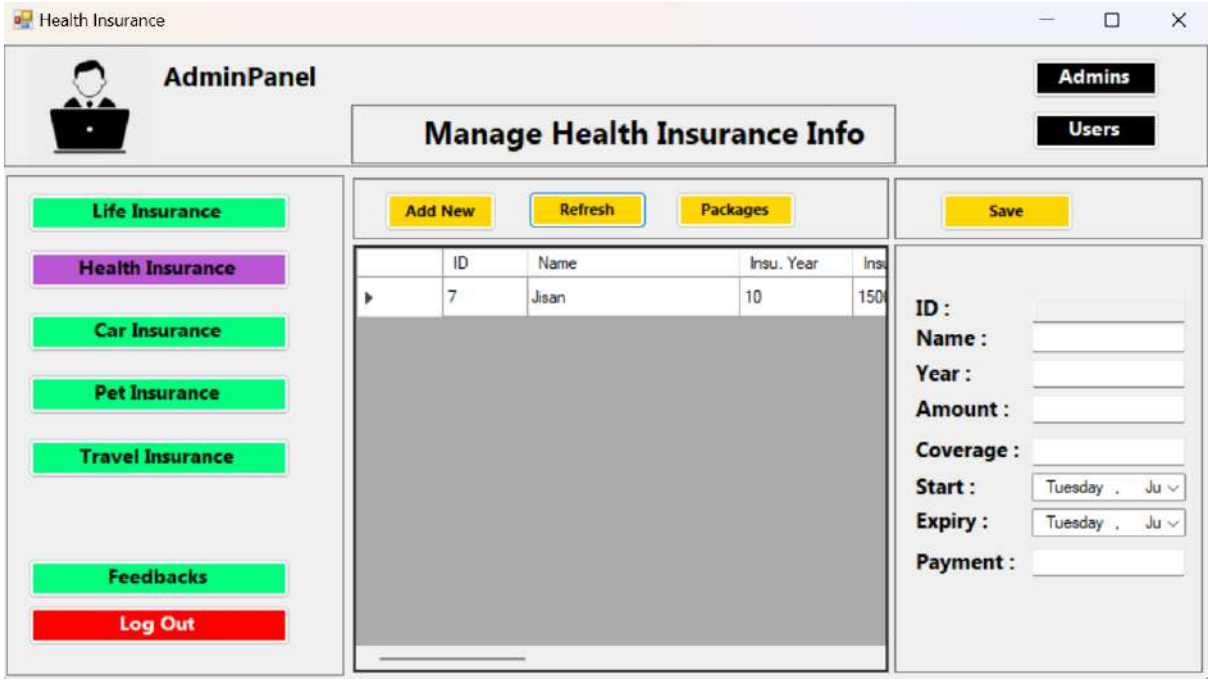
Feed Back From



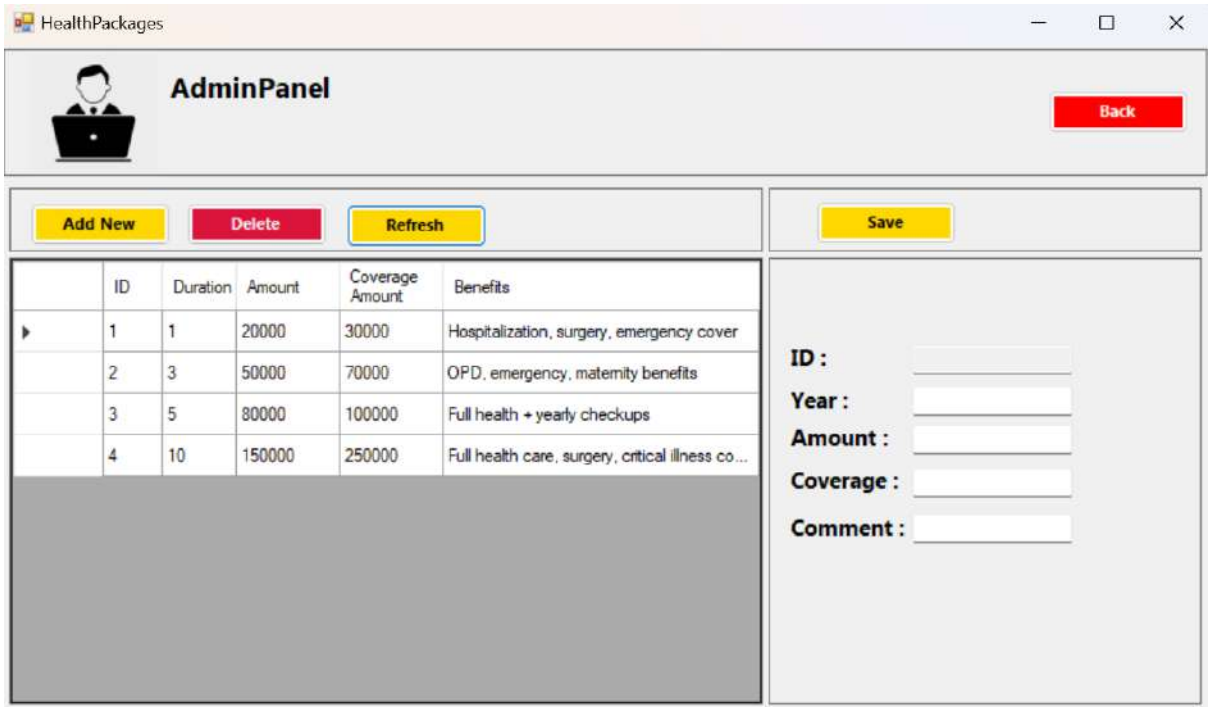
Life Insurance Panel



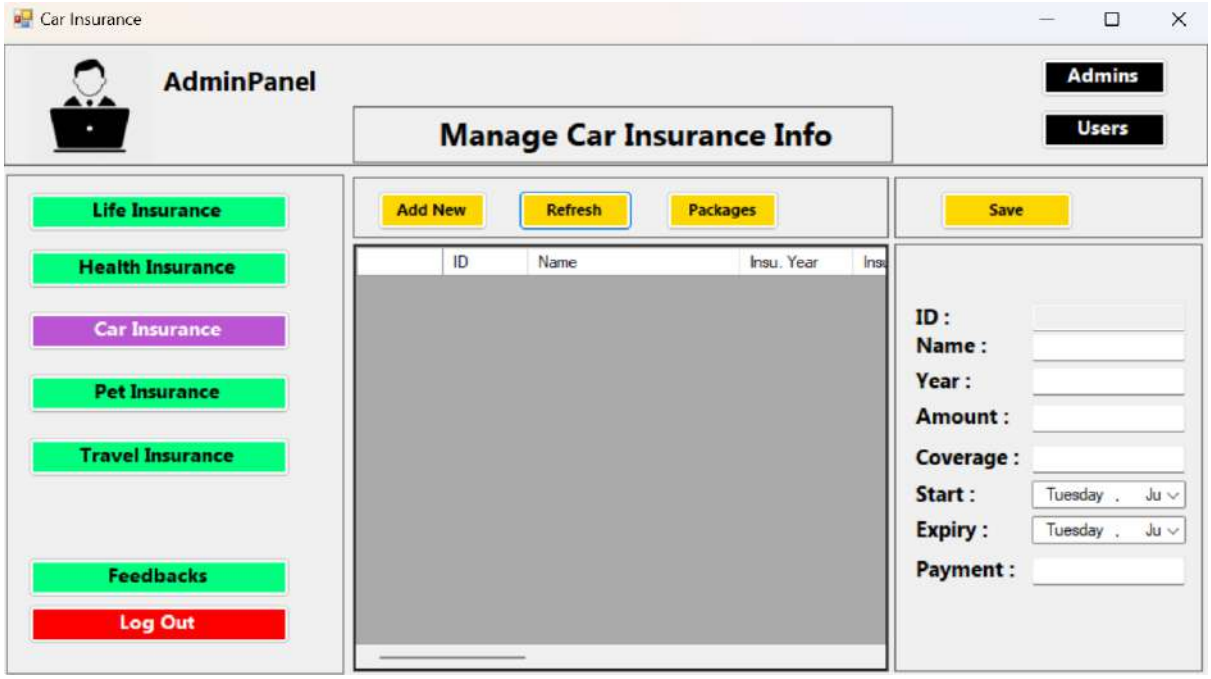
Life Insurance Package Admin View



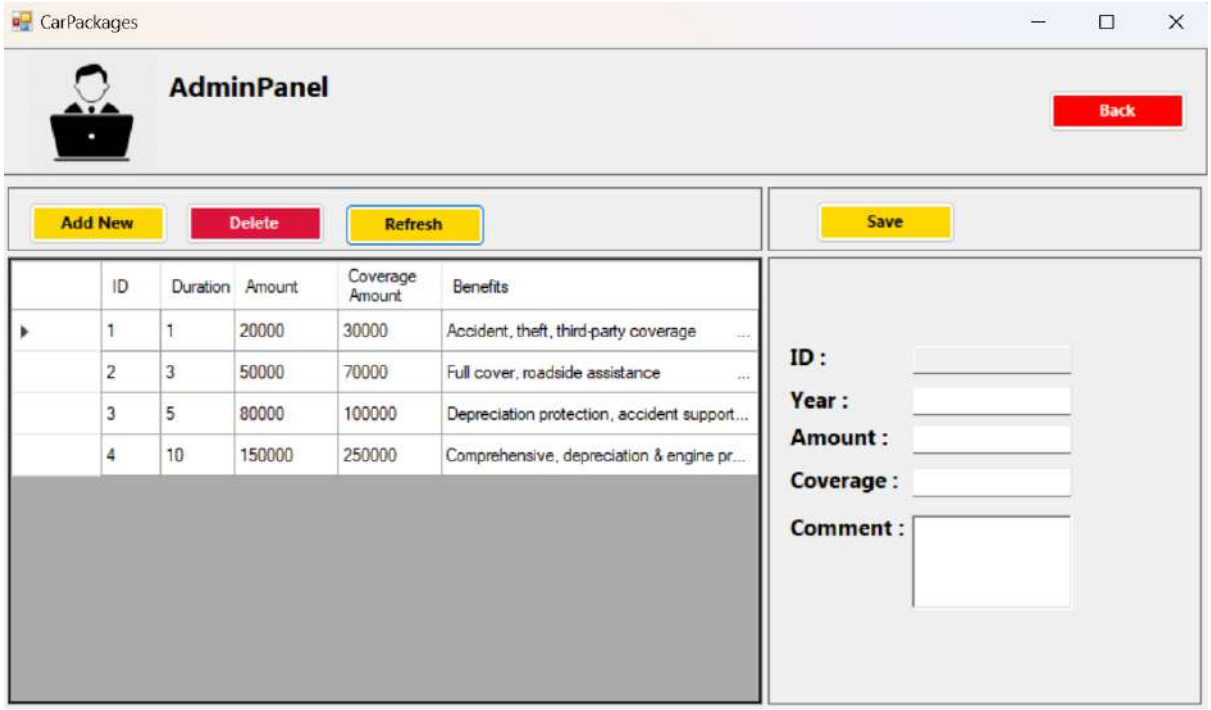
Health Insurance Panel



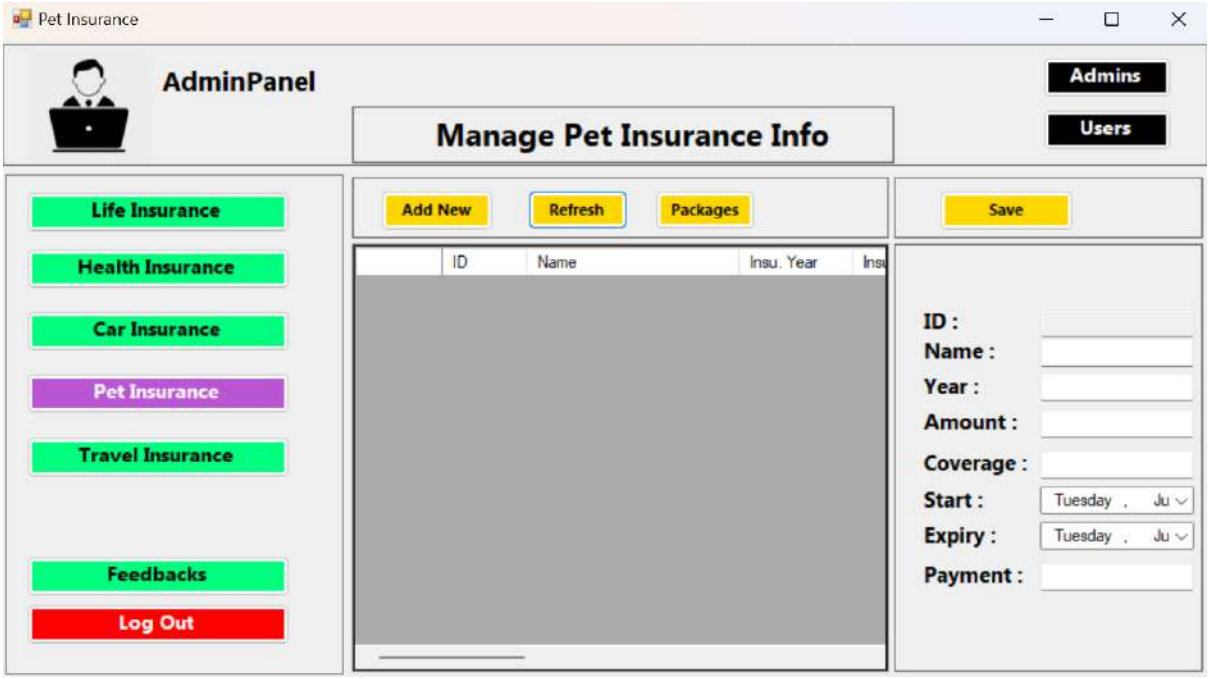
Health Insurance Package Admin View



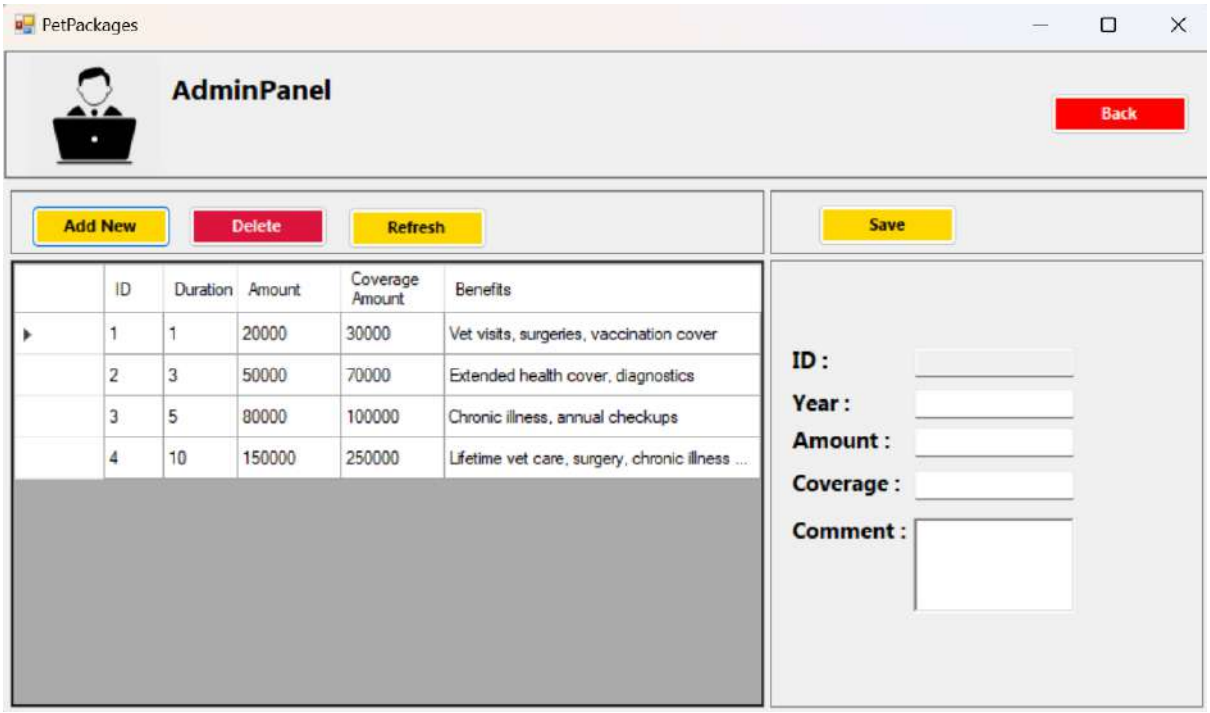
Car Insurance Panel



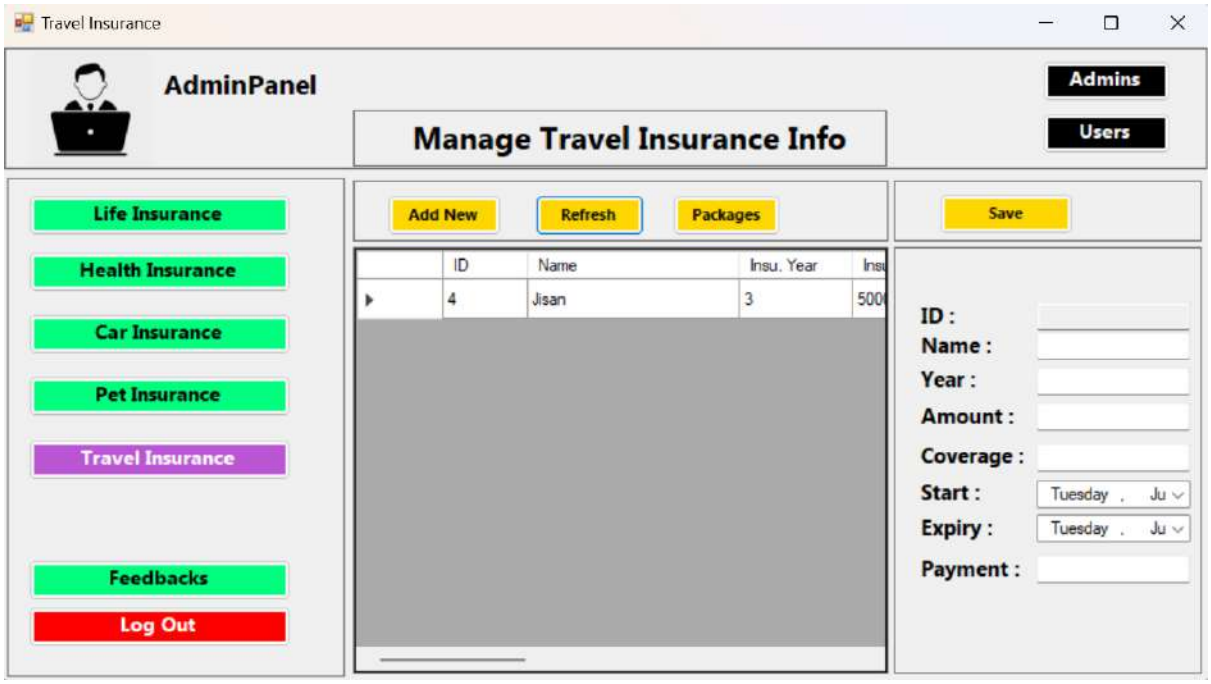
Car Insurance Package Admin View



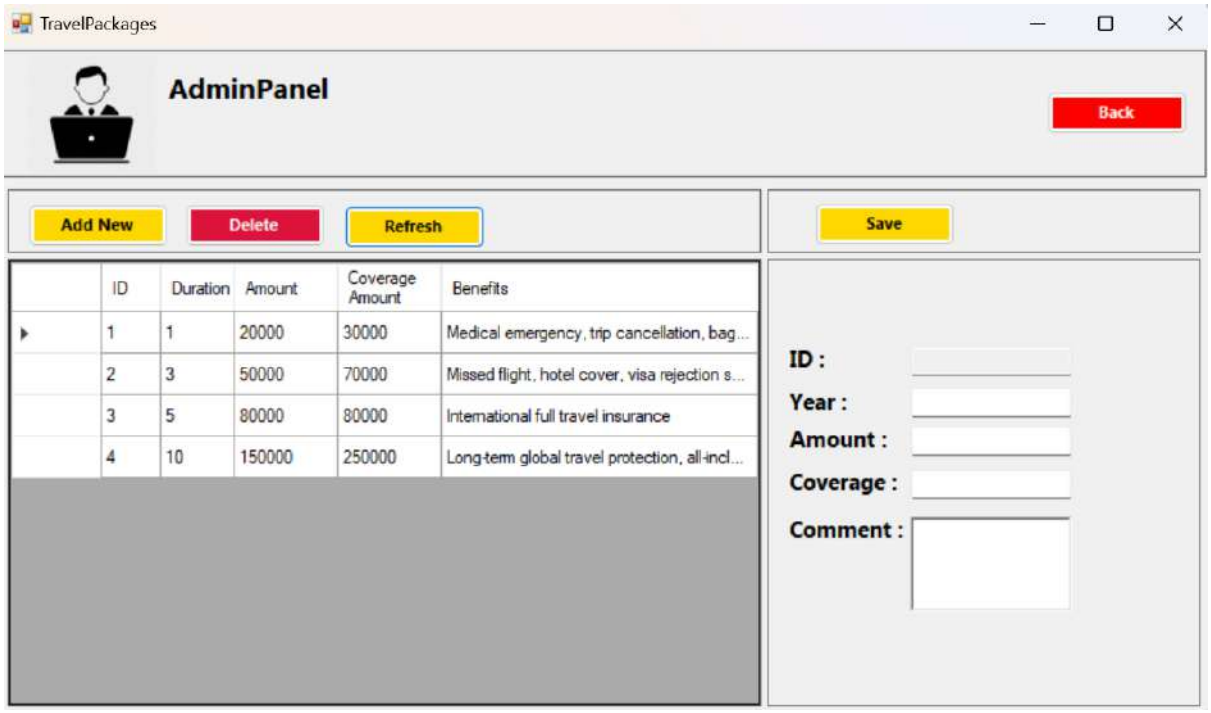
Pet Insurance Panel



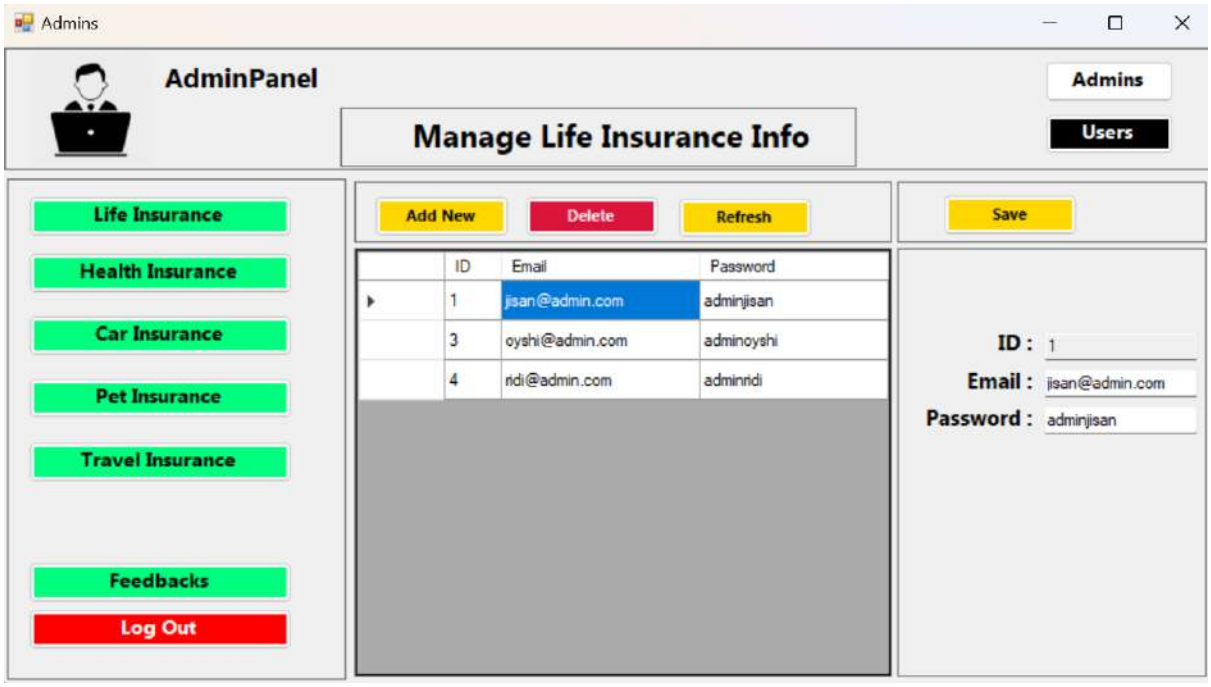
Pet Insurance Package Admin View



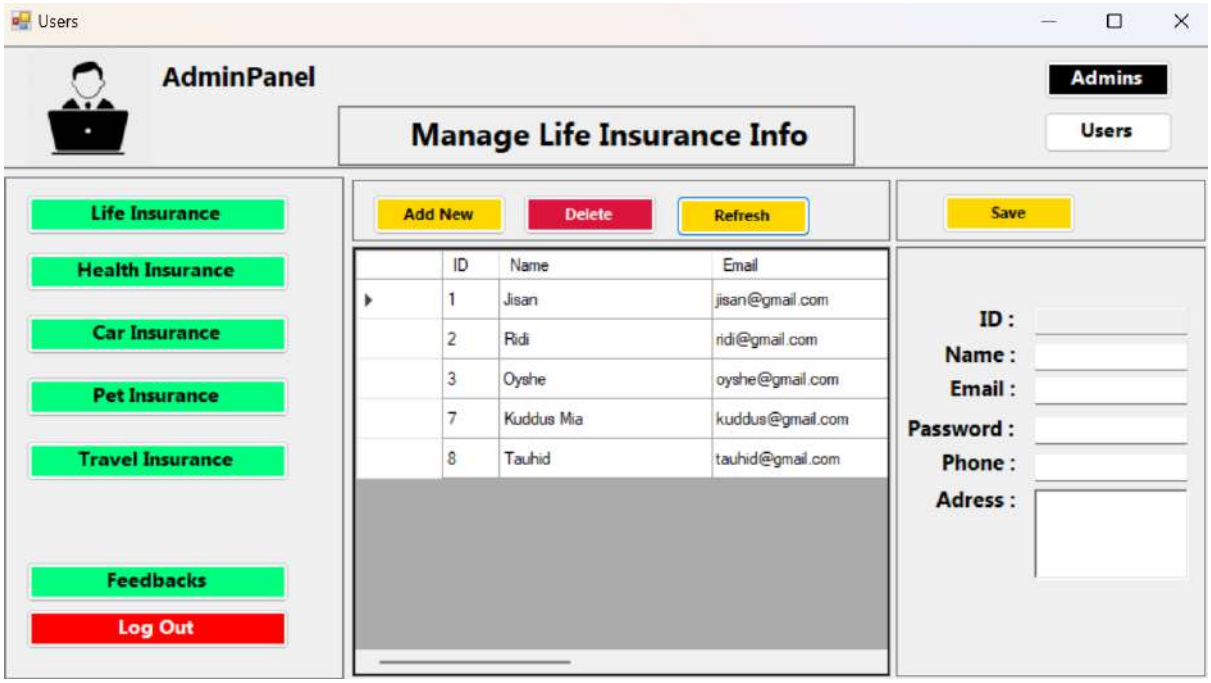
Travel Insurance Panel



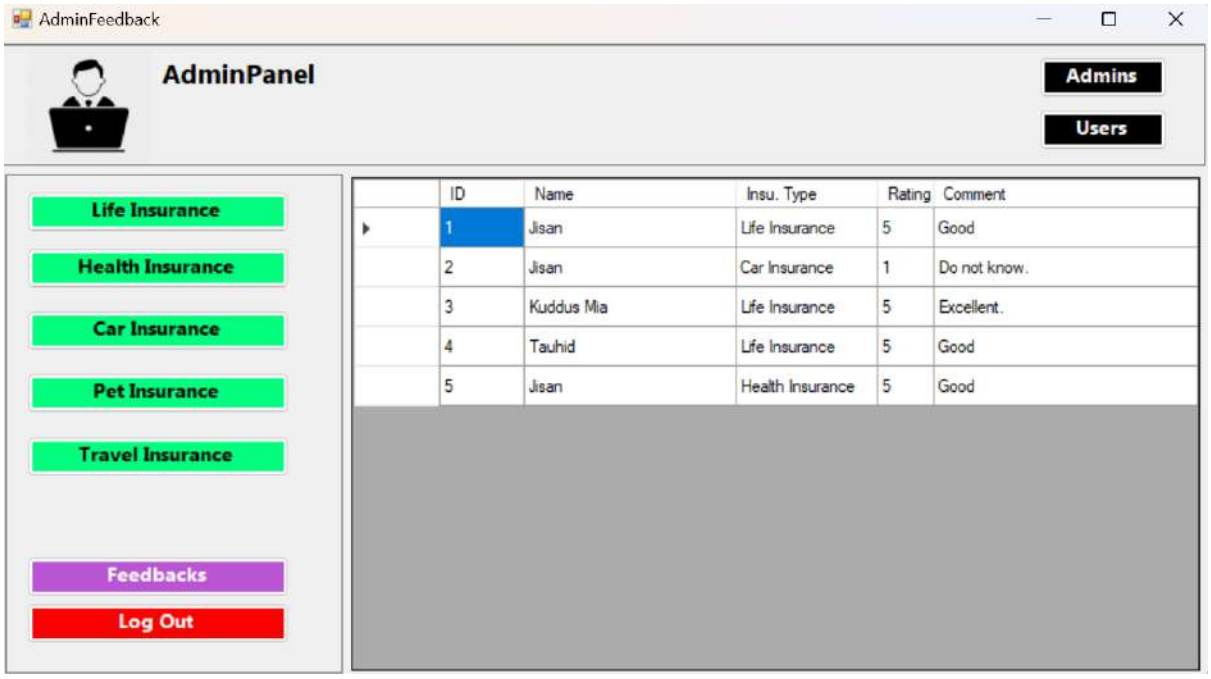
Travel Insurance Package Admin View



Admin Info Form



User Info Form



Feed Back Admin View