

C# Assignment

Develop a **menu-driven console application** for managing insurance policies using **collections in C#**. The system should allow users to add, update, delete, and search for policies using various criteria. Implement appropriate exception handling and follow object-oriented principles.










Follow the Proper project Structure

1. Model----Define all properties and ToString() method
2. Interface –Declare methods
3. Repository—Write the logic to interact with collections
4. Exceptions-Implement custom exception

1. Class Structure

- Create a **Policy** class with the following attributes:
 - PolicyID (int, unique identifier)
 - PolicyHolderName (string)
 - PolicyType (enum: Life, Health, Vehicle, Property)
 - StartDate (DateTime)
 - EndDate (DateTime)
- Implement **constructor(s), properties**


2. Implement the following Methods

-  **Add a New Policy**
 -  Accept input from the user and validate details before adding it to the collection.
 -  Ensure that the PolicyID is unique.
-  **View All Policies**
 -  Display all stored policies in a formatted manner.
-  **Search Policy by ID**
 -  Allow the user to input a PolicyID and display the details if found.
-  **Update Policy Details**
 -  Search for a policy by PolicyID and allow modification of details (excluding PolicyID).

Delete a Policy

 Remove a policy using PolicyID after confirming with the user.

View Active Policies

 List all policies where IsActive() returns true.

3. Implement **PolicyNotFound** Exception When deleting it with Id