ASSIGNMENT – 6

Firstly made an abstract class called InsurancePolicy, which defines a common structure for all types of insurance policies that I am about to use.

This makes sure that every class will implement the fllowing functions: calculate\_premium(), process\_claim(), policy\_details()

Then made 3 more classes to implement 3 more insurance policies:

Life , Auto, Health Insurance with rules of their own or citeria of their own to evaluate the basis for processing an Insurance to the policy holder.

So in this way by using DuckTyping the InsurancePolicy can be used as a basic structure for other Insurance Policies which also implements the methods of the InsurancePolicy protocol.

Advantages and limitations of using DuckTyping in Insurance domain:

**Advantages**

Flexibility: Any class that implements the required methods can be used as an insurance policy, even if it doesn’t explicitly inherit from InsurancePolicy.

Easier Code Reusability: we can introduce new types of insurance without changing existing functions

**Disadvantages**

Risk of Method Calls: typo or missing methodwill cause a failure

At the time of compiling there might be compile tie issues.