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| **StrategyEx.java** |
| **Line** | **Code** |
| **1****2****3****4****5****6****7****8****9****10****11****12****13****14****15****16****17****18****19****20****21****22****23****24****25****26****27****28****29****30****31****32****33****34****35****36****37****38****39****40****41****42****43****44****45****46****47****48****49****50****51****52****53****54****55****56****57****58****59****60****61****62****63****64****65****66****67****68****69****70****71****72****73****74****75****76****77****78****79****80****81****82****83****84****85****86****87****88****89****90****91****92****93** | **using** System;/\*Your Strategy Challenge:========================You have 4 strategies to reach Airport from your office.1) By Bus2) By Taxi3) By Train4) WalkingBasically there 2 criteria to determine which strategy the program will select:1) Time2) CostWrite a program to use Strategy Pattern. In the program you will prompt the user about how important are those criteria, the program will select an adequate stratery for the task.\*/**namespace** StrategyEx { **class** Context { //Context state **static public** IStrategy byBus = **new** ByBus(); **static public** IStrategy byWalking = **new** ByWalking(); **static public** IStrategy byTrain = **new** ByTrain(); **static public** IStrategy byTaxi = **new** ByTaxi(); //Strategy aggregation IStrategy strategy = **null**; **public** IStrategy Strategy { **set** { strategy = **value**; } } // Algorithm invokes a strategy method **public void** GotoAirport() { Console.Write("Going to airport "); strategy.Transportation(**this**); } } **interface** IStrategy { **void** Transportation(Context c); } **class** ByBus : IStrategy { **public void** Transportation(Context c) { Console.WriteLine("by Bus"); } } **class** ByWalking : IStrategy { **public void** Transportation(Context c) { Console.WriteLine("by Walking"); } } **class** ByTrain : IStrategy { **public void** Transportation(Context c) { Console.WriteLine("by Train"); } } **class** ByTaxi : IStrategy { **public void** Transportation(Context c) { Console.WriteLine("by Taxi"); } } **class** Program { **static void** Main(**string**[] args) { Console.Write("Are you in hurry?>>[Y/n]"); **bool** time = Console.ReadLine().ToUpper() == "Y"; Console.Write("Is cost is you concern?>>[Y/n]"); **bool** cost = Console.ReadLine().ToUpper() == "Y"; //Ask from the user about cost and time Context Trip = **new** Context(); **if** (cost) {//I am poor **if** (time) {//I am in hurry Trip.Strategy = Context.byBus; } **else** { Trip.Strategy = Context.byWalking; } } **else** {//Money is not my concern **if** (time) {//I am in hurry Trip.Strategy = Context.byTaxi; } **else** { Trip.Strategy = Context.byTrain; } } Trip.GotoAirport(); Console.WriteLine(); Console.ReadKey(); } }} |