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| **VisitorDoubleDispatching** | |
| **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** | **using** System;  **namespace** VisitorDoubleDispatching {  **class** SpaceShip {  **public virtual string** GetShipType() {  **return** "SpaceShip";  }  }  **class** ApolloSpacecraft : SpaceShip {  **public override string** GetShipType() {  **return** "ApolloSpacecraft";  }  }  /\*\*/  **class** Asteroid {  **public virtual void** CollideWith(SpaceShip ship) {  Console.WriteLine("Asteroid hit a SpaceShip");  }  **public virtual void** CollideWith(ApolloSpacecraft ship) {  Console.WriteLine("Asteroid hit an ApolloSpacecraft");  }  }  **class** ExplodingAsteroid : Asteroid {  **public override void** CollideWith(SpaceShip ship) {  Console.WriteLine("ExplodingAsteroid hit a SpaceShip");  }  **public override void** CollideWith(ApolloSpacecraft ship) {  Console.WriteLine("ExplodingAsteroid hit an ApolloSpacecraft");  }  }  /\*\*/  **class** Program {  **static void** Main(**string**[] args) {  //Single Dispatching  #region  /\*  SpaceShip ship = new ApolloSpacecraft();  Console.WriteLine(ship.GetShipType());  \*/  #endregion  #region  /\*  Asteroid theAsteroid = new Asteroid();  ExplodingAsteroid theExplodingAsteroid = new ExplodingAsteroid();  SpaceShip theSpaceShip = new SpaceShip();  ApolloSpacecraft theApolloSpacecraft = new ApolloSpacecraft();  theAsteroid.CollideWith(theSpaceShip);  theAsteroid.CollideWith(theApolloSpacecraft);  theExplodingAsteroid.CollideWith(theSpaceShip);  theExplodingAsteroid.CollideWith(theApolloSpacecraft);  \*/  #endregion  #region  /\*\*/  //Double Dispatch issue  Asteroid theExplodingAsteroid = **new** ExplodingAsteroid();  SpaceShip theApolloSpacecraft = **new** ApolloSpacecraft();  theExplodingAsteroid.CollideWith(theApolloSpacecraft);  /\*\*/  #endregion  Console.ReadKey();  }  }  } |