

Problem : Program to buy a laptop in the Internet

Identify Objects and Behaviors:

Thing (Object)/Entity:

Information (Data)/(State):

Services (Behaviors)/Actions

Things :

Consumer (Internet Shopper) :

Data: Name, Address, Phone

Behaviors : buy, search, reviews, compare, return, cancel

Internet

Data : Amazon, BestBuy, Alibaba, Google, website2,

: Group of Websites (Collection of Websites)

Behaviors : searchForElectronicWebsites

ElectronicWebsite

Data : URL, Product[] products, BankAccount

Behaviors : search, sort, display, compare , placeTheOrder

Laptop

Data : Price, Color, Memory, size, brand, year

Behavior:

CreditCard

Data : Number, name, company, expiry, security code

Behavior :

CreditCardCompany

Behavior : authorizeTransaction

Sequence of invoking behaviors on Objects:

BuyLaptopOnInternet:

Consumer peter,

Internet internet,

ElectronicWebsite bestBuy,

Laptop myAssistant,

CreditCard card,

CreditCarCompany visa

ShoppingConfirmation response

If Internet.isAvailable

peter.searchInInternet -> internet, question : Collection of ElectronicWebsite

//peter.findDesirableWebsiteInFirstPage -> Collection of Websites : website

pageNumber = 1;

Loop

if peter.findsNoPages

break

end

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website      peter.findDesirableWebsiteInAPage -> internet, question, page Number :
              bestBuy = website;
              If bestBuy is not empty
                  break
              else
                  pageNumber = pageNumber + 1
              end
            End
            bestBuy = website
            If bestBuy is not empty or bestBuy!=null
                bestBuy.searchForLaptop -> priceRange, color, brand : Collection of Laptop
                myAssistant = laptop
                peter.purchaseLaptop -> myAssistant, creditCard, address, bestBuy :
ShoppingConfirmation
                response = shoppingConfirmation
            Else
                peter.cantBuyProduct
        Else
            peter.browseInternetAfterAWhileBack

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