**Case Study: Amaze Door's Invoice Management System**

The Amaze Door Logistics is a successful name in the e-commerce vertical. The Company's development team is just trying to implement their Online Invoice Management Application, which will help its Customers to purchase the desired items and get the Invoice generated for the items in the shopping list. To begin with, they start with few modules of the application.

Help the development team for writing codes for login validation, making a purchase and displaying the purchase details. 

Initially, the application reads the username from the user, if invalid credentials are given then print "Invalid Username and Password" and terminate the application.

* Once a valid username and password is given, the application should  print "Login Successful"  and then prompt for the item to be purchased. Display “Item not present”  if the item number is not present in the item file in the main. If the valid item number is given, the application should prompt for the quantity of the item to be purchased. Use the prompt "Do you want to add one more item?(Yes/No):" to add more items to the list
* When the user chooses "No" from the above prompt, the list of items along with the item number, item name, quantity and the cost is displayed with the total cost of the shopping list.
* When the user selects Exit, the application terminates.

**Note:**

 1) The list of registered users is available in an xml file named userpass.xml

2) The list of items is available in an xml file named item.xml

**Method Description:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Method name** | **Arguments** | **Return type** | **Description** |
| validateUsernamePassword() | Users file name (userFile), userName, password. | Boolean | This function validates the username and password.  Print "Login Successful" and return True, if valid user; else print "Invalid Username and Password" and return False. |
| |  |  | | --- | --- | | checkItemPresent() |  | | Item File name (itemFile), itemNo.    itemFile - string  it*e*mNo - integer | Boolean | **This function will check whether the itemNo is present in the itemFile or not.**    Return True if the item is present, else return False. |
| purchaseItem() | Item File name (itemFile), username, itemNo, quantity.    itemFile - string  username - string  itemNo - integer  quantity - integer | List | This function checks whether the given item has the specified quantity present. If present, build a list with elements- itemNo, itemName, quantity and cost, and return the list. If the specified quantity is not present, print "The required quantity is not available" and return an empty list. |
| calculateAmount() | purchaseList.    purchaseList - list of purchased items | Integer | This function calculates the total cost for the purchased items. |

**Note:**

The python version to be followed is 3.6.3

**Don'ts:**

 Do not use Internet Explorer, highly recommended to use chrome browser to launch Tekstac platform.(Applicable for all skills)

**Sample Input and Output 1:**

Enter username:

**Sahana**

Enter password:

**saanaa**

Invalid Username and Password

**Sample Input and Output 2:**

Enter username:

**Sahana**

Enter password:

**sana**

Login Successful

1. Purchase Item

2. Exit

Enter your choice:

**1**

Enter item number:

**51**

Enter quantity of item:

**200**

The required quantity is not available

Do you want to add one more item?(Yes/No):

**Yes**

Enter item number:

**52**

Enter quantity of item:

**2**

Do you want to add one more item?(Yes/No):

**No**

Item No  Name  Quant  Cost

52 Shoes 2 1800

Total cost = 3600

1. Purchase Item

2. Exit

Enter your choice:

**2**

**Sample Input Output 3:**

Enter username:

**Sahana**

Enter password:

**sana**

Login Successful

1. Purchase Item

2. Exit

Enter your choice:

**1**

Enter item number:

**501**

Item not present

Enter item number:

**51**

Enter quantity of item:

**1**

Do you want to add one more item?(Yes/No):

**Yes**

Enter item number:

**52**

Enter quantity of item:

**2**

Do you want to add one more item?(Yes/No):

**No**

Item No  Name  Quant  Cost

51           Tops      1        700

52          Shoes     2       1800

Total cost = 4300

1. Purchase Item

2. Exit

Enter your choice:

**2**