Q5 Z-Kart

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Task : 1 - Customer Initialization

We are going to write a software to perform an online shopping application called **Z-Kart**.

The back bone for every online retail application is its customers. The initial customer details for our system will be given in a file zusers_db.txt

The file contains multiple lines and every line will be of the form

UserName/Email	EncryptedPwd	Name	Mobile
abc@zoho.com	ApipNbjm	Rahul	9922992299
123@zoho.com	Cboljoh	Anitha	8564119904
user@zoho.com	kbwb22	Arpan	9872345693

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At first, the Z-Kart application will read the contents of this file and initialize its customer base

Task : 2 - Inventory Initialization

Z-Kart is an online shopping kart focussing on selling electronic gadgets especially laptops, mobiles and tablets

The inventory of Z-Kart is initialized from the file z-kart_db.txt which is of below format

Category	Brand	Model	Price	Stock
Mobile	Apple	6S	60000	10
Mobile	Motorola	G	12000	5
Laptop	HP	Elite	56000	20
Tablet	Google	ChromeBook	8000	12

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Read the file and initialize the Z-Kart inventory database

Task : 3 - Login
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Already signed up customers can login into Z-Kart for shopping. In the login screen, get the username and password. Check whether the username entered is a valid registered user. If not, prompt the user to sign up instead of sign in!
As the users are not aware of and are abstracted from the encryptions applied to passwords, they will input the simple plain password which they provided. Encrypt it and verify with the stored encrypted password for authentication

Task : 4 - Shopping
The system will guide the user to ease his shopping effort. The user will choose what he looks for - (Mobile / Laptop / Tablet). The system will display the models, brand and price based on user's preference. The system can also suggest a list of best selling products in the category of gadget the user is looking for mobile/laptop/tablet.

The user will choose the brand and model. The system will ask for the user to continue shopping where he can add any number of additional products. Once he decides to check out the cart, the system will check the availability of stock for all the items in cart and present the user with an invoice.
The system will generate a unique invoice number and present the order details to the user

Task : 5 - Admin mode
Z-Kart supports a special login for the admin with the username admin@zoho.com and password "xyzzy"
When the password entered is correct, the user will be taken to the admin section. When the admin enters, first the app will display a list of items whose stock is less than or equal to a configured threshold (say 10) to help him in placing the re-order
Once the admin places the re-order, the stock details should get updated

Task : 6 - Persistence of Order History
The order history will be persisted for every user. Any user after successful login, is allowed to check his order history. The sample format of history is displayed below

Invoice Number 312684
Date 19-Jul-2016

Category	Brand	Model	Price
Mobile	Apple	6S	60000

Total - 60000

Invoice Number 132793
Date 1-Jun-2016

Category	Brand	Model	Price
Tablet	Google	ChromeBook	8000

Total - 8000

Ensure that Z-Kart application continues to run until the user asks to quit