API - SERVER

בעבודה זו אנו נבנה חנות וירטואלית לבגדים.

ID	Method Name	HTTP Method	Parameters	Returns	Explanation
1	Login	POST	Username: char, Password: char	Bool	Login cannot pass in GET. The user entered sensitive details (password) and this is not secure, because other people can get to this details too. **If success returns the userName else returns userName or Password is wrong.**
2	AllProducts	GET	-	Returns all products : List<Product>	Produces are related to the seller not to the client. Using GET because there is no information to deliver to the server or any wish to change any information.
3	Hot5Products	GET	-	Returns the 5 hot Products from the last week: List<Products >	Products are related to the seller not to the client. Using GET because there is no information to deliver to the server or any wish to change any information. **The server send the list of the 5 hot products.**
4	Registration	POST	userName: char, password : char, firstName : char, lastName : char, gender: char, email: char, phone: int, Birthdate : Date, country : char, address : char, SecurityAnswer : char, shirts: bool, pants: bool , dresses : bool, skirts : bool , belts : bool , shorts : bool, underwears : bool, hats : bool ,	Bool	Registration cannot pass in GET We create a new user, and its need to be stored in the server memory, so it's a POST method. **return True if the registration success and update the last entry, else if the registration failed return false.**

			bathing suits : bool , scarfs : bool .		
5	ForgetPassword	POST	Username : char, answers : char	string	Forget Password cannot pass in GET The server check the answers of the user for identification and then if success – show the password. The user can not get the password without the answers, and when he succeeded to get it its need to be secured. So the POST method is the only option. **if the answer matches to the username return the user's password, else return an error message**
6	NewProducts	GET	-	Returns list of all **new Products from the last month:** List<Product>	Products are related to the seller not to the client. Using GET because there is no information to deliver to the server or any wish to change any information. **The server send the list of the new products from the last month.**
7	ProductsByCategory	POST	Category : char	**Returns list of products by category:** List<Product>	Products are related to the seller not to the client. Using POST because there is information to deliver to the server. **The user insert the category and the server returns the list of products in this category**.
8	SortProducts	POST	sortedBy : char	Returns list of sort **products by typeOfSort**: List<Product>	Using POST because there is no information to deliver to the server or any wish to change any information.

9	Recommended Products	POST	userId : int	**Returns list of recommended Products by id of user:** List<Product>	Products are related to the seller not to the client. Using POSTbecause there is no information to deliver to the server or any wish to change any information. **The user insert the id of himself and the server returns the list of products in the category that the user interested in.**
10	SearchProductBy Name	POST	nameOfItem : char	Returns the product with the same name List<Product>	Products are related to the seller not to the client. Using POST because there is no information to deliver to the server or any wish to change any information. **The user enter the name of product that he want to get, and the server returns it to him.**
11	SearchProductBy Color	POST	ColorOfItem : char	Returns list of product with the same colors List<Product>	Products are related to the seller not to the client. Using GET because there is no information to deliver to the server or any wish to change any information. **The user enter the color of product that he want to get, and the server returns a list of product with the same colors.**
12	SearchProductBy Size	POST	SizeOfItem : char	Returns list of product with the same size List<Product>	Products are related to the seller not to the client. Using POST because there is no information to deliver to the server or any wish to change any information. **The user enter the size of product that he want to get, and the server returns a list of product with the same size.**
	SearchProductBy SizeAndColor	POST	SizeOfItem : char ColorOfItem : char	Returns list of product with the same size and color List<Product>	Products are related to the seller not to the client. Using POST because there is no information to deliver to the server or any wish to change any information. **The user enter the size of product that he want to get, and the server returns a list of product with the same size.**

13	ShowPastOrders	POST	UserName: char	Return list of orders: List<Order>	Orders are related to the server. using POST to get the username. return the all orders of the user.
14	AddOrder	POST	Order Id: int, UserName: char, Order date: date, Shipment Date: date, Currency:varchar	bool	Using POST to get details about the order and add a new order, remove the cart from the carts.
15	AddToCart	POST	UserName: char, ItemId: int, ammount: int	Bool	Using POST to get details about the user and the item and add a new item to cart. returns true if success and false if failed.
	DisplayCart	POST	UserName: char	Return list of products: List<Product>	Carts are related to the server. using POST to get the username. return the all orders of the user.
16	RemoveFromCart	POST	UserName: char, ItemId: int	Bool	Using POST to get details about the user and the item to remove and remove all the items with the itemId from the cart. returns true if success and false if failed.
17	IsProductAvailable	POST	Product id :int	bool	Using POSTbecause there is no information to deliver to the server or any wish to change any information. **The client enter the product id and the server returns if the products available or not. return True if the product available else returns False.**
18	ListUsers	GET	-	Returns all users: Users[]	Using GET because there is no information to deliver to the server or any wish to change any information. **The server return list of the users in the system.**
19	DeleteUser	DELETE	UserId : int	Bool	Using Delete to delete information from the database of the server. Return if the action success or fail. **if the server succeeded to delete the user it return**

					true, else it returns false.
20	AddUser	POST	userName: char, password : char, firstName : char, lastName : char, gender: char, email: char, phone: int, Birthdate : Date, country : char, address : char, SecurityAnswer : char shirts: bool pants: bool , dresses : bool, skirts : bool , belts : bool , shorts : bool, underwears : bool , hats : bool , bathing suits : bool , scarfs : bool .		bool	Create new user. Using POST to update new information in the server. **return if the function success to add a new user or not . returns : True = success False = fail**
21	DeleteProduct	POST	Username : int		bool	Using Post because we should update the server with the new user that added if the delete succeeded it returns true else the server returns False.
22	AddProduct	POST	Id: char, name : char ,size: char , color:char , quantity : int, price : money, hot : bit, category :char, day: int , month : int, year : int.		bool	Create new product, insert the details about this product so we use the POST method for insert the information to the server. **if the add function was succeeded it returns true else the server returns False.**
23	UpdateStock	PUT	Product Id :int , quantity : int		bool	Using PUT to update the information about product supply in the server. And then if the action succeeded or failed. **The server update the quantity of an item. it the**

					update was succeeded return true, else return false.
24	AddToCart	POST	Product id : int, User id : int	bool	Add to cart new product . we use the POST method for insert the information to the server. **if the add function was succeeded it returns true else the server returns False.**
25	RemoveFromCart	POST	Product id : int, User id : int	bool	Remove from cart a produce. we use the POST method for insert the information to the server. **if the remove function was succeeded it returns true else the server returns False.**
26	LastEntry	POST	userName: int	bool	Update in the users the last Entry of the user to the system. **returns true if it got updated or false if it was not.**

<u>קשיים מצד הלקוח ומצד המתכנת:</u>

הלקוח התקשה להגדיר את בקשותיו ולאפיין את המערכת באופן היקפי כך שאף דרישה לא תסתור דרישה אחרת.

המתכנת חווה קושי בקבלת החלטות לגבי שמירת המידע בצד הלקוח או בצד השרת ובהתאם לכך בניית הפונקציות בטבלה, לאפיין אילו מהשיטות יצטרכו גישה לשרת בצורה שתצמצם את מספר הפניות לשרת, ניסיון למידול השיטות בצורה גנרית.