



# Software design specification document

## 2023

### Project Team

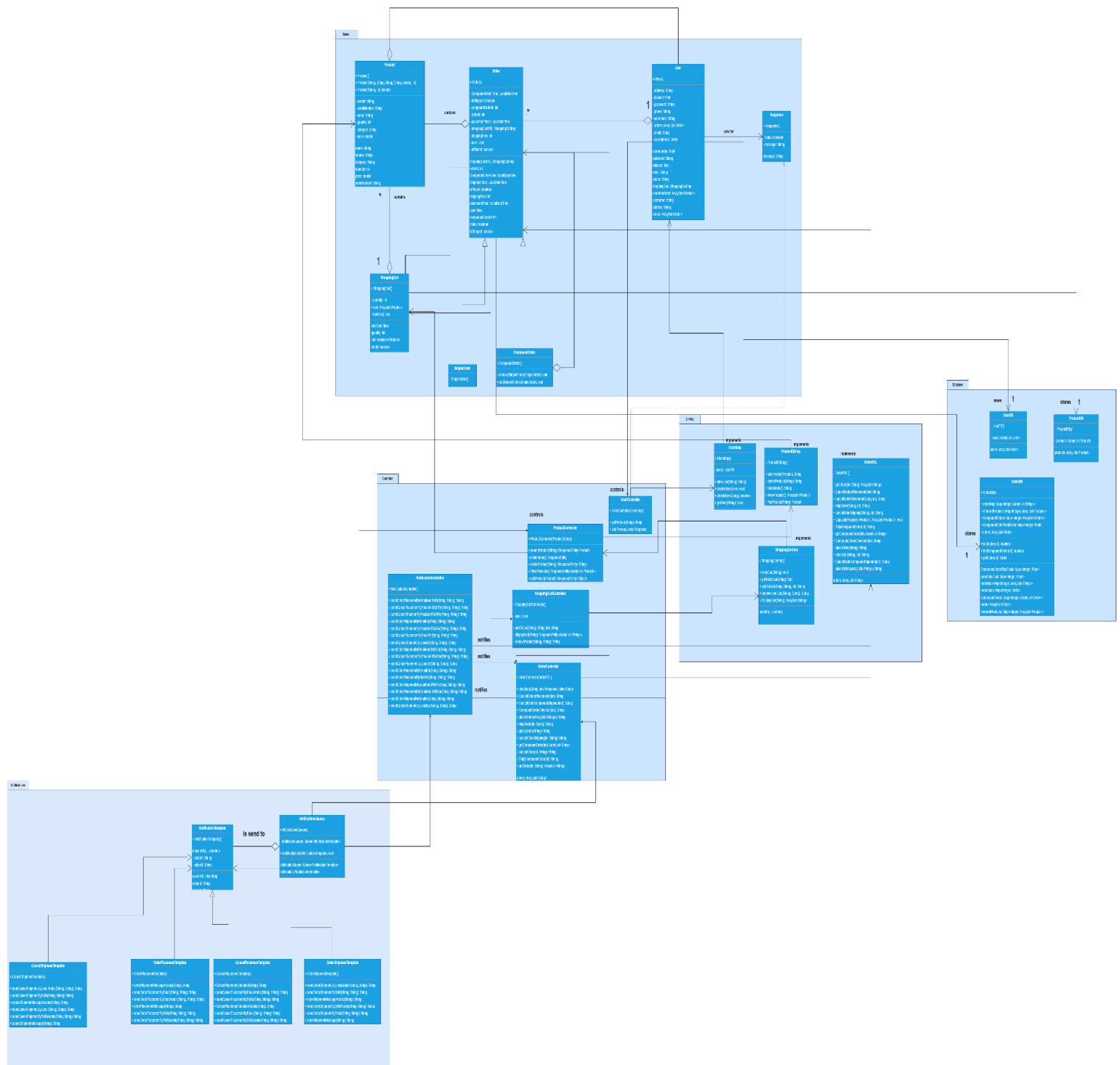
ID	Name	Email
20211058	Tareq Mahfouz	tareq11mahfouz@gmail.com
20210458	Yousef Ahmed	youssefahmed052@gmail.com
20211087	Maram Wael	maramwael188@gmail.com
20211043	Zeyad Ehab	zeyad.alnaggar@gmail.com

### Contents

Instructions[To be removed] .....	2
Class diagram design .....	2
Class diagram Explanation .....	3
Sequence diagram design.....	Error! Bookmark not defined.

## CS352: Sprint SDS- El-Vendors

## SDS document





# CS352: Sprint SDS– El-Vendors

## SDS document

### Class diagram Explanation

- We used the composite pattern in the order, simple order and compound order. As simple and compound order inherits from Order class and compound order contains list of simple order (LEAF)
- We used the strategy pattern in the notification template which enables us to handle different templates of notifications based on the notification controller.



# CS352: Sprint SDS– El-Vendors

## SDS document

### Requirements Exposure as Web Service API

#### Part 1: Exposed Postman Collection

[https://app.getpostman.com/join-team?invite\\_code=b6a0cb2e294cb7dbb837a1702fe792ae&target\\_code=fcbbed3c0b6dbf968b91cd0d375d42d3](https://app.getpostman.com/join-team?invite_code=b6a0cb2e294cb7dbb837a1702fe792ae&target_code=fcbbed3c0b6dbf968b91cd0d375d42d3)

#### Endpoints

##### 1. Make Menu

- Endpoint: ``http://localhost:8080/makeMenu``
- Method: GET
- Description: Retrieves the menu of available products.

##### 2. Ship Order

- Endpoint: ``http://localhost:8080/shipOrder/{orderId}``
- Method: GET
- Description: Initiates the shipping process for the specified order.

##### 3. Send Cancel Placement Notification Email (Arabic)

- Endpoint: ``http://localhost:8080/sendCancelPlacementNotificationEmailAr/{param1}/{param2}``
- Method: GET
- Description: Sends a cancel placement notification email in Arabic with specified parameters.

##### 4. Checkout

- Endpoint: ``http://localhost:8080/checkout/{orderId}``
- Method: GET
- Description: Initiates the checkout process for the specified order.

##### 5. Add To Cart

- Endpoint: ``http://localhost:8080/addToCart/{username}/{product}/{quantity}``
- Method: GET
- Description: Adds a specified quantity of a product to the user's cart.



# CS352: Sprint SDS– El-Vendors

## SDS document

### 6. Products

- Endpoint: ``http://localhost:8080/products``
- Method: GET
- Description: Retrieves information about available products.

### 7. Display Cart

- Endpoint: ``http://localhost:8080/displayCart/{username}``
- Method: GET
- Description: Displays the contents of a user's cart.

### 8. Place Order

- Endpoint: ``http://localhost:8080/placeOrder/{username}``
- Method: GET
- Description: Places an order for the items in the user's cart.

### 9. Get Order

- Endpoint: ``http://localhost:8080/getOrder/{orderId}``
- Method: GET
- Description: Retrieves information about a specific order.

### 10. Get User

- Endpoint: ``http://localhost:8080/get/{username}``
- Method: GET
- Description: Retrieves information about a specific user.

### 11. Place Orders

- Endpoint: ``http://localhost:8080/placeOrders``
- Method: POST
- Description: Places orders for multiple users.



# CS352: Sprint SDS– El-Vendors

## SDS document

### Part 2:

Requirement	Exposed API
A customer should be able to create an account and put a specific balance using that account.	<b>1-POST localhost:8080/addUser</b>  A service that adds a user to the system, if the user already exists it doesn't add it, it takes all user info into the Body to add.  Input: username, email, password, address, balance, phone
A system can get a user by username.	<b>2-GET localhost:8080/get/{username}</b>  It checks if a user exists already by checking the username, if it exists it returns all user attributes.  Input:username
A system that can create a menu to add products in,	<b>3-GET localhost:8080/makeMenu</b>  It creates a menu to add products in, it takes no input.
Products are defined by a serial number, a name, a vendor, a category, and a price. Furthermore, a count of the remaining parts	<b>4-POST localhost:8080/addProduct</b>  It adds a product to the menu, it takes a product info, if the product already exists it does not add it.  Input: serialNumber, name, vendor, category, price, quantity



# CS352: Sprint SDS– El-Vendors

## SDS document

from each category should be available.	
A system that can delete a product from added products	<b>5-DELETE localhost:8080/deleteProduct/{name}</b>  It checks if a product exists, if it does exist, it deletes it from the menu.
A system checks for a product by name.	<b>6-GET localhost:8080/getProduct/{name}</b>  It takes a product name and checks for the product and display products infor
A system can adds a product to user's cart.	<b>7-GET localhost:8080//addToCart/{username}/{productName}/{quantity}</b>  It adds a product to cart by taking the username, product name and quantity and adds it to the user's cart.  Input: username, productName, quantity.
A system can deletes a product form user's cart.	<b>8-DELETE localhost:8080//removeProduct/{username}/{productName}</b>  It deletes a product from cart, but before that it checks if the product exists in cart.  Input: username, productName
A system can display the user's cart.	<b>9-GET localhost:8080//displayCart/{username}</b>  It displays the user's cart  Input: username
A customer can place a simple order, where such an order would	<b>8-GET localhost:8080//placeOrder/{username}</b>  It takes the listed products from the user's cart and places an order for the user, them empties the cart.



# CS352: Sprint SDS– El-Vendors

## SDS document

include a single product or several products.	Input:username
A customer can cancel his simple order.	<b>9-GET localhost:8080//cancelOrder/{username}/{orderId}</b> It checks for the order id of a user and then cancels it Input: username, orderId
To place a compound order, the customer needs to pick his products, and his friends' orders as well.	<b>10-POST localhost:8080//placeOrders</b> It places multiple orders and takes multiple usernames using @RequestParam Input: @RequestParam usernames, usernames, .....
A customer can cancel his compound order.	<b>11-GET localhost:8080//cancelCompoundOrder/{orderId}</b> It cancels a compound order by taking the compound order ID. Input: orderId.
A customer checks out after placing his compound order	<b>12.GET localhost:8080//CheckoutCompoundOrder/{orderId}</b> It takes orderId and prints the total cost of the order Input: orderId
A customer checks out after placing his simple order	<b>13.GET localhost:8080//Checkout/{username}/{orderId}</b> It takes username and orderId and prints the total cost of the order. Input: username, orderId
For simple orders, when an order is shipped, its	<b>14.GET localhost:8080//shipOrder/{username}/{orderId}</b> It takes orderId and username and ships the order.





# CS352: Sprint SDS– El-Vendors

## SDS document

shipping fees are deducted from its customer's account.	Input: username, orderId
Customers can cancel an order placement, or cancel only its shipping within a pre-configured, automated duration.	<b>15.GET</b> <b>localhost:8080//cancelOrderShipping/{username}/{orderId}</b> It cancels order after shipping, it takes username and orderId. Input: username, orderId
For compound orders, when an order is shipped, its shipping fees are deducted from all the customers who participated in the compound order	<b>16.GET localhost:8080///ShipCompoundOrder/{orderId}</b> It ships the compound order by taking the compound orderId. Input : orderId
Customers can cancel an order placement, or cancel only its shipping within a pre-configured, automated duration.	<b>17.GET</b> <b>localhost:8080//cancelCompoundShipping/{username}/{orderId}</b> It takes compound orderId and cancels shipping the order Input: orderId
System can display all orders	<b>18.GET localhost:8080//getOrders</b> It return all orders in the system
System can display a simple order details of a user by taking the username and orderId.	<b>19.GET localhost:8080//getOrder/{orderId}/{username}</b> It takes orderId and username and returns simple order details. Input: orderId, username



# CS352: Sprint SDS– El-Vendors

## SDS document

System can display a compound order details of a user by taking the compound orderId.	<b>20. GET localhost:8080//getCompoundOrder/{orderId}</b> It takes orderId and returns the compound order details  Input: orderId
Notifications creation for various operations. The system manages those different notification "templates", and the languages these templates can be sent in.	<b>21. GET /sendPlacementNotificationEmailAr/{username}/{email}</b> Sends notification after order is placed in Arabic. Input: Username, Email
Notifications creation for various operations. The system manages those different notification "templates", and the languages these templates can be sent in.	<b>22. GET /sendPlacementNotificationEmailEn/{username}/{email}</b> Sends notification after order is placed in English by Email. Input: Username, Email
Notifications creation for various operations. The system manages those different notification "templates", and the languages these templates can be sent in.	<b>23. GET /sendShipmentNotificationEmailEn/{username}/{email}</b> Sends notification after order is shipped in English by Email.. Input: Username, Email



## CS352: Sprint SDS– El-Vendors

### SDS document

It gets the most used template	<b>25. /getMostUsedTemplate</b> It gets the most used template
--------------------------------	---

### Github repository link

<https://github.com/youssefahmedzakaria/Orders-management-and-notifications-system>