סדנא ליישום פרויקט תוכנה

<u>מגישים:</u>

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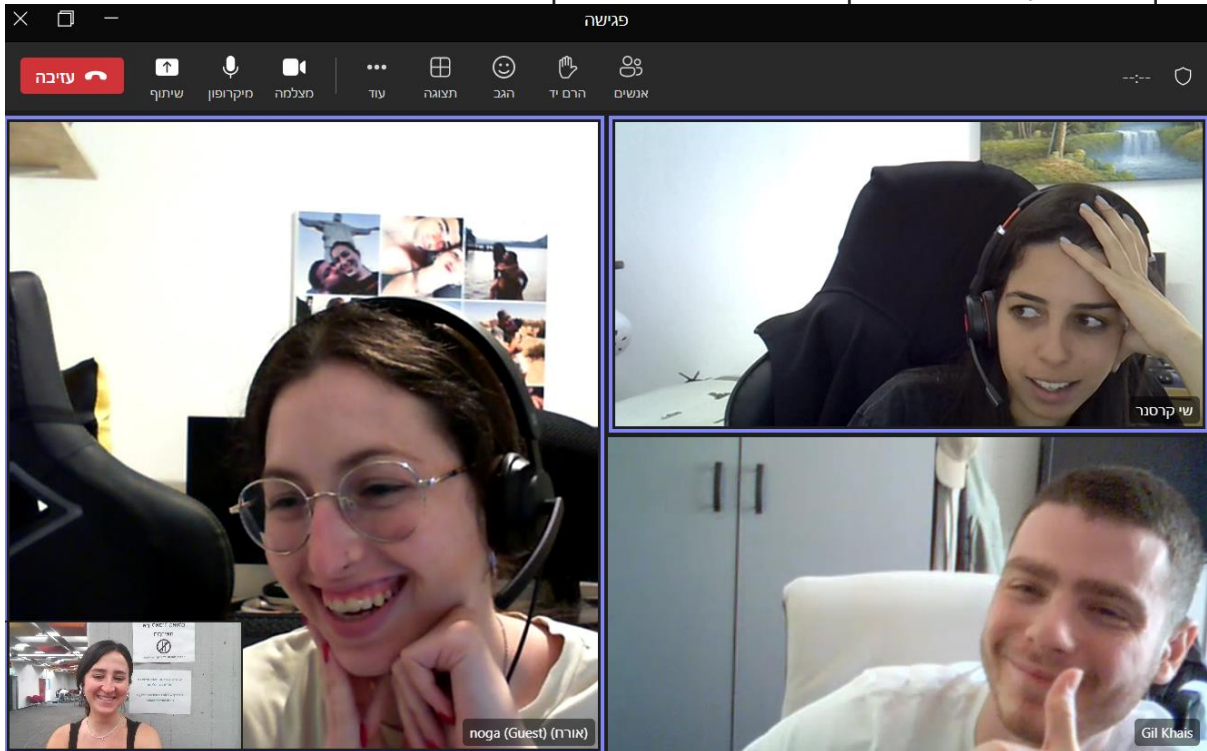
רדואן גאנם - 322509951

תוכן עניינים

דו"ח גרסה 1 :

לאורך הגרסה קיימנו מספר פגישות סנכרון של הצוות בנוגע להספק שלנו כדי לדעת
היכן אנחנו עומדים ולחלק משימות בהתאם לכך.

<u>התוצרים של גרסה זו הם:</u>

1)שכבות domain ו service בהתאם לדיאגרמה של גרסה 0. תוך כדי המימוש ביצענו
שינויים ותוספות לעיצוב שנראו לנו מתאימים יותר תוך כדי התחשבות בעתיד כדי למנוע
כמה שיותר שינויים בקוד.
לבסוף שינינו את דיאגרמת המחלקות ואת תרחישי השימוש בהתאם למימוש הסופי.
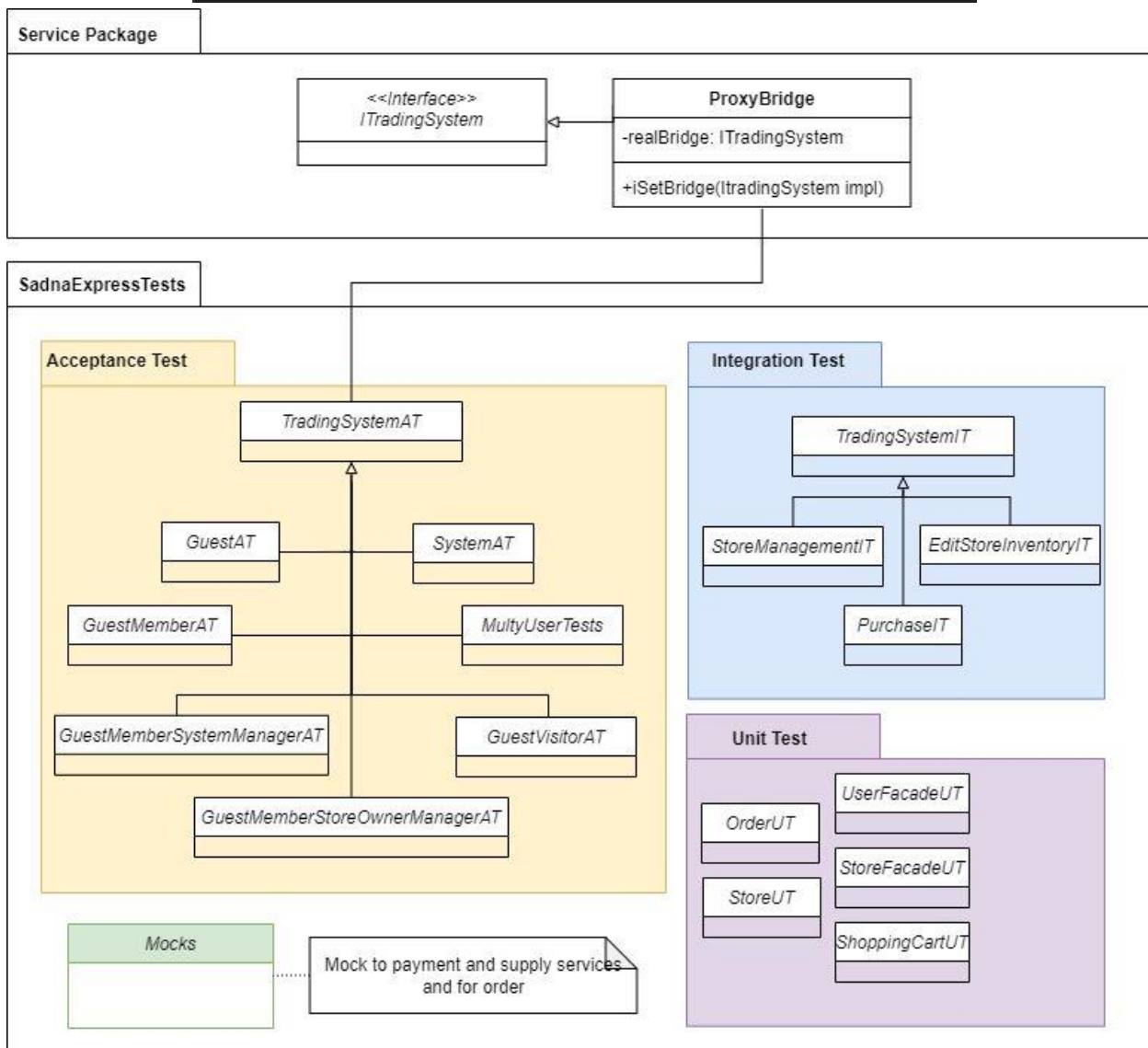
2) כתבנו טסטים! Iintegration tests, Cconcurrency tests, Aacceptance tests, Unit tests
בדקנו את הלוגיקה של הקוד וקיום הדרישות הנדרשות שבעקבותיהם מצאנו באגים
במערכת שתוקנו מיד לאחר מכן.
הרצנו את הטסטים עד לכישלון.

Sadna Express

Test Explorer

98 | 98 | 0

Search (Ctrl+I)
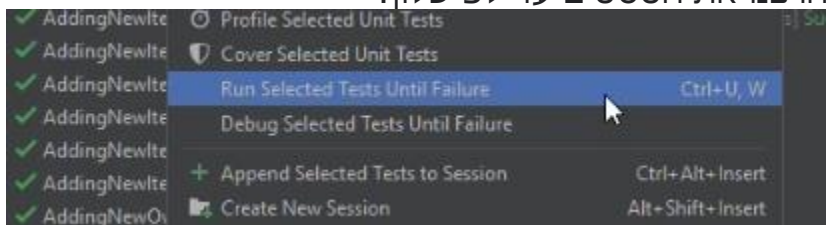
Test run finished: 98 Tests (98 Passed, 0 Failed, 0 Skipped) run in 34.4 se | 0 Warnings | 0 Errors

Test	Duration	Traits
SadnaExpressTests (98)	32.7 sec	
SadnaExpressTests.Acceptance_Tests (44)	1.6 sec	
EmployeeAT (1)	78 ms	
GuestAT (15)	420 ms	
GuestMemberAT (1)	9 ms	
GuestMemberStoreManager (1)	8 ms	
GuestMemberStoreOwner (1)	12 ms	
GuestVisitorAT (17)	889 ms	
SystemAT (8)	213 ms	
SadnaExpressTests.Unit_Tests (54)	31.1 sec	
InventoryUT (1)	< 1 ms	
OrderUT (3)	11 ms	
ShoppingCartUT (9)	15 ms	
StoreFacadeUT (10)	59 ms	
StoreUT (4)	47 ms	
UserFacadeUT (26)	31 sec	
UserUT (1)	1 ms	

Service Package

<<Interface>>
ITradingSystem

ProxyBridge
-realBridge: ITradingSystem
+iSetBridge(ItradingSystem impl)

SadnaExpressTests

Acceptance Test

TradingSystemAT

GuestAT

SystemAT

GuestMemberAT

MultyUserTests

GuestMemberSystemManagerAT

GuestVisitorAT

GuestMemberStoreOwnerManagerAT

Mocks

Mock to payment and supply services and for order

Integration Test

TradingSystemIT

StoreManagementIT

EditStoreInventoryIT

PurchaseIT

Unit Test

UserFacadeUT

OrderUT

StoreFacadeUT

StoreUT

ShoppingCartUT

Sadna Express

finished AT for usecase 4.7 4.9 4.11 4.13 #165

Merged shaykres merged 1 commit into `main` from `gil/FinishAT4` 13 hours ago

Conversation 0 Commits 1 Checks 0 Files changed 5

Gil4390 commented 14 hours ago

found and fixed some bugs in member appointment
relates to issues #117 #40 #41 #39 #36

finished AT for usecase 4.7 4.9 4.11 4.13 ···

shaykres merged commit `45fc5a4` into `main` 13 hours ago

Gil4390 / Sadna Private

<> Code Issues 1 Pull requests Actions Projects 1 Wiki Security Insights

Watch 0 Fork 0 Star

Filters is:issue is:open Labels 19 Milestones 3 New issue

1 Open 69 Closed Author Label Projects Milestones Assignee Sort

Upload updated documentations for version 1 documentation
#44 opened 3 weeks ago by shaykres Version 1

5) ביקרנו את העבודה של חברי הצוות ע"י כך שכל חבר צוות שביצע משימה העלה pull request שאושר רק ע"י חבר צוות אחר וביצענו code review אחד לשני.

```
src/Version 1/SadnaExpress/DomainLayer/User/PromotedMember.cs
        167   +                        permissions[storeID].Contains("get store purchases"))
        168   +                        return permissionsHolder.GetStorePurchases(storeID, this);
        169   +                throw new Exception("The member doesn't have permissions to get store purchases");
        170   +
```

nogaschw 4 days ago   ...

perfect! 💯

☺

[Reply...]

[Resolve conversation]

```
src/Version 1/SadnaExpress/DomainLayer/User/PromotedMember.cs   (Outdated)
        174   +          {
        175   +              if (permissions.ContainsKey(storeID))
        176   +                  if (permissions[storeID].Contains("system manager permissions") ||
        177   +                      permissions[storeID].Contains("get all stores purchases"))
```

nogaschw 4 days ago   ...

I don't think we need this permission "get all stores purchases". Just the system manager can watch all the details, not the other employees.

☺

Sadna Express
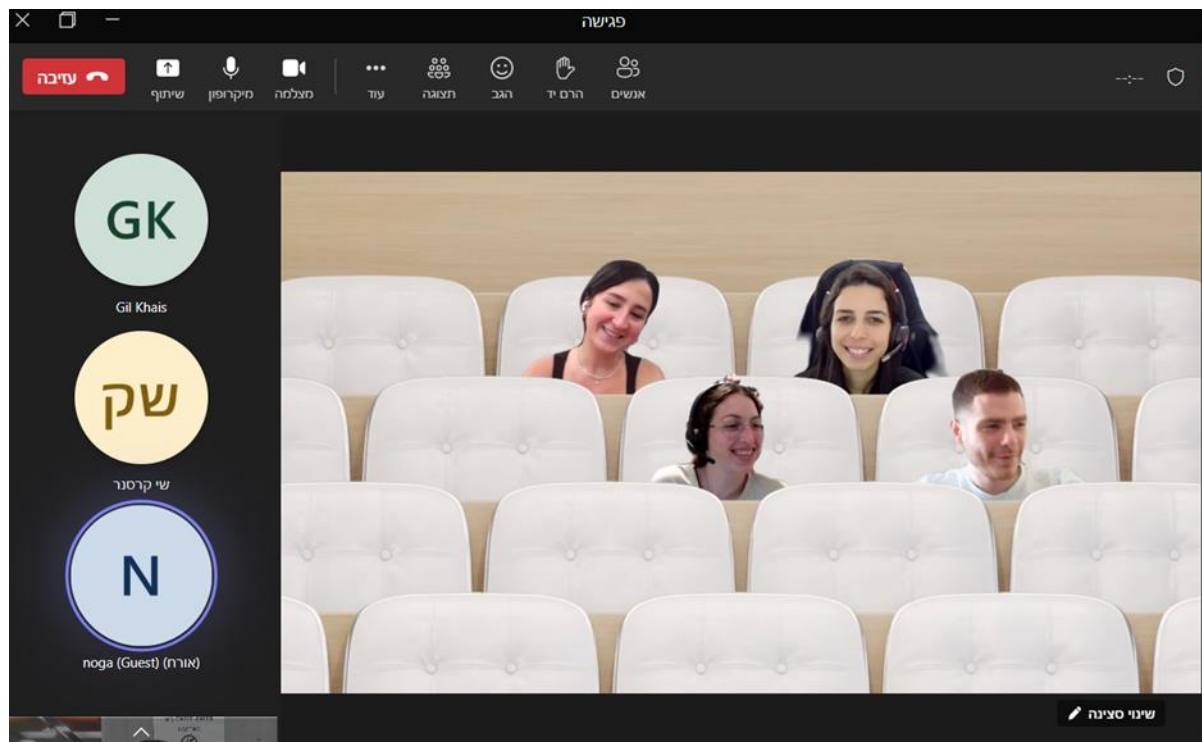
מילון מונחים - Glossary:

מילון מושגים עבור תרחישי השימוש במערכת.

1. Trading system - מערכת המסחר, האתר המרכזי שמציג את כלל החנויות.
2. Login - כניסה למערכת עבור מנויים בעזרת פרטי זיהוי שנקבעו מראש.
3. User - משתמש במערכת - יכול להיות אורח/מנוי
4. Guest - מבקר באתר שאין לו חשבון.
5. Member - משתמש הרשום למערכת המסחר. משתמש מנוי היכול לשמש בתפקידים שונים בשוק - בעל-חנות, מנהל-חנות.
6. System manager - מנהל מערכת המסחר. אחראי על הניהול השותף של המערכת ובעל הרשאות אדמין באתר.
7. Store owner - בעל חנות והוא גם מנהל בחנות עם כל ההרשאות.
8. Store manager - מנהל בחנות עם הרשאות מוגבלות.
9. Store Founder - מייסד החנות , בעל החנות הראשון.
10. User notification center - מקום בו מאוחסנים כלל ההתראות עבור משתמש.
11. User shopping cart - עגלת הקניות של משתמש, המקום בו מאוחסנים כלל המוצרים שהמשתמש מעוניין לקנות, אוסף של סלי קניות מחנויות שונות.
12. User shopping basket - סל קניות של משתמש עבור חנות ספציפית במערכת המסחר.
13. Store policy – מכיל את המדיניות של החנות.
14. Discount policy – מפרט הנחה מסוימת שקיימת ברכישה.
15. Purchase policy – מפרט הגבלה מסוימת שקיימת ברכישה.
16. Inventory – המלאי של חנות ספציפית, כלומר מכיל את הזמינות של המוצרים של החנות.
17. Item – פריט של חנות ספציפית. מכיוון שלכל חנות יש תיאור ומחיר משלה לכל מוצר, אז המוצרים של חנויות שונות יהיו אובייקטים שונים זה מזה.
18. External services - שירותים חיצוניים שמערכת המסחר נעזרת בהן על מנת לנהל אותה - כמו שירותי אספקה ושירותי רכישה ותשלומים.
19. Limited server time - זמן מוגדר בשניות במערכת עבור זמן המתנה מקסימלי לתגובה משירות חיצוני כלשהוא.
20. Password protocol - פרוטוקול במערכת המסחר המגדיר מה היא סיסמא חוקית.
21. Promoted Member - משתמש בעל הרשאות מיוחדות.
22. Order - הזמנה במערכת המסחר שנעשתה ע"י אורח/מנוי.
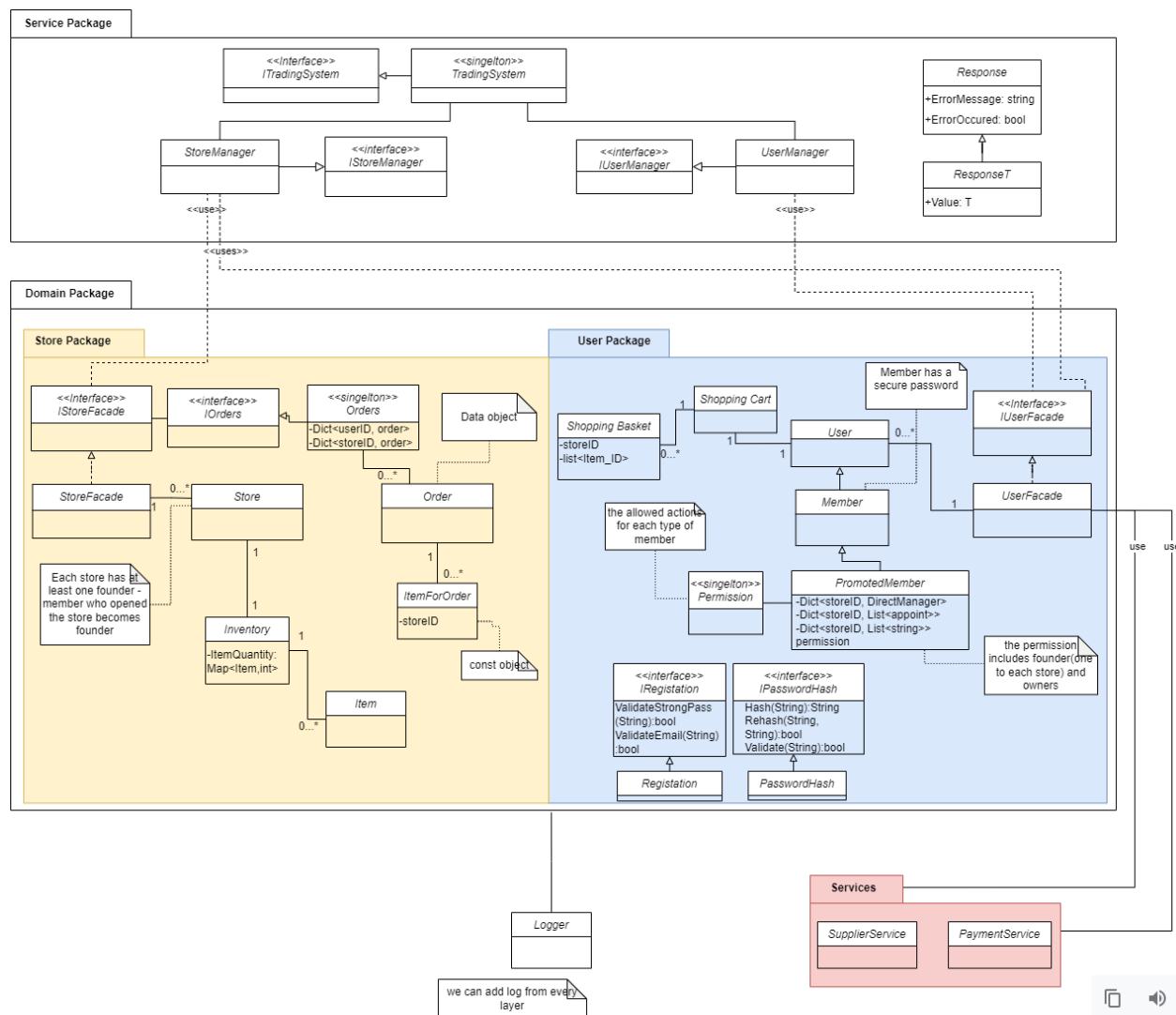
דיאגרמת ארכיטקטורה:

Sadna Express
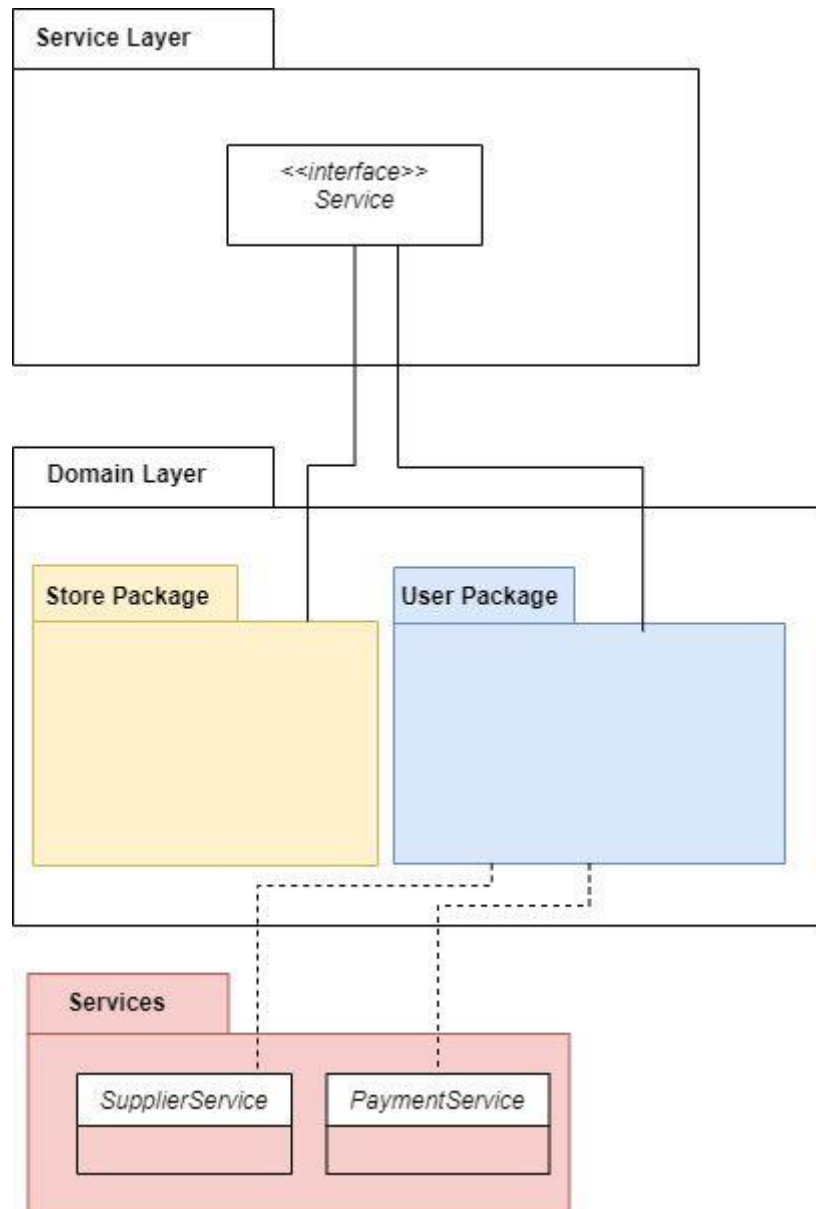
הטלת אחריות לקיום אילוצי נכונות

מס' אילוץ	אילוץ נכונות	הטלת אחריות לקיום האילוץ
1	למנוי יש שם יחיד המזהה אותו במערכת.	תרחיש שימוש - Register To the system
2	יש למערכת לפחות מנהל אחד. מנהל- מערכת חייב להיות מנוי (עבר תהליך רישום).	תרחיש שימוש – Initialization of the trading system
3	בעל-חנות או מנהל-חנות חייב להיות מנוי.	תרשים מחלקות - לפי יחס הירושה (Promoted Member יורש מmember ובעל חנות או מנהל חנות הוא כזה)
4	פעולות בשוק מבוצעות רק ע"י משתמשים המבקרים בשוק.	תרחישי שימוש – כלל פעולות השוק הרלוונטיות למנויים מותנות ברישום למערכת
5	לחנות פעילה (שאינה סגורה) חייב להיות לפחות מייסד-חנות אחד.	תרשים מחלקות - Promoted Member מחזיק מילון ID של חנות והרשאות (כל חנות פתוחה נמצאת באיחוד המילונים)
6 א	לחנות חייבים להיות מוגדרים תהליכי קנייה (רכישה) והנחה. יתכן ויש ברירות מחדל עבור אופן קנייה ועבור סוג הנחה.	תרשים מחלקות – אובייקט store חייב להחזיק policy (לא בגרסה הזו)
6 ב	לחנות חייבים להיות מוגדרים מדיניות רכישה ומדיניות הנחה. תיתכן ברירת מחדל של כללי רכישה או חישוב הנחה כמו למשל "אין מגבלות רכישה או הנחה".	תרשים מחלקות – אובייקט store חייב להחזיק policy (לא בגרסה הזו)
7	לקונה יש עגלת קניות יחידה, המורכבת מאוסף כל סלי הקנייה שלו. לקונה יש לכל היותר סל קניות יחיד עבור חנות כלשהי.	תרשים מחלקות - לפי קרדינליות הקשר (קשר יחיד ליחיד) שדות storeID בItem, ShoppingBasket
8	עגלת הקניות של קונה (אורח או מנוי) הינה בבעלותו הבלעדית ואינה ניתנת לשינוי על ידי שום משתמש אחר.	תרשים מחלקות – shopping cart מקושרת לuser אחד בלבד

תרשים מחלקות – inventory מחזיקה את הitems לפי כמותם.	ניתן לקנות פריטים של מוצר בחנות לכל היותר בכמות הקיימת במלאי.	9
תרחיש שימוש מערכת : payment	ניתן לגבות כסף מקונים רק עבור עסקאות שבוצעו ולגבות רק את הסכומים שהוצהרו.	10 א
תרחיש שימוש מערכת : payment, supply	תהליך קנייה מסתיים בהצלחה רק אם שולם הסכום הדרוש ורק אם האספקה אושרה	10 ב
לאחר שתהליך קניה יסתיים בהצלחה (10 ב) המערכת תבצע העברת תשלום למוכר	מוכר יכול לקבל תשלום רק כתוצאה מתהליך קנייה מוצלח	10 ג
תרשים מחלקות - קיים אובייקט payment service עם קרדינליות של לפחות אחד	נדרש לפחות קשר אחד לשירות גביית כספים	11 א
תרשים מחלקות - קיים אובייקט supplier service עם קרדינליות של לפחות אחד	נדרש לפחות קשר אחד לשירות אספקה	11 ב

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תרחישי שימוש – Use Cases :

System use cases:

Use case: Initialization of the trading system. (1.1)

- Actor: user

- Precondition: user is logged in.

- Postcondition: trading system is initialized.

- Parameter: none

- Actions:

    1. User request to open (initialize) the trading system.

    2. System checks that the user has permissions to perform this operation.

    3. System if user has permissions – checks whether there is a connection to payment and supply services and there is a system manager.

    4. System if action succeeded – opens the trading system for clients.

Participants	Parameters	Expected Result	Scenario
Member	User is system Manager	Trading system is initialized	Good
Member	User isn't System Manager	Trading system staying closed	Bad

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External services	There is a connection to payment and supply services	Trading system is initialized	Good
External services	There isn't a connection to payment and supply services	Trading system staying closed	Bad

<u>Use case:</u> Update connection with external services. (1.2)

- Actor: System Manager

- Precondition: user is logged in

- Postcondition: external services are connected to the trading system.

- Parameter: old external service, new external service

- Actions:

    1. System checks that the user has permissions to perform this operation.

    2. System if user has permissions – checks whether is it possible to connect to the new external service.

    3. System if action succeeded – checks that old and new services have the same API.

    4. System if action succeeded – waits until there is no use in old service.

    5. System replaces the old service with the new one.

    6. System sends an indication to the user about the exchange.

Participants	Parameters	Expected Result	Scenario
System Manager	old external service, new good external service	Service replaces successfully	Good
System Manager	old external service, new bad external service (unavailable service/service doesn't exist)	Service is not replaced	Bad

Use case: Payment. (1.3)

- Actor: System

- Precondition: user triggered a request to make a payment, User shopping cart is valid and not empty.

- Postcondition: Store received the payment from the system.

- Parameter:

  - Transaction details
  - User details

  - User shopping cart details

- Actions:

  1. System sends request to payment external service.

  2. System waits Limited server time for service response.

  3. System if action succeeded –

     - Sends user shopping cart and user details to supply external service.

     - Sends positive indication for the user and emptying the user shopping cart.

     - Store received the payment from the system.

  4. System if action failed–Send negative indication to the user.

Participants	Parameters	Expected Result	Scenario
System, external service	Good transaction details	Payment completed successfully	Good

System, external service	bad transaction details (for example wrong ccv)	Payment is not completed	Bad
System, external service	Good transaction details, external service is not responding	User receives error message from the system with appropriate message	Good

<u>Use case:</u> Supply. (1.4)

- Actor: System

- Precondition: Payment completed (for some shopping cart)

- Postcondition: Supply process started (for some shopping cart)

- Parameter:

  - User details

  - User shopping cart details

- Actions:

  1. System sends user shopping cart and user details to supply external service.

  2. System waits Limited server time for service response.

  3. System if action succeeded sends positive indication for the user that supply process has begun successfully.

  4. System if action failed– sends negative indication for the user.

Participants	Parameters	Expected Result	Scenario
System, external service	Good user shopping cart and user details	Receiving a supply confirmation from the service	Good
System, external service	Bad user shopping cart and user details (errors in user details - bad address ext.)	Receiving error from the supply service	Bad

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System, external service	Good user shopping cart and user details, external service is not responding	User receives error message from the system with appropriate message	Good

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<u>Use case:</u> User online notifications. (1.5)

- Actor: System

- Precondition:

  - Message has received or
  - purchase has occurred or
  - Store opened or closed or

  - Subscription has been removed.

- Postcondition: Message received by the user if logged in, or added to the user notification system if not logged in.

- Parameter:

  - User Message with notification info

  - User details

- Actions:

  1. System checks if the user with the user details is logged in.

  2. System if logged in - sends the message to the user.

  2. System if not logged in - adds the message to the user notification center which the user will receive when logs into the system.

Participants	Parameters	Expected Result	Scenario
System	purchase has occurred to a specific store; store manager is connected to the trading system	The store manager receives a notification about the purchase	Good

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System	purchase has occurred to a specific store; store manager is connected to the trading system	The store manager does not receive a notification about the purchase	Bad

Use case: User offline notifications. (1.6)

- Actor: System

- Precondition:

  - Message has received or
  - purchase has occurred or
  - Store opened or closed or

  - Subscription has been removed.

- Postcondition: Message received by the user if logged in, or added to the user notification system if not logged in.

- Parameter:

  - User Message with notification info

- Actions:

  1. System checks if the user with the user details is logged in.

  2. System if logged in - sends the message to the user.

  3. System if not logged in - adds the message to the user notification center which the user will receive when logs into the system.

Participants	Parameters	Expected Result	Scenario
System	purchase has occurred to a specific store; store manager is not connected to the trading system.	The store manager logs in to the system and accepts a notification about the purchase	Good

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System	purchase has occurred to a specific store, store manager is not connected to the trading system	The store manager logs in to the system and does not accept a notification about the purchase	Bad

Users use cases:

Guest user:

<u>Use case:</u> Enter the system. (1.1)

- Actor: User

- Precondition: User not logged in

- Postcondition: -

- Parameter: none

- Actions:

   1. User entering the system.
   2. System defines user as Guest-user.

   3. System assigns the user a shopping cart.

Participants	Parameters	Expected Result	Scenario
User	The user entered to the system	Successfully entered the system and accepts a shopping cart	Good
User	The user entered to the system	The system did not upload correctly to the user, user got null id	Bad

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Use case: Exit from the system. (1.2)

- Actor: User

- Precondition: User not logged in

- Postcondition: -

- Parameter: none

- Actions:

    1. User exits from the system.

    2. System Delete User from current users list and all user guest information.

Participants	Parameters	Expected Result	Scenario
User	-	Successfully exit the system and his shopping cart deleted	Good
User	-	Successfully exit the system and did not delete from guest's list	Bad

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<u>Use case:</u> Register To the system. (1.3)

- Actor: User

- Precondition: User not logged in and not registered to the system before

- Postcondition: System registered the user to the system.

- Parameter: Identifying details

- Actions:

    1. User enters the system.
    2. User register to the system by giving Identifying details.
    3. System validates user email and checks it's unique in the system.
    4. System creates new member.
    5. System assigns registered user a new empty shopping cart.

Participants	Parameters	Expected Result	Scenario
User	Unique and valid email, strong password, valid id	Successfully registered to the system	Good
User	username that already in the system, strong password, valid id	Username already used in the system, msg will be thrown	Bad

<u>Use case:</u> Login To the system. (1.4)

- Actor: User

- Precondition: User not logged (guest) in and registered to the system before

- Parameter: username and password

- Actions:

    1. User enters the system.
    2. User login to the system using the username and password.

    3. System defines user as member.

    4. System will update the shopping cart, according to member's shopping history.

    5. System will show all offline notification of the user.

Participants	Parameters	Expected Result	Scenario
User	Unique username, strong password	Successfully logged in to the system	Good
User	Username and password that don't match the username and password from the system's db.	Failed to log in to the system	Bad

Use case: Getting information about stores in the market and the products in the stores. (2.1)

- Actor: User

- Precondition: User not logged in

- Postcondition: User received the info.

- Parameter: none

- Actions:

    1. User asked from the system to accept information about specific store or all stores and items.

    2. System if store doesn't exist, raises appropriate message.

    3. System displays information for the chosen store

Participants	Parameters	Expected Result	Scenario
User	-	User see's the updated and valid store info	Good
User	-	User see's old/non updated store info	Bad

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Use case: Guest search products by general search or filters. (2.2)

- Actor: User

- Precondition: User not logged in

- Postcondition: User received the list of items according to the search.

- Parameter: Info of product

- Actions:

   1. User asks from the system to search according to the info of the product he has.
   2. System if store doesn't exist, raises appropriate message.
   3. All stores search for items that match the search terms.
   4. System presents the results from all the stores, if there is no results- system present appropriate message.

Participants	Parameters	Expected Result	Scenario
User	Search on known product in the searching tool of the system	System shows list of products according to the info provided	Good
User	Search work that doesn't has related items	System shows a message that no match items has found	Good
User	Search on known product in the searching tool of the system	System shows list of products that some of them are from inactive stores	Bad

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User	Enter product that didn't exists	System shows list of products that unrelated to the info provided	Bad

Use case: Guest saving item in the shopping cart for some store. (2.3)

- Actor: User

- Precondition: User not logged in

- Postcondition: System saved the item in shopping cart.

- Parameter: -

- Actions:

    1. User request to put item in the shopping cart.

    2. Store checks that item is in stock, if no sends appropriate error

    3. Shopping cart creates a shopping basket if necessary for the item store.

    4. Shopping basket adds the item to the basket

    5. System updates the shopping cart to be visible for the client.

Participants	Parameters	Expected Result	Scenario
User	User adds item to the shopping cart	Shopping cart is updated with the new item in it	Good
User	User adds item to the shopping cart	Shopping cart is not updated with the new item.	Bad

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<u>Use case:</u> Guest checking the content of the shopping cart and making changes. (2.4)

- Actor: User

- Precondition: User not logged in.

- Precondition: User can see his shopping cart items and changes has been done to the shopping cart.

- Parameter: -

- Actions:

    1. User request to see the items in the shopping cart.
    2. System Displays the shopping cart items.
    3. User request to make changes in the shopping cart (change item count/delete item from shopping cart).
    4. Store of the item checks that the item quantity fits to the user request, if no present appropriate mesage.
    5. Shopping cart preforming the user requests and adding/removing/editing the item by the item shopping basket.
    6. User shopping cart is updated.
    7. System presents the updated shopping cart to the user.

Participants	Parameters	Expected Result	Scenario
User	User requests to see items in his shopping cart	when checking the content of the cart, the item appears	Good
User	User requests to see items in his shopping cart	when checking the content of the cart, the item doesn't appear	Bad
User	User requests to delete item from his shopping cart	when checking the content of the cart, the item doesn't appear	Good

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User	User requests to delete item from his shopping cart	when checking the content of the cart, the item appears	Bad

Use case: Guest making a purchase of the shopping cart. (2.5)

- Actor: User

- Precondition: User not logged in, User's Shopping cart is not empty, payment method is provided.

- Postcondition: System validate the order and remove the purchased items from the store they brought from.

- Parameter: Shopping list

- Actions:

  1. User puts items in his shopping cart.
  2. User request to buy his shopping cart.
  3. System checks that shopping cart is not empty
  4. Store - Each store that has items from the user shopping cart checks that discount policy and purchase policy are applied and that the items are in stock.
  5. Shopping cart calculate the payment for the user and the payment to be transfer to each store
  6. System request from the user transaction details and delivery details.
  7. User inserts payment method.
  8. System starting the scenario of Payment use case and then moving to Supply use case.
  9. new order is created for the user and for each relevant store.

Participants	Parameters	Expected Result	Scenario
User	Valid payment information	Successful purchase: Payment is accepted, and supply process began to the user	Good
User	invalid payment information	Payment is not received, and the purchase is not made	Bad

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User	One of the items in the shopping cart is not in stock	Purchase failed, and appropriate message presents to user	Good
User	One of the items in the shopping cart is not in stock	Successful purchase	Bad
User	User shopping cart has 5 dresses from "renunar" and renuar limiting 4 dresses per a purchase	Purchase is not approved by one of the stores purchase policy that involves items in the shopping cart	Good
User	User shopping cart has 5 dresses from "renunar" and renuar limiting 4 dresses per a purchase	Successful purchase: Payment is accepted, and supply process began to the user	Bad

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Member:

Use case: Exit from the system. (3.0)

- Actor: Member

- Precondition: User logged in

- Postcondition: -

- Parameter: none

- Actions:

  1. User exits from the system.

  2. System logs out the user, and then exit from system (3.1, 1.2).

Participants	Parameters	Expected Result	Scenario
User	-	Successfully exit the system and his shopping cart saved	Good
User	-	Successfully exit the system and his shopping cart deleted	Bad

Use case: Logout. (3.1)

- Actor: Member

- Precondition: User logged in

- Postcondition: User not logged in.

- Parameter: none

- Actions:

    1. User request to logs out from the system.
    2. User change his login status to false
    2. System define user as guest.

Participants	Parameters	Expected Result	Scenario
User	-	Successfully logged out	Good
User	-	User logged out but the system recognizes the user as log in	Bad

Use case: Opening a store. (3.2)

- Actor: Member

- Precondition: User logged in.

- Postcondition: New store is opened.

- Parameter: Store's detailed information

- Actions:

    1. User request to create store in the system.
    2. System checks that store name is unique, is no present appropriate message to user.
    3. System marks the user as the 'Store Founder' of the store.
    4. System set the store to 'open.'

Participants	Parameters	Expected Result	Scenario
User	Good and unique store name	Store created Successfully	Good
User	Invalid store name (exist in the system)	Store is not created	Bad

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Use case: Writing a review on items the user purchased. (3.3)

- Actor: Member

- Precondition: User logged in and he has purchased products before

- Postcondition: Written review appears in the item's comment section

- Parameter: The product the user wants to write a review about

- Actions:

    1. User request to inserts his review about a specific item.
    2. System checks that item exist, if not present appropriate message.
    2. Item adds the review to it comments section.

Participants	Parameters	Expected Result	Scenario
User	Well written review, user purchased in the past the specific item	The users' review is added to the comments on the product	Good
User	Well written review, user purchased in the past the specific item	The users' review is not added to the comments on the product	Bad
User	Well written review, user did not purchase in the past the specific item	User cannot add a review to this item- appropriate message is presented	Good

Store owner:

Use case: product management. (4.1)

- Actor: store owner

- Precondition: user is logged in, store exist, user is the owner of the store

- Postcondition: new item appears in the inventory of the store.

- Parameter: product information (name, price, etc.)

- Actions:

    1. User request to Add/Remove/Edit item in the store inventory.

    2. Inventory checks that operation is possible:

        a. If new Item is added - check that his name is unique
        b. If user requested to edit/remove item- check that item exist

    3. If operation is not possible Inventory sends appropriate message

    4. Inventory updates the new item/new item quantity and sends positive indication to user.

    5. Item updates his new details and sends positive indication to user.

Participants	Parameters	Expected Result	Scenario
Store owner	Valid product data	The item is added to store	good
Store owner	Invalid product price	The item was not added to the store, and an error is displayed	bad

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Store owner	Edit product that does not exist price	Operation failed - Appropriate message sends to the user	bad

Use case: changing store policy. (4.2)

- Actor: store owner

- Precondition: user is logged in, store exist, user is the owner of the store

- Postcondition: discount policy of the store updated.

- Parameter: discount policy (items affected, discount amount…)

- Actions:

    1. User chooses to edit the store policy.

    2. User chooses to change an existing discount policy.

    3. User enters the new discount policy details.

    4. Store checks that new discount policy is consistent with traceability constraints of the store founder, if yes - updated the discount policy, if no- present an appropriate message.

Participants	Parameters	Expected Result	Scenario
Store owner	Valid discount policy	The discount policy of the store is changed	good

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| Store owner | Valid discount policy | The discount policy was not changed, and an error is displayed | bad |
| Store owner | Valid discount policy that does not fit to founder constraints | The discount policy was not changed, and an appropriate message is displayed | good |

Use case: appointing a new store owner. (4.4)

- Actors: store owner, member

- Precondition: store owner is logged in, member is registered, store exists, store owner is the owner of the store, member is not the owner of the store

- Postcondition: member is storing owner in the store.

- Parameter: member to appoint details.

- Actions:

    1. Store owner requests to add new store owner.

    2. System asks for new store owner details.

    3. System checks that new store owner is a member in the system. If not system present appropriate message to user.

    3. Permissions checks that the new store owner is not already a store owner in the store. If he is, store sends to system an appropriate message that the system will display to the user.

    4. Permissions adds member as the owner of the store and gives the new store owner permissions of management and store policy and adds the store owner as the appointer of the new store owner.

    5. System sends a positive indication to the user.

Participants	Parameters	Expected Result	Scenario
store owner, member	New store owner is a member and is not yet the store's owner	member is added as the owner of the store.	good
store owner, member	Store owner enter details of un-registered user	The operation fails and an error is displayed	bad

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<u>Use case:</u> appointing a new store manager. (4.6)

- Actors: store owner, member

- Precondition: store owner is logged in, member is registered, store exist, store owner is the owner of the store, member is not the store manager.

- Postcondition: member is store manager in the store.

- Parameter: member to appoint details.

- Actions:

  1. Store owner requests to add new store manager.

  2. System asks for new store manager details.

  3. System checks that new store manager details is a member in the system. If not system present appropriate message to user.

  3. Permissions checks that the new store manager is not already a store owner/store manager in the store. If he is, store sends to system an appropriate message that the system will display to the user.

  4. Permissions adds member as the manager of the store and gives the new store manager permissions to receive information (4.12, 4.13) and adds the store owner as the appointer of the new store manager.

  5. System sends a positive indication to the user.

Participants	Parameters	Expected Result	Scenario
store owner, member	New store manager is a member and is not yet the store's owner/manager	member is added as the manager of the store.	good

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store owner, member	Store owners enter details of unregistered user/ member is already owner/manager in the store	The operation fails and an error is displayed	bad

Use case: changing a store manager permission (4.7)

- Actors: store owner, store manager.

- Precondition: store owner is logged in, store manager is registered and is a manager in the store, store exist, store owner is the owner of the store, and store owner is the appointer of store manager.

- Postcondition: store manager permission updated.

- Parameter: store manager's identifying details.

- Actions:

    1. Store owner chooses to edit the permissions of the store manager.

    2. The system asks for identifying details of store manager.

    3. Store owner enters the identifying details of store manager.

    4. System checks that store manager details are valid (member and store manager) and that store owner is not the appointer of the store - if not present an appropriate message.

    5. Store owner enters new permissions of the store manager. If permissions are not valid - present an appropriate message.

    6. System updates the permission of the store manager.

Participants	Parameters	Expected Result	Scenario
store owner, store manager	The store manager of the specific store and the store owner is the appointer of the store manager	store manager permissions are updated.	good

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store owner, store manager	store manager is not a manager of this store / store owner is not the appointer of the store manager	The operation fails and an error is displayed	bad

Use case: closing a store. (4.9)

- Actors: store founder.

- Precondition: user is logged in, store exist, user is the founder of the store

- Postcondition: store closed.

- Parameter: store id

- Actions:

  1. Store owner request to close his store.

  2. Store sets itself as inactive.

  3. Store sends notifications to all the store managers and owners.

  4. System updated the store as an inactive store.

Participants	Parameters	Expected Result	Scenario
store owner	Store owner is the owner of the store	Store is now inactive, and all the managers and owners get notified, store items are not available on search.	good
store owner	Store owner is not the owner of the store	The operation fails and an error is displayed	bad
store owner	Store owner is the owner of the store	Store is now inactive, and all the managers and owners get notified, store items are still available on search.	bad

Use case: request store employees' information. (4.11)

- Actors: store owner.

- Precondition: user is logged in, store exist, user is the owner of the store

- Postcondition: store owner receives the info.

- Parameter: store id

- Actions:

    1. Store owner requests store employee information.

    2. Store displays all the managers and owners of the store as well as their permissions.

Participants	Parameters	Expected Result	Scenario
store owner	Store id is valid and store owner is the owner of the store	System displays the details	good
store owner	Store id is invalid/ store owner is not the owner of the store	The operation fails and an error is displayed	bad

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Use case: Get info and read users complaints and respond. (4.12)

- Actor: Store owner

- Precondition: User logged in, user is store manager with permissions or owner

- Postcondition: Complaint received on the store manager notifications, his response received by the user/ user got the wanted info.

- Parameter: Complaint response

- Actions:

1. Store owner request to get info about the store and to see customers complaints.
2. Store check that the user is a Store owner/store manager with permissions. If not present appropriate message.
3. Store present customers complaints to the store owner.
4. Store owner added a comment to customer complaint.
5. System sends a notification to the user about the store owner comment (1.5, 1.6)

Participants	Parameters	Expected Result	Scenario
store, store owner	complaint response	response added and notification sent to user successfully	Good
store, store owner	complaint response	complaint response didn't get sent, the user got an error.	Bad

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<u>Use case:</u> request store purchase history. (4.13)

- Actors: store owner.

- Precondition: user is logged in, store exists, user is the owner of the store

- Postcondition: store owner receives the info.

- Parameter: store id

- Actions:

    1. Store owner requests the store purchase information.

    2. Store checks that the user is store owner/ manager with permissions to see it's purchase history. If not present appropriate message.

    2. Store displays it's purchase history.

Participants	Parameters	Expected Result	Scenario
store owner	Store id is valid	System displays the details	good
store owner	Store id is invalid/ user is not store owner/user is store manager without the right permissions.	The operation fails and an error is displayed	bad

System Manager use cases:

Use case: Purchases information history. (6.4)

- Actor: System Manager user

- Precondition: System Manager is logged in.

- Precondition: System Manager receives store purchases information history.

- Parameter: Store details

- Actions:

    1. User request to see store purchases information history.

    2. System checks that the user has permissions to perform this operation.

    3. System if user has permissions – asks from the user for store details

    3. User inserts store details

    4. System checks that store exist

    5. System if action succeeded – search for Store purchases information history.

    6. Store if search succeeded – present purchases information history. if not - show an appropriate message

Participants	Parameters	Expected Result	Scenario
System Manager	Good and valid Store details	Store purchases information history is presented	Good

System Manager	Bad and invalid Store details	Store purchases information history is not presented, appropriate message presented to user	Bad
System Manager	No specific store details	All Stores purchases information history is presented	Bad

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