CS319
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Deliverable 1

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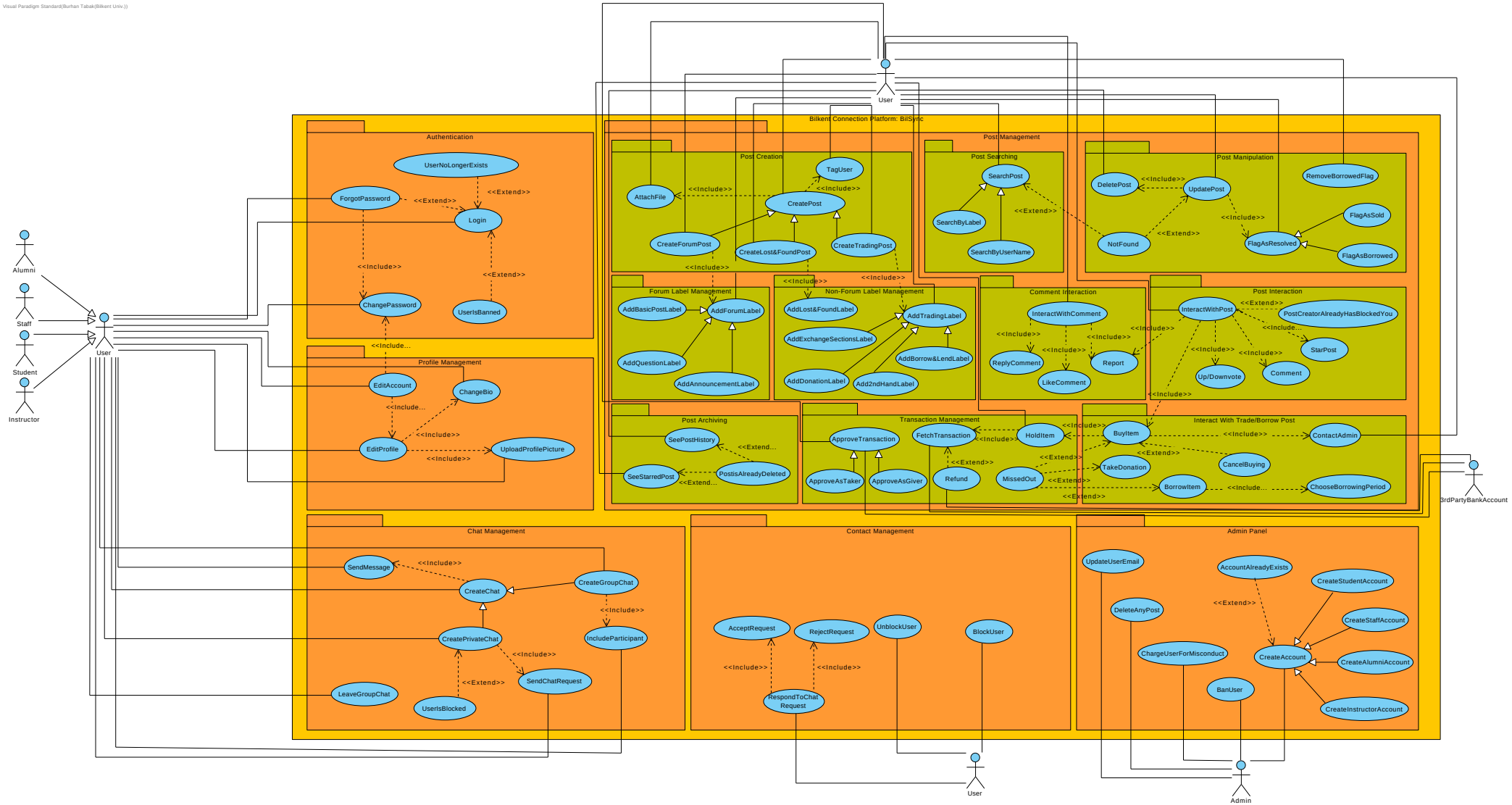

Authentication Package

User: Student, Alumni, Instructor, Staff

1. **Name:** Login
2. **Participating Actor:** Initiated by User
3. **Entry Condition:** The user has just launched the app, or re-launched the app after not logging out within 5 minutes.
4. **Exit Condition:** The user has successfully logged in.
5. **Flow of Events:**
   5.1. User provides their ID and current password.
   5.2. System checks the user's credentials

1. **Name:** UserNoLongerExists
2. **Participating Actor:** Initiated by System
3. **Entry Condition:** The credentials do not match with any current user
4. **Exit Condition:** User is notified about bad credentials
5. **Flow of Events:**
   5.1. System textually notifies user that they cannot log in due to bad credentials

1. **Name:** ForgotPassword
2. **Participating Actor:** Student, Alumni, Instructor, Staff
3. **Entry Condition:**
   User has an account, User forgets password, User remembers their email
4. **Exit Condition:** User is directed to the login page.
5. **Flow of Events:**
   5.1. System sends an email containing a link to change the password.
   5.2. System notifies the user that the email is sent.
   5.3. User approves the password.
   5.4. System redirects the user back.

1. **Name:** UserIsBanned
2. **Participating Actor:** Initiated by System
3. **Entry Condition:** User was banned from the system by an Admin previously
4. **Exit Condition:** User is informed about failed login
5. **Flow of Events:**
   5.1. System textually notifies user that they cannot log in due them being banned

1. **Name:** ChangePassword
2. **Participating Actor:** Student, Alumni, Instructor
3. **Entry Condition:** User requested a password change.
4. **Exit Condition:** User cancels the change or creates a new password.
5. **Flow of Events:**
   5.1. User enters the new password.
   5.2. System overwrites the password.
   5.3. System sends an email to the user that the password has been changed.

Profile Management Package

1. **Name:** EditAccount
2. **Participating Actor:** Student, Alumni, Instructor
3. **Entry Condition:** User requests a change in their account.
4. **Exit Condition:** User finishes interacting with Change Password
5. **Flow of Events:**
    5.1. User initiates a password change
    5.2. System links the user to the relevant page

1. **Name:** EditProfile
2. **Participating Actor:** Student, Alumni, Instructor
3. **Entry Condition:** User requests a change in their profile.
4. **Exit Condition:** User finishes interacting with relevant functionality
5. **Flow of Events:**
    5.1. User initiates a bio change or profile picture update
    5.2. System links the user to the relevant page

1. **Name:** ChangeBio
2. **Participating Actor:** Student, Alumni, Instructor
3. **Entry Condition:** User modifies the text written in the bio
4. **Exit Condition:** User saves the changes or cancels.
5. **Flow of Events:**
    5.1. User modifies the text written in the bio
    5.2. User saves the changes
    5.3. System saves the new bio

1. **Name:** UploadProfilePicture
2. **Participating Actor:** Student, Alumni, Instructor
3. **Entry Condition:** User requests to change their profile picture
4. **Exit Condition:** New photo is saved
5. **Flow of Events:**
    5.1. User uploads a photo.
    5.2. System checks the file format and accepts the appropriate ones.
    5.3. System updates the user profile picture as the new picture

Chat Management Package

1. **Name:** CreateChat
2. **Participating Actor:** User
3. **Entry Condition:** User initiates a chat creation
4. **Exit Condition:** User successfully creates a chat or cancels the initiation
5. **Flow of Events:**
    5.1. User chooses a participant or participants to create a chat
    5.2. System links the user to the relevant use case based on the chat type

1. **Name:** LeaveGroupChat
2. **Participating Actor:** User

3. **Entry Condition:** User must be a participant in the group chat the leave is initiated on
4. **Exit Condition:** User successfully leaves the group chat or cancels the initiation
5. **Flow of Events:**
    5.1. User confirms or cancels the leave initiation
    5.2. System removes that participant from the group chat

1. **Name:** CreateGroupChat
2. **Participating Actor:** Inherited from CreateChat
3. **Entry Condition:** User chooses multiple participants in CreateChat
4. **Exit Condition:** Inherited from CreateChat
5. **Flow of Events:**
    5.1. User selects the participants to be added to the chat
    5.2. System adds the selected participants and the user to a new chat

1. **Name:** CreatePrivateChat
2. **Participating Actor:** Inherited from CreateChat
3. **Entry Condition:**
    3.1. User chooses one participant in CreateChat
    3.2. The selected user is not blocked
4. **Exit Condition:** Inherited from CreateChat
5. **Flow of Events:**
    5.1. User selects the participant to be added to the chat
    5.2. System adds the selected participants and the user to a new chat

1. **Name:** SendMessage
2. **Participating Actor:** User
3. **Entry Condition:** User must be in either a private chat where the chat request was accepted previously, or in a group chat
4. **Exit Condition:** Message is sent
5. **Flow of Events:**
    5.1. User types the message
    5.2. User sends the message
    5.3. System adds the new message to the chat

1. **Name:** IncludeParticipant
2. **Participating Actor:** User
3. **Entry Condition:** User must be in a group chat
4. **Exit Condition:** System adds the indicated participant to the group chat
5. **Flow of Events:**
    5.1. User chooses a new participant to be added to the group chat
    5.2. User confirms or cancels the inclusion of the indicated participant

1. **Name:** SendChatRequest
2. **Participating Actor:** User
3. **Entry Condition:** System created a new private chat
4. **Exit Condition:** System creates a chat request

5. **Flow of Events:**
    5.1. User types new messages to the chat to send alongside the request
    5.2. User confirms the chat request creation
    5.3. System creates the chat request and sends it to the recipient

1. **Name:** UserIsBlocked
2. **Participating Actor:** User
3. **Entry Condition:** Sender is trying to create a private chat with the recipient, and the sender is blocked by the recipient
4. **Exit Condition:** User is informed about the recipient being blocked
5. **Flow of Events:**
    5.1. System informs the user that a private chat cannot be created because the user is blocked by the recipient

Contact Management

1. **Name:** RespondToChat Request
2. **Participating Actor:** User
3. **Entry Condition:** User views the request
4. **Exit Condition:** User replies to the request or leaves it on hold
5. **Flow of Events:**
    5.1. User views the chat request's messages
    5.2. User accepts or declines the request

1. **Name:** AcceptRequest
2. **Participating Actor:** User
3. **Entry Condition:** User views the request
4. **Exit Condition:** User accepts the request
5. **Flow of Events:**
    5.1. User accepts the chat request
    5.2. System adds the user to the chat

1. **Name:** RejectRequest
2. **Participating Actor:** User
3. **Entry Condition:** User views the request
4. **Exit Condition:** User rejects the request
5. **Flow of Events:**
    5.1. User rejects the chat request
    5.2. System deletes the request and the messages

1. **Name:** BlockUser
2. **Participating Actor:** User
3. **Entry Condition:** User requests to block a user.
4. **Exit Condition:** User blocks the indicated user.
5. **Flow of Events:**
    5.1. System adds the indicated user to the blocked users list
    5.2. System prevents the future messages from the indicated user

1. **Name:** UnblockUser
2. **Participating Actor:** User
3. **Entry Condition:** User requests to unblock a user, and the indicated user was blocked
4. **Exit Condition:** User unblocks the indicated user
5. **Flow of Events:**
    5.1. System removes the indicated user from the blocked users list

Admin Panel Package

1. **Name:** CreateAccount
2. **Participating Actor:** Admin
3. **Entry Condition:** Admin opens the admin panel
4. **Exit Condition:** Admin creates an account
5. **Flow of Events:**
    5.1. Admin chooses account type
    5.2. Admin enters an email address
    5.3. Admin enters a user ID
    5.4. Account is created

1. **Name:** CreateStudentAccount
2. **Participating Actor:** inherits from Create Account
3. **Entry Condition:** inherits from Create Account
4. **Exit Condition:** inherits from Create Account
5. **Flow of Events:**
    5.1. Admin chooses student account type
    5.2. Admin enters an email address
    5.3. Admin enters a user ID
    5.4. Account is created

1. **Name:** CreateStaffAccount
2. **Participating Actor:** inherits from Create Account
3. **Entry Condition:** inherits from Create Account
4. **Exit Condition:** inherits from Create Account
5. **Flow of Events:**
    5.1. Admin chooses staff account type
    5.2. Admin enters an email address
    5.3. Admin enters a user ID
    5.4. Account is created

1. **Name:** CreateAlumniAccount
2. **Participating Actor:** inherits from Create Account
3. **Entry Condition:** inherits from Create Account
4. **Exit Condition:** inherits from Create Account
5. **Flow of Events:**
    5.1. Admin chooses alumni account type
    5.2. Admin enters an email address
    5.3. Admin enters a user ID

5.4. Account is created

1. **Name:** CreateInstructorAccount
2. **Participating Actor:** inherits from Create Account
3. **Entry Condition:** inherits from Create Account
4. **Exit Condition:** inherits from Create Account
5. **Flow of Events:**
   5.1. Admin chooses instructor account type
   5.2. Admin enters an email address
   5.3. Admin enters a user id
   5.4. Account is created

1. **Name:** UpdateUserEmail
2. **Participating Actor:** Admin
3. **Entry Condition:** Admin opens a user in admin panel
4. **Exit Condition:** User email is updated
5. **Flow of Events:**
   5.1. Admin chooses an account by mail or id
   5.2. Admin enters a new email address
   5.3. User email is updated

1. **Name:** ChargeUserForMisconduct
2. **Participating Actor:** Admin
3. **Entry Condition:** Admin receives a misconduct report
4. **Exit Condition:** Account is charged with the specified time
5. **Flow of Events:**
   5.1. Admin receives the misconduct report
   5.2. Admin decides to charge the user
   5.3. Admin chooses the amount of time to charge the user for
   5.4. Admin charges the user

1. **Name:** DeleteAnyPost
2. **Participating Actor:** Admin
3. **Entry Condition:** Admin chooses a post
4. **Exit Condition:** Admin deletes the post of the user
5. **Flow of Events:**
   5.1. Admin chooses a post
   5.2. Admin removes a post due to specific reasons

1. **Name:** BanUser
2. **Participating Actor:** Admin
3. **Entry Condition:** Admin chooses a user
4. **Exit Condition:** Admin successfully bans the user from entering the system
5. **Flow of Events:**
   5.1. Admin chooses a user
   5.2. Admin bans the user
1. **Name:** AccountAlreadyExists
2. **Participating Actor:** Admin

3. **Entry Condition:** Admin is trying to create a new user account.
4. **Exit Condition:** System detects an account with same credentials
5. **Flow of Events:**
    5.1. System finds an account with the same name and notifies the admin

Post Creation

1. **Name:** CreatePost
2. **Participating Actor:** User
3. **Entry Condition:** User must have the content of the post that he/she wants to create.
4. **Exit Condition:** User created and shared the post
5. **Flow of Events:**
    5.1. User selects which post type to create among (Forum, Lost&Found, trading post)
    5.2. User adds the label from a set of options.
    5.3. User adds image/images (optional User may add no Images).
    5.4. User tags the wanted user. (optional User may tag no user)
    5.5. User adds a description.
    5.6. Submits the post creation.

1. **Name:** CreateForumPost
2. **Participating Actor:** inherits from Create Post
3. **Entry Condition:** User selects Forum Type
4. **Exit Condition:** inherits from Create Post
5. **Flow of Events:**
    5.1. User selects Forum type.
    5.2. Users add the label from Form labels. These are Basic Post, Question and Announcement labels.
    5.3. User adds image/images. (optional User may add no Images)
    5.4. User tags the other Users. (optional User may tag no user)
    5.5. User adds description/text.
    5.6. User created the post

1. **Name:** CreateLost&FoundPost
2. **Participating Actor:** inherits from Create Post
3. **Entry Condition:** User selects Lost&Found Post type
4. **Exit Condition:** inherits from Create Post
5. **Flow of Events:**
    5.1. User selects Lost&Found Post type.
    5.2. Lost & Found Label automatically added.
    5.3. Image(s) of the Lost/Found item is added. (optional User may addd no Images)
    5.4. User adds a description.
    5.5. User created the post

1. **Name:** CreateTradingPost

2. **Participating Actor:** inherits from Create Post
3. **Entry Condition:** User selects trading label
4. **Exit Condition:** inherits from Create Post
5. **Flow of Events:**
    5.1. User selects a trading label.
    5.2. User selects one of the Trading labels among Exchange Section, Donation, 2nd hand, Borrow&Lend labels.
    5.3. User gives his IBAN.
    5.4. User adds an image(s) of the item that he/she wants to trade. (optional User may add no Images)
    5.5. User tags other users.(optional User may tag no user)
    5.6. User adds a description.
    5.7. User created the post.

1. **Name:** AttachFile
2. **Participating Actor:** User
3. **Entry Condition:** User adds image while creating post
4. **Exit Condition:** Image is added
5. **Flow of Events:**
    5.1. User selects the image he/she wants to add.
    5.2. Selected Images are uploaded.
    5.3. Image is added.

1. **Name:** TagUser
2. **Participating Actor:**
3. **Entry Condition:** User selects other users to tag while creating post
4. **Exit Condition:** Other user is tagged
5. **Flow of Events:**
    5.1. User is selects another user he/she wants to tag among unblocked users.
    5.2. User tags the user to post.
    5.3. Selected user is tagged.

Post Searching

1. **Name:** SearchPost
2. **Participating Actor:** User
3. **Entry Condition:** User opens the search bar
4. **Exit Condition:** User enters the conditions
5. **Flow of Events:**
    5.1. User opens the search bar
    5.2. User searches the post with keywords
    5.3. User receives the listed results

1. **Name:** SearchByLabel
2. **Participating Actor:** Inherits from Search Post
3. **Entry Condition:** Inherits from Search Post
4. **Exit Condition:** Inherits from Search Post
5. **Flow of Events:**

5.1. User opens the search bar
5.2. User searches the post by their label
5.3. User receives the listed results

1. **Name:** SearchByUserName
2. **Participating Actor:** Inherits from Search Post
3. **Entry Condition:** Inherits from Search Post
4. **Exit Condition:** Inherits from Search Post
5. **Flow of Events:**
   5.1. User opens the search bar
   5.2. User searches the post with keywords
   5.3. User receives the listed results

Comment Interaction

1. **Name:** InteractWithComment
2. **Participating Actor:** User
3. **Entry Condition:** User chooses a comment
4. **Exit Condition:** User leaves the comment
5. **Flow of Events:**
   5.1. User chooses a comment
   5.2. User engages with the comment
   5.3. User leaves the comment

1. **Name:** ReplyComment
2. **Participating Actor:** User
3. **Entry Condition:** User chooses a comment
4. **Exit Condition:** User leaves the comment
5. **Flow of Events:**
   5.1. User chooses a comment
   5.2. User replies to the comment with a message
   5.3. User leaves the comment

1. **Name:** LikeComment
2. **Participating Actor:** User
3. **Entry Condition:** User chooses a comment
4. **Exit Condition:** User leaves the comment
5. **Flow of Events:**
   5.1. User chooses a comment
   5.2. User likes the comment
   5.3. User leaves the comment

1. **Name:** Report
2. **Participating Actor:** User
3. **Entry Condition:** User chooses a comment
4. **Exit Condition:** User leaves the comment
5. **Flow of Events:**
   5.1. User chooses a comment

5.2. User reports the comment
5.3. User enters an explanation text about the report
5.4. User leaves the comment

Post Archiving

1. **Name:** SeePostHistory
2. **Participating Actor:** User
3. **Entry Condition:** User enters the post history tab
4. **Exit Condition:** User closes the tab
5. **Flow of Events:**
   5.1. User enters the post history tab
   5.2. User sees the past posts of themselves as a list

1. **Name:** SeeStarredPost
2. **Participating Actor:** User
3. **Entry Condition:** User enters the starred post tab
4. **Exit Condition:** User closes the tab
5. **Flow of Events:**
   5.1. User enters the starred post tab
   5.2. User sees the starred post list

1. **Name:** PostisAlreadyDeleted
2. **Participating Actor:** extends from See Post History and See Starred Post
3. **Entry Condition:** extends from See Post History and See Starred Post
4. **Exit Condition:** User is textually warn that the post has been deleted
5. **Flow of Events:**
   5.1. User enters the starred post tab
   5.2. The deleted post is not shown to the user

Forum Label Management Package

1. **Name:** AddForumLabel
2. **Participating Actor:** User
3. **Entry Condition:** User creates a post in forum tab
4. **Exit Condition:** User creates the post
5. **Flow of Events:**
   5.1. User creates a post in forum tab
   5.2. User chooses a label for the forum tab
   5.3. Post takes the label

1. **Name:** AddBasicPostLabel
2. **Participating Actor:** Inherits from Add Forum Label
3. **Entry Condition:** Inherits from Add Forum Label
4. **Exit Condition:** Inherits from Add Forum Label
5. **Flow of Events:**
   5.1. User creates a post in forum tab
   5.2. User chooses the basic post label

5.3. Post takes the label

1. **Name:** AddQuestionLabel
2. **Participating Actor:** Inherits from Add Forum Label
3. **Entry Condition:** Inherits from Add Forum Label
4. **Exit Condition:** Inherits from Add Forum Label
5. **Flow of Events:**
   5.1. User creates a post in forum tab
   5.2. User chooses the question label
   5.3. Post takes the label

1. **Name:** AddAnnouncementLabel
2. **Participating Actor:** Inherits from Add Forum Label
3. **Entry Condition:** Inherits from Add Forum Label
4. **Exit Condition:** Inherits from Add Forum Label
5. **Flow of Events:**
   5.1. User creates a post in forum tab
   5.2. User chooses the announcement label
   5.3. Post takes the label

Non-Forum Label Management Package

1. **Name:** AddTradingLabel
2. **Participating Actor:** User
3. **Entry Condition:** User creates a post in trading tab
4. **Exit Condition:** User creates the post
5. **Flow of Events:**
   5.1. User creates a post in trading tab
   5.2. User chooses the trading label
   5.3. Post takes the label

1. **Name:** AddLost&FoundLabel
2. **Participating Actor:** User
3. **Entry Condition:** User creates a post in lost&found tab
4. **Exit Condition:** User creates the post
5. **Flow of Events:**
   5.1. User creates a post in forum tab
   5.2. User chooses the Lost&Found label
   5.3. Post takes the label

1. **Name:** AddExchangeSectionsLabel
2. **Participating Actor:** inherits from Add Trading Label
3. **Entry Condition:** inherits from Add Trading Label
4. **Exit Condition:** inherits from Add Trading Label
5. **Flow of Events:**
   5.1. User creates a post in trading tab
   5.2. User chooses the exchange sections label
   5.3. Post takes the label

1. **Name:** AddDonationLabel
2. **Participating Actor:** Inherits from Add Trading Label
3. **Entry Condition:** Inherits from Add Trading Label
4. **Exit Condition:** Inherits from Add Trading Label
5. **Flow of Events:**
    5.1. User creates a post in trading tab
    5.2. User chooses the donation label
    5.3. Post takes the label

1. **Name:** Add2ndHandLabel
2. **Participating Actor:** Inherits from Add Trading Label
3. **Entry Condition:** Inherits from Add Trading Label
4. **Exit Condition:** Inherits from Add Trading Label
5. **Flow of Events:**
    5.1. User creates a post in trading tab
    5.2. User chooses the 2nd hand label
    5.3. Post takes the label

1. **Name:** AddBorrow&LendLabel
2. **Participating Actor:** inherits from Add Trading Label
3. **Entry Condition:** inherits from Add Trading Label
4. **Exit Condition:** inherits from Add Trading Label
5. **Flow of Events:**
    5.1. User creates a post in trading tab
    5.2. User chooses the Borrow&Lend label
    5.3. Post takes the label

Transaction Management

1. **Name:** ApproveTransaction
2. **Participating Actor:** User, 3rd Party Bank Account
3. **Entry Condition:** Item delivered to User.
4. **Exit Condition:** User
5. **Flow of Events:**
    5.1. Items are delivered to User.
    5.2. Seller approved his/her delivery.
    5.3. User approves the transaction.
    5.4. Money is transferred to the seller from a 3rd Party Bank Account.

1. **Name:** ApproveTransactionAsTaker
2. **Participating Actor:** User, 3rd Party Bank Account
3. **Entry Condition:** Item delivered to User.
4. **Exit Condition:**
    4.1. Purchase is approved, money is transferred to the seller by a 3rd Party Bank Account.
    4.2. Purchase is not approved. Transaction information sent to admin. Money is refunded by 3rd Party Bank Account

5. **Flow of Events:**
    5.1. Items are delivered to User.
    5.2. Seller approved his/her delivery.
    5.3. User approves the transaction.
    5.4. Money is transferred to the seller from a 3rd Party Bank Account.

1. **Name:** ApproveTransactionAsGiver
2. **Participating Actor:** User
3. **Entry Condition:** User gives the card transactions.
4. **Exit Condition:**
    4.1. Purchase is approved.
    4.2. Purchase is not approved. Transaction by 3rd Party Bank Account.
5. **Flow of Events:**
    5.1. User gets notified that one of his items is sold.
    5.2. User chats with the buyer user for more information.
    5.3. User delivers the item to the buyer via specified methods.
    5.4. User approves that he/she delivered the item.

1. **Name:** FetchTransaction
2. **Participating Actor:** Initiated by System, communicates with 3rd Party Bank Account
3. **Entry Condition:** User gives the card transactions.
4. **Exit Condition:**
    4.1. Purchase is approved.
    4.2. Purchase is not approved. Transaction refunded.
5. **Flow of Events:**
    5.1. User buys the item.
    5.2. Money is transferred to a 3rd Party Bank Account.
    5.3. When the transaction is approved by the buyer, money is transferred to the seller.

1. **Name:** Refund
2. **Participating Actor:** 3rd Party Bank Account
3. **Entry Condition:** Transaction is not approved.
4. **Exit Condition:** Transaction is refunded by 3rd Party Bank Account.
5. **Flow of Events:**
    5.1. User buys the item.
    5.2. Money is transferred to a third party account.
    5.3. When the transaction is approved by the buyer, money is transferred to the seller by a 3rd Party Bank Account.
6. **Special/Quality Requirements:** 3rd Party Bank Account needs to refund money to the user in 3 days at max.

1. **Name:** HoldItem
2. **Participating Actor:**
3. **Entry Condition:** User initiated buy action
4. **Exit Condition:**
    4.1. User buys the item

4.2. User cancels buying

5. **Flow of Events:**
   5.1. User enters the buy use case.
   5.2. Items become in the state of not being bought by other users.

1. **Name:** MissedOut
2. **Participating Actor:**
3. **Entry Condition:** Transaction is held by another user.
4. **Exit Condition:** Buying attempt failed.
5. **Flow of Events:**
   5.1. User attempts to buy an item.
   5.2. Other users are already in the buying state.

Post Interaction

1. **Name:** InteractWithPost
2. **Participating Actor:** User
3. **Entry Condition:** User sees a post.
4. **Exit Condition:** User changed post statistics.
5. **Flow of Events:**
   5.1. User sees a post.
   5.2. Users do actions among Upvote/Downvote, Comment to, or Star the post.
   5.3. Users interact with posts and some of the post information is changed.

1. **Name:** Comment
2. **Participating Actor:** User
3. **Entry Condition:** User attempts to interact with post
4. **Exit Condition:** User made a comment to a post.
5. **Flow of Events:**
   5.1. User attempts to interact with the post.
   5.2. User writes a comment.
   5.3. User commented on a post.

1. **Name:** Up/Downvote
2. **Participating Actor:** User
3. **Entry Condition:** User attempts to interact with post
4. **Exit Condition:** User made a comment to a post.
5. **Flow of Events:**
   5.1. User attempts to interact with the post.
   5.2. User writes a comment.
   5.3. User commented on a post.

1. **Name:** StarPost
2. **Participating Actor:** User
3. **Entry Condition:** User attempts to interact with post
4. **Exit Condition:** User starred a post.

5. **Flow of Events:**
    5.1. User attempts to interact with the post.
    5.2. User starts the post.

1. **Name:** PostCreatorHasAlreadyBlockedYou
2. **Participating Actor:** User
3. **Entry Condition:** User attempts to interact with post
4. **Exit Condition:** User cannot interact with post.
5. **Flow of Events:**
    5.1. User attempts to interact with the post.
    5.2. Post creator has already blocked you.
    5.3. User can not interact with the post.

Post Manipulation Package

1. **Name:** DeletePost
2. **Participating Actor:** User
3. **Entry Condition:** User is viewing a post created by them
4. **Exit Condition:** User deletes the post
5. **Flow of Events:**
    5.1. User requests to delete the post
    5.2. System marks the post as deleted and invisible to others

1. **Name:** NotFound
2. **Participating Actor:** User
3. **Entry Condition:** The user does initiate search operation
4. **Exit Condition:** The system returns search results
5. **Flow of Events:** User could not find searched post

1. **Name:** UpdatePost
2. **Participating Actor:** User
3. **Entry Condition:** User requests a change in their post.
4. **Exit Condition:** User finishes interacting with relevant functionality
5. **Flow of Events:**
    5.1. User makes the preferred changes to the post.
    5.2. User confirms the changes
    5.3. System updates the changed post

1. **Name:** FlagAsResolved
2. **Participating Actor:** User
3. **Entry Condition:** Post is resolved
4. **Exit Condition:** System marks the post as resolved
5. **Flow of Events:**
    5.1. User flags the post as “borrowed” or “sold”
    5.2. System adds the mark
    5.3. System updates the post as resolved

1. **Name:** RemoveBorrowedFlag
2. **Participating Actor:** User

3. **Entry Condition:** User requests to remove the “borrowed” flag
4. **Exit Condition:** System removes the “borrowed” flag from the post
5. **Flow of Events:**
    5.1. User confirms to remove the “borrowed” flag from the post
    5.2. System removes the “borrowed” flag and updates the post accordingly

1. **Name:** FlagAsSold
2. **Participating Actor:** User
3. **Entry Condition:** User requests to flag the post as “sold”
4. **Exit Condition:** System flags the post as “sold”
5. **Flow of Events:**
    5.1. User confirms to flag the post as “sold”
    5.2. System flags the post as “sold” and updates the post accordingly

1. **Name:** FlagAsBorrowed
2. **Participating Actor:** User
3. **Entry Condition:** User requests to flag the post as “borrowed”
4. **Exit Condition:** System flags the post as “borrowed”
5. **Flow of Events:**
    5.1. User confirms to flag the post as “borrowed”
    5.2. System flags the post as “borrowed” and updates the post accordingly

Interact With Trade/Borrow Post

1. **Name:** ContactAdmin
2. **Participating Actor:** User
3. **Entry Condition:** User requests to contact with an admin
4. **Exit Condition:** System sends the contact request to admin
5. **Flow of Events:**
    5.1. User types the necessary messages
    5.2. User confirms the contact request
    5.3. System saves the messages and notifies the admin

1. **Name:** CancelBuying
2. **Participating Actor:** User
3. **Entry Condition:** User changes his/her mind.
4. **Exit Condition:** User cancels buying
5. **Flow of Events:**
    5.1. User changes his/her mind.
    5.2. User cancels the purchase.

1. **Name:** ChooseBorrowingPeriod
2. **Participating Actor:** User
3. **Entry Condition:** User chooses to borrow an item
4. **Exit Condition:** Preferences are saved
5. **Flow of Events:**
    5.1. User enters the time interval that they want to borrow the item
    5.2. System saves the preferences

1. **Name:** BuyItem
2. **Participating Actor:** User
3. **Entry Condition:** User requests to buy the item
4. **Exit Condition:** System notifies the seller of the buy
5. **Flow of Events:**
    5.1. User makes the payment
    5.2. User specifies delivery method among on Campus, or Cargo Delivery.
    5.3. User confirms the purchase
    5.4. System saves the payment
    5.5. System notifies the seller

1. **Name:** TakeDonation
2. **Participating Actor:** User
3. **Entry Condition:** Uses chooses to take donation
4. **Exit Condition:** The book donation is successfully completed, and the book is given to the recipient.
5. **Flow of Events:** User receives donation from other user

1. **Name:** BorrowItem
2. **Participating Actor:** User
3. **Entry Condition:** User requests to borrow the item on a lend post
4. **Exit Condition:** System notifies the lender of the borrowing request
5. **Flow of Events:**
    5.1. User chooses a borrowing period
    5.2. User confirms the entered information
    5.3. System saves the preferences
    5.4. System notifies the lender of the borrowing request

Non-Functional Requirements

Usability: The web app should have, at most, a 5-click path to a menu to ensure ease of use.
Performance: The load time of any page should be within 5 to 10 seconds at most.
Reliability: The web app should be available for at least 1000 users, with a downtime of 5 minutes at most.
Scalability: The web app should be able to handle 250 new users, listings with photos and forum posts per week without performance degradation.
Privacy: Sensitive user information, such as passwords and bank account credentials, should be stored encrypted. When a user does not respond in 5 minutes, the authentication token must expire.
Compatibility: The web app should be compatible with October 2023 versions of modern web browsers such as Google Chrome, Firefox, Safari, and Opera; additionally it should render on the current versions of iOS, iPadOS, and Android.
Maintainability: The web app should be implemented with packages that don't exceed 200 lines per file. Additionally every method must be documented.
Response Time: A change should be able to occur at most 5 seconds after a click on a relevant item.
Adaptability: UI must support both 1440x720 sizes and screen sizes below the height of 500px and width of 400px.
Robustness: The web app must handle unexpected inputs, exceptions, and errors without causing internal crashes for the users. Additionally, all transactions, especially buy sell transactions can be rolled back in case of a failure or exception.
Throughput: The webpage must withstand 100 concurrent API requests that make Create, Read, Update, Delete, Operations to the database.

Tech Stack

Java Spring Framework: Java with Spring framework will interact with both frontend and database. When reading data from the database, objects will be converted to entity objects.
PostgreSQL: PostgreSQL will be used because it is a relational database that provides ACID. It is suitable for transactions.
Docker: Docker will be used for running the database along with the Java Spring Framework. With that, we don't need to synchronize every package's version in our application. One command and it will run
ReactJS: React will be used for the front end of the application. It will get the rest API in JSON format and decorate the data with HTML and CSS with rules and logic.
Tailwind CSS: It is a CSS framework that has generic and very extensive CSS designs.