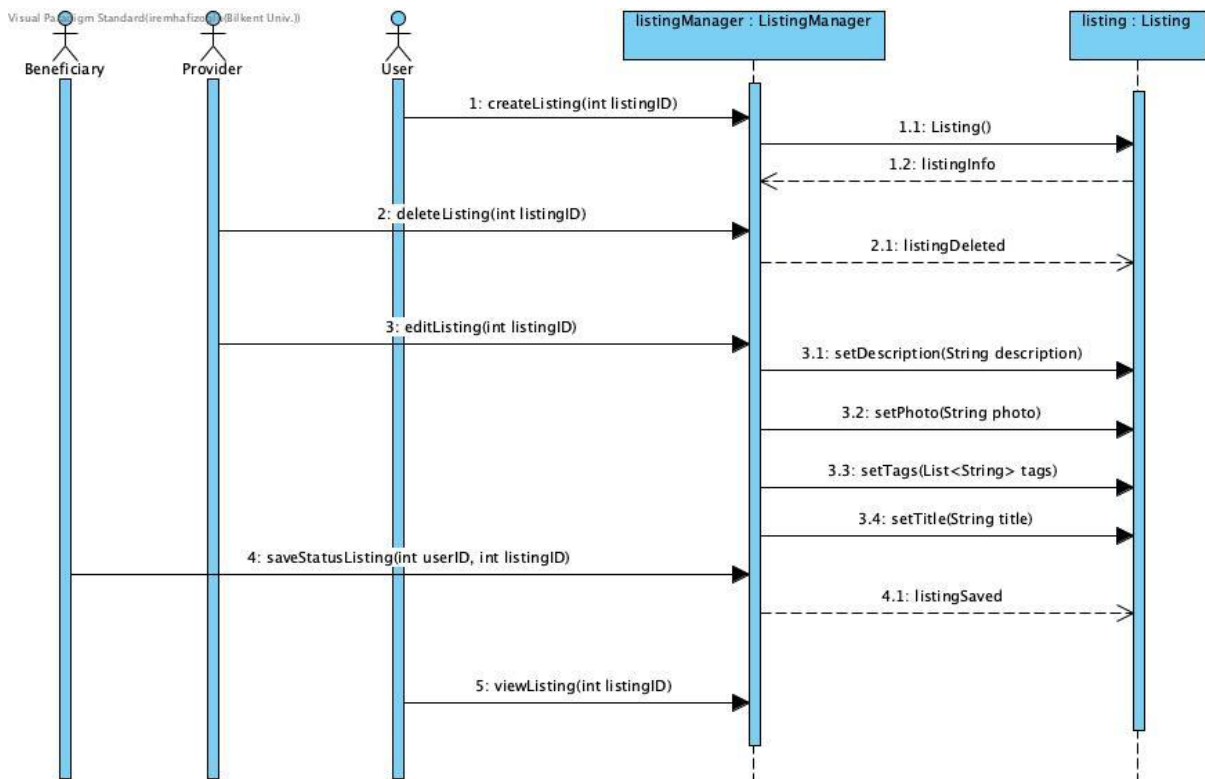# 1. Sequence Diagrams
1.1. General User Diagram

Users can create a new listing from the main page. They can see all the pieces of information about their listing after they are done with it. Whenever they need to change information about the listing they can go to the edit page and change its attributes such as description, photo, tags, and title. Users can delete their listings if they change their mind or whenever it serves its purpose. Users can interact with others' listings by clicking on them or saving them to look at them later.

1.2. Admin Diagram
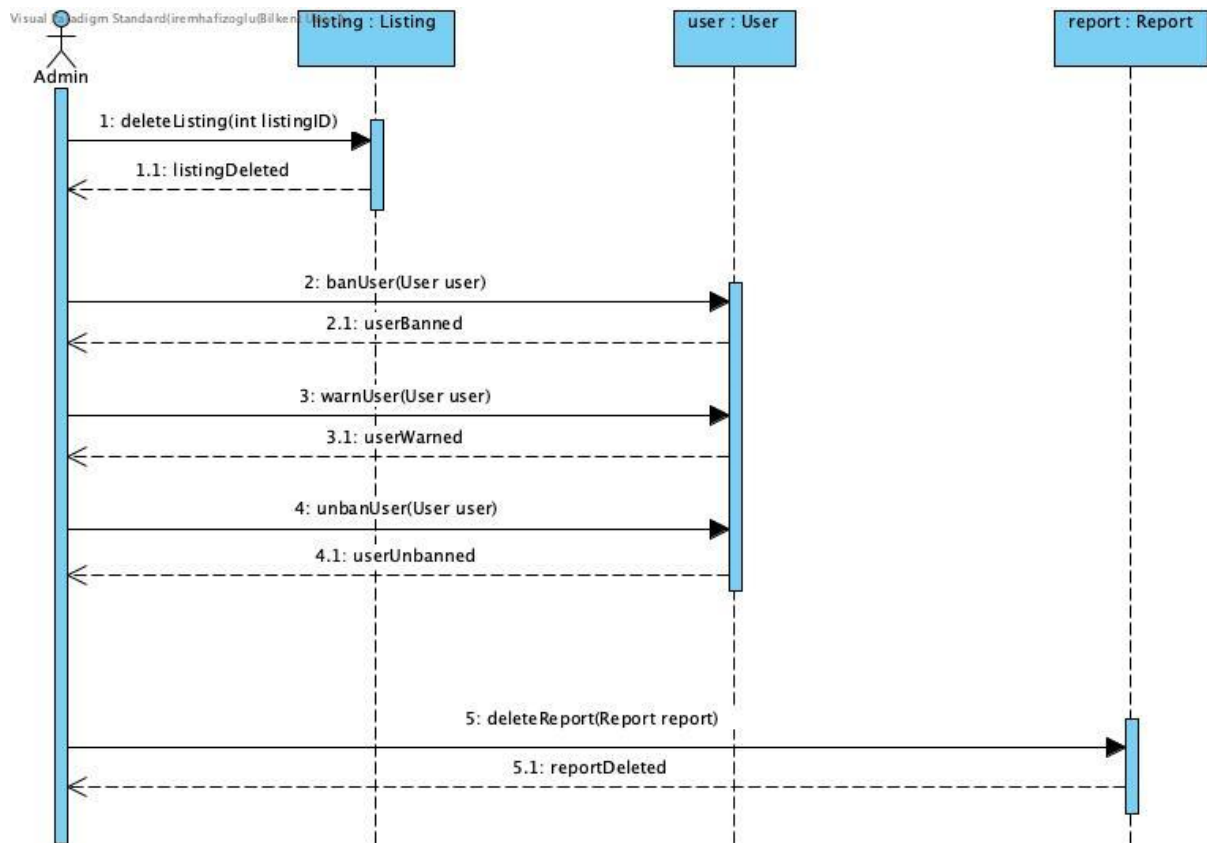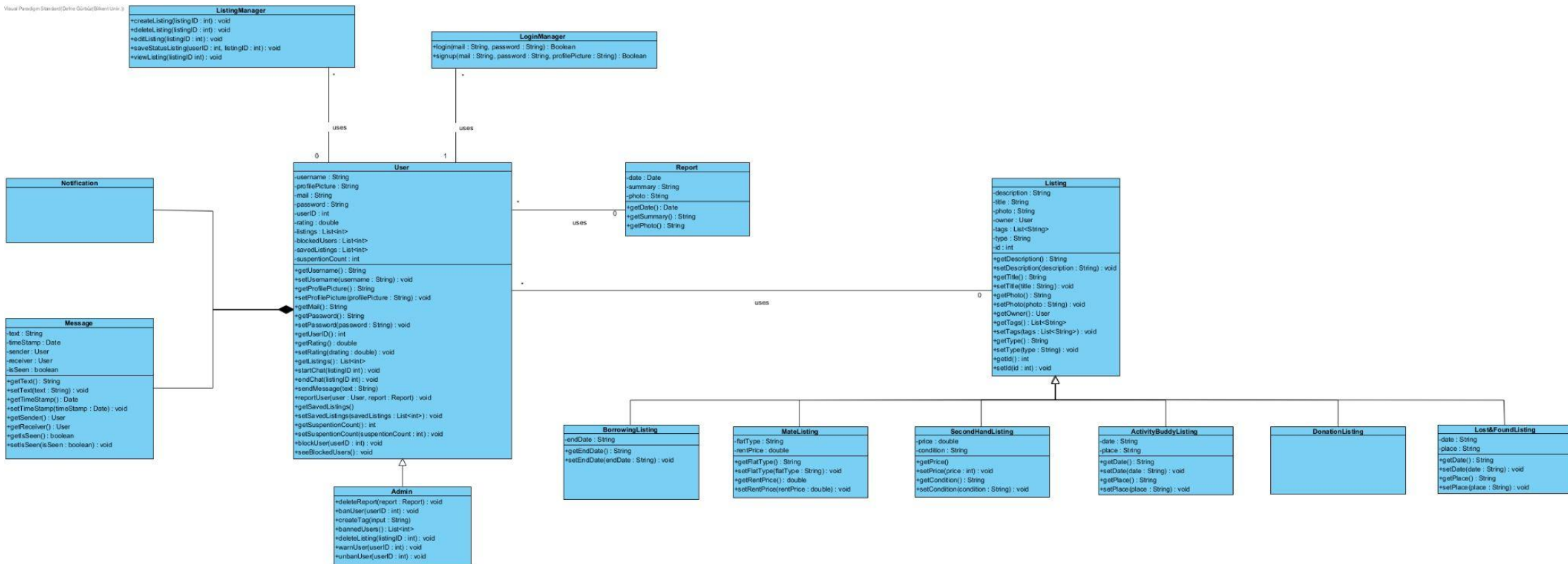

Admin can delete a listing if the listing has inappropriate content. Admin can warn users of their reported actions if necessary. If a user gets warned 3 times, admin bans a user. If a user gets banned, they cannot create an account with that email again. Admin can unban a user if there is a misunderstanding or an unusual situation. Admin can delete the viewed reports.

2. State Diagrams

3. Class Diagram

Visual Paradigm Standard(Defne Gürbüz(Bilkent Univ.))

ListingManager
+createListing(listingID : int) : void
+deleteListing(listingID : int) : void
+editListing(listingID : int) : void
+saveStatusListing(userID : int, listingID : int) : void
+viewListing(listingID int) : void

LoginManager
+login(mail : String, password : String) : Boolean
+signup(mail : String, password : String, profilePicture : String) : Boolean

uses

uses

0

1

Notification

User
-username : String
-profilePicture : String
-mail : String
-password : String
-userID : int
-rating : double
-listings : List<int>
-blockedUsers : List<int>
-savedListings : List<int>
-suspentionCount : int
+getUsername() : String
+setUsername(username : String) : void
+getProfilePicture() : String
+setProfilePicture(profilePicture : String) : void
+getMail() : String
+getPassword() : String
+setPassword(password : String) : void
+getUserID() : int
+getRating() : double
+setRating(rating : double) : void
+getListings() : List<int>
+startChat(listingID int) : void
+endChat(listingID int) : void
+sendMessage(text : String)
+reportUser(user : User, report : Report) : void
+getSavedListings()
+setSavedListings(savedListings : List<int>) : void
+getSuspentionCount() : int
+setSuspentionCount(suspentionCount : int) : void
+blockUser(userID : int) : void
+seeBlockedUsers() : void

Report
-date : Date
-summary : String
-photo : String
+getDate() : Date
+getSummary() : String
+getPhoto() : String

uses

Listing
-description : String
-title : String
-photo : String
-owner : User
-tags : List<String>
-type : String
-id : int
+getDescription() : String
+setDescription(description : String) : void
+getTitle() : String
+setTitle(title : String) : void
+getPhoto() : String
+setPhoto(photo : String) : void
+getOwner() : User
+getTags() : List<String>
+setTags(tags : List<String>) : void
+getType() : String
+setType(type : String) : void
+getId() : int
+setId(id : int) : void

uses

0

Message
-text : String
-timeStamp : Date
-sender : User
-receiver : User
-isSeen : boolean
+getText() : String
+setText(text : String) : void
+getTimeStamp() : Date
+setTimeStamp(timeStamp : Date) : void
+getSender() : User
+getReceiver() : User
+getIsSeen() : boolean
+setIsSeen(isSeen : boolean) : void

Admin
+deleteReport(report : Report) : void
+banUser(userID : int) : void
+createTag(input : String)
+bannedUsers() : List<int>
+deleteListing(listingID : int) : void
+warnUser(userID : int) : void
+unbanUser(userID : int) : void

BorrowingListing
-endDate : String
+getEndDate() : String
+setEndDate(endDate : String) : void

MateListing
-flatType : String
-rentPrice : double
+getFlatType() : String
+setFlatType(flatType : String) : void
+getRentPrice() : double
+setRentPrice(rentPrice : double) : void

SecondHandListing
-price : double
-condition : String
+getPrice()
+setPrice(price : int) : void
+getCondition() : String
+setCondition(condition : String) : void

ActivityBuddyListing
-date : String
-place : String
+getDate() : String
+setDate(date : String) : void
+getPlace() : String
+setPlace(place : String) : void

DonationListing

Lost&FoundListing
-date : String
-place : String
+getDate() : String
+setDate(date : String) : void
+getPlace() : String
+setPlace(place : String) : void

User: This class contains standard information of all users such as their username, Bilkent University e-mail addresses, profile pictures, and passwords.

Report: Reports are created with a summary of the reported event and a photo. Also, every report has a creation date.

Message: Message class will store the properties of a message such as its text, sender, receiver, isSeen, and timeStamp.

Admin: Admin can warn users that are being reported three times before banning them from. They can delete the reports they already reviewed. Delete listings if necessary or create some tags for users to use during the creation of the lists. They can also unban users later if necessary.

LoginManager: Users see the login page before logging in to their accounts. If they enter their mails and password correctly they log in to their account.

ListingManager: With this class, users can create a listing, delete a specific listing they created before, edit the listing as they like, view them by clicking on them and they can save other users' listings for later to look at.

Listing: Listing is an abstract class. It contains the common properties of all Listings such as their description, title, photo, owner, tags, type, and ID.

BorrowingListing: BorrowingListing is a child class of Abstract Listing Class. This class has an endDate property additional to its parent class. The user enters information about the listing they want to create.

MateListing: MateListing is a child class of Abstract Listing Class. This class has flatType and rentPrice properties additional to its parent class.
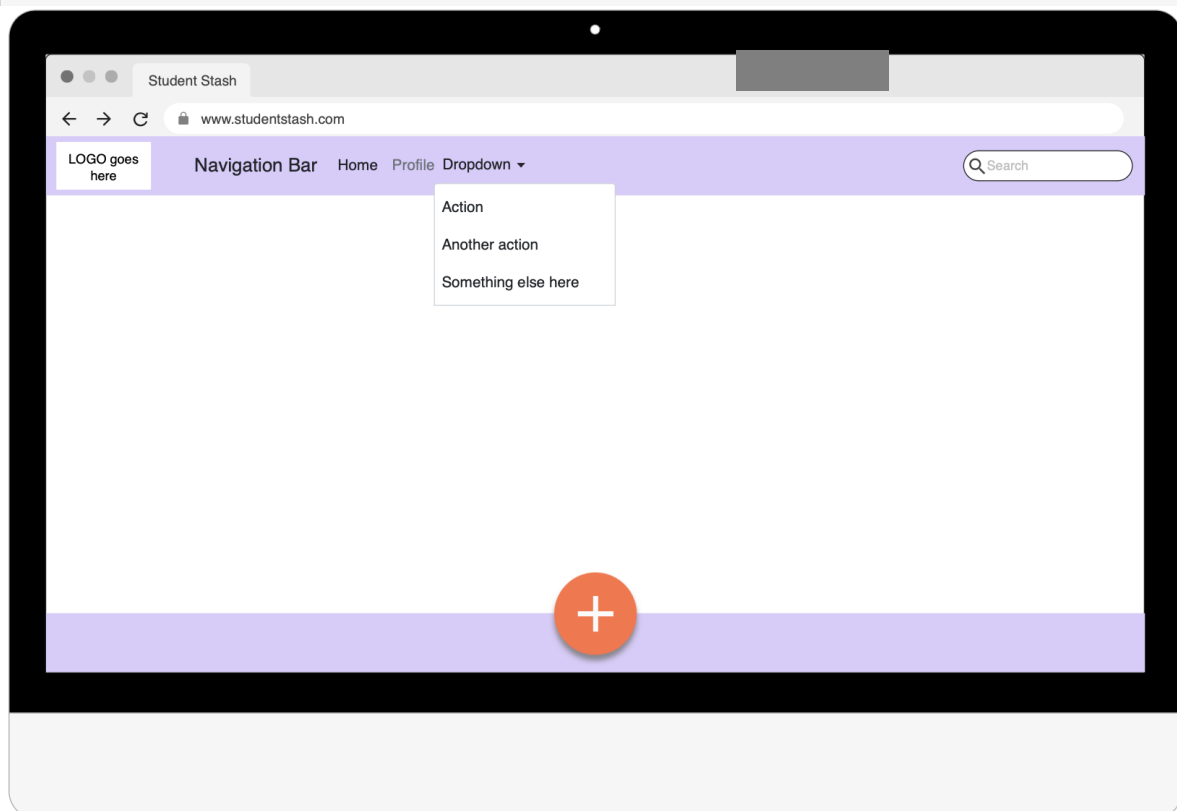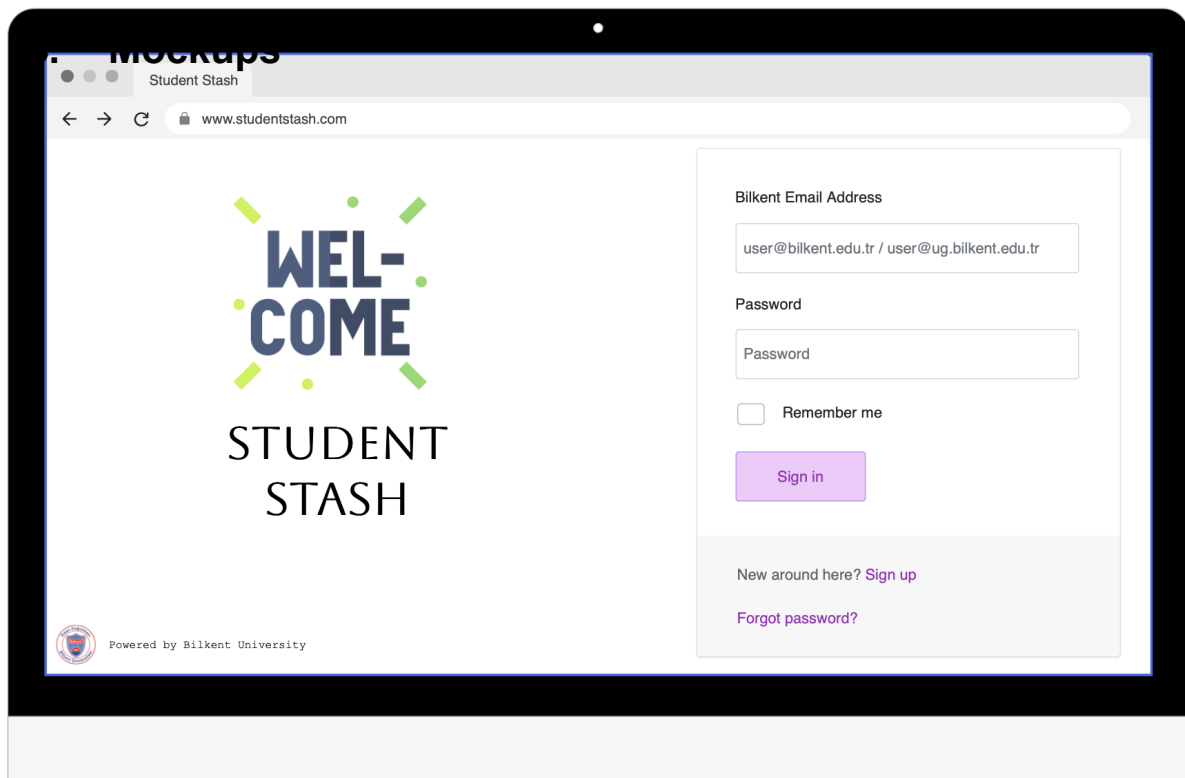
SecondHandListing: SecondHandListing is a child class of Abstract Listing Class. This class has price and condition properties additional to its parent class.
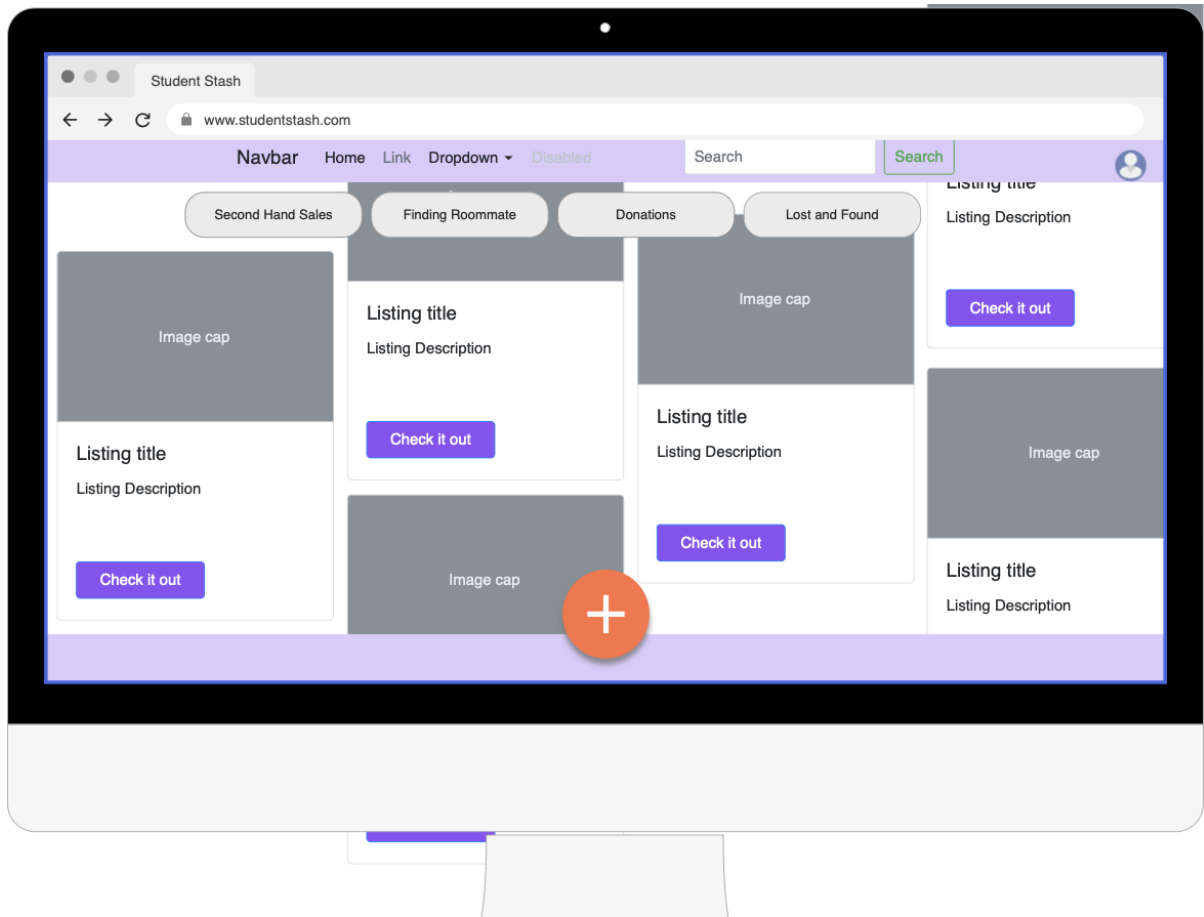
ActivityBuddyListing: ActivityBuddyListing is a child class of Abstract Listing Class. This class has date and place properties additional to its parent class.
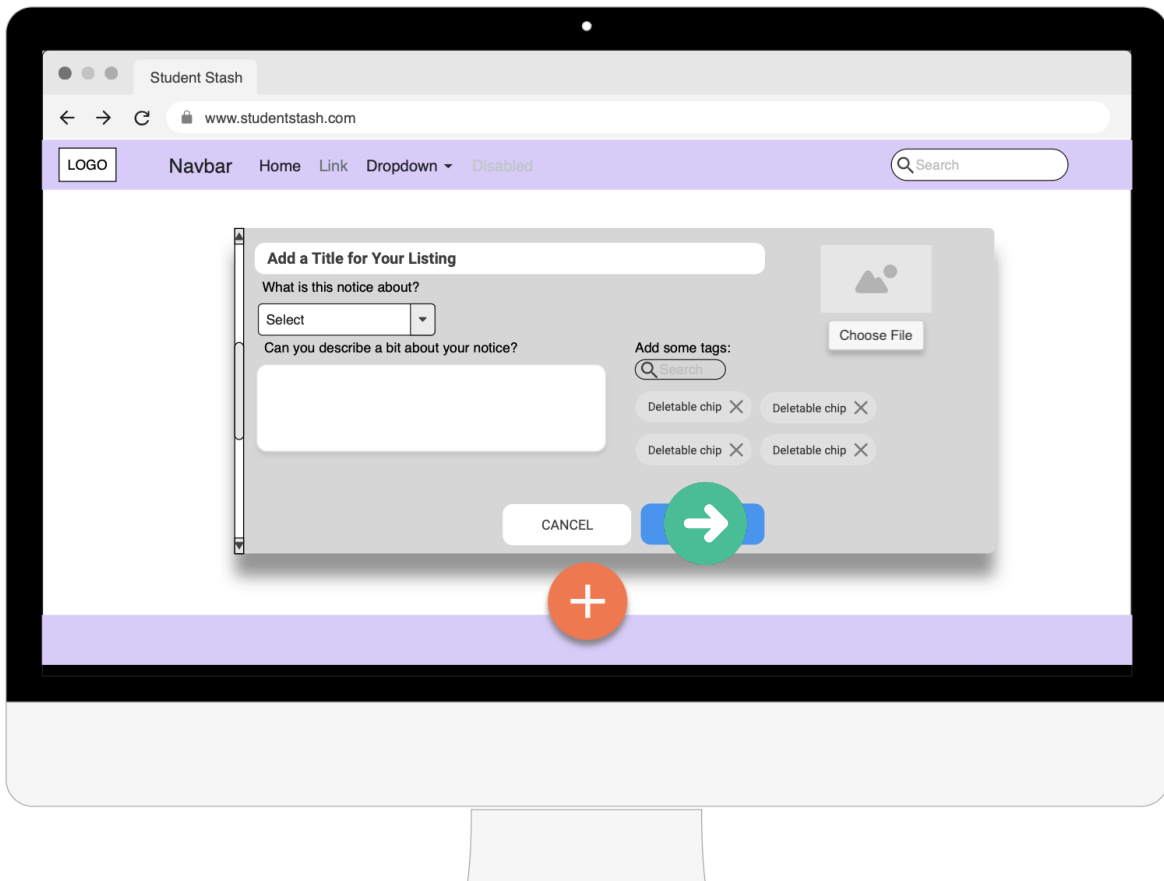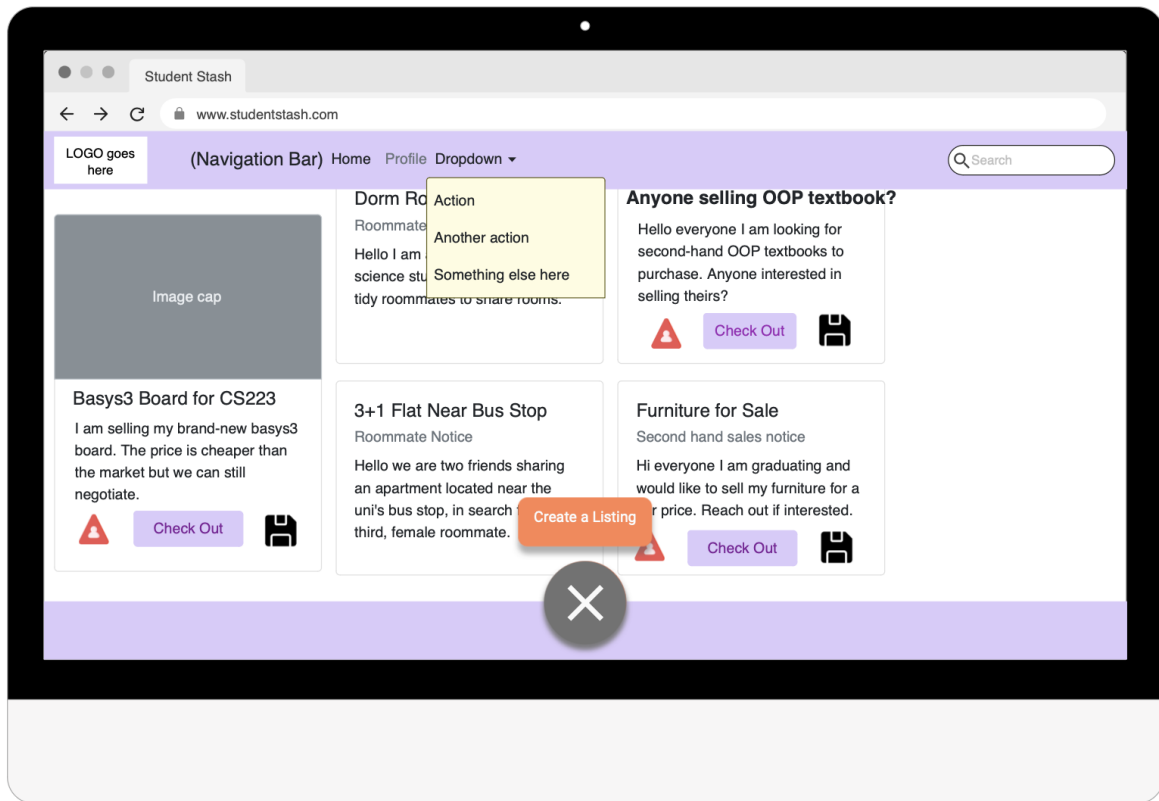
DonationListing: DonationListing is a child class of Abstract Listing Class.

Lost&FoundListing: Lost&FoundListing is a child class of Abstract Listing Class. This class has date and place properties additional to its parent class.

4. MockUps

www.studentstash.com

LOGO goes here

(Navigation Bar) Home Profile Dropdown ▾

Search

Action

Another action

Something else here

Dorm Ro

Roommate

Hello I am
science stu
tidy roommates to share rooms.

Image cap

Anyone selling OOP textbook?

Hello everyone I am looking for second-hand OOP textbooks to purchase. Anyone interested in selling theirs?

⚠ Check Out 💾

Basys3 Board for CS223

I am selling my brand-new basys3 board. The price is cheaper than the market but we can still negotiate.

⚠ Check Out 💾

3+1 Flat Near Bus Stop

Roommate Notice

Hello we are two friends sharing an apartment located near the uni's bus stop, in search
third, female roommate.

Create a Listing

Furniture for Sale

Second hand sales notice

Hi everyone I am graduating and would like to sell my furniture for a
price. Reach out if interested.

⚠ Check Out 💾

✕

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www.studentstash.com

LOGO

Navbar Home Link Dropdown ▾ Disabled

Search

Add a Title for Your Listing

What is this notice about?

Select ▾

Can you describe a bit about your notice?

Choose File

Add some tags:

🔍 Search

Deletable chip ✕   Deletable chip ✕

Deletable chip ✕   Deletable chip ✕

CANCEL   →

➕

Second hand sales listing

Student Stash

www.studentstash.com

Navbar   Home   Link   Dropdown ▾   Disabled   [Search]   Search

Select Status of Usage: [Select ▾]

Price: [   ]   TL

CANCEL   Create

Second hand sales listing

Student Stash

www.studentstash.com
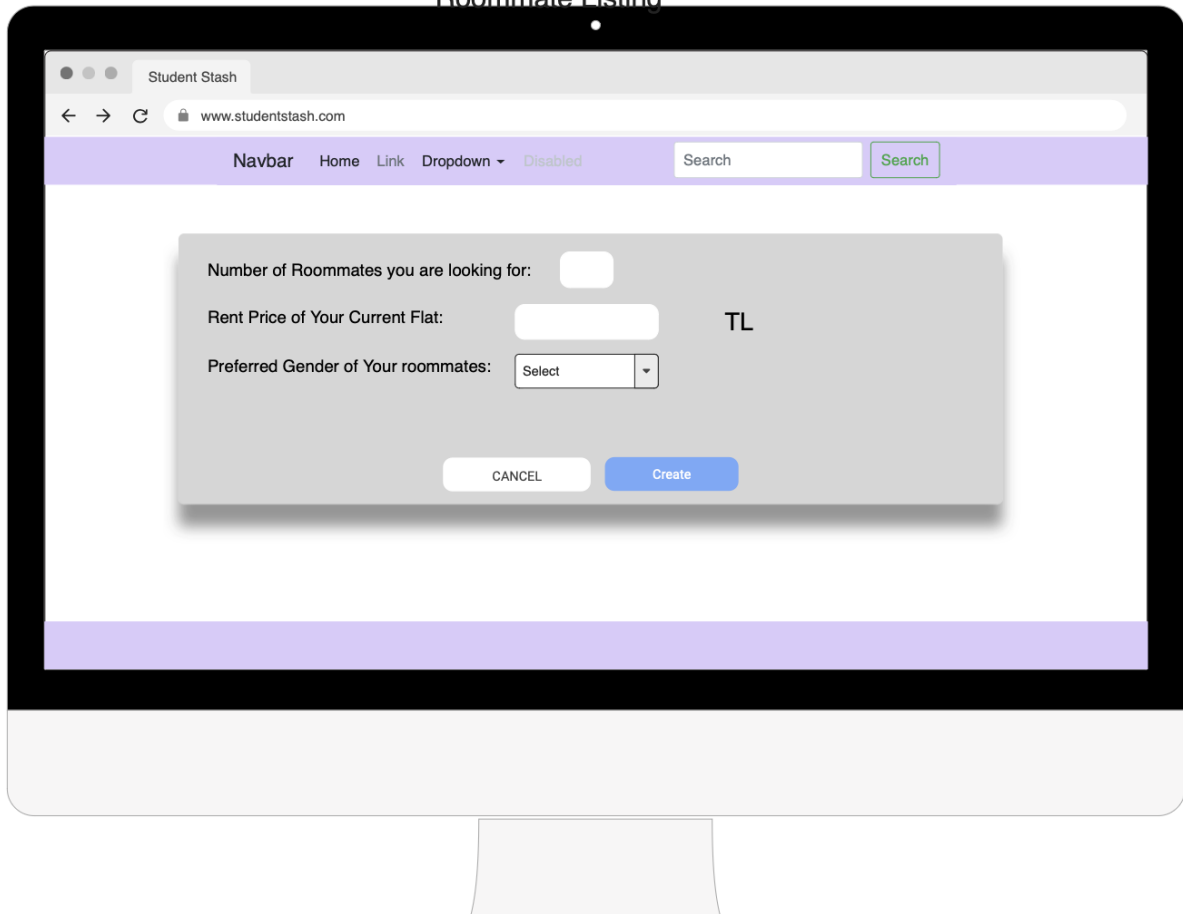
Navbar   Home   Link   Dropdown ▾   Disabled   [Search]   Search

Select Status of Usage: [Select ▾]

Price: [   ]   TL

Not Used and New
New
Barely Used
Used a lot

CANCEL   Create

Student Stash

www.studentstash.com

Navbar   Home   Link   Dropdown ▾   Disabled

Search   Search

Number of Roommates you are looking for:

Rent Price of Your Current Flat: TL

Preferred Gender of Your roommates: Select ▾

CANCEL   Create

Student Stash

www.studentstash.com

Navbar   Home   Link   Dropdown ▾   Disabled   Search   Search

Number of Roommates you are looking for:

Rent Price of Your Current Flat: TL

Preferred Gender of Your roommates: Select   ▾

Female

Male

CAN   Non-Binary   Create

Type in custom

Student Stash

www.studentstash.com
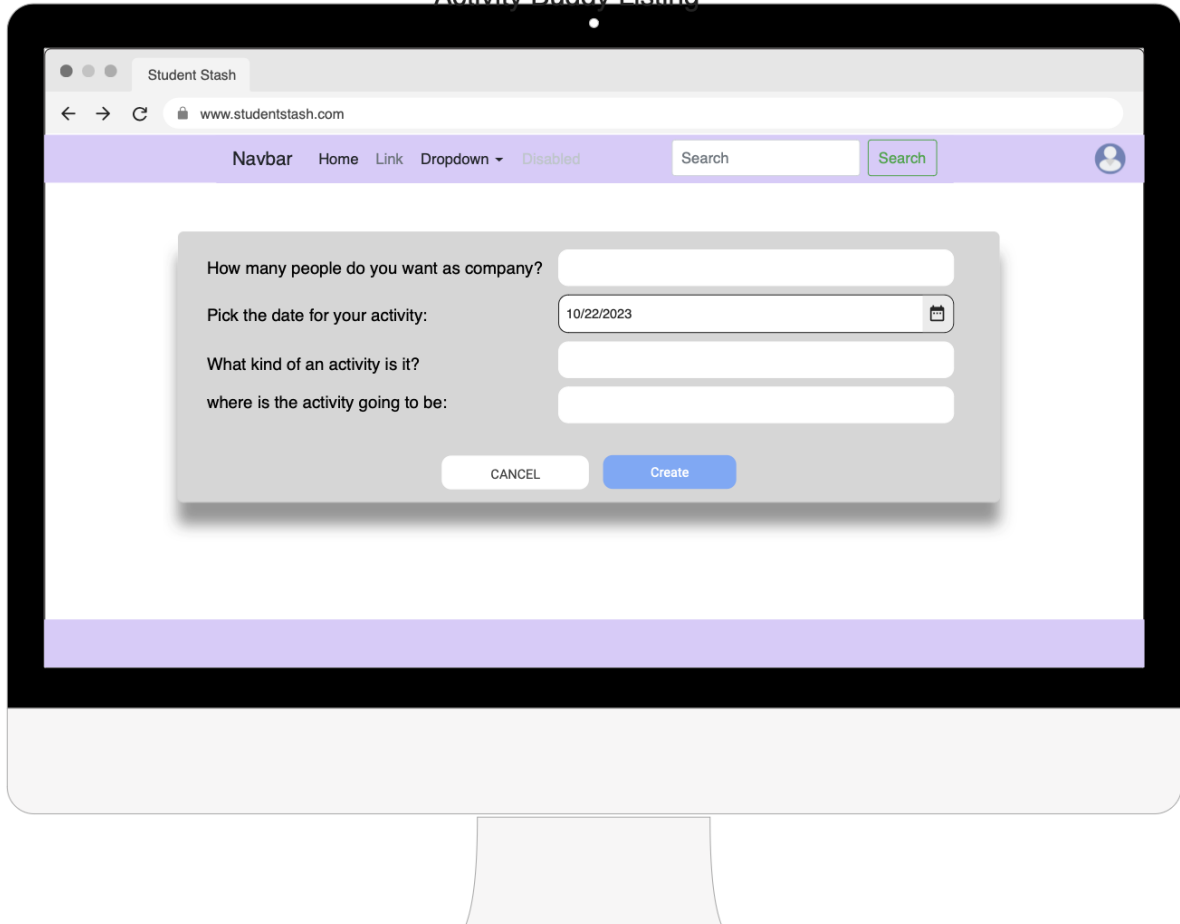
Navbar   Home   Link   Dropdown ▾   Disabled   Search   Search

Where do you think you lost/found the item?

Enter the date when you lost/found the item: 10/22/2023   📅

CANCEL   Create

Student Stash

www.studentstash.com

Navbar   Home   Link   Dropdown ▾   Disabled   Search   Search
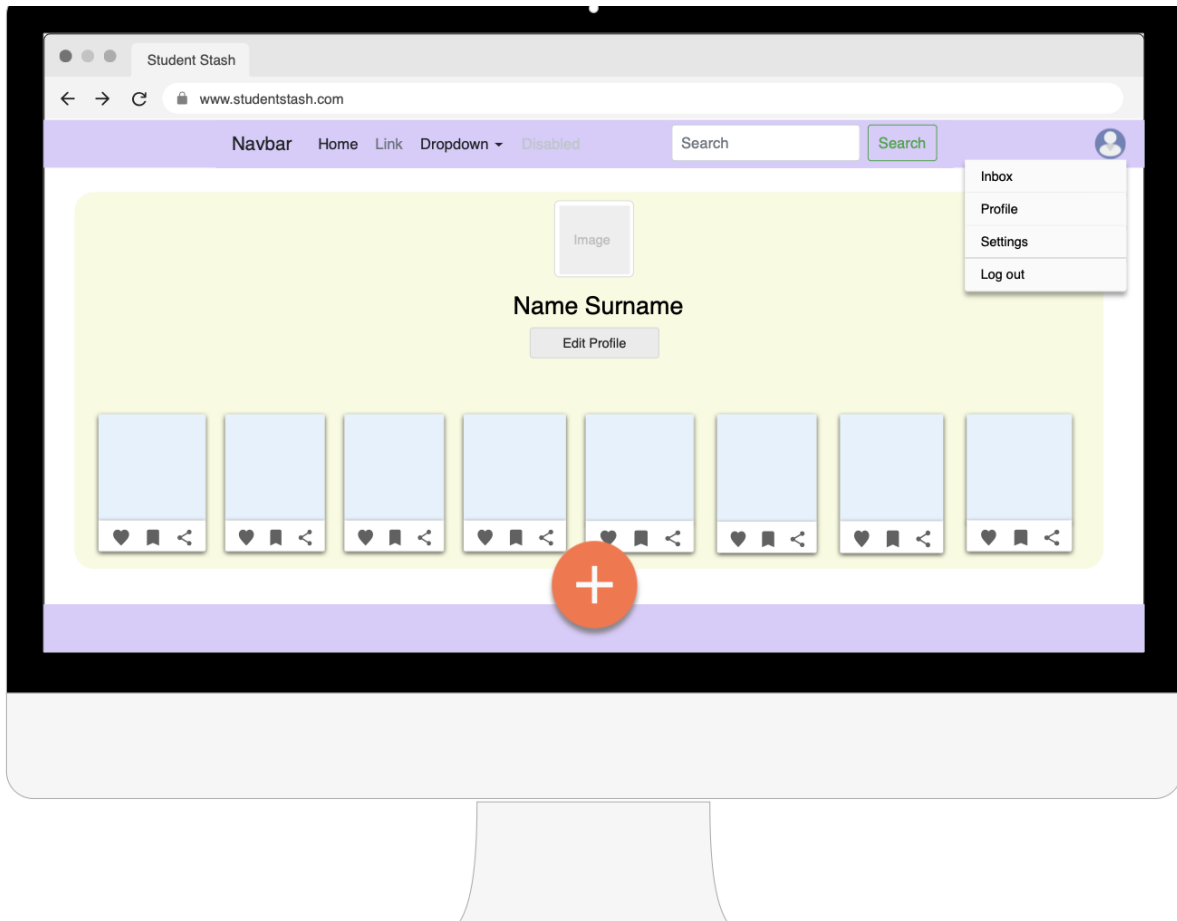
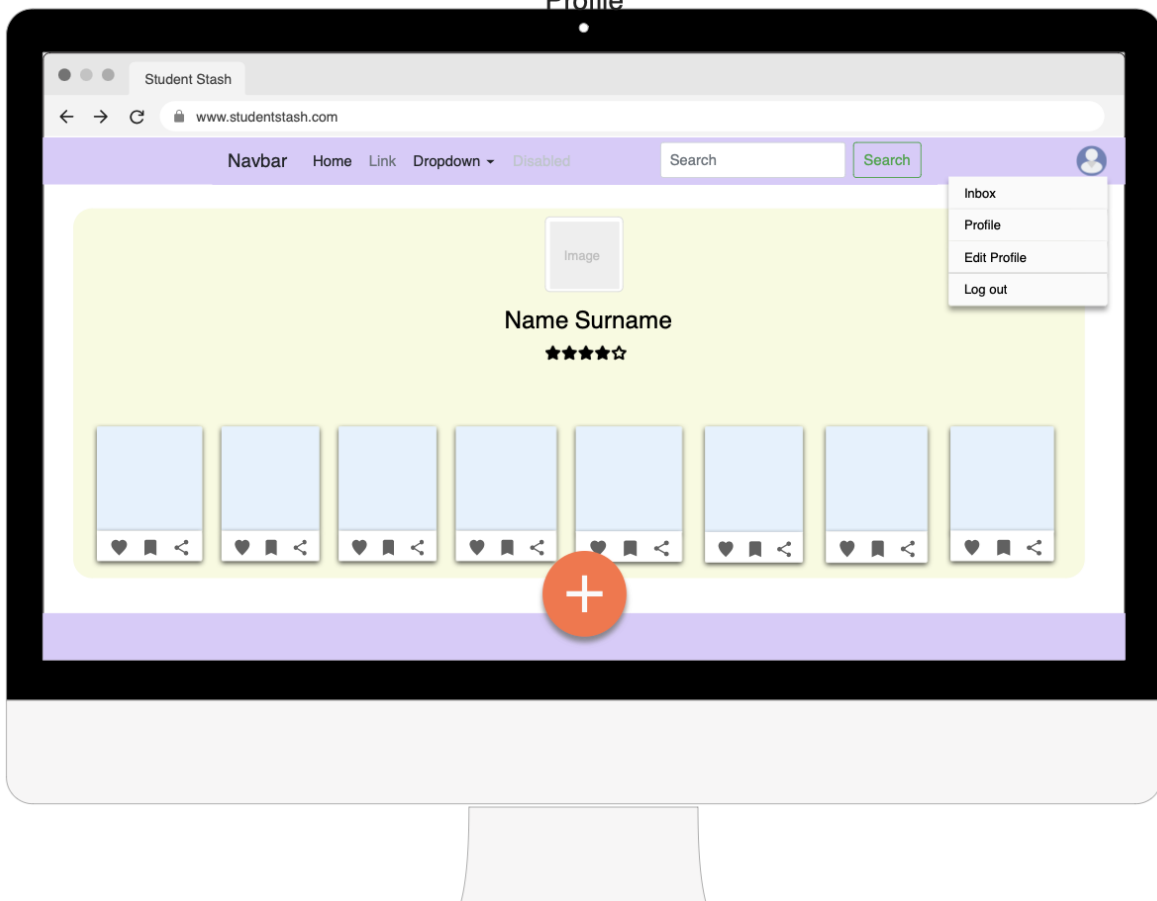How many people do you want as company?

Pick the date for your activity: 10/22/2023   📅

What kind of an activity is it?
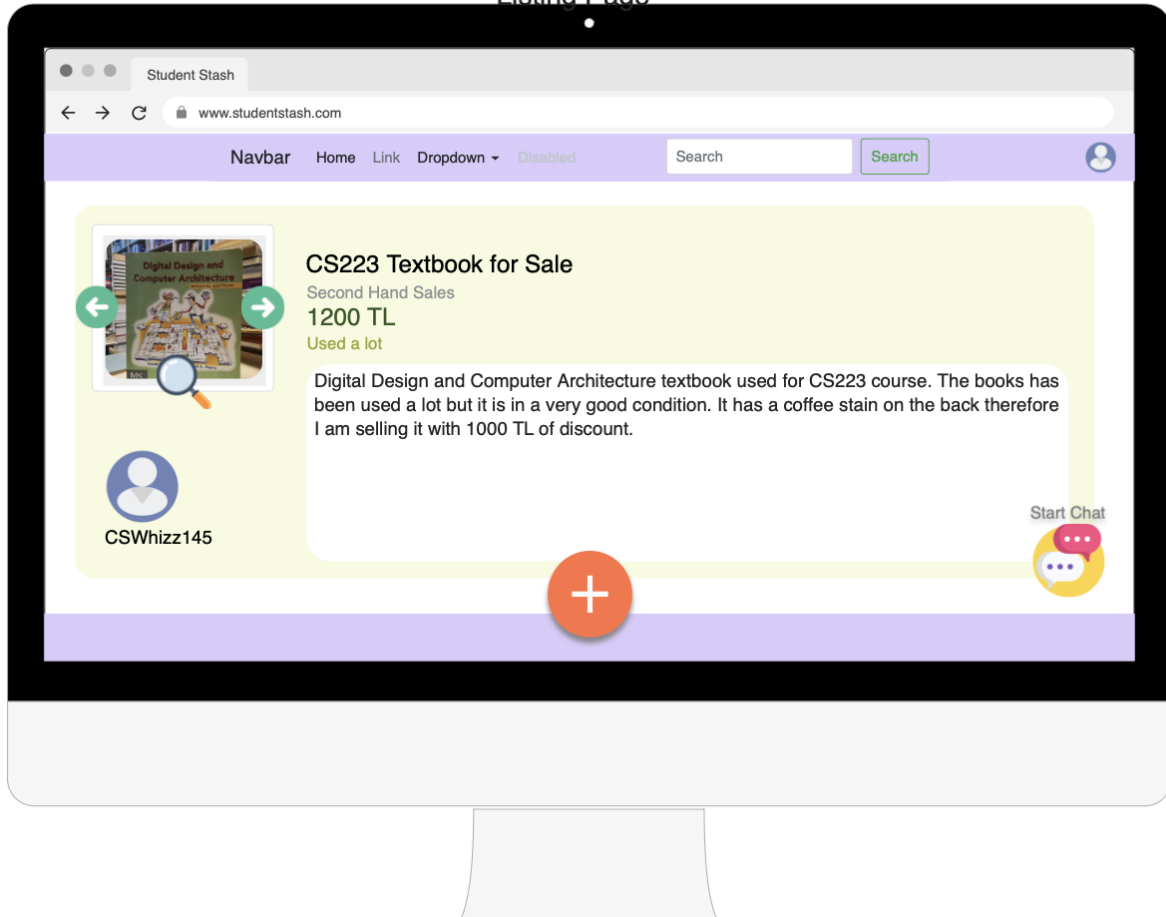
where is the activity going to be:

CANCEL   Create

Student Stash

www.studentstash.com

Navbar   Home   Link   Dropdown ▾   Disabled   Search   Search

Inbox
Profile
Settings
Log out

Image

Name Surname

Edit Profile

♥ 🔖 ◁   ♥ 🔖 ◁   ♥ 🔖 ◁   ♥ 🔖 ◁   ♥ 🔖 ◁   ♥ 🔖 ◁   ♥ 🔖 ◁   ♥ 🔖 ◁

+

Profile

Student Stash

www.studentstash.com

Navbar   Home   Link   Dropdown ▾   Disabled   Search   Search

Inbox
Profile
Edit Profile
Log out

Image

Name Surname
★★★★☆

♥ 🔖 ◁   ♥ 🔖 ◁   ♥ 🔖 ◁   ♥ 🔖 ◁   ♥ 🔖 ◁   ♥ 🔖 ◁   ♥ 🔖 ◁   ♥ 🔖 ◁

+

Navbar   Home   Link   Dropdown ▾   Disabled   Search   Search

CS223 Textbook for Sale
Second Hand Sales
1200 TL
Used a lot

Digital Design and Computer Architecture textbook used for CS223 course. The books has been used a lot but it is in a very good condition. It has a coffee stain on the back therefore I am selling it with 1000 TL of discount.

CSWhizz145

Start Chat

Student Stash

www.studentstash.com

Navbar   Home   Link   Dropdown ▾   Disabled   Search   Search

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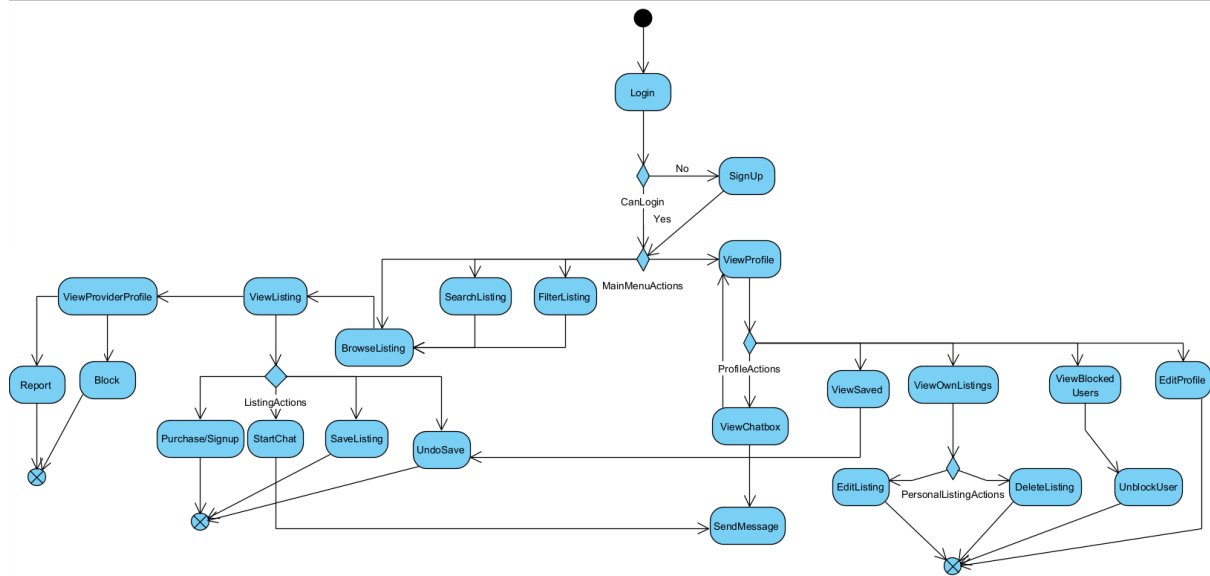
CSWhizz145

Start Chat

5. Activity Diagrams
5.1 Provider/Beneficiary Activity Diagram

5.2 Admin Activity Diagram