

Project: **Grizz Housing**

Use Cases

Presented to

Dr. Yaman R****

Prepared by

Gaby P, Ori O, Ruma Begum, Elli N, Kelly G

Oakland University

School of Business Administration

Use Case 1: Account Registration

Fully Developed Use Case

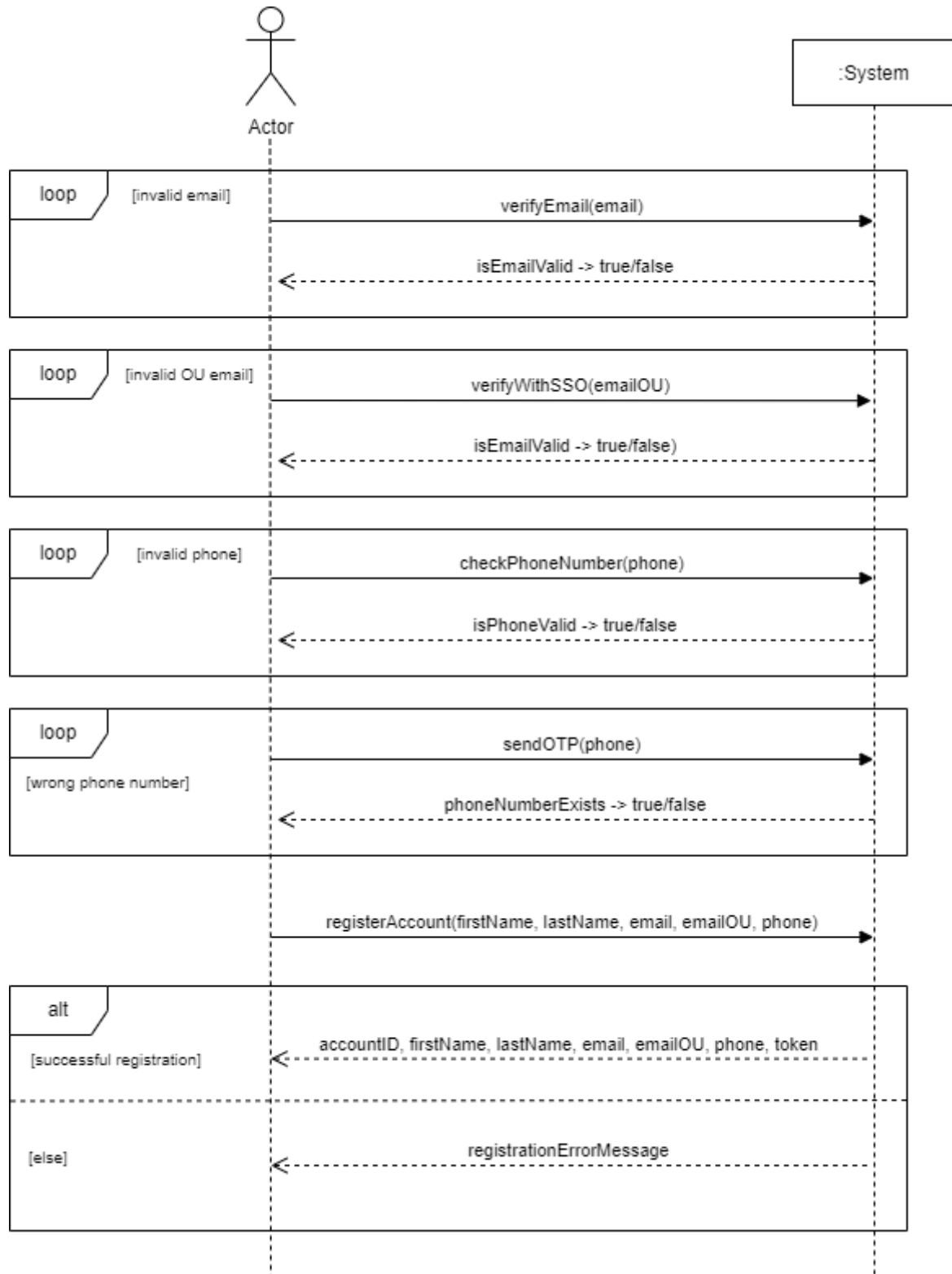
Use case name	Register account	
Scenario	Register new account	
Triggering event	User clicks the “Create New Account” button in the “New Account” screen.	
Brief description	The user wants to sign up with a new account into the system, the user clicks onto the “New Account” button which will then take the user to the “New Account” screen where they can fill out a list of required fields in order to complete creating new account including: <i>First Name</i> , <i>Last Name</i> , <i>Personal Email Address</i> , <i>OU Email Address</i> , and <i>Phone Number</i> .	
Actors	Consumer User	
Stakeholders	Consumer User, Server Backend	
Preconditions	User has to be inside the “New Account” screen	
Postconditions	New account registered into the system, and the user is able to log in with their new account.	
Flow of activities	Actor	System
	<ol style="list-style-type: none">1. Fill out First Name.2. Fill out Last Name.3a. Fill out Email Address.3b. If the email address is invalid or already existed in the system, update the email address.4. Fill out the OU Email Address.5a. Fill out the Phone Number field.5b. Hit “Verify Phone Number”.6. Tap onto the “Create new account” button.	<ol style="list-style-type: none">3a.1. Check if the email address is in the correct format, if not, show a red border around the text input.3a.2. Check if the email address is already in the system, if yes, show an error message.3b.1. Verify again that the updated email address is valid and not existed in the database.4.1. Open a browser window for the user so that the system can verify the OU email via SSO.4.2. Verify that the enter OU email is not registered before, if yes, show an error message.5a.1. Verify that the phone number is not already registered in the system.5b.1. Send an OTP to verify that the phone number exists.6.1. Execute database update with new account information, send the user error messages if any occurs.

Exception conditions

International phone number verification requires further research.

Use Case 1: Account Registration

System Sequence Diagram



Use Case 2 - Contact a Merchant

Fully Developed Use Case

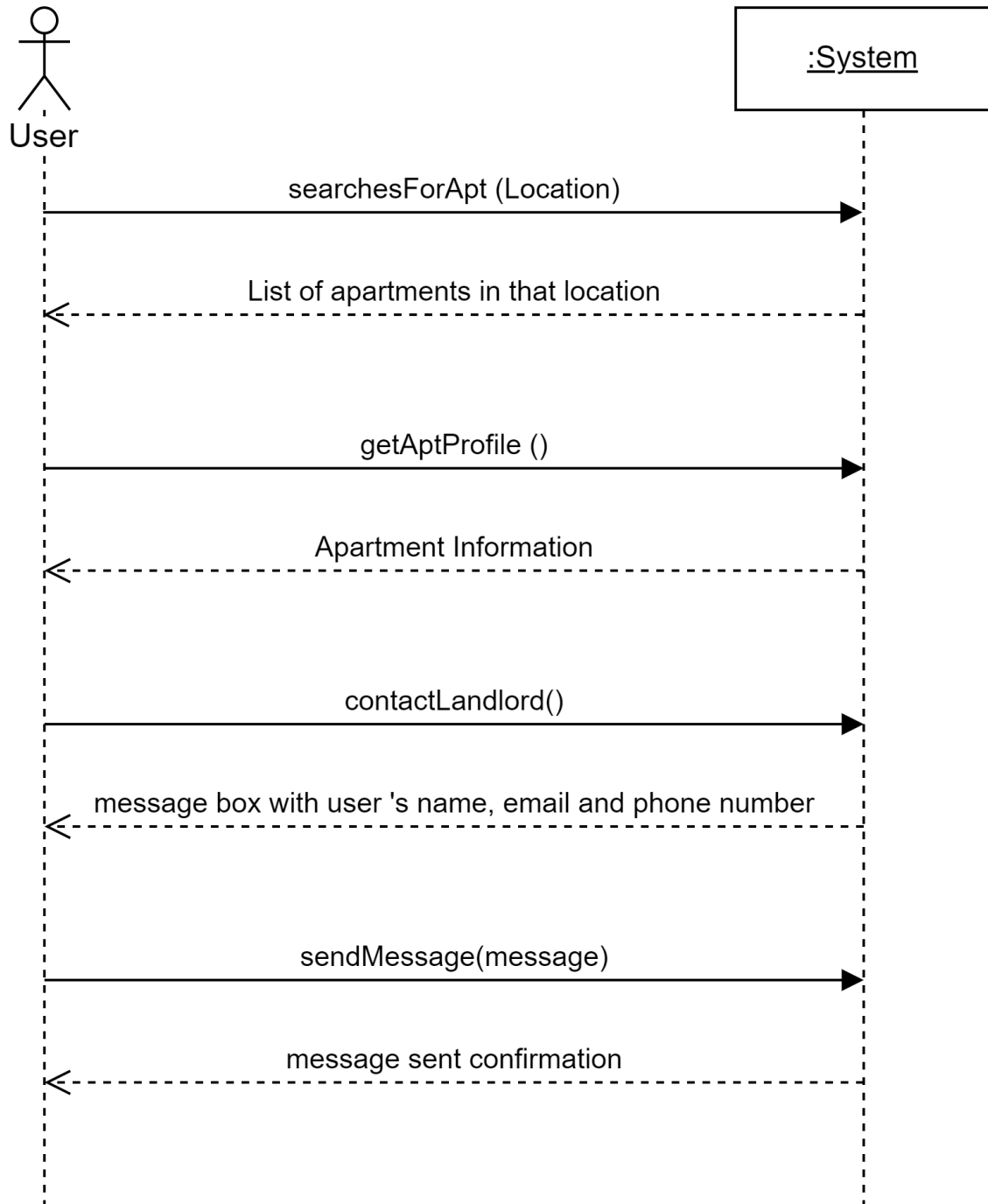
Use case name	Contact a merchant	
Scenario	Contact the merchant of an apartment	
Triggering event	Existing user wants to contact a merchant to inquire about an apartment	
Brief description	Existing user contacts the merchant of an apartment by entering the apartment information and then following up with the reason and a message for the merchant	
Actors	User	
Stakeholders	User, Merchant	
Preconditions	User profile must exist Apartment profile must exist Merchant profile must exist	
Postconditions	User receives a confirmation of message sent to merchant Merchant receives a notification of new message from user Message is saved to user history Message is saved to merchant history	
Flow of activities	Actor	System
	1. Enters apartment location 2. Checks and selects the apartment of choice 3. Selects contact button to enter message message 4. Checks information and enters message	1.1. Validates location and returns a list of available apartments in that location 2.1. Looks up apartment details and returns apartment profile 3.1. Displays new window with user's name, email, and phone number and a text box for message 4.1. Returns message sent confirmation to user 4.2. Adds message to user history

Exception conditions

No text is entered in the message box

Use Case 2 - Contact a Merchant

System Sequence Diagram



Use Case 3 - Add Payment Method

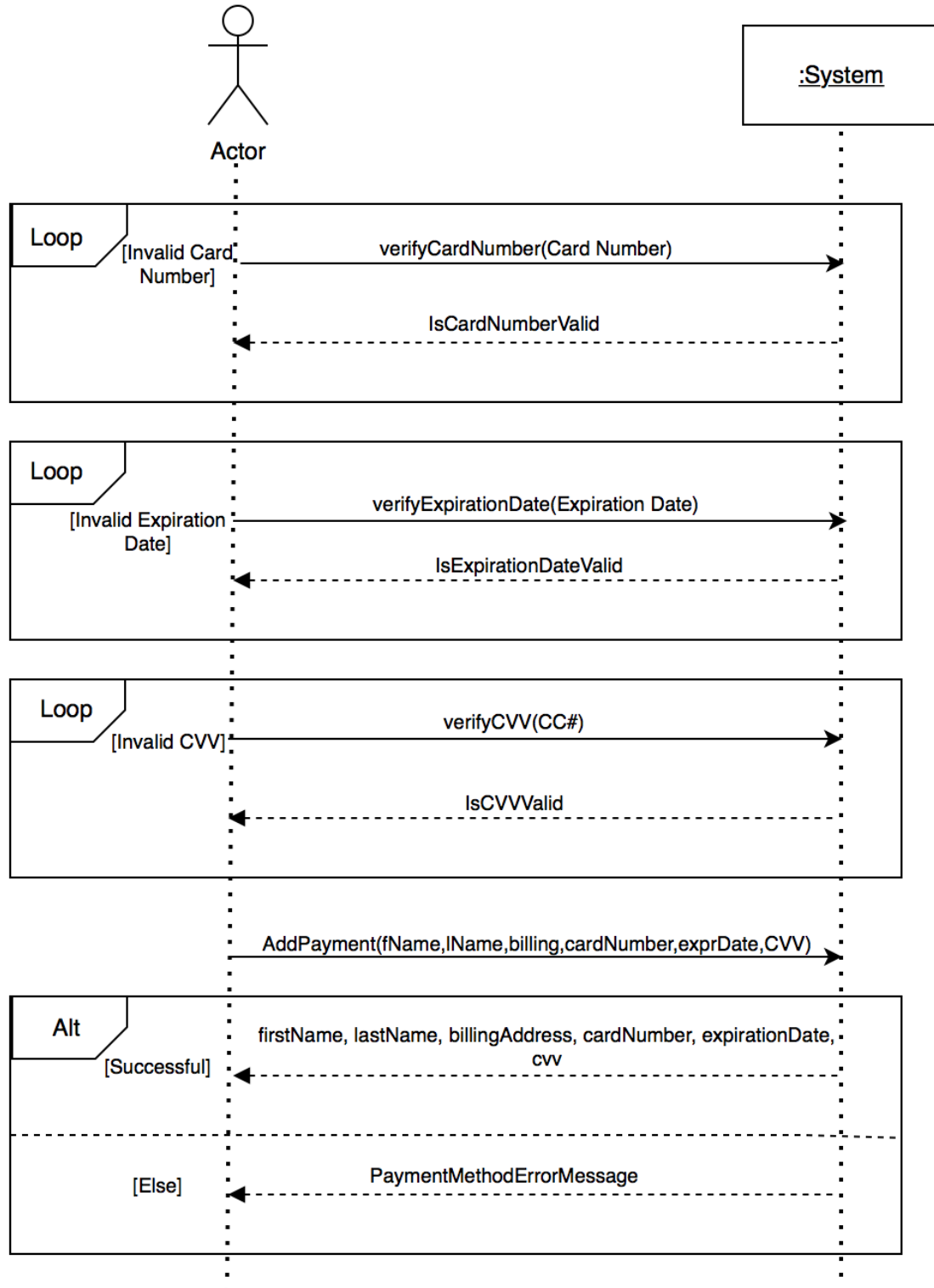
Fully Developed Use Case

Use case name	Add Payment Method	
Scenario	Add Payment Method to an account	
Triggering event	User clicks on “Add Payment Method” on “Payment” screen	
Brief description	Customer wants to add a payment method on their profile. They click on the “Add Payment Method Button.” This takes them to a screen where they need to enter their information such as <i>Full Name, Billing Address, Type of Payment, Card Number, Expiration Date, and CVV.</i>	
Actors	User	
Stakeholders	User	
Preconditions	User profile must exist User must be inside “Add Payment Method” screen	
Postconditions	Payment method included in user profile and the user is able to pay balance using payment method.	
Flow of activities	Actor	System
	1. Fill out First Name 2. Fill out Last Name 3. Fill out Billing Address 4. Select Payment Method (Credit/Debit) 5. Enter card number 6. Enter card expiration date 7. Enter CVV 8. Hit “Add Payment Method” button	5.1. Verify if card number is valid, if not, show an error stating “Invalid Card Number.” 6.1. Verify if card expiration is valid, if not, show an error stating “Invalid Expiration Date.” 7.1. Verify if CVV is valid, if not, show an error stating “Invalid CVV.” 8.1. Execute database update with new payment information, send user confirmation stating “A new payment method has been successfully added to your account.”
Exception conditions	Card number is invalid	

CVV is invalid
Basic Information is incomplete

Use Case 3 - Add Payment Method

System Sequence Diagram



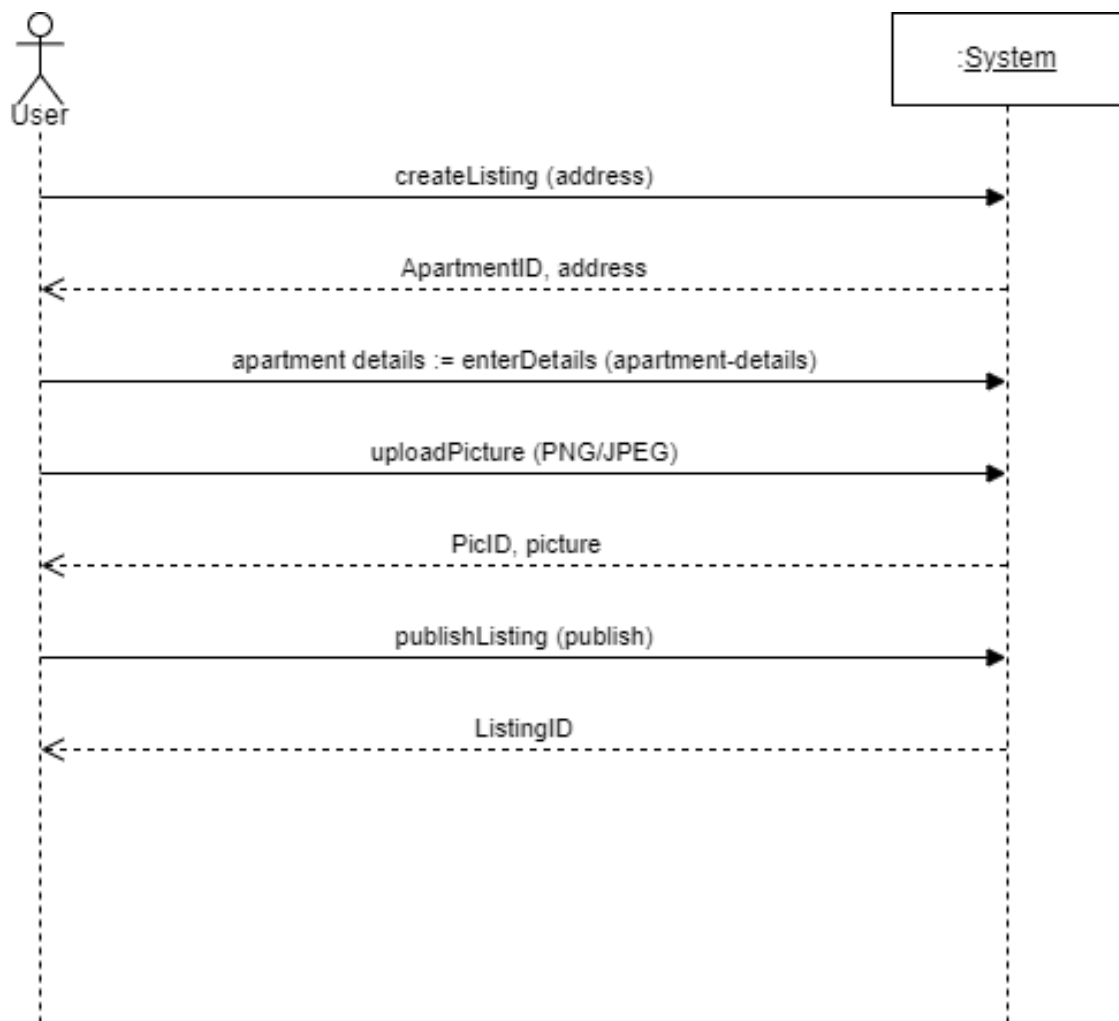
Use Case 4 - Create New Listing

Fully Developed Use Case

Use case name	Create and publish new listing	
Scenario	Publish a listing for a new apartment created by a user online	
Triggering event	User clicks the "Create Listing" button in the "My Account" screen.	
Brief description	The user wants to create a new listing in their profile. The user clicks onto the "Create Listing" button from the "My Profile" section. This will take them to a form that they can fill in information such as <i>Address</i> , <i>Bedroom No.</i> , <i>Bathroom No.</i> , <i>Rental Period</i> , <i>Rent Price</i> , and <i>Pet Allowed</i> . They can also upload pictures to the listing.	
Actors	Consumer User	
Stakeholders	Consumer User, Marketing, Accounting	
Preconditions	Communication Subsystem must available User has to be inside the "My Account" screen Address Verification Services available	
Postconditions	New listing must be created and published Address must be created and saved Address must be associated with user	
Flow of activities	Actor	System
	1. User clicks "Create Listing" and fills out Address 2. User fills out Bedroom No., Bathroom No., Rental Period, Rent Price, and Pets Allowed. 3. User uploads pictures of the apartment 4. User clicks "Publish Listing"	1.1 System creates new address 1.2 System verifies address is real 1.3 systems prompts to enter listing information 2.1 System creates listing information 2.2 System prompts to upload pictures of the apartment. 3.1 System saves uploaded files 3.2 System prompts to publish listing 4.1 System creates publishing 4.2 System associates address with user 4.3 System returns a published listing
Exception conditions	1.2 Address does not pass verification 2.1 Basic information is incomplete 3.1 Files must JPEG or PNG	

Use Case 4 - Create New Listing

System Sequence Diagram



Use Case 5 - Split Payment

Fully Developed Use Case

Use case name	Split Payment with Roommate	
Scenario	User wants to split the rent costs with their roommate	
Triggering event	User clicks the “Split payment” option on their “My apartment”page	
Brief description	The user wants to split their rent payments between themselves and their roommates. The user will begin by a user trying to pay their rent. The user can choose to click on the “Split payment” button. The app presents a page with a field for the user to input the amount of the rent they would like to pay. The user can then proceed to use the payment system and finalize their payment. After this, the system sends an alert to the roommate that a payment split has been requested.	
Actors	User, Roommate	
Stakeholders	User, Roommate, Server Backend	
Preconditions	User has to be assigned an apartment with a registered roommate, and in the “Pay rent” screen	
Postconditions	Part of the rent will be paid for, with the other portion awaiting for payment by the roommate	
Flow of activities	Actor	System
	1. User inputs their chosen form of payment	1.1. Capture user payment data from form 1.2. Authenticate payment data 1.3. Report to user of successful transaction
	2. User inputs the amount they wish to pay	2.1. Capture portion of user bill they want to pay 2.2. Inform user of the portion they have chosen
	3. User completes their payment process	3.1. Provide User with confirmation they have paid their bill with a receipt
	4. Roommate receives a notification to repeat process	4.1. Send Roommate notification informing them to repeat this process for their payment

Exception conditions	If no roommate exists, the option to split payment will not pop-up. If the payment information is invalid, it will advise the user. If the amount the user inputs that they wish to pay is invalid, it will inform the user.
-----------------------------	--

Use Case 5 - Split Payment

System Sequence Diagram

