

## **ENSF 480: Term Project Design Document**

Course Name: Principles of Software Design

Section: L01 B01

Course Code: ENSF 480

Assignment Number: Term Project Design Document

Instructor: Moussavi M.

Submission Date and Time: 2021/11/29

Group Number: 15

Names(s):

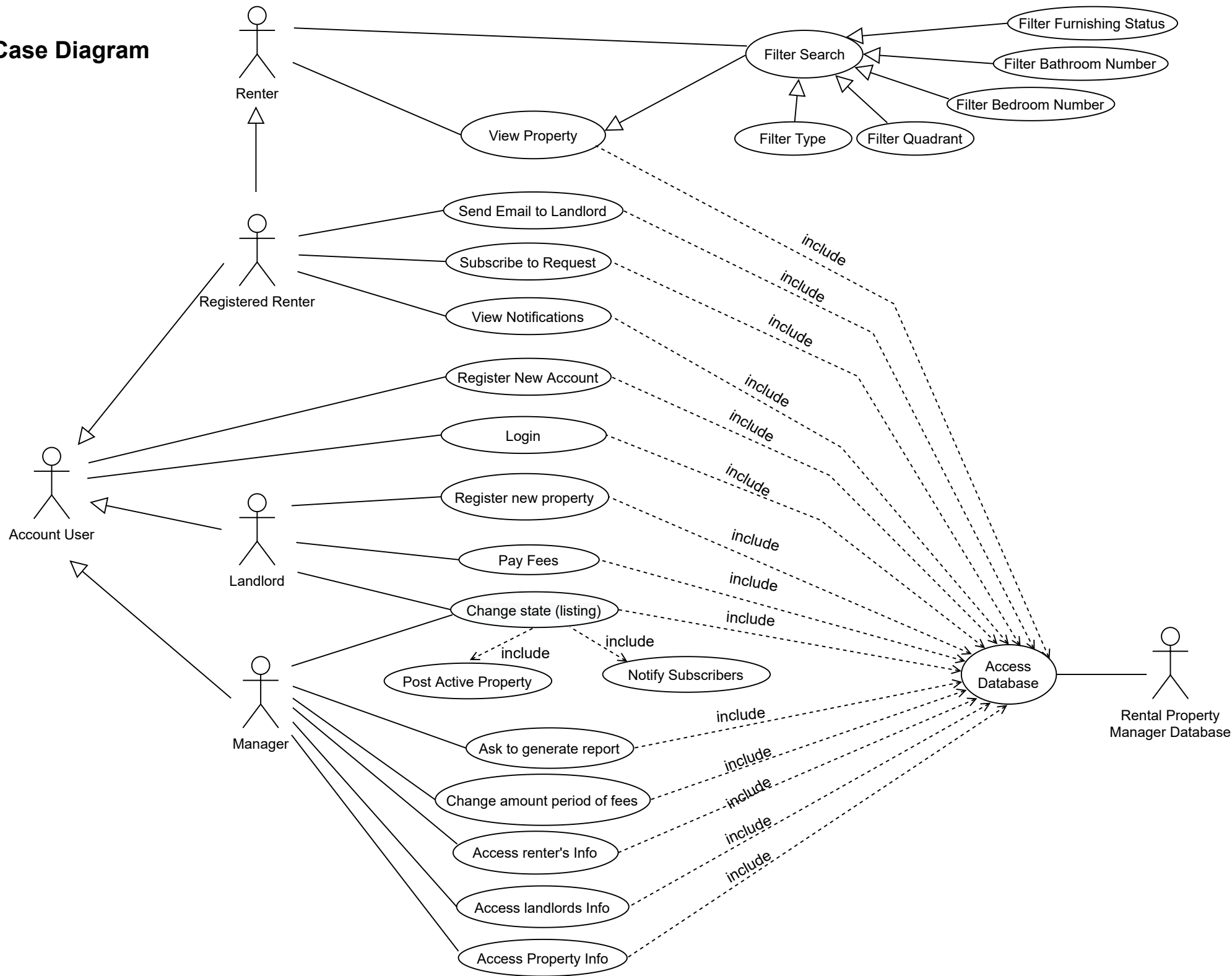
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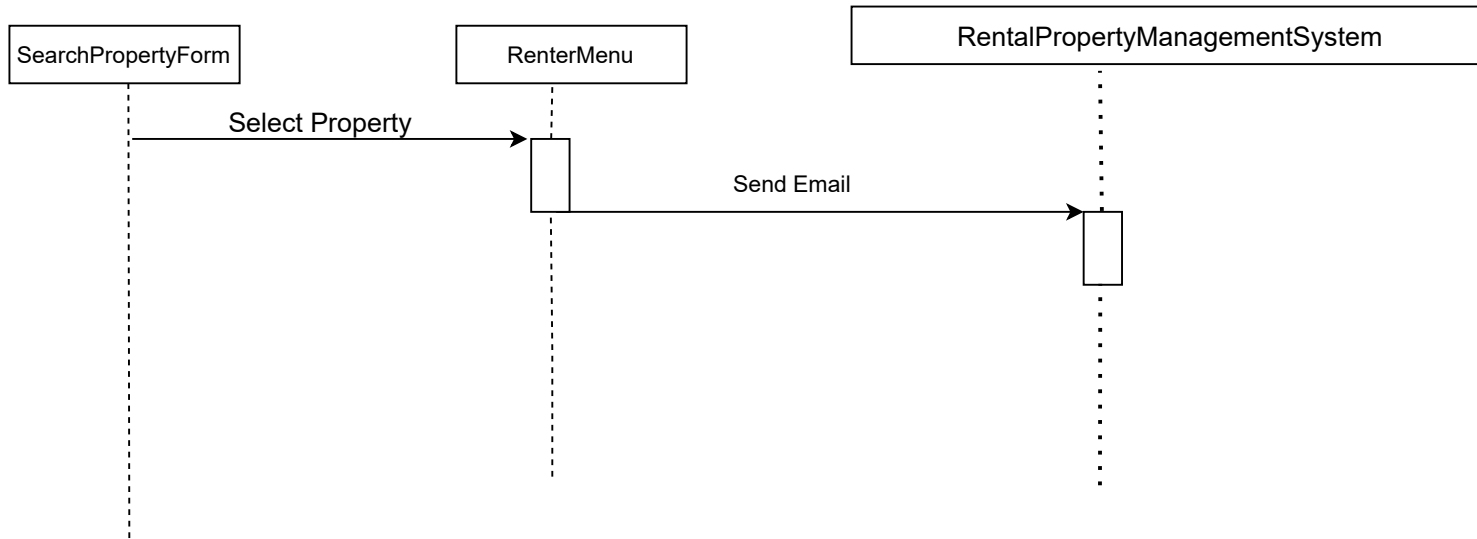
Kaamil Patel (30088096)

Case Diagram

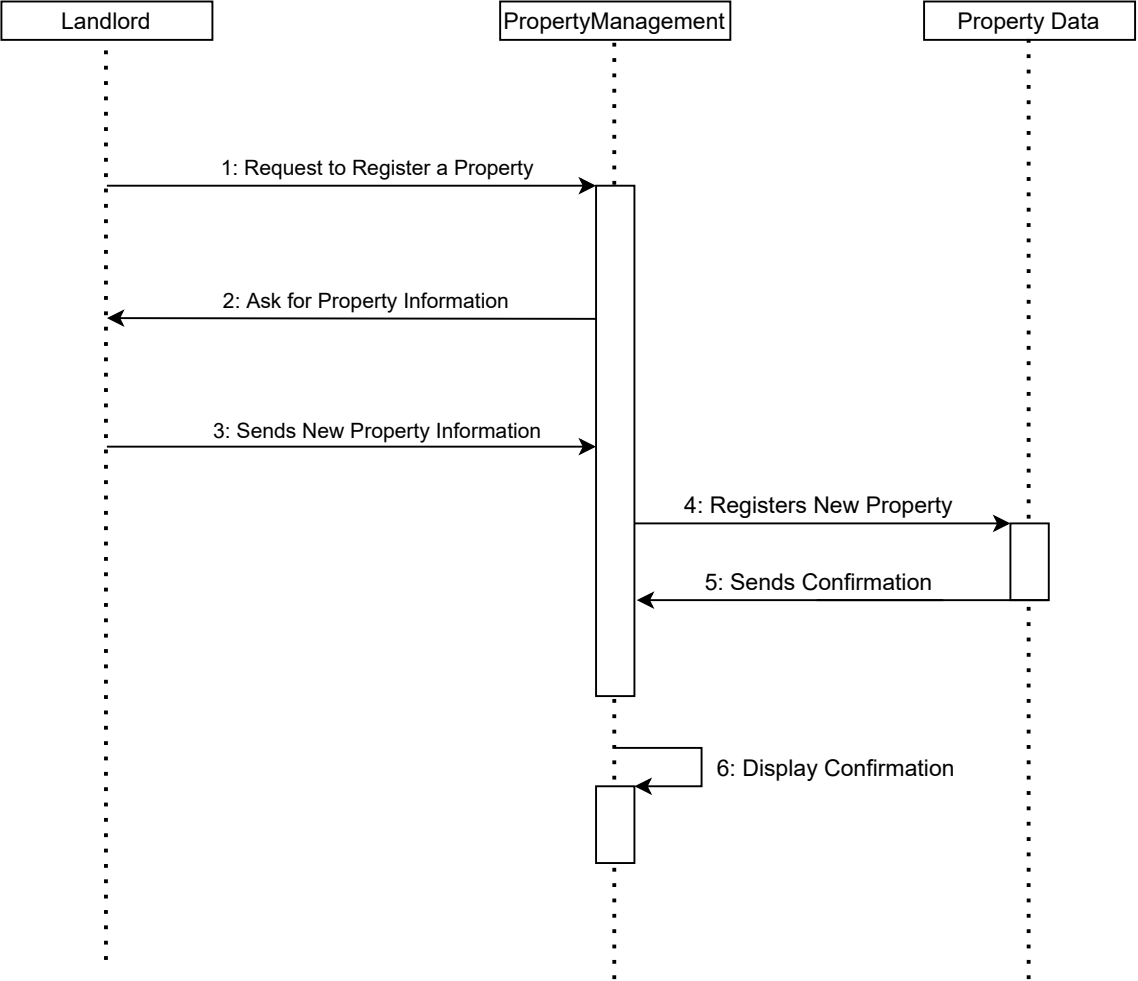


# Sequence Diagrams

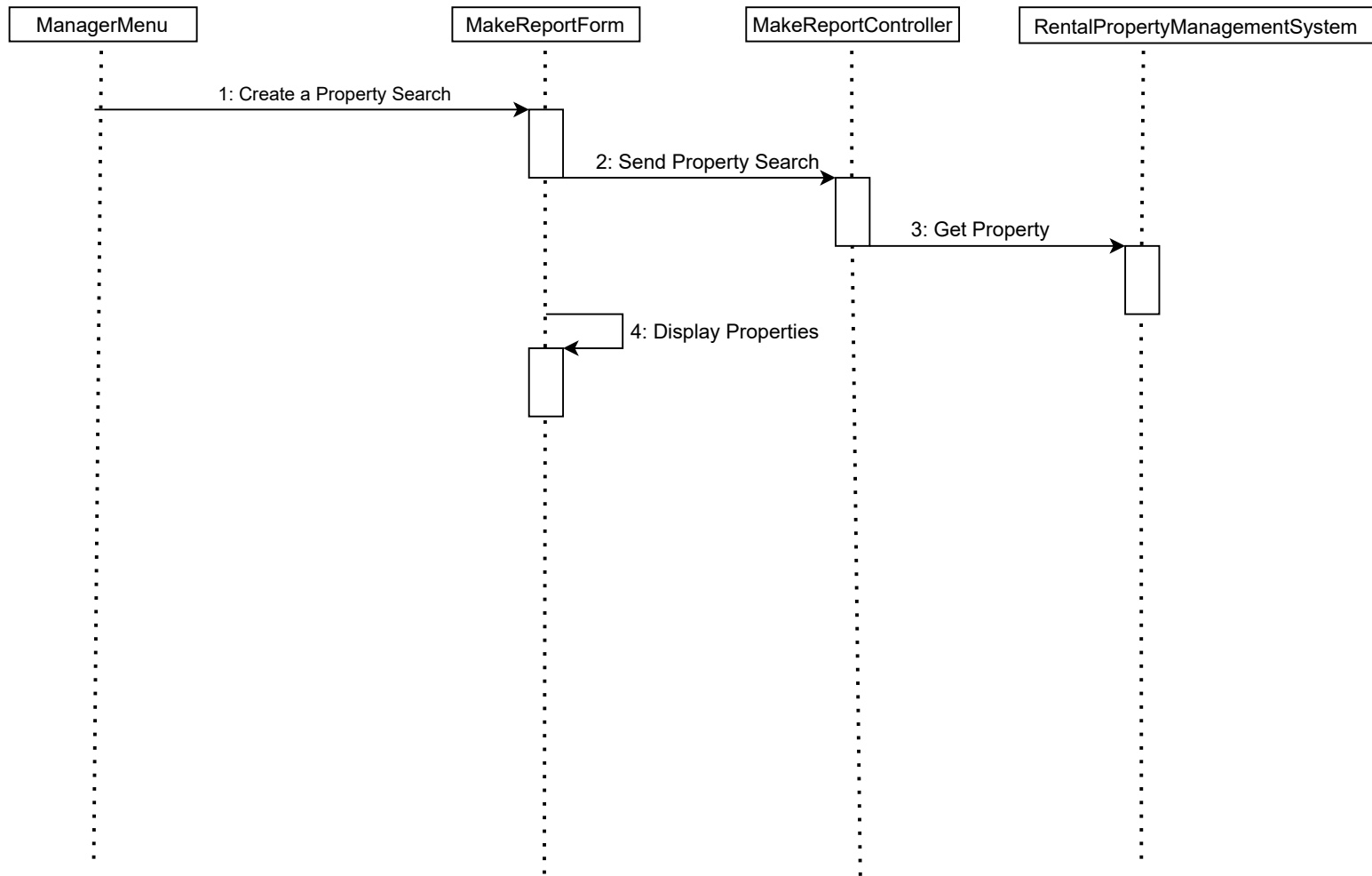
## Rent Property



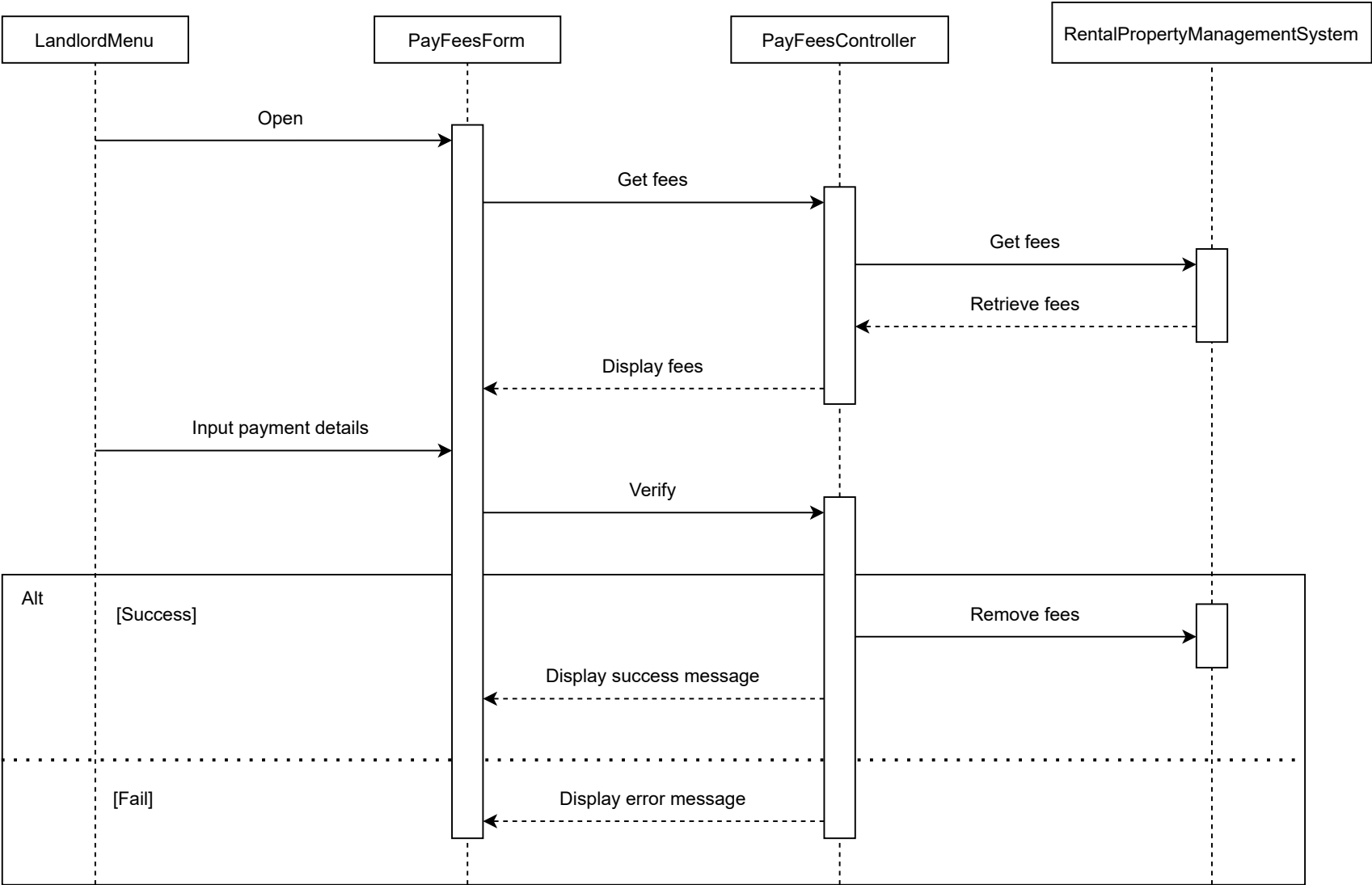
**Register Property**



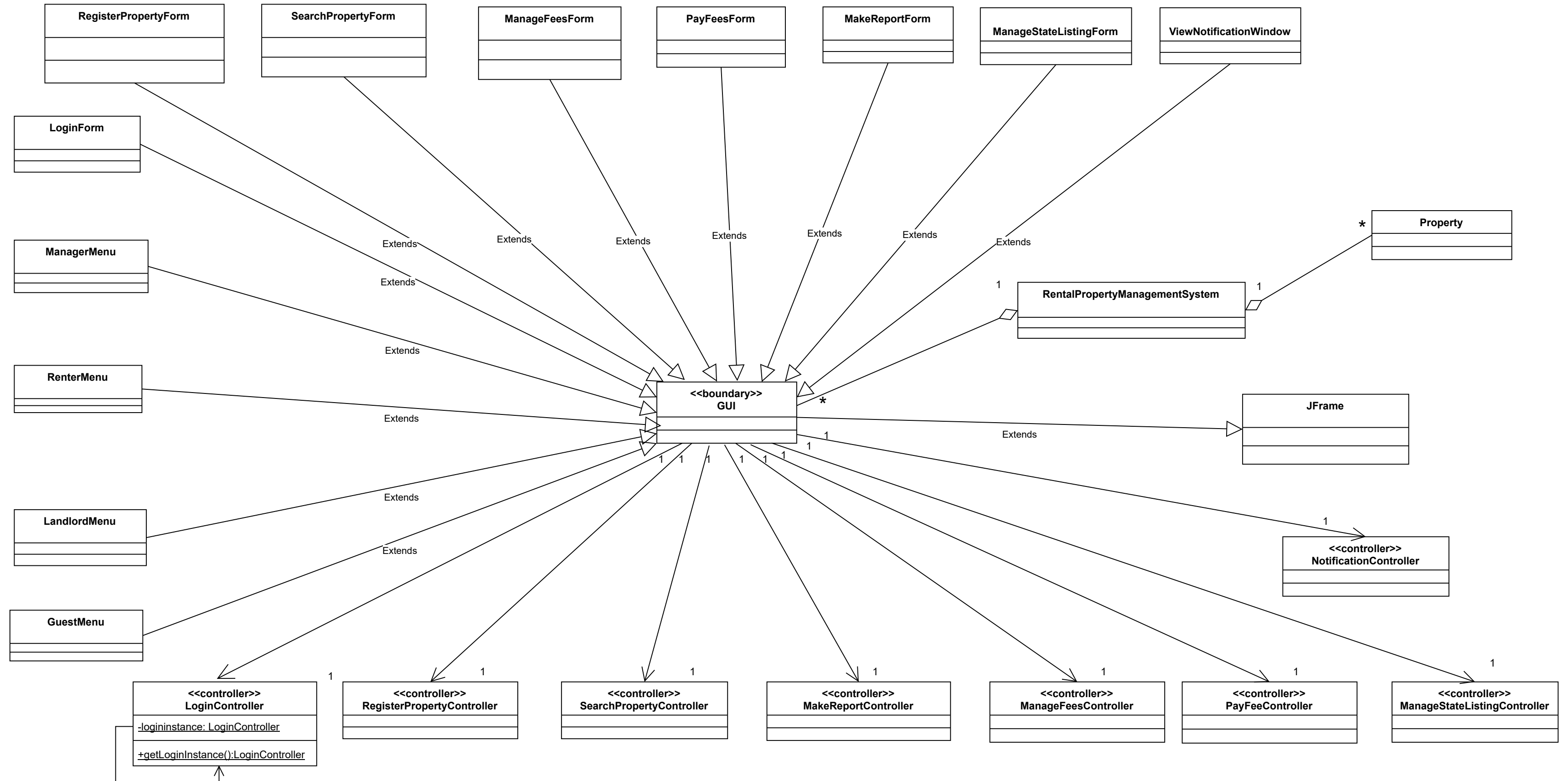
## View Property



**Pay Fee**



# Class Diagram



# Detailed Class Diagram

## Gui Package

GuestMenu
-startLogin(): JButton -startSearchQueryButton(): JButton -startSearchQueryLabel(): JLabel
+createGuestMenu(): void +makeSearchPropertyForm():void

LoginForm
-controller: LoginController -enterUsername:JTextField -enterPassword:JTextField -enterUsername:JTextField -enterPassword:JTextField
+createLoginPage(): void

ManagerMenu
-setPeriodFeesButton: JButton -changePeriodFeesButton: JButton -displayPeriodicalSummaryButton: JButton -changeStateListingButton: JButton -setPeriodFeesLabel: JLabel -changePeriodFeesLabel: JLabel -displayPeriodicalSummaryLabel: JLabel -changeStateListingLabel: JLabel
+createManagerMenu(): void +makeManageFeesForm():void +makeManageStateListingForm(): void +makeMakeReportForm():void

RenterMenu
-emailButton: JButton -subscribeButton: JButton -notificationButton: JButton -emailLabel: JLabel -subscribeLabel: JLabel -notificationLabel: JLabel
+createRenterMenu(): void +makeSearchPropertyForm():void +makeViewNotificationWindow():void

LandlordMenu
-registerPropertyButton: JButton -payFeeButton: JButton -changeStateButton: JButton -registerPropertyLabel: JLabel -payFeeLabel: JLabel -changeStateLabel: JLabel
+createLandlordMenu(): void +makeRegisterPropertyForm(): void +makePayFeesForm(): void +makeManageStateListingForm(): void



## Gui Package

### **MakeReportForm**

-managerController: LandlordFeeController

+createFeePaymentQuery(): void  
+makeReport(): void

### **RegisterPropertyForm**

-propertyRegisterController: LandlordRegisterController  
-headLine: JLabel  
-type: JTextField  
-bedrooms: JTextField  
-bathrooms: JTextField  
-location: JTextField  
-name: JTextField  
-state: JTextField  
-furnished: JTextField  
-submit: JButton  
-payFee: JButton

+createPropertyRegisterQuery(): void  
+makePayFeesForm(): void

### **PayFeesForm**

-controller: FeePeriodsController  
-paymentDetails: JTextField  
-period: JTextField  
-payFeeButton: JButton  
-payFeeLabel: JLabel

+createChangeFeePeriodQuery(): void  
+payFees(): void

### **ManageFeesForm**

-managerController: ManagerSummaryFormController  
-changePeriodButton: JTextField  
-changeFeeButton: JTextField  
-headLine: JLabel  
-submit: JButton

+createSetFeePeriodQuery(): void

### **SearchPropertyForm**

-propertyController: PropertySearchFormController  
-searchQuery: JTextField  
-searchButton: JButton  
-searchLabel: JLabel

+createSearchQuery(): void  
+sendEmailGUI(): void  
+displayMatches(match: Property): ArrayList Property

### **ManageStateListingForm**

-stateController: StateListingController  
-headLine: JLabel  
-state: JTextField  
-Submit: JButton

+createChangeStateQuery(): void

### **ViewNotificationWindow**

-stateController: StateListingController  
-notification: JLabel

+displayNotification(): void

# Controller Package

<b>&lt;&lt;controller&gt;&gt; LoginController</b>
-logininstance: LoginController
+getLoginInstance():LoginController

<b>&lt;&lt;controller&gt;&gt; PayFeeController</b>
-parsing(details: String, period: int): void

<b>&lt;&lt;controller&gt;&gt; ManageStateListingController</b>
-parsing(stateUpdate: String, propertyName: String): void

<b>&lt;&lt;controller&gt;&gt; ManageFeesController</b>
-parsing(fee: int, period: int): void

<b>&lt;&lt;controller&gt;&gt; NotificationController</b>
-parsingDatabase(): void

<b>&lt;&lt;controller&gt;&gt; RegisterPropertyController</b>
- parsing(type: String, bedrooms: int, bathrooms, int, isFurnished: boolean, quadrant: String): Property

<b>&lt;&lt;controller&gt;&gt; SearchPropertyController</b>
-parsing(type: String, bedrooms: int, bathrooms, int, isFurnished: boolean, quadrant: String): Property

<b>&lt;&lt;controller&gt;&gt; MakeReportController</b>
- parsing(period: int, numHousesListed: int, numHousesRented: int, numHousesActive: int, houses: ArrayList<Property>): void

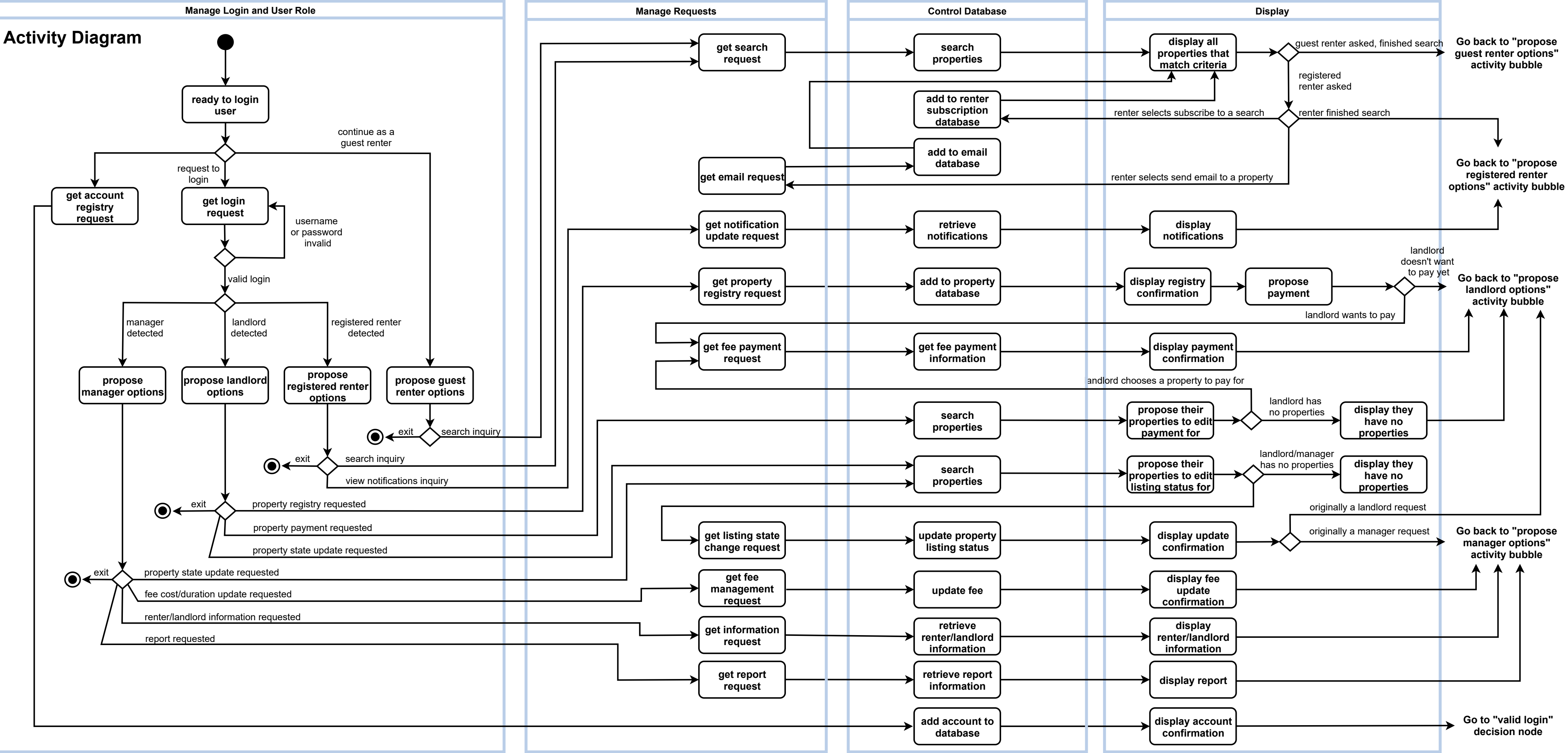
**Database Package**

RentalPropertyManagementSystem
- results: ResultSet -DBURL: String -USERNAME: String -PASSWORD: String -dbConnect: Connection
+ makeRequest(): void +getConnection(): Connection +getDBURL(): String +initializeConnection(): Connection +close(): void

**Property Package**

Property
-type: String -bedrooms: int -bathrooms: int -location: String -owner: Landlord -state: String -id: String -furnished: Boolean -Payment: Boolean
+Property(type: String, bedrooms: int, location: String, owner: Landlord, state: String, id: String, furnished: Boolean, payment: Boolean)

Activity Diagram

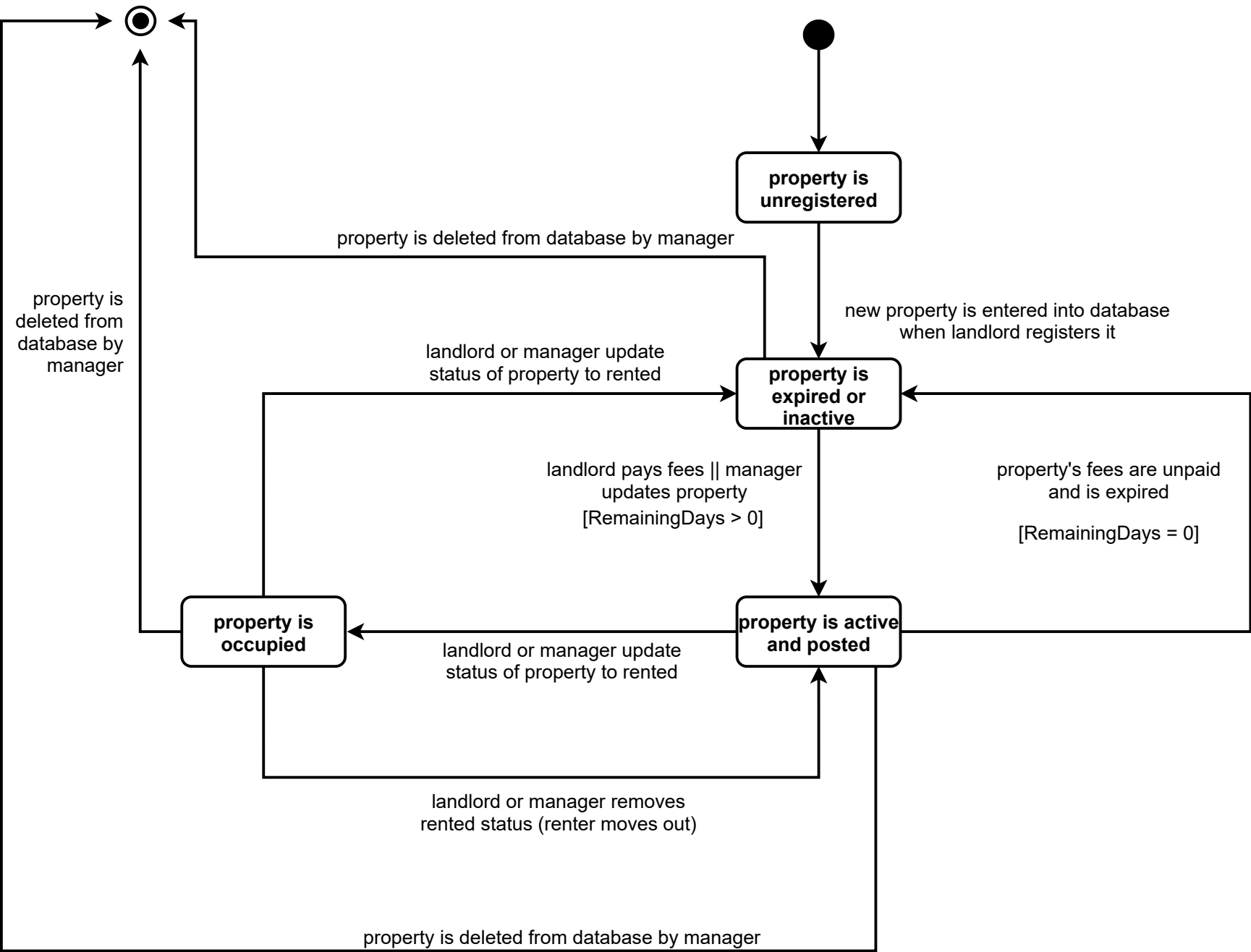


Please Note:

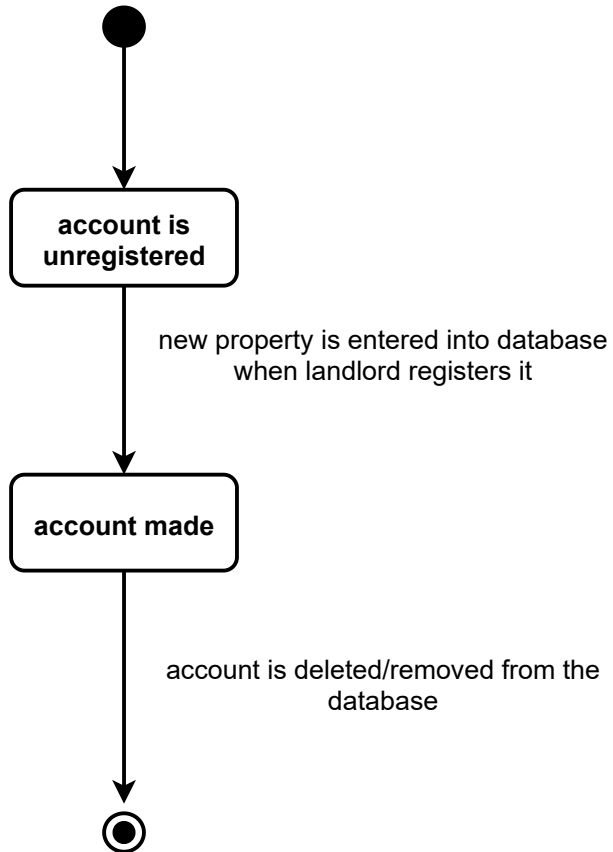
For the sake of organization, lines returning to the option menu will not be drawn to avoid clutter, and instead will be noted as going there (eg. will point to "go back to propose landlord options" rather than actually pointing to the "show landlord option" activity bubble.

# State Diagram

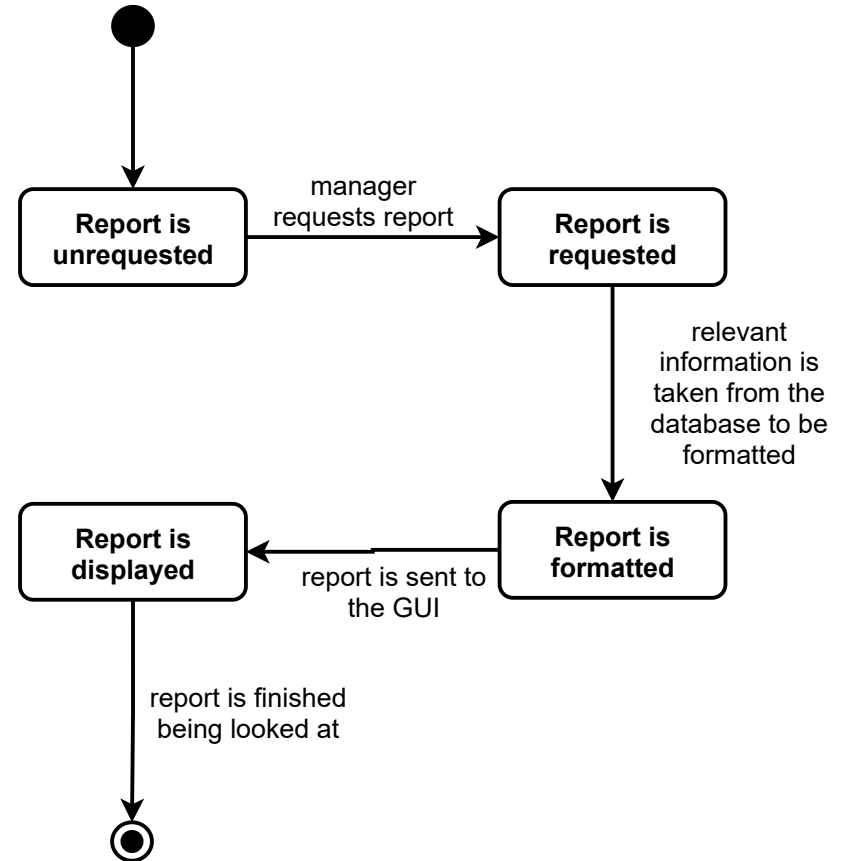
## Property.



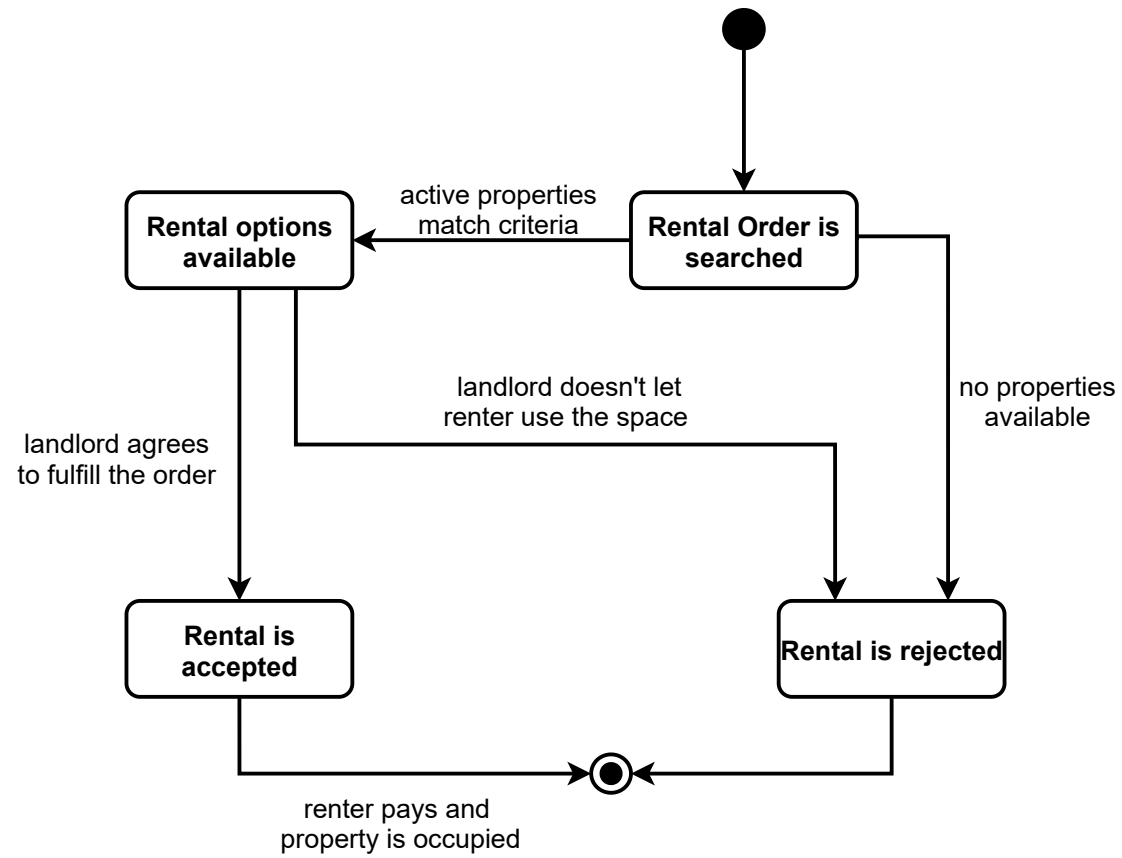
## Account



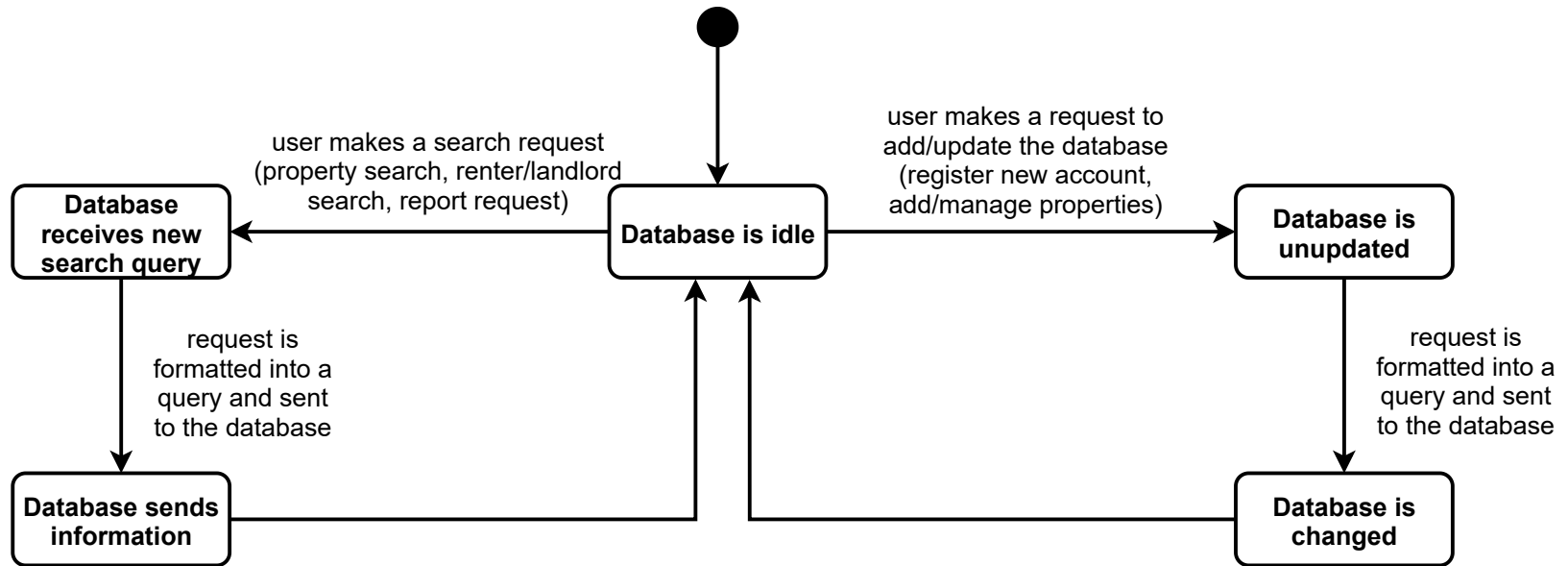
## Report



## Rental Order Form

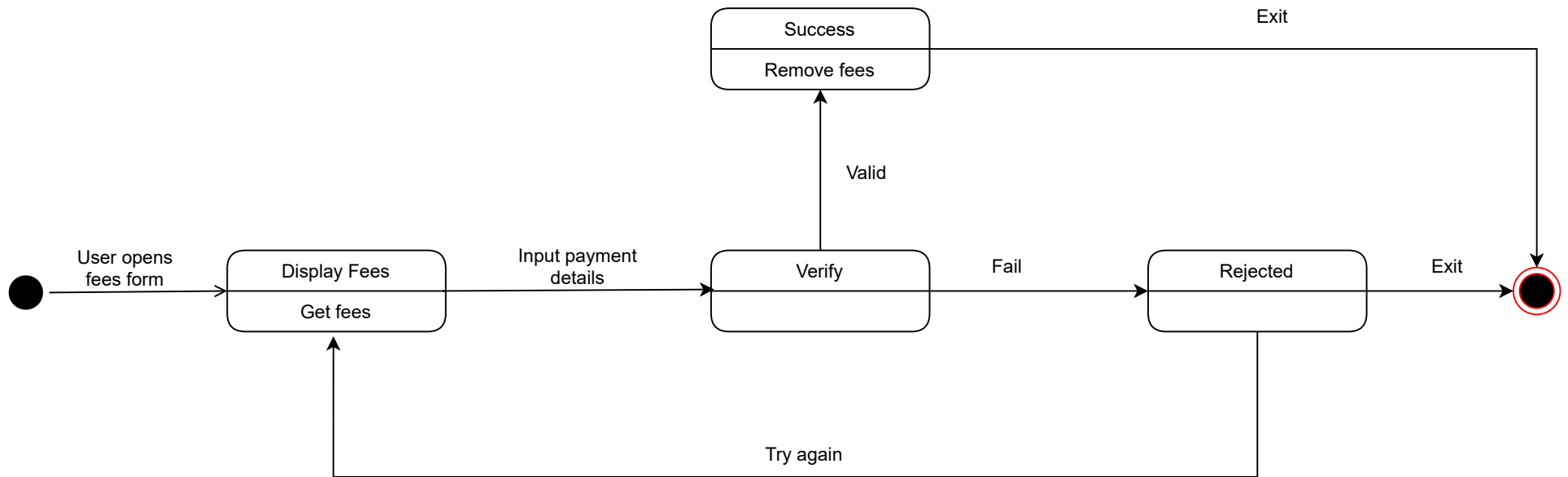


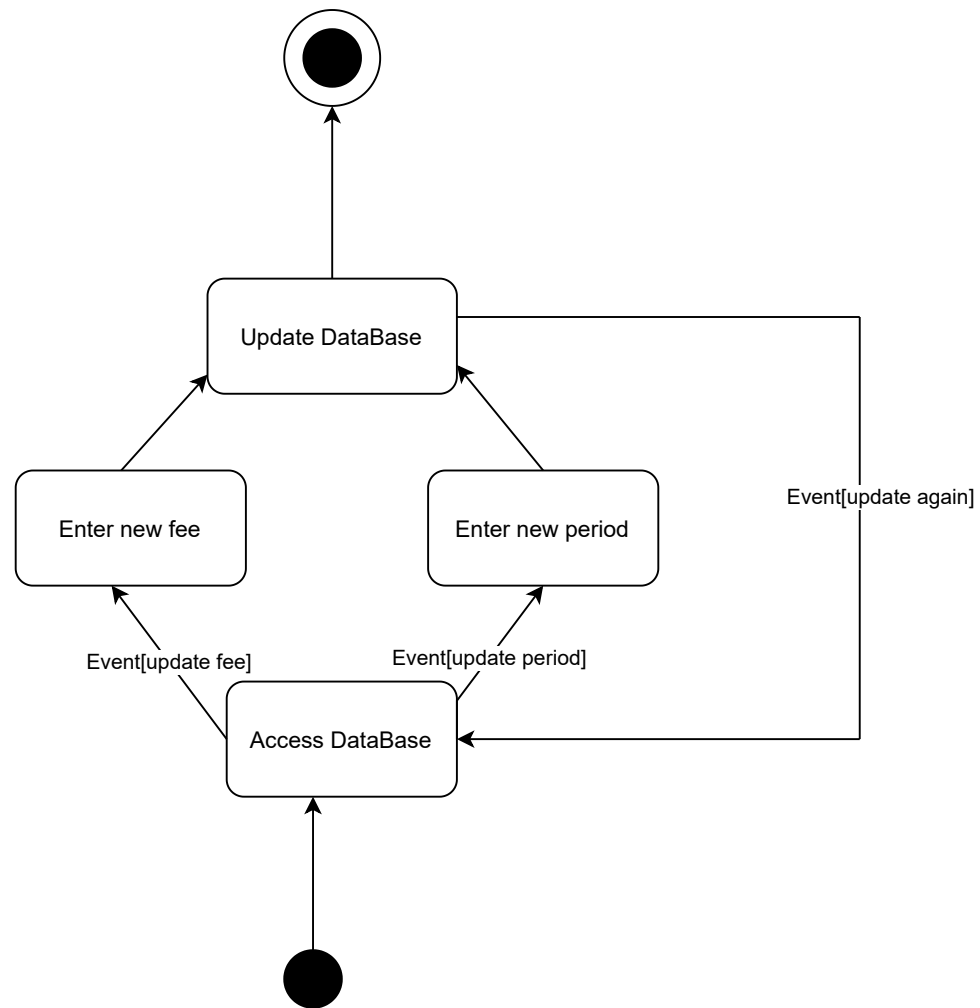
## Database





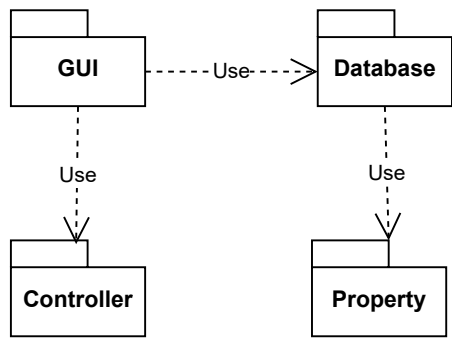
## Pay Fee Form





**Manager changing period fees (Use Case)**

# Package Diagram



# Deployment Diagram

