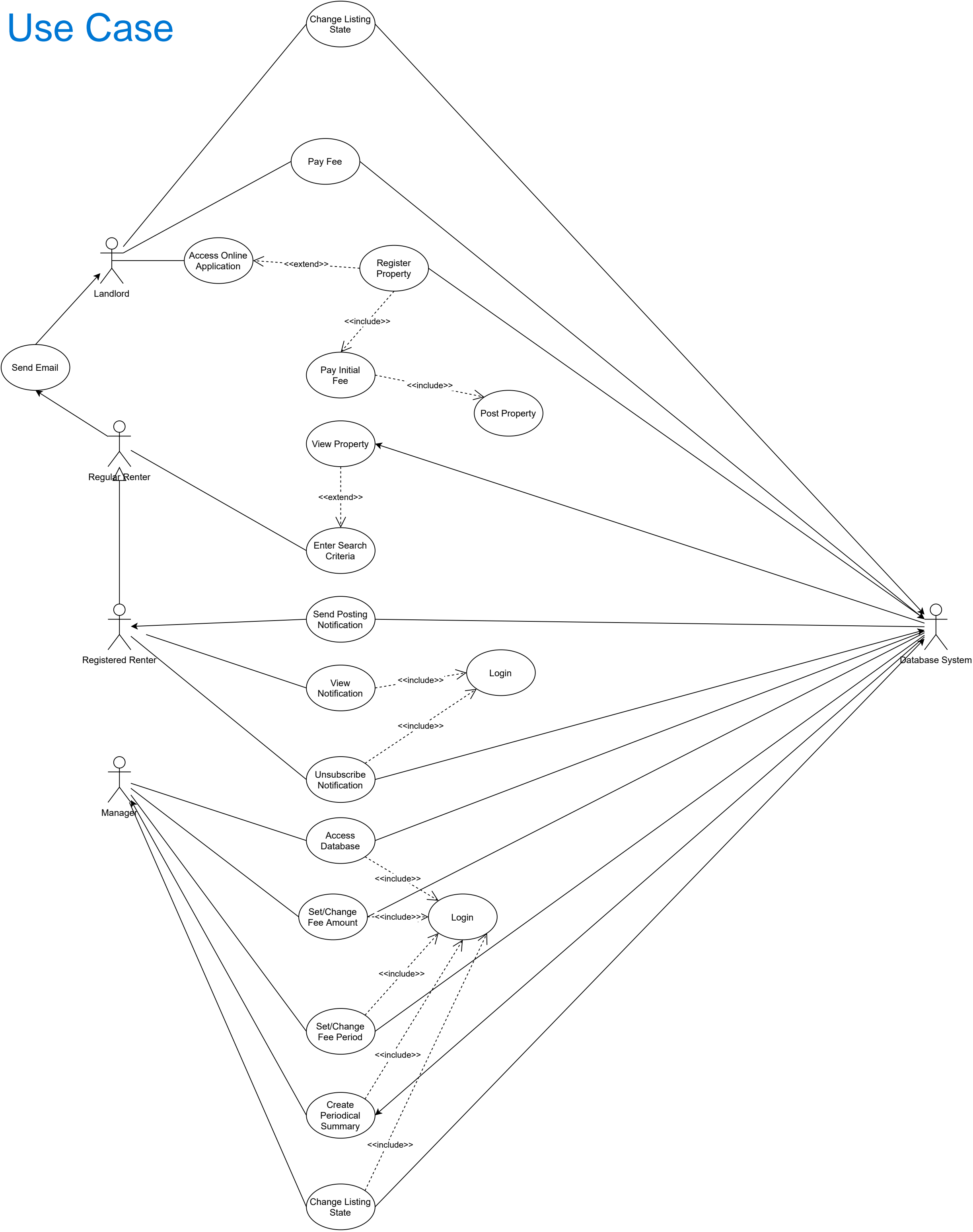
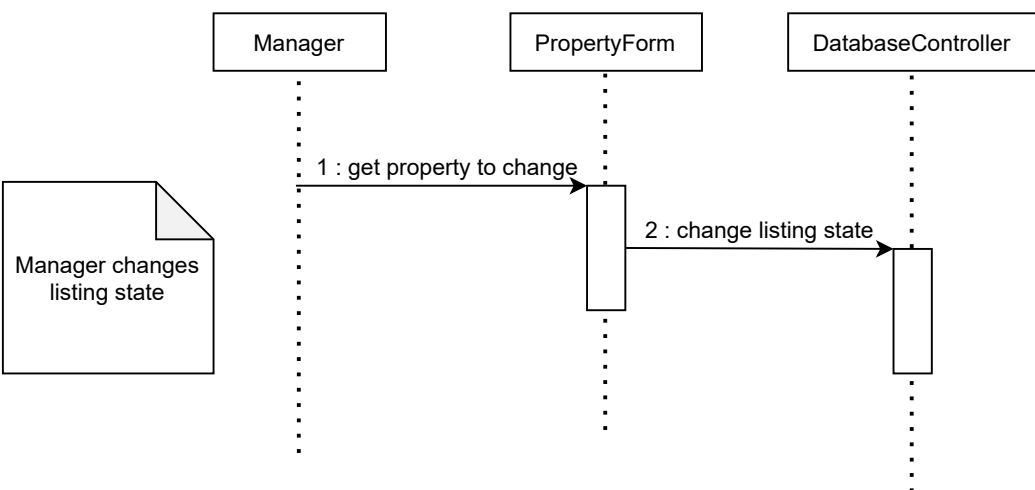
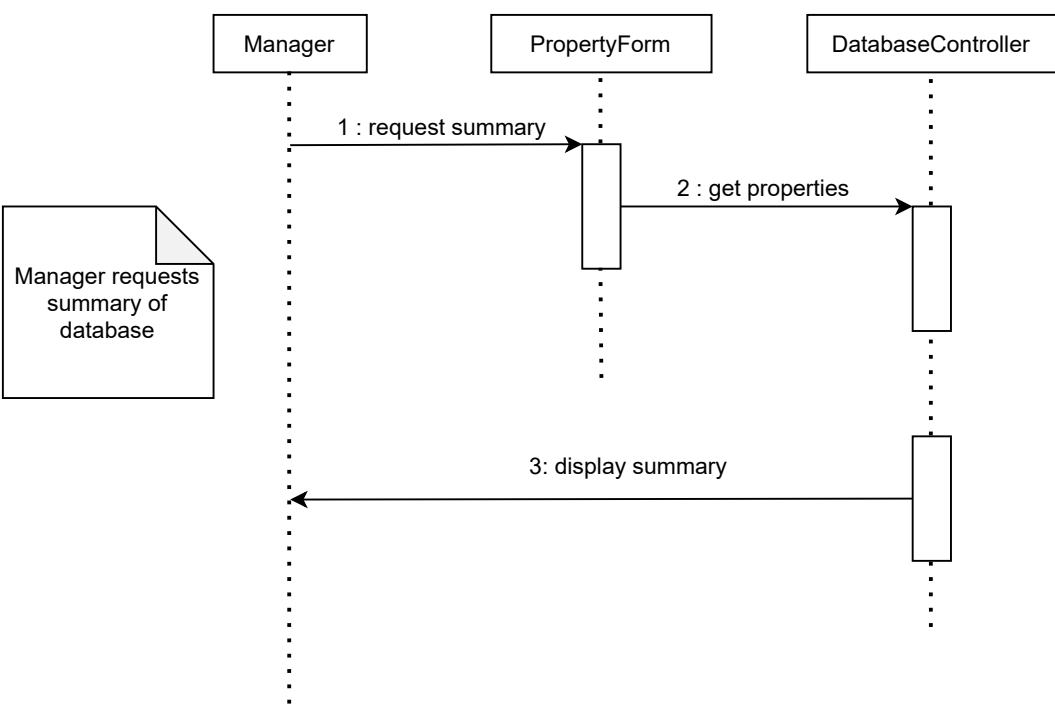
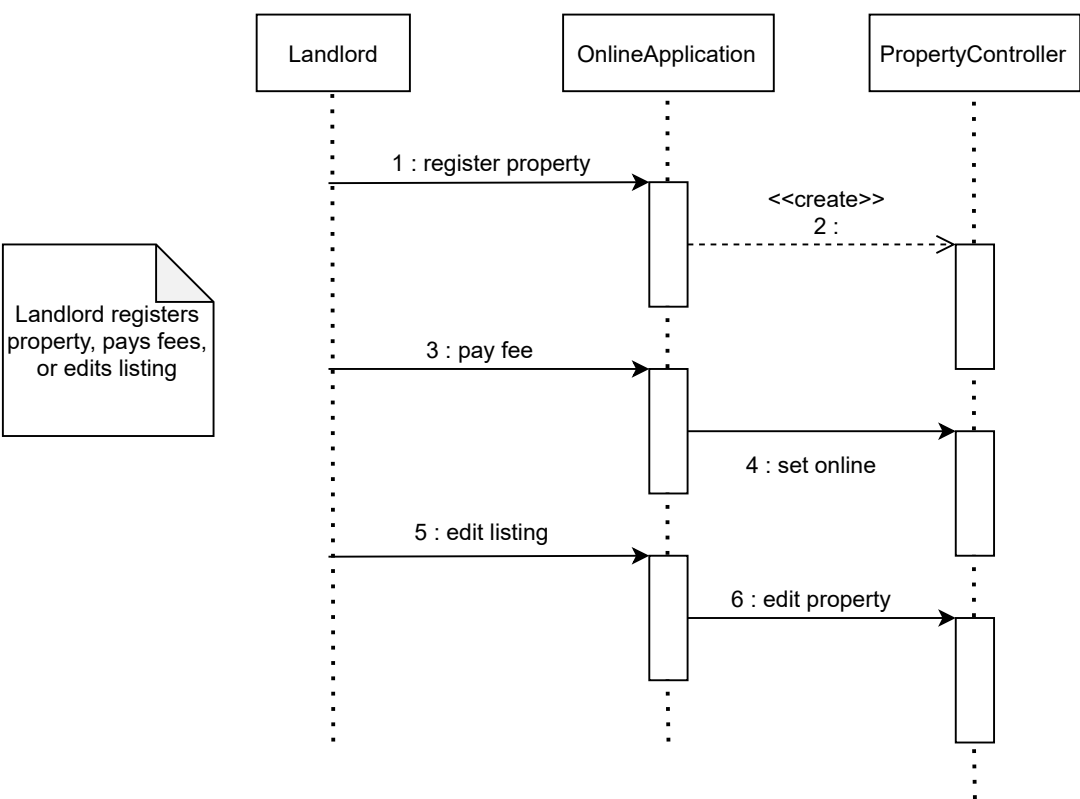
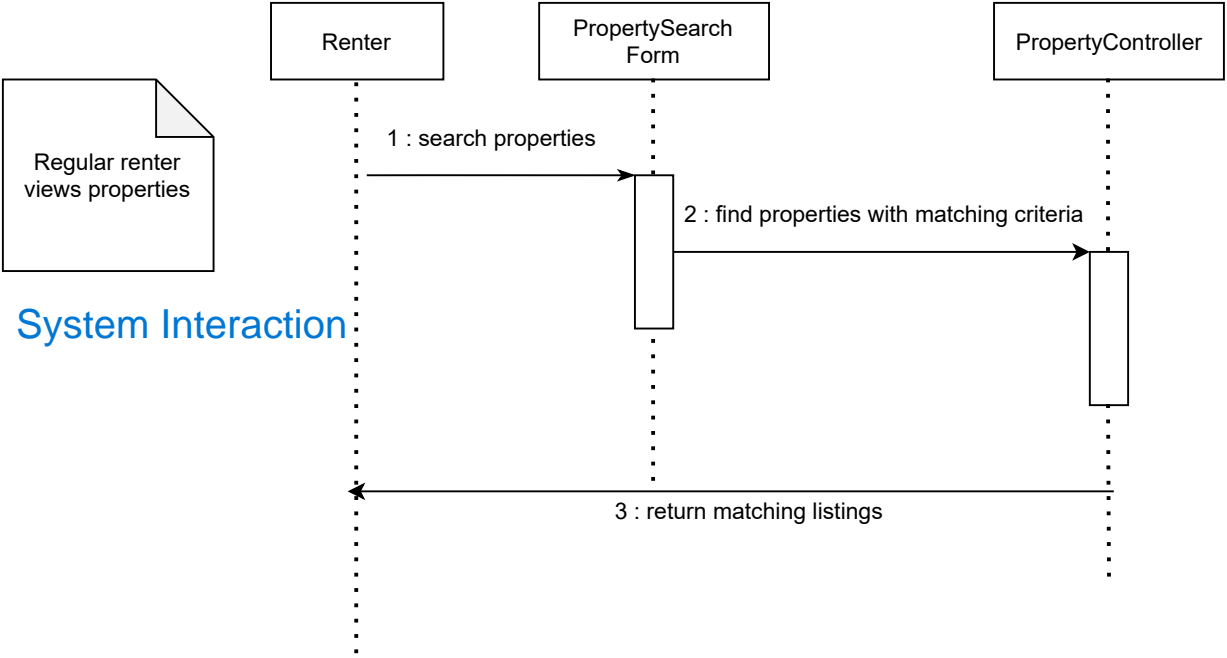


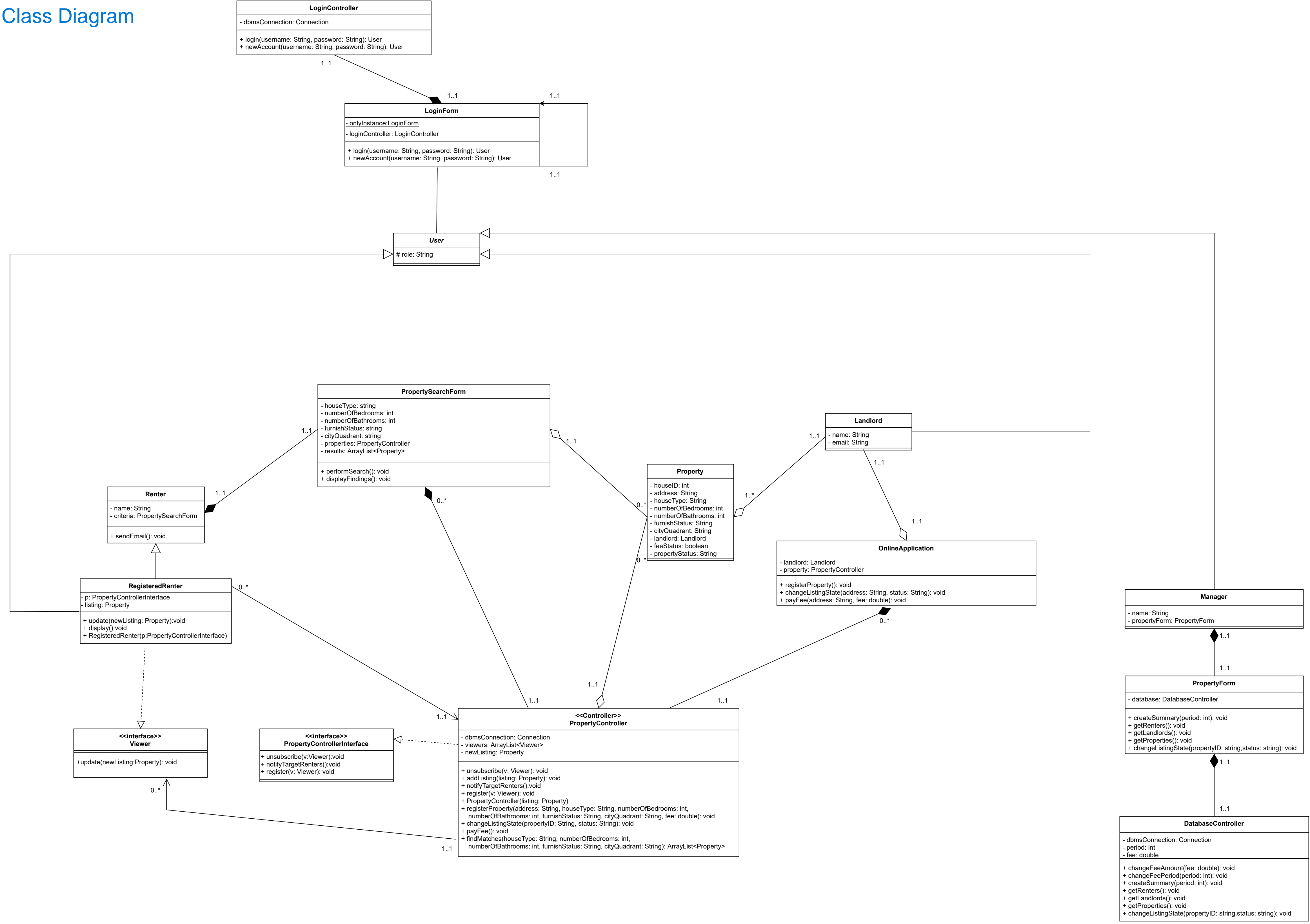
# Use Case



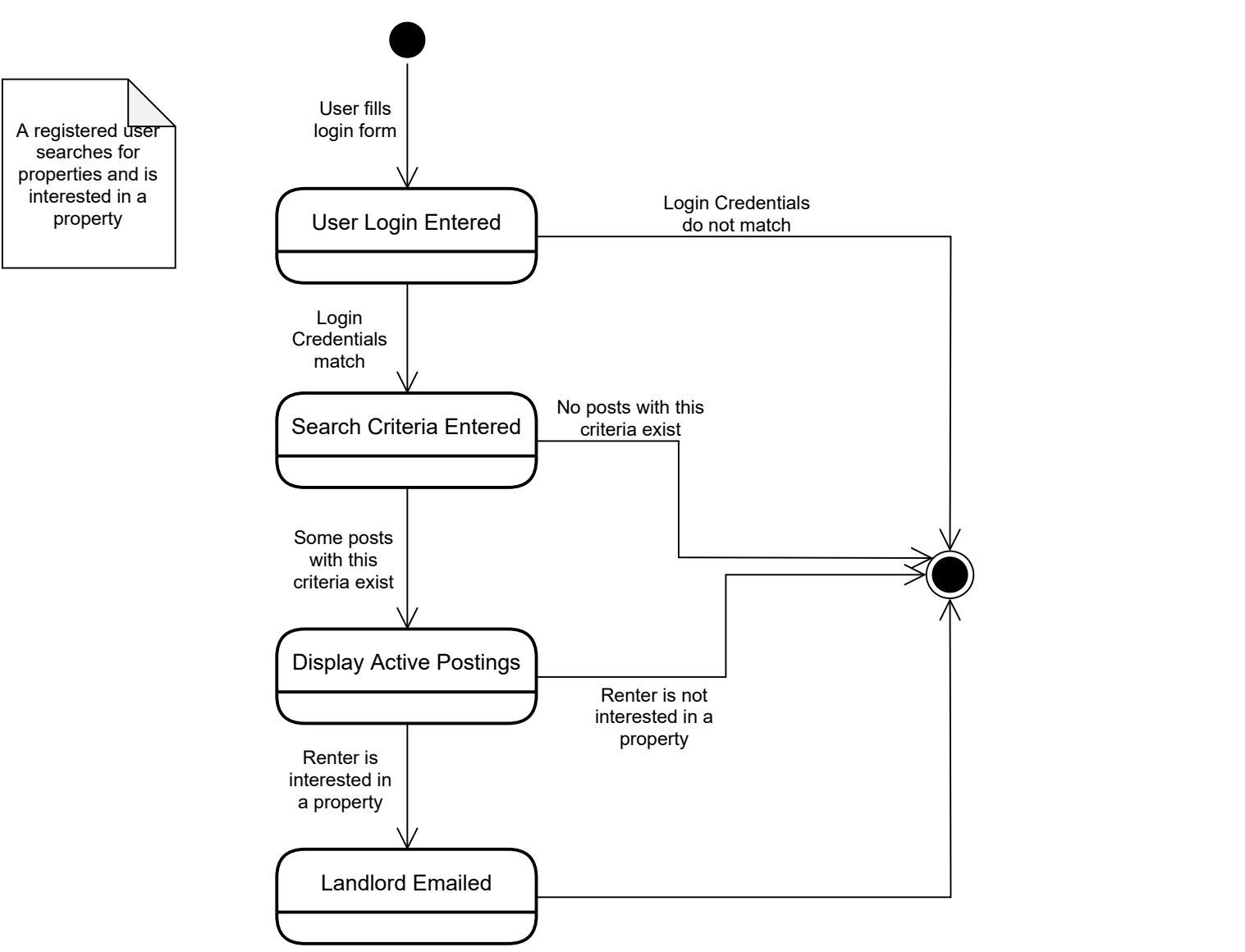
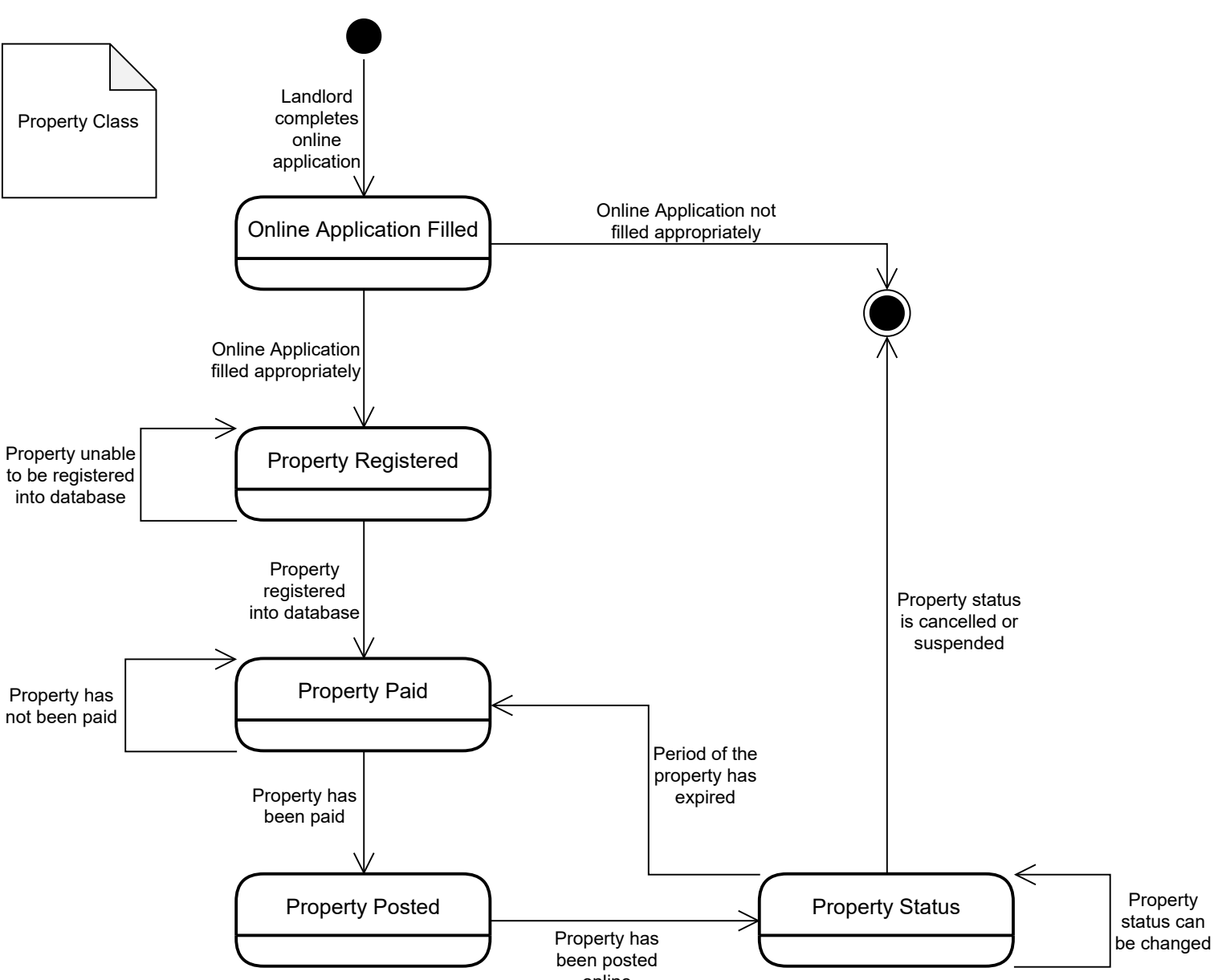
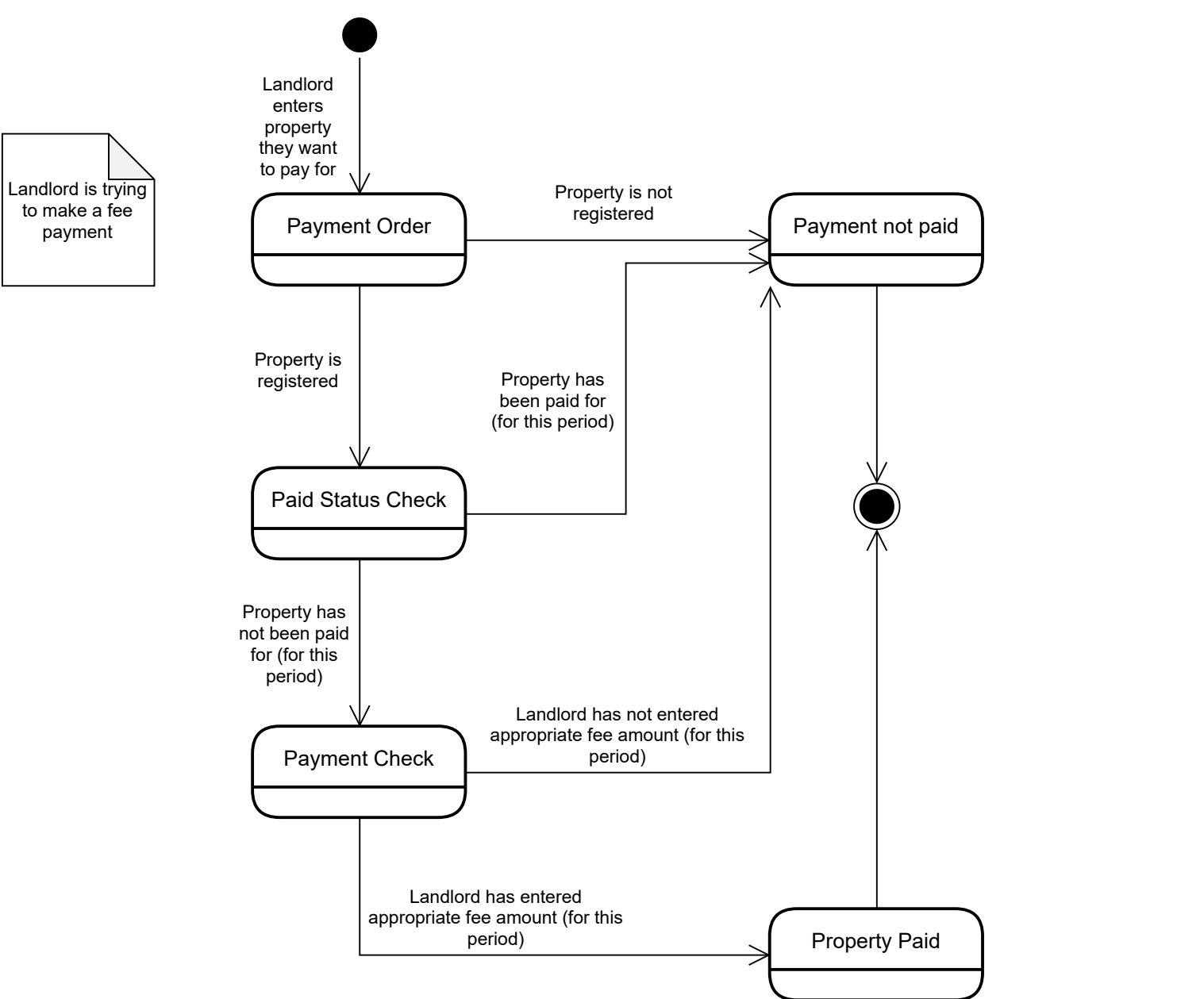
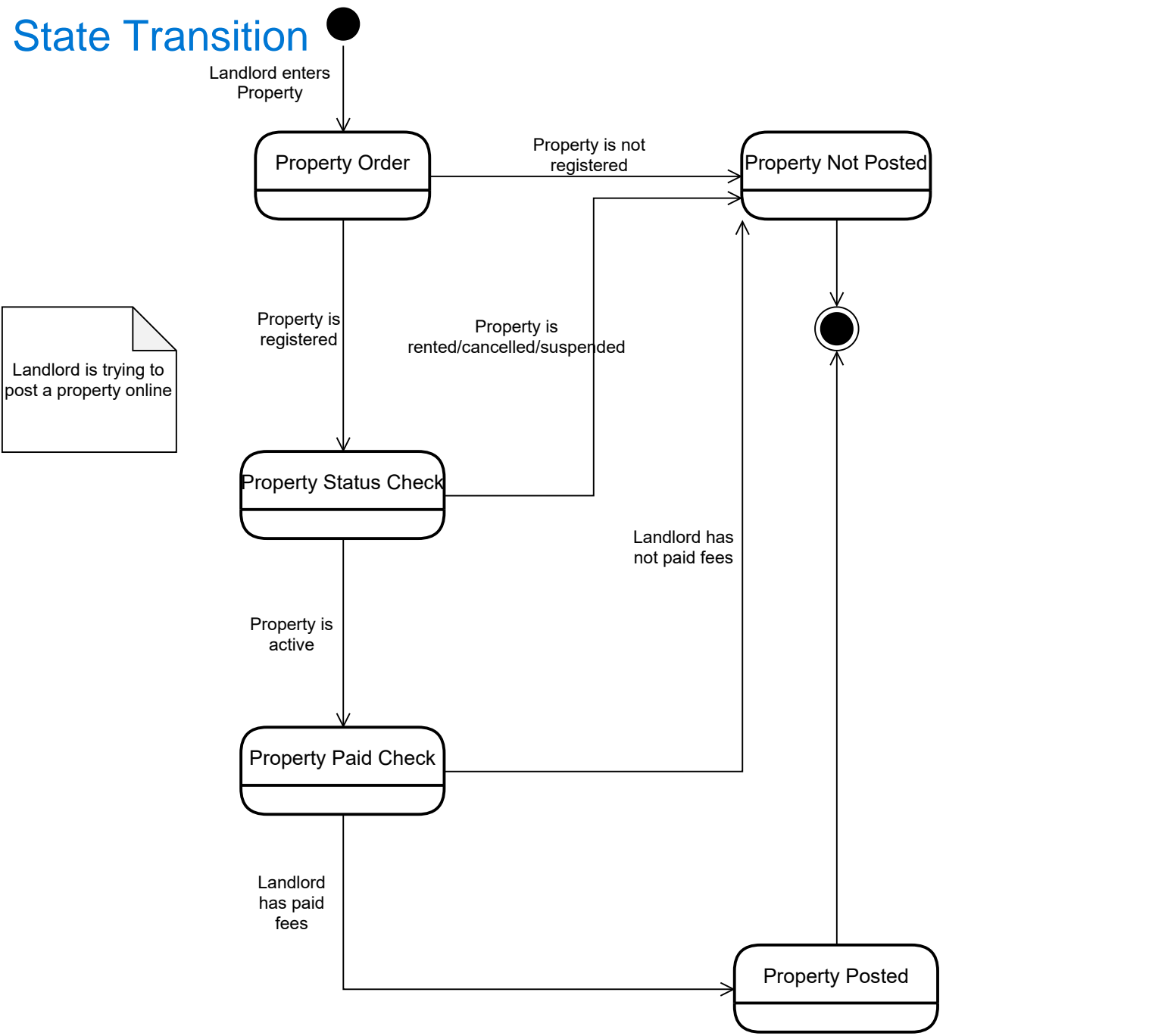
## System Interaction



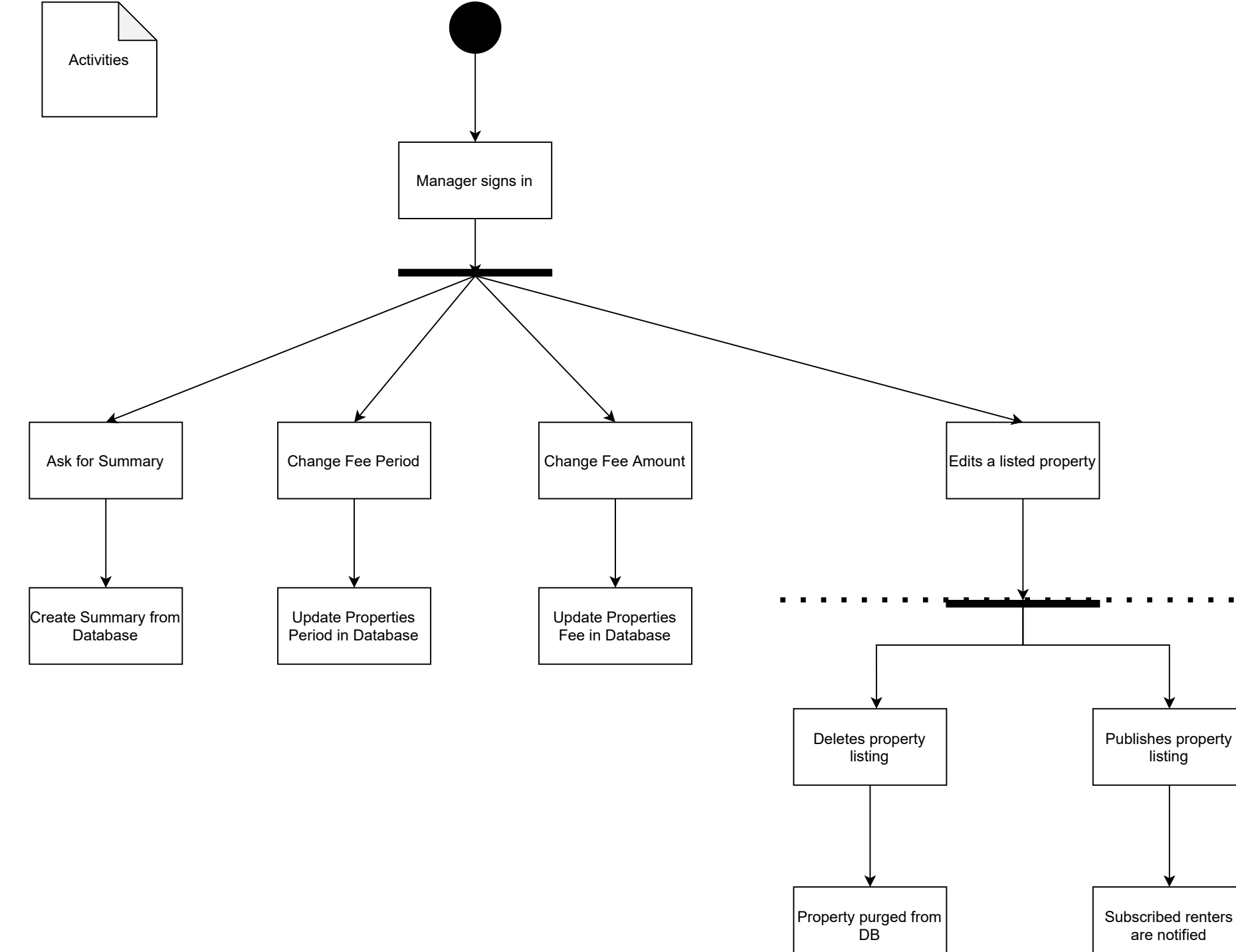
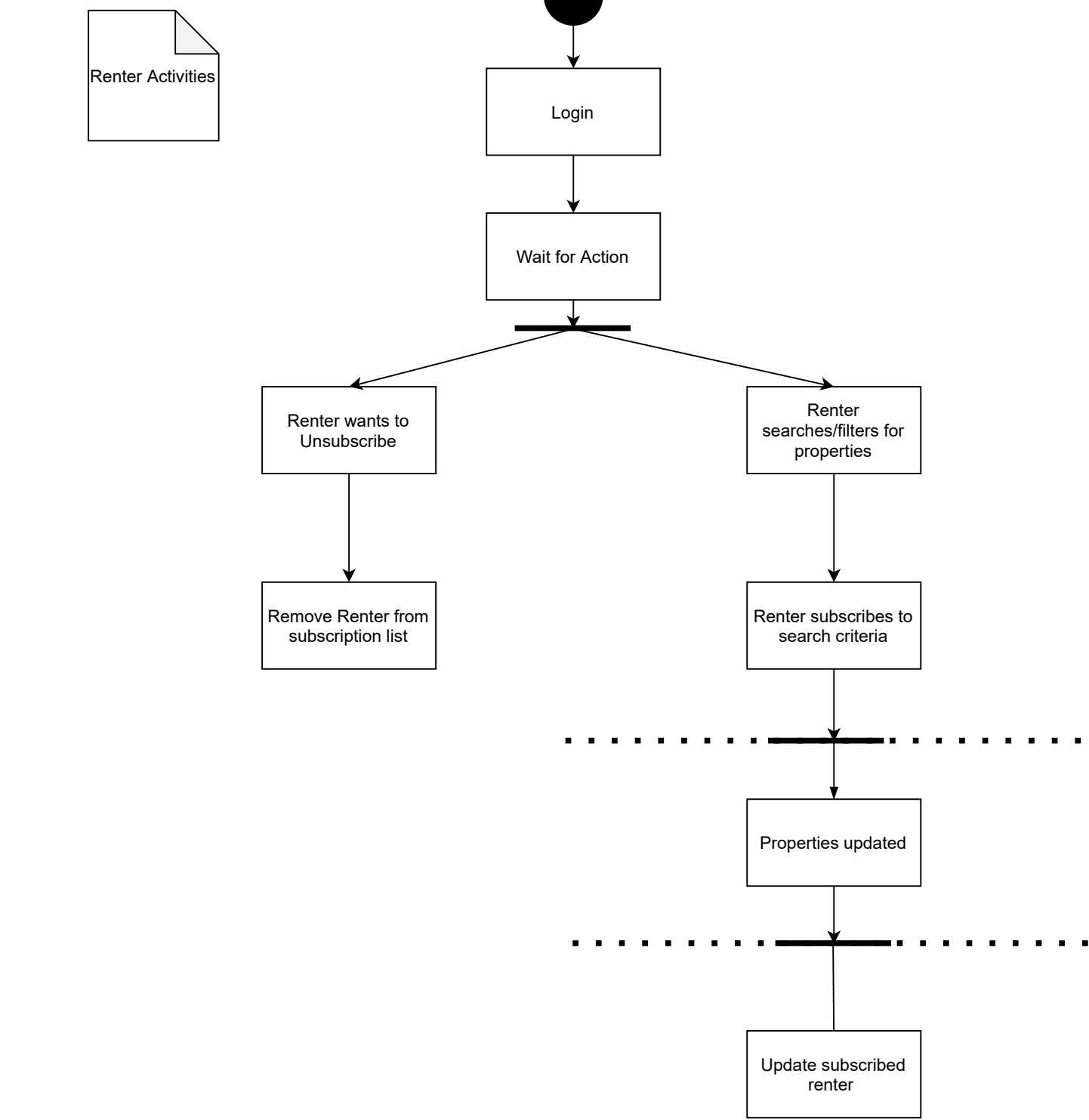
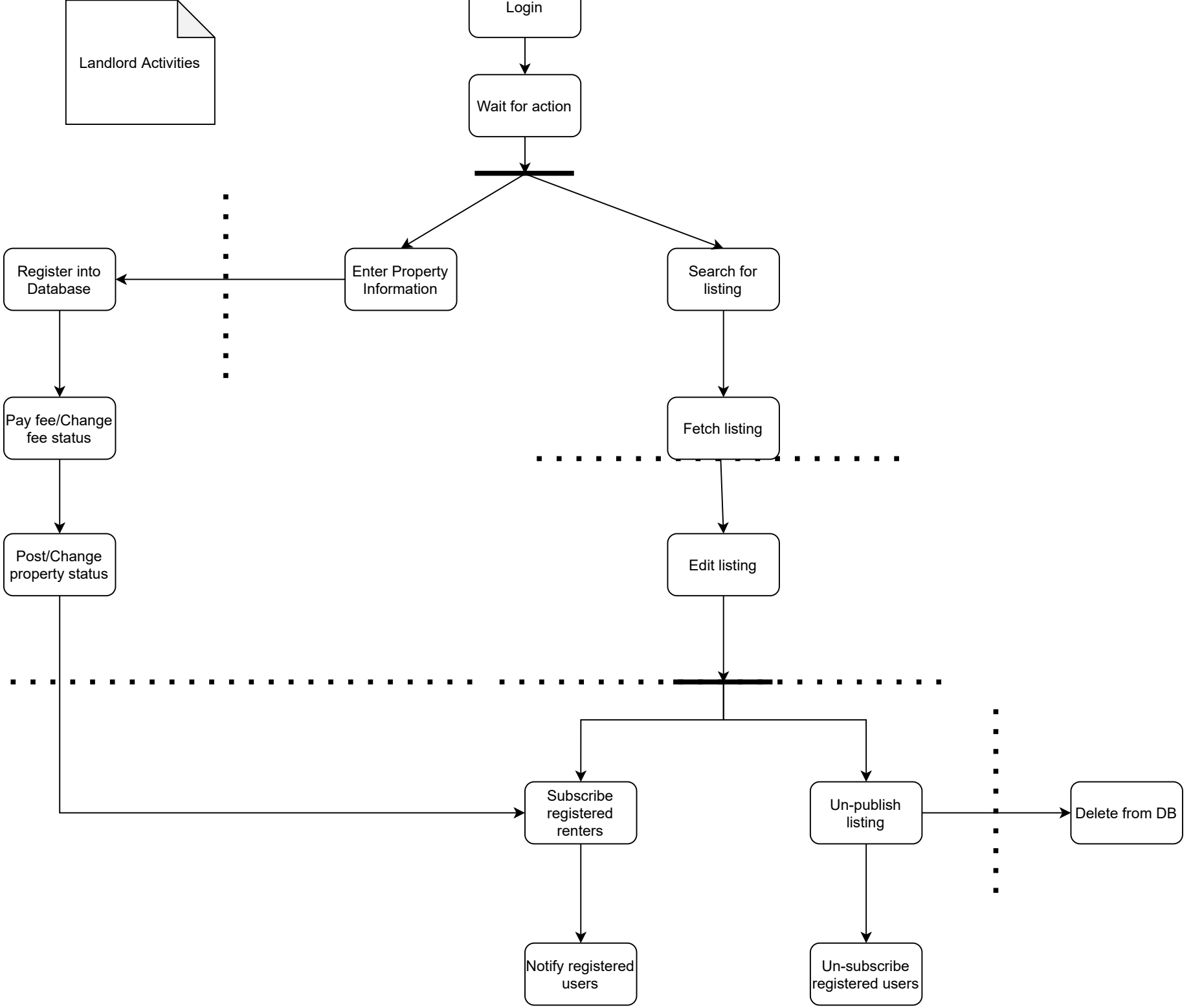
# Class Diagram



# State Transition



# System Activity

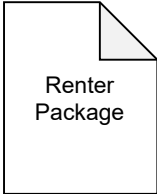


## C.Specfication#1

<b>LoginForm</b>
- <u>onlyInstance: LoginForm</u> - loginController: LoginController
+ <u>setOnlyInstance(onlyInstance: LoginForm): void</u> + <u>getOnlyInstance(): LoginForm</u> + LoginForm():void + login(username: String, password: String): User + newAccount(username: String, password: String): User

<b><i>User</i></b>
#role: String
+setRole(role: String): void +getRole(): String

<b>LoginController</b>
- dbmsConnection: Connection
+ login(username: String, password: String): User + newAccount(username: String, password: String): User + setConnection(dbmsConnection: Connection): void + getConnection(): Connection



Renter
<div>- name: String</div> <div>- criteria: PropertySearchForm</div>
<div>+ Renter()</div> <div>+ sendEmail(): void</div> <div>+ setName(name: String): void</div> <div>+ setPropertySearchForm(criteria: PropertySearchForm): void</div> <div>+ getName(): String</div> <div>+ getPropertySearchForm(): PropertySearchForm</div>

<<interface>> Viewer
<div>+update(newListing:Property): void</div>

## C.Specification#2

RegisteredRenter
<div>- p: PropertyControllerInterface</div> <div>- listing: Property</div>
<div>+ RegisteredRenter()</div> <div>+ update(newListing: Property):void+display():void</div> <div>+ RegisteredRenter(p:PropertyControllerInterface)</div> <div>+ setPropertyControllerInterface(p: PropertyControllerInterface): void</div> <div>+ setProperty(listing: Property): void</div> <div>+ getPropertyControllerInterface(): PropertyControllerInterface</div> <div>+ getProperty(): Property</div>

<<interface>> PropertyControllerInterface
<div>+unsubscribe(v:Viewer):void</div> <div>+notifyTargetRenters():void</div> <div>+register(v: Viewer): void</div>

PropertyController
<div>- dbmsConnection: Connection</div> <div>- viewers: ArrayList&lt;Viewer&gt;</div> <div>- newListing: Property</div>
<div>+ PropertyController()</div> <div>+ setViewers(viewers: ArrayList&lt;Viewer&gt;): void</div> <div>+ setProperty(newListing: Property): void</div> <div>+ getViewers(): ArrayList&lt;Viewer&gt;</div> <div>+ getProperty(): Property</div> <div>+ setConnection(dbmsConnection: Connection): void</div> <div>+ getConnection(): Connection</div> <div>+ unsubscribe(v: Viewer): void+addListing(listing: Property): void</div> <div>+notifyTargetRenters():void</div> <div>+register(v: Viewer): void</div> <div>+PropertyController(listing: Property)</div> <div>+registerProperty(address: String, houseType: String, numberOfBedrooms: int, numberOfBathrooms: int, furnishStatus: String, cityQuadrant: String, fee: double): void</div> <div>+ changeListingState(propertyID: String, status: String): void</div> <div>+payFee(): void</div> <div>+ findMatches(houseType: String, numberOfBedrooms: int, numberOfBathrooms: int, furnishStatus: String, cityQuadrant: String): ArrayList&lt;Property&gt;</div>

Property
<div>- houseID: int</div> <div>- address: String</div> <div>- houseType: String</div> <div>- numberOfBedrooms: int</div> <div>- numberOfBathrooms: int</div> <div>- furnishStatus: String</div> <div>- cityQuadrant: String</div> <div>- landlord: Landlord</div> <div>- feeStatus: boolean</div> <div>- propertyStatus: String</div>
<div>+ setHouseID(houseID: String): void</div> <div>+ setAddress(address: String): void</div> <div>+ setHouseType(houseType: String): void</div> <div>+ setNumberOfBedrooms(numberOfBedrooms: int): void</div> <div>+ setNumberOfBathrooms(numberOfBathrooms: int): void</div> <div>+ setFurnishStatus(furnishStatus: String): void</div> <div>+ setCityQuadrant(cityQuadrant: String): void</div> <div>+ setLandlord(landlord: Landlord): void</div> <div>+ setFeeStatus(feeStatus: boolean): void</div> <div>+ setPropertyStatus(propertyStatus: String): void</div> <div>+ getHouseID(): String</div> <div>+ getAddress(): String</div> <div>+ getHouseType(): String</div> <div>+ getNumberOfBedrooms(): int</div> <div>+ getNumberOfBathrooms(): int</div> <div>+ getFurnishStatus(): String</div> <div>+ getCityQuadrant(): String</div> <div>+ getLandlord(Landlord): Landlord</div> <div>+ getFeeStatus(): boolean</div> <div>+ getPropertyStatus(): String</div>

Manager  
Package

## C.Specification#3

### Manager

- name: String  
- propertyForm: PropertyForm

+ Manager()  
+ setName(name: String): void  
+ getName(): String  
+ setPropertyForm(propertyForm: PropertyForm): void  
+ getPropertyForm(): PropertyForm

### DatabaseController

- dbmsConnection: Connection  
- feePeriod: int  
- feeAmount: double

+ DatabaseController()  
+ setConnection(dbmsConnection: Connection): void  
+ getConnection(): Connection  
+ setFeeAmount(fee: double): void  
+ setFeePeriod(): int  
+ getFeeAmount(): double  
+ getFeePeriod(period: int): void  
+ createSummary(period: int): void  
+ getRenters(): void  
+ getLandlords(): void  
+ getProperties(): void  
+ changeListingState(propertyID: string,status: string): void

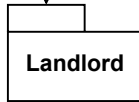
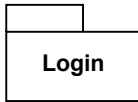
### PropertyForm

- database: DatabaseController

+ PropertyForm(): void  
+ setDatabase(database: DatabaseController): void  
+ getDatabase(): DatabaseController  
+ createSummary(period: int): void  
+ getRenters(): void  
+ getLandlords(): void  
+ getProperties(): void  
+ changeListingState(propertyID: string,status: string): void



# Package Diagram



# Deployment Diagram

