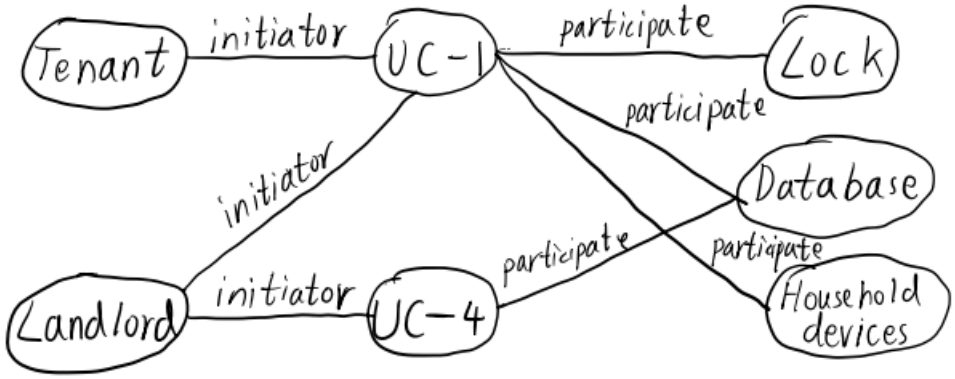
T1 Use case diagram:



T2 Use case schema:

UC-1:

Use Case UC-1: Unlock	
Related Requirements:	REQ-1, REQ-2, REQ-3, REQ-4, REQ-6
Initiating Actor:	Any of: Tenant, Landlord
Actor's Goal:	Unlock and enter home
Participating Actors:	Lock, household devices, database
Preconditions:	The database has stored valid mobile phone number
Postconditions:	The door automatically locks on after a period of time
Flows of Events for Main Success Scenario:	
1.Tenant/Landlord arrives at the door and open the application in the phone to open the door.	
2.Household devices and database check the phone number and open the lock.	
3.Tenant/Landlord enter the house and door automatically lock on.	

UC-4:

Use Case UC-4: RetireUser	
Related Requirements:	
Initiating Actor:	Any of: Landlord; Some of: Tenant
Actor's Goal:	Retire an existing user account and disable access
Participating Actors:	Database
Preconditions:	User account needed to be deleted exists in the database
Postconditions:	Needed user account is deleted and the user can't unlock the door
Flows of Events for Main Success Scenario:	
1.Landlord logins in the database and finds the user account needed to be deleted.	
2.Landlord deletes the user account.	

T3 Acceptance test:

UC-1:

Test-case Identifier: TC-1 Use Case Tested: UC-1 Pass/fail criteria: The test passes if the user uses phone contained in the database within the maximum unsuccessful attempts and opens the door.	
Test Procedure:	Expected Result:
Step 1: Use an unidentified phone	System beeps to indicate failure; records unsuccessful attempt in the database; prompts the user to try again.
Step 2: Use a phone contained in the database	System opens the door lock and arms the lock automatically later.

UC-4:

Test-case Identifier: TC-4 Use Case Tested: UC-4 Pass/fail criteria: The test passes if the user successfully logins in the database and deletes the user account needed.	
Test Procedure:	Expected Result:
Step 1: User login in the database with a valid account	Correctly logining the database.
Step 2: User find and delete the user account	Successfully delete the user account.