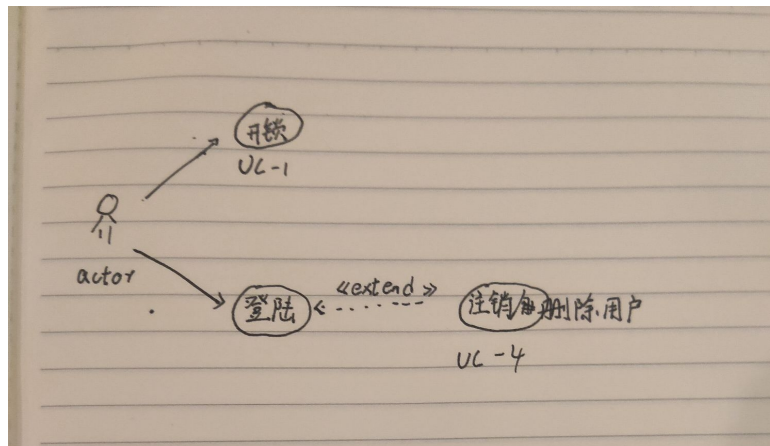


Use Case UC-1	Unlock
Related Requirements:	Req-1 Req-2 Req-3 Req-4 Req-5 Req-9
Initiating Actor:	Any of: Tenant, Landlord
Actor's Goal:	Unlock and enter home
Participating Actors:	LockDevice Mobilephone-system HouseholdDevices Timer
Preconditions:	<p>The set of valid keys in the system database is non-empty.</p> <p>The system displays the menu of available functions on mobile phone; at the door keypad the menu choices are "Lock" and "Unlock".</p>
Postconditions:	<ol style="list-style-type: none"> 1. If unlock succeed, the system displays the result "unlock" on mobile phone; the door is opened; household devices are set as configured. 2. If unlock failed , the door will be locked; the system will block.
Flow of Events for Main Success Scenario:	<ol style="list-style-type: none"> 1. Tenant/Landlord open the mobile phone and select the menu item "Unlock" 2. Include:: UC-6 and UC-7 3. System(a) signals to the Tenant/Landlord the lock status, e.g., "Unlock succeed", (b)signals to LockDevice to disarm the lock, and (c) signals to HouseholdDevices to be activated 4. System signals to the Timer to start the auto-lock timer countdown 5. Tenant/landlord opens the door and enters the home.
Flow of Events for Extensions (Alternate Scenarios):	<ol style="list-style-type: none"> 1a. Intruder open the mobile phone and select the menu item "Unlock" 2a. System(a) signals to the Intruder the lock status, e.g., "Unlock failed", (b) signals to LockDevice to block



Acceptance tests

ATC1.01 Test without any Tenant/Landlord sign in, the door will be locked.

*(pass/fail?)

ATC1.02 Test with the valid key of a current tenant on his or her apartment on mobile phone to unlock the door. (pass/fail?)

ATC1.03 Test with the valid key of a current tenant on someone else's apartment on mobile phone to unlock the door. (pass/fail?)

ATC1.04 Test with an invalid key on any apartment (pass/fail?)

ATC1.05 Test with open the door directly after unlocked the door for several minutes. (pass/fail?)

Use Case UC-4	RetireUser
Related Requirements:	Req-4 Req-7 Req-8
Initiating Actor:	Any of: Tenant, Landlord
Actor's Goal:	Retire an existing user account and disable access.
Participating Actors:	LockDevice Mobilephone-system Timer
Preconditions:	The set of valid keys in the system database is non-empty. A user account has been signed in.
Postconditions:	User account is signed out, access is disabled, the system displays the menu of sign in.
Flow of Events for Main Success Scenario:	<ol style="list-style-type: none"> 1. Tenant/Landlord open the mobile phone and select the menu item "Retire" 2. System(a) signals to the Tenant/Landlord the lock status, e.g., "Retire succeed", (b)signals to LockDevice to disable access. 3. System signals to the Timer to start the auto-lock timer countdown

Acceptance tests

ATC4.01 Test with a user account have been signed in. (pass/fail?)

ATC4.02 Test with a user account have not been signed in. (pass/fail?)

ATC4.03 Test with a user account when trying to unlock the door. (pass/fail?)