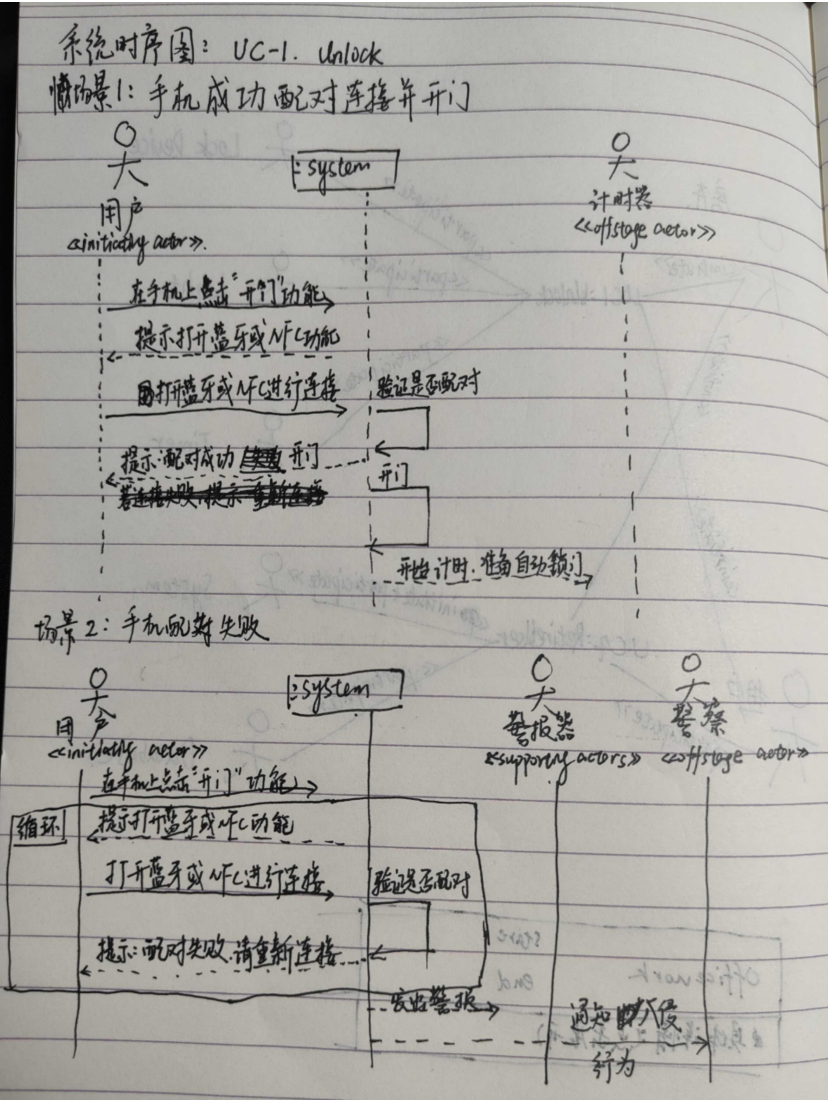
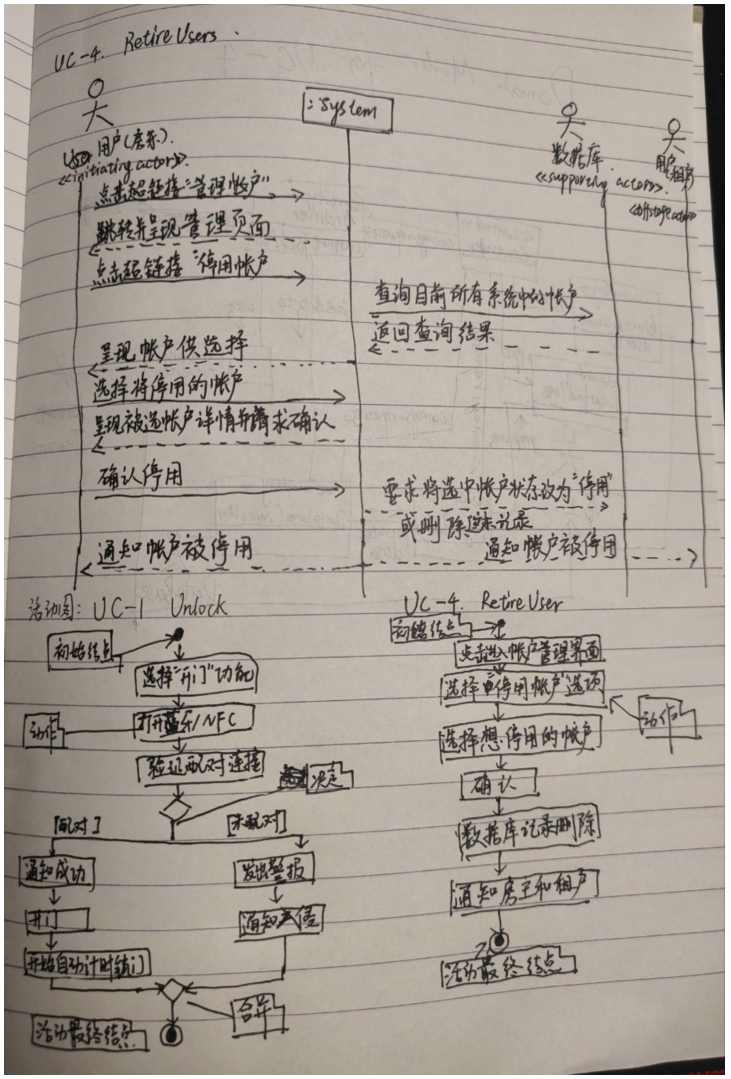
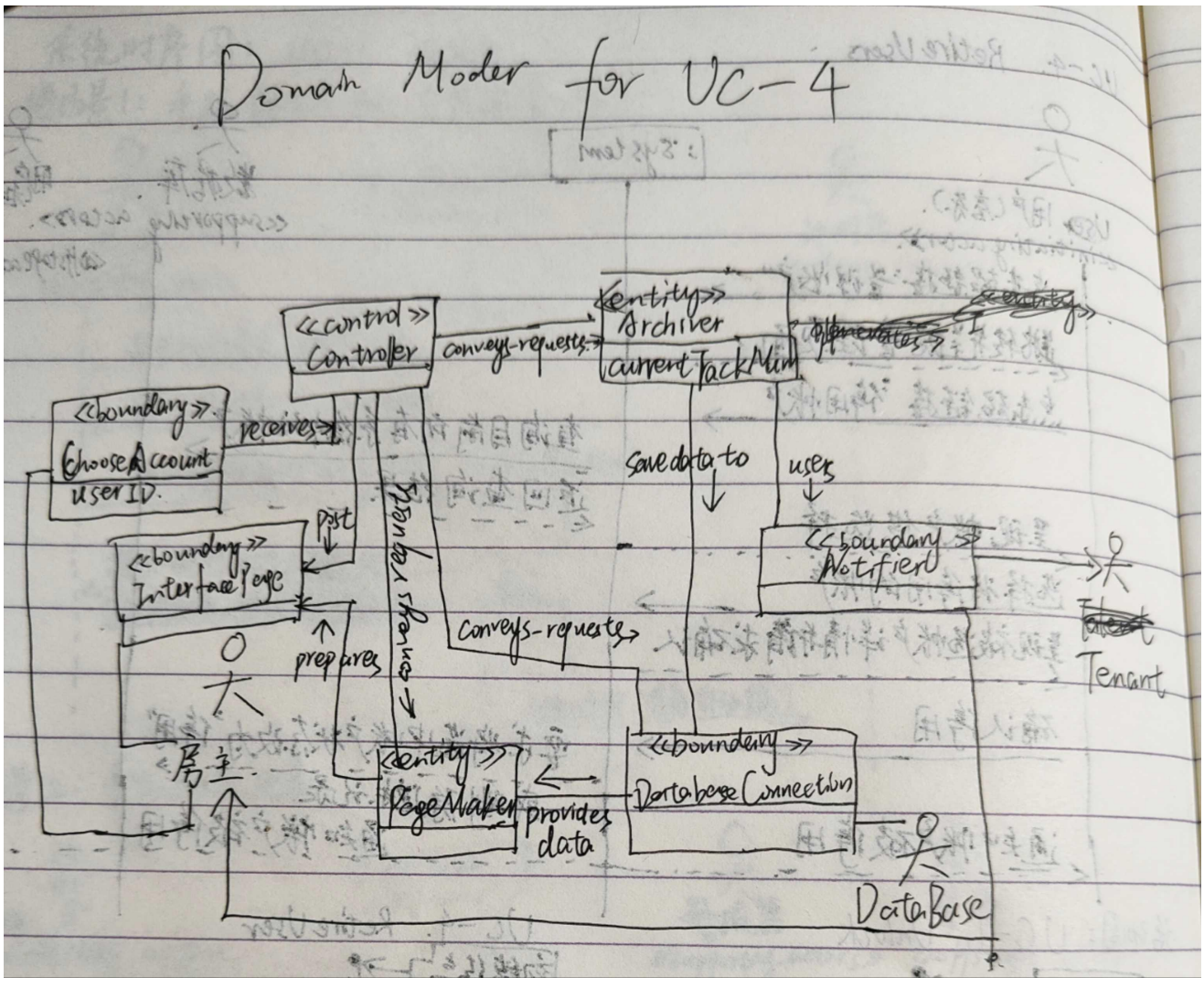

系统时序图：UC-1. Unlock
情场景1：手机成功配对连接并开门
用户
<<initiating actor>>
:system
计时器
<<offstage actor>>
在手机上点击"开门"功能
提示打开蓝牙或NFC功能
打开蓝牙或NFC进行连接
验证是否配对
提示：配对成功 开门
开门
开始计时，准备自动锁门
场景2：手机配对失败
用户
<<initiating actor>>
:system
警报器
<<supporting actors>>
警察
<<offstage actor>>
在手机上点击"开门"功能
循环
提示打开蓝牙或NFC功能
打开蓝牙或NFC进行连接
验证是否配对
提示：配对失败，请重新连接
发出警报
通知入侵
行为


UC-4. Retire Users
用户(房东)
<<initiating actor>>
:system
数据库
<<supporting actors>>
用户租房
<<offstage actor>>
点击超链接"管理帐户"
跳转并呈现管理页面
点击超链接"停用帐户"
查询目前所有系统中的帐户
返回查询结果
呈现帐户供选择
选择将停用的帐户
呈现被选帐户详情并请求确认
确认停用
要求将选中帐户状态改为"停用"
或删除这条记录
通知帐户被停用
通知帐户被停用
活动图：UC-1 Unlock
初始结点
选择"开门"功能
打开蓝牙/NFC
动作
验证配对连接
决定
[配对]
[未配对]
通知成功
发出警报
开门
通知入侵
开始自动计时锁门
合并
活动最终结点
UC-4. Retire User
初始结点
点击进入帐户管理界面
选择"停用帐户"选项
动作
选择想停用的帐户
确认
数据库记录删除
通知房主和租户
活动最终结点


Domain Moder for UC-4
<<control>>
Controller
conveys-requests
<<entity>>
Archiver
currentTackMum
<<boundary>>
ChooseAccount
userID
receives
post
<<boundary>>
InterfacePage
prepares
conveys-requests
save data to
users
<<boundary>>
Notifier
Tenant
房主
<<entity>>
PageMaker
provides data
<<boundary>>
Database Connection
DataBase

# Extracting the Responsibilities

| Responsibility Description | Type | Concept Name |
|---|---|---|
| Rs1. Coordinate actions of concepts associated with this use case and delegate the work to other concepts. | D | Controller |
| Rs2. Select from the account to retire | D | Choose Account |
| Rs3. Render the retrieved records into an HTML document for sending to actor's Web browser for display. | D | Page Maker |
| Rs4. HTML document that shows the actor the current context, what actions can be done, and outcomes of the previous actions. | K | Interface Page |
| Rs5. Prepare a database query that best matches the actor's search criteria and retrieve the records from the database (from UC-5, Step 4). | D | Database Connection |
| Rs6. Filter the retrieved records to match the actor's search criteria (from UC-5, Step 6). | D | Postprocessor |
| Rs7. Archive the request in the database and assign it a tracking number (from UC-5, Step 8). | D | Archiver |
| Rs8. Notify Landlord about the request (from UC-5, Step 8). | D | Notifier |

# Extracting the Associations

| Concept pair | Association description | Association name |
|---|---|---|
| Controller ↔ Page Maker | Controller passes requests to Page Maker and receives back pages prepared for displaying | conveys requests |
| Page Maker ↔ Database Connection | Database Connection passes the retrieved data to Page Maker to render them for display | provides data |
| Page Maker ↔ Interface Page | Page Maker prepares the Interface Page | prepares |
| Controller ↔ Database Connection | Controller passes search requests to Database Connection | conveys requests |
| Controller ↔ Archiver | Controller passes a list of "interesting" records and complaint description to Archiver, which assigns the tracking number and creates Investigation Request | conveys requests |
| Archiver ↔ Database Connection | Archiver requests Database Connection to store changes into the database | requests save |
| Archiver ↔ Notifier | Archiver requests Notifier to notify Landlord about investigation requests | requests notify |