Mini Project 2

UC-1(Unlock)：
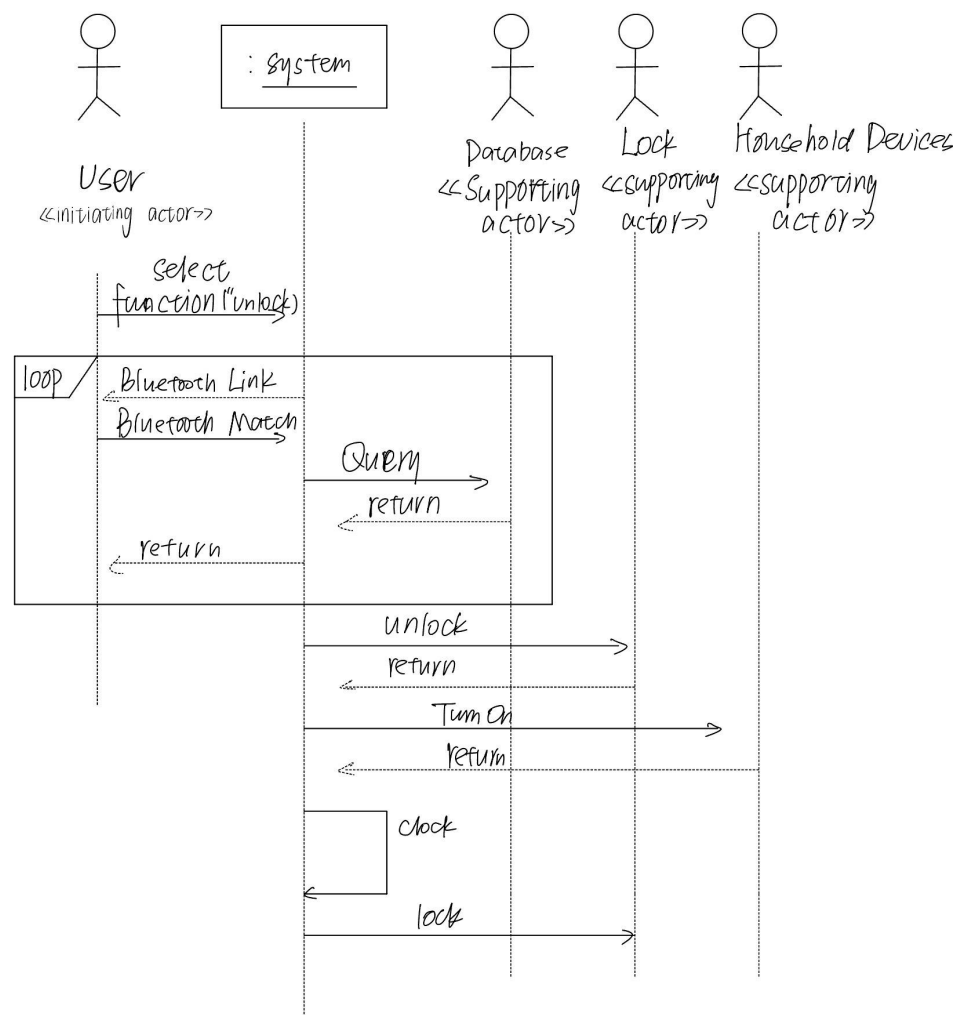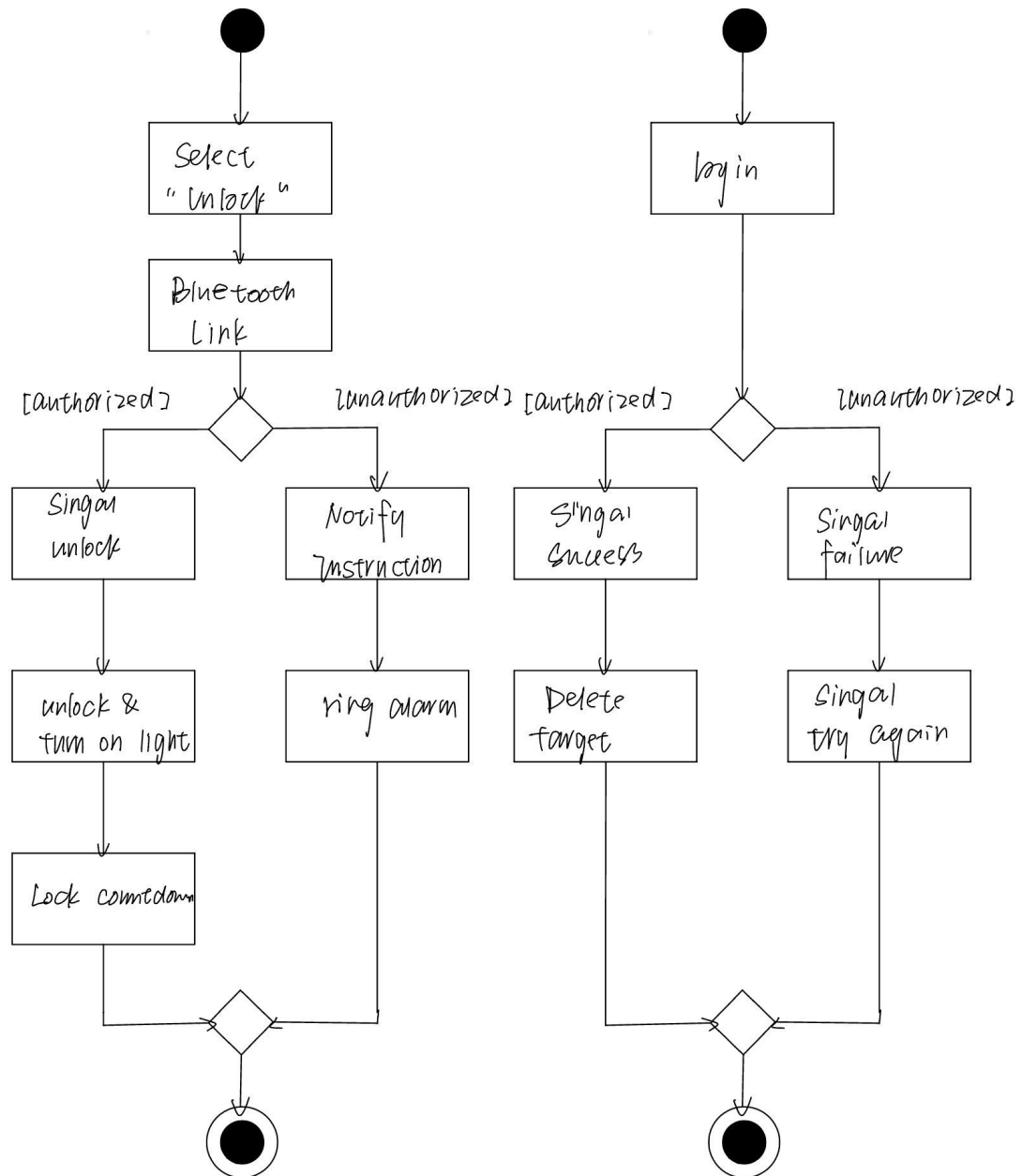

UC-4(RetireUser)：
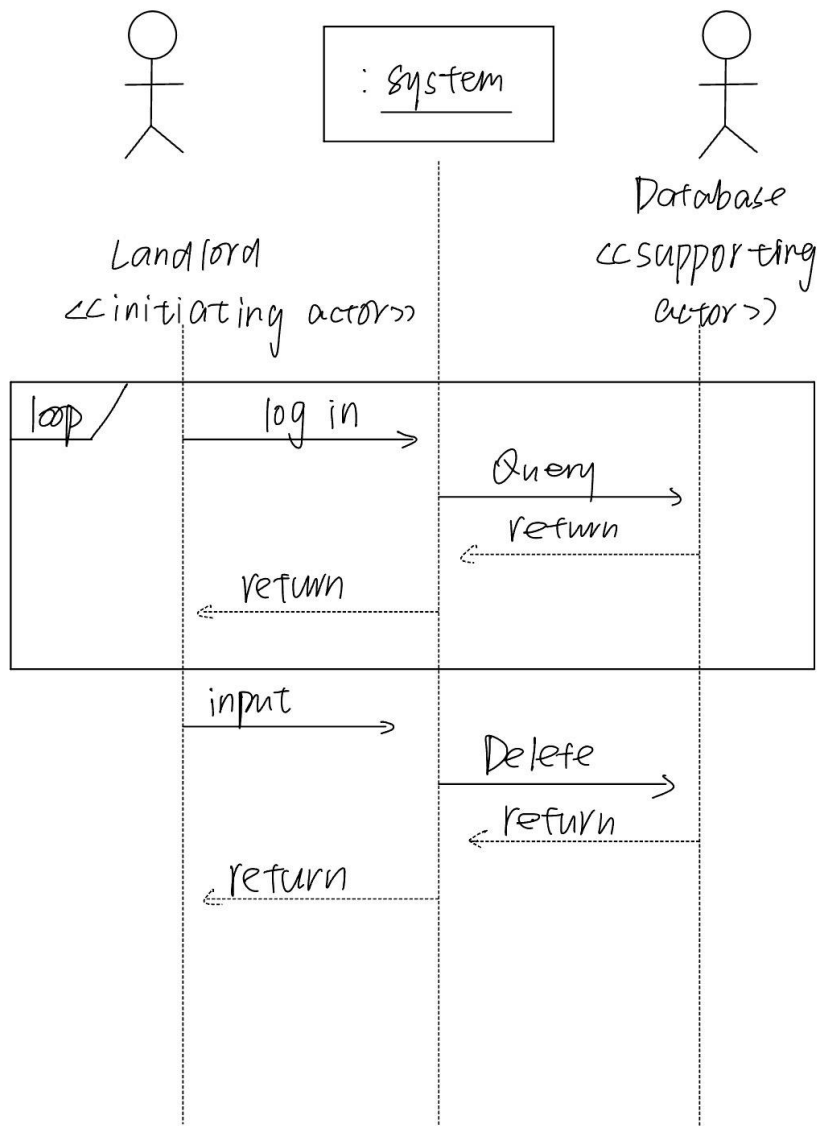
Activity diagram for UC-1(Unlock)

Activity diagram for UC-4(RetireUser)

Left flow:
- (initial node) → Select "Unlock" → Bluetooth Link → (decision)
  - [authorized] → Singal unlock → unlock & turn on light → Lock countdown → (merge) → (final node)
  - [unauthorized] → Notify Instruction → ring alarm → (merge)

Right flow:
- (initial node) → log in → (decision)
  - [authorized] → Singal Success → Delete target → (merge) → (final node)
  - [unauthorized] → Singal failure → Singal try again → (merge)

Domain model for UC-4(RetireUser): CRC 分析

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. Form specifying the delete parameters for database log retrieval (from UC-4).	K	Delete Request
Rs3. Render the operation panel and retrieved records into an UI for sending to actor's screen for display.	D	PageMaker
Rs.4 A UI to show the actor the current context, which contains current tenants and all operations.	K	UserPage
Rs.5 Support SQL service to the system, e.g., JDBC driver.	D	DB-Connection
Rs.6 An object generated by system to be deleted.	K	TargetUser

Extracting the Associations

Concept Pair	Association Description	Association Name
Controller↔ Page Maker	Controller passes requests to PageMaker and receives back pages prepared for displaying	conveys requests
PageMaker↔ DB-Connection	Database Connection passes the retrieved data to Page Maker to render them for display	provides data
PageMaker↔ UserPage	PageMaker prepares the UI to Userpage	prepares
Controller↔ DB-Connection	Controller passes delete requests to DB-Conn.	conveys requests
Controller↔ TargetUser	Controller generates the targeted user entity object, as the Java DAO item.	generates
TargetUser↔ DB-Connection	TargetUser acquires SQL methods in the mapper layer, which needs DB-Connection to operate.	TargetUser

Domain model for
UC-4(RetireUser)

`<<boundary>>` DeletePequest — receives ▶ — *`<<boundary>>`* Controller — Conven request — *`<<entity>>`* Target User

UserID

◀ post

conveы request ▶

to-be-delet

`<<boundary>>` UserPage — ▲ prepare — *`<<entity>>`* PageContainer — ▲ provivde — *`<<boundary>>`* DB-Line

data

LandLord

Datatbase