"SMART HEALTH ASSISTANT FOR EPILEPSY PATIENTS WITH SMART WATCH"

SHEW

Group:

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(CHAPTER 1)

Business requirements:

- ***Brief Description:***

Development of a smartwatch-based health assistant system designed to monitor and assist patients with epilepsy. The system uses smartwatch sensors and artificial intelligence to track symptoms, manage fatigue, detect stress, suggest health recommendations, provide medication reminders, and send notifications to the patient's family when an epileptic seizure occurs.
General benefit:
1• Improve the quality of life of epilepsy patients by providing accurate monitoring and daily support.
2• Reduce anxiety in patients and their families.
3• Enhance adherence to treatment plans and management of factors that increase the risk of seizures.

- ***Business requirements:***

1. Medication Reminder Alerts
2. Detailed Health Condition Reports
3. Immediate Notifications for Family and Friends During Seizure Events

- **Individual task for each member:**

- Shahed: Read online about the topic, collect sources and information, and write the report
- Mashael: Read about the value of the topic in society, and write interview questions and personal interviews
- Lana: Collect ideas and solutions that benefit the platform, and write personal interview questions
- Amal: Analyze the needs of the target group to develop and provide solutions, and write interview questions and personal interviews

- **Meeting time:**

Name of member	***Time & Date***
Shahad, attended all meetings	Sunday (2hours) Tuesday (2hours) Thursday (3hours)
Mashael, attended all meetings	Sunday (2hours) Tuesday (2hours) Thursday (3hours)
Lana, attended all meetings	Sunday (2hours) Tuesday (2hours) Thursday (3hours)
Amal, attended all meetings	Sunday (2hours) Tuesday (2hours) Thursday (3hours)

(CHAPTER 2)

Stakeholders

- **Software Stakeholders :**
  - Epilepsy Patients
  - Family Members

- **Type of software :**
  - data collection system
  - Embedded system
  - Batch processing System

- **Requirement Ghathering: interviews**

name	purpose	Date
Nada Al Sayed NadAlseed2@gmail.com	Collecting patients' needs	Thursday, December 12
Maryam Al-Salmi maAlsolamii@gmail.com	Collecting information from a patient's family	Friday, December 13

- **Interview questions:**

Epilepsy Patients

- **What are the biggest challenges you face in your daily life due to epilepsy?**

My biggest challenge is the unpredictability of seizures, which makes me feel unsafe especially when I'm out and about or at work.

- **Do you use any techniques or strategies to relieve stress or fatigue?**

- I always try to maintain a healthy lifestyle, such as getting regular sleep and cutting down on caffeine. I practice breathing and relaxation techniques such as meditation or yoga to relieve stress

.

- **Have you ever used smartwatches or health apps to track your condition? If so, what has been your experience?**

Yes, I have tried smartwatches to track heart rate and activity levels. The experience is helpful in tracking some indicators, but it lacks tools specific to my condition such as seizure prediction or emergency alerts.

- **What features would you like to have in a device that helps you manage your MS?**

Flexible medication reminders

- **Would you prefer to receive alerts or suggestions directly from the device?**

Yes, definitely. I prefer alerts that are clear and easy to understand

- **Do you have frequent balance problems or falls?**

Yes, sometimes during or after seizures, especially when I am alone or in unsafe places

- **How can a smart device help improve your safety on the go?**

Send instant notifications to a trusted person when a seizure occurs.
• Geo-locate me to ensure I get help when I need it.
• Provide alerts to avoid stress while on the go, such as taking breaks or drinking water.
Having such a device would enhance my sense of security and independence when I am out of the house

- **Interview questions:**

Family Members

- **What is the hardest thing about taking care of your family member with epilepsy?**

The hardest part is always worrying they might have a seizure when I'm not with them. It's scary to think I won't be there to help.

- **Do you help them relax or feel less tired?**

Yes, I try to keep the house calm and quiet for them. I also remind them to take their medicine

- **Have you used smartwatches or health apps to check their health?**

No, we haven't tried anything like that yet.

- **What things would you like a smart device to do to help you?**

I'd like a smart device to alert us if they have a seizure.

- **Would you like to get alerts or messages from a smart device about their health?**

Yes, I would. If something happens, I want to know as soon as possible.

- **Do they often lose balance or fall?**

Not too often, but sometimes they get dizzy. I try to stay nearby to help if they need it

- **How can a smart device help you keep them safe when you are not with them?**

A smart device could tell me if they fall or aren't feeling well. It could also help me know where they are

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(CHAPTER 3)

Glossary

- ***Case Glossary:***

word	term
Smartwatch	A wearable computer in the form of a wristwatch that provides functionality beyond just telling time, such as health and fitness tracking, phone notifications, and app execution.
Sensors	Devices that detect changes in the surrounding environment (such as temperature, pressure, motion) and convert them into electrical signals that can be processed.
Artificial Intelligence	A branch of computer science that aims to develop systems and programs capable of simulating human cognitive abilities, such as learning, reasoning, and problem-solving.
Data Collection System	A system designed to gather data from various sources and store it in an organized manner for later analysis and use.
Embedded System	A computer system designed to perform a specific function within a larger device, such as a car's control system or a pacemaker.
Batch Processing System	A system that processes large volumes of data in batches without direct user intervention, often used for tasks that require periodic processing.
Database	An organized collection of data stored electronically, designed to facilitate data access, management, and updating.

- ***Case Glossary:***

word	term
GPS (Global Positioning System):	A navigation system that uses satellites to determine the precise geographic location of a receiver on the Earth's surface.
PDF (Portable Document Format)	A file format designed to represent documents independently of the operating system or application used to view them.
API (Application Programming Interface)	A set of rules and protocols that allow different applications to communicate and exchange data with each other.
Failover	The ability to automatically switch to a backup system in the event of a primary system failure, ensuring service continuity
User Interface	The part of the system that the user interacts with, whether through a touch screen, buttons, or voice commands.
Data Encryption	The process of converting data into an unreadable format to protect its confidentiality, which can only be decrypted using a special key.
Uptime	The percentage of time that a system is operational and able to serve users.

- ***Case Glossary:***

word	term
Real-time alerts	Notifications that are sent immediately upon the occurrence of a specific event, allowing users to respond quickly.
Geo-locate	To determine the precise geographic location of a device or person using technologies such as GPS or Wi-Fi

- **Meeting time:**

Name of member	***Time & Date***
amal, attended all meetings	Friday (2hours) Saturday (3hours)
refal, attended all meetings	Friday (2hours) Saturday (3hours)
sulafah, attended all meetings	Friday (2hours) Saturday (3hours)
walaa, attended all meetings	Friday (2hours) Saturday (3hours)

- **Individual task for each member:**

- Shahed: writing non functional Requirement
- Mashael: writing functional Requirement
- Lana: writing functional Requirement
- Amal: writing functional Requirement

(CHAPTER 4)

Analysis phase

- **Functional Requirement:**
  Epilepsy Patients

1. The user should be able to create an account (H1)

1.1 The system shall allow the user to input a username and an email.
1.2 The system shall require the user to input a password .

1.3 The system shall send an email with a verification code to verify the account.
1.4The system shall ask the user to enter verification code
1.5The system shall display in error message if the entered verification code is incorrect
1.6The system shall re-send the verification code if the user enters the wrong code
1.7The system shall allow the user to re-enter the code

1.8 The system shall display a puzzle for the user to solve to confirm they are human.
1.9 The system shall send another puzzle after displaying an error message if the puzzle solution is incorrect
1.10the system shall allow the ser to solve the new puzzle
1.11 The system shall create the account if the verification is successful.

1.12 The system shall notify the user about the account creation.

1.13The system shall display an error message if incorrect information is entered.

1.14 The system shall allow the user to re-enter the correct information after displaying an error message.

1.15The system shall limit the number of allowed attempts for entering incorrect information.

1.16 The system shall temporarily lock the user's account after exceeding the allowed number of attempts.

1.17 The system shall send an email notification to the user about the temporary account lock.

1.18 The system shall provide the user with an option to recover the account after a specified period or through additional verification steps.

1.19 The system shall save all user information in the database for later use.

2. The user should be able to log in their existing account (H2)

2.1 The system shall prompt the user to input their username/ password.
2.2 The system shall check if the account exists in the database.
2.3 The system shall allow the user to log in if the account exists.
2.4 The system shall display an error message if the account does not exist.

3. The user should be able to log out of their existing account (H3)

3.1 The system shall provide an option for the user to log out.
3.2 When the user selects the log-out option, the system shall automatically initiate the process.
3.3 The system shall clear the user's session data to ensure security and privacy.
- If the system fails to clear the session data, it shall display an error message
- If the log-out is successful, redirect the user to the login page.
3.4 The system shall display a confirmation message indicating a successful log-out

4.The user shall be able to display a health report using monitored data.(H4):

4.1 The system shall allow the user to create a health report based on monitored data such as seizure events, heart rate, and activity levels.
4.2 The system shall prompt the user to specify the type of data, time range, and style of report they want to generate.
4.3 The system shall retrieve the relevant data from the database for the specified time range and type.
4.4 If no data is available for the selected criteria, the system shall display an error message: “No data available for the selected range.”
4.5 The system shall organize and present the data according to the user’s specified preferences for the report.
4.6 The system shall display the health report for the user to review.
4.7 The system shall allow the user to export the health report in a specified format (e.g., PDF, CSV).

5.The user shall be able to set reminders for medications, including times and doses.(H5):

5.1 The system shall allow the user to set medication reminders, including specifying times and doses for each medication.
5.2 The system shall save the medication reminders in the database
5.3 The system shall send notifications to the user at the set times for medication intake.

6. The user shall be able to modify medication reminders(H6):

6.1 The system shall allow the user to enter the name of the medication they want to modify.
6.2 The system shall allow the user to modify the reminder time if the medication name exists.
6.3 The system shall display an error message if the medication name does not exist.
6.4 The system shall display the message “Modified successfully”after the modification

7. The user shall be able to removal their linked accounts for receiving notifications during a seizure. (H8)

8.1 The system shall allow users to view a list of all linked accounts that are receiving notifications for seizures.
8.2 The system shall allow users to search for linked accounts by username.
8.3 The system shall allow users to remove any linked account from the list, disabling notifications for that account.
8.4 The system shall notify the user once a linked account has been successfully removed and no longer receives seizure notifications.

- **Functional Requirement:**

Family Members

1. The user shall be able to create an account(H1):

1.1 The system shall allow the user to enter a phone number, email, and a new password.
1.2 The system shall verify the entered email by sending a randomly generated verification code to the email.
-If the email is invalid, the system shall display the message: “Invalid email address.”
1.3 The system shall allow the user to enter the verification code received via email
-If the codes do not match, the system shall display the message: “Incorrect verification code.”
-If the verification code is correct, the system shall create the account.
1.4 The system shall display the message: “The account was created successfully.”

2. The user shall be able to log in.(H2):

2.1 The system shall allow the user to enter their email and password.
2.2 The system shall check if the entered email and password match an existing account in the database.
• If no matching account is found, the system shall display the message: “This account doesn’t exist.”
2.3 The system shall save the time of login

3. The user shall be able to link their account to the patient’s account (H3):

3.1 The system shall allow the user to submit a request to link their account to the patient's account.
3.2 The system shall allow the patient to approve or reject the linking request
- If the patient approves the request, the system shall send the user a verification code.
- If the patient does not approve, a message saying "Sorry, the request was rejected" shall appear.
3.3 The system shall allow “the approved user”to show the verification code
3.4The system shall allow “the approved user”to enter the verification code sent to them by the system to complete the linking process
3.5The system shall record the user's linking and unlinking activities for security and auditing purposes.
3.6The system shall allow the user to unlink their account from the patient's account at any time.

4. The user shall be able to get alerts if the patient has a seizure(H4):

4.1 The system shall send alerts to the user if it detects a seizure using sensors or medical devices.
4.2 The system shall immediately notify the user through app notifications when a seizure is detected.
4.3 The system shall allow the user to respond to alerts and confirm the patient’s condition through the app.

5. The user shall be able to see the patient’s location during a seizure.(H5):

5.1 The system shall display the patient’s real-time location during a seizure.
5.2 The system shall allow the user to access the location map directly through the notification alert.
5.3 The system shall share the patient’s movement until the seizure alert is resolved.

6. The user shall be able to log out of their account..(H6):

6.1 The system shall display a check message if the user is sure about logging out.
6.2 ,the system shall exit the user from the system; else, ignore the log out.when the user wants to log out
6.3 The system shall save the time of logging out for the user.

- **Non Functional Requirement:**

1-Security:

- Data Encryption: All sensitive data must be encrypted both in transit and at rest

2-Availability:

-The system should be available at all times (24/7)

3-Performance:

- Response Time: The system should respond to user requests within 2 seconds.
- Throughput: The system must handle 100 transactions per second

4-Reliability:

- Uptime: The system must have 99.9% uptime over a year.
-Failover: The system should automatically switch to a backup in case of failure

5-Usability:

- User Interface: The system should be intuitive and easy to navigate for users with no prior training

- **Individual task for each member:**

- Shahed: Context Diagram,Use-Case diagram
- Mashael:Context Diagram,Use-Case diagram
- Lana,Use-Case diagram
- Amal:Use-Case diagram

- **Meeting time:**

Name of member	***Time & Date***
Shahad, attended all meetings	Friday (2hours) Saturday (3hours)
Mashael, attended all meetings	Friday (2hours) Saturday (3hours)
Lana, attended all meetings	Friday (2hours) Saturday (3hours)
Amal, attended all meetings	Friday (2hours) Saturday (3hours)

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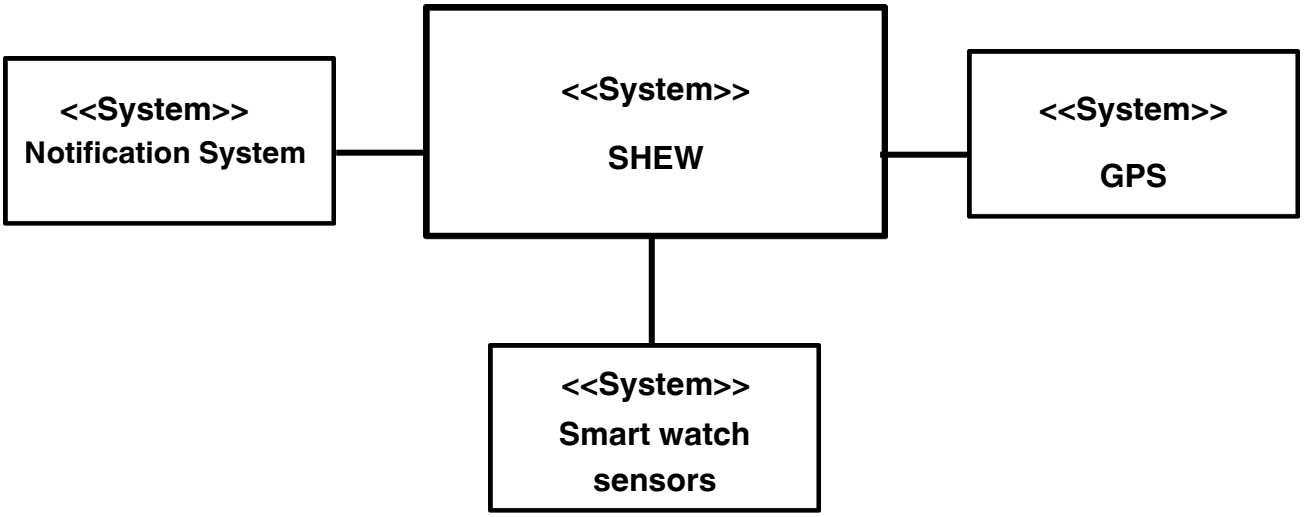
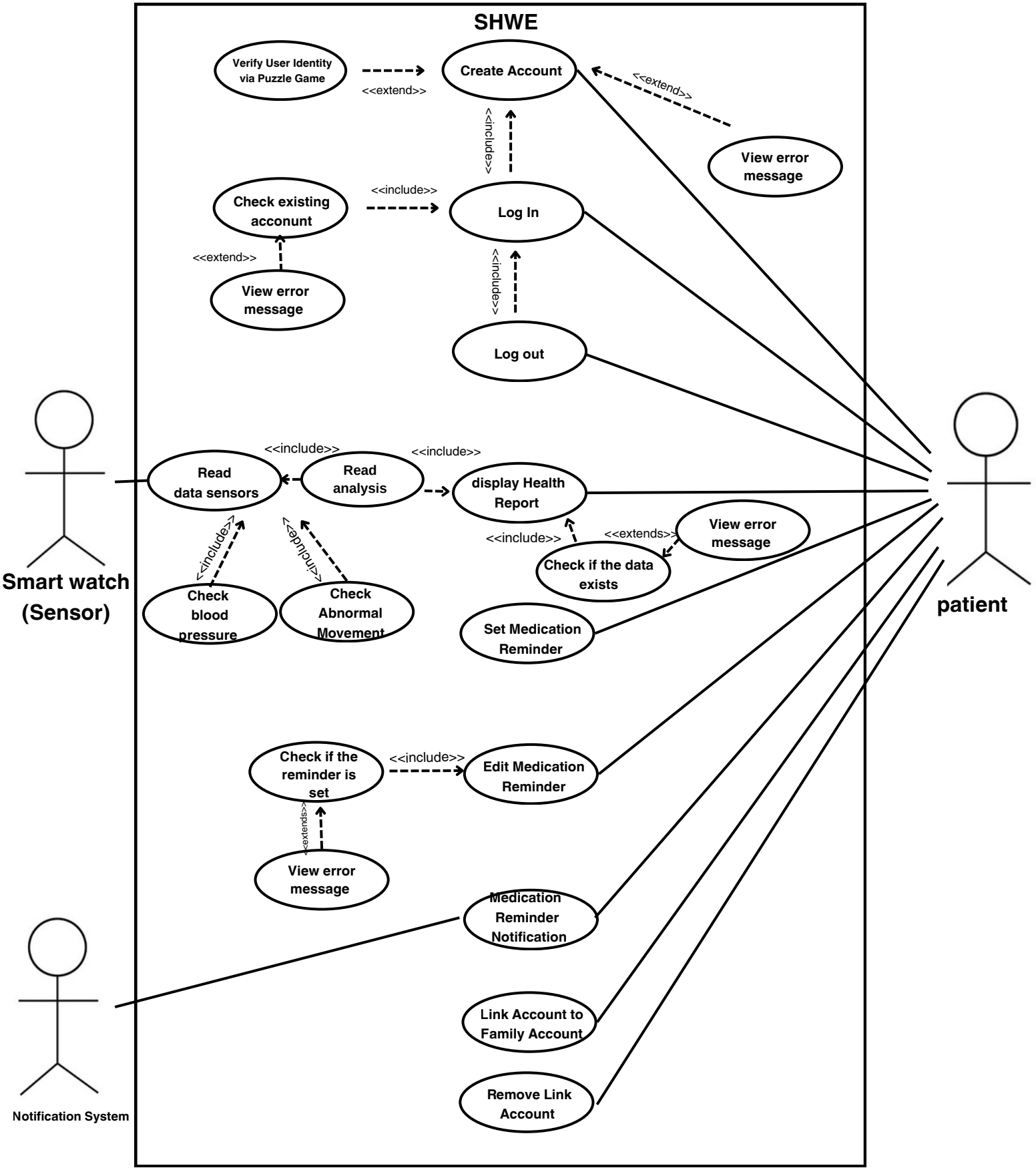
UML System Model

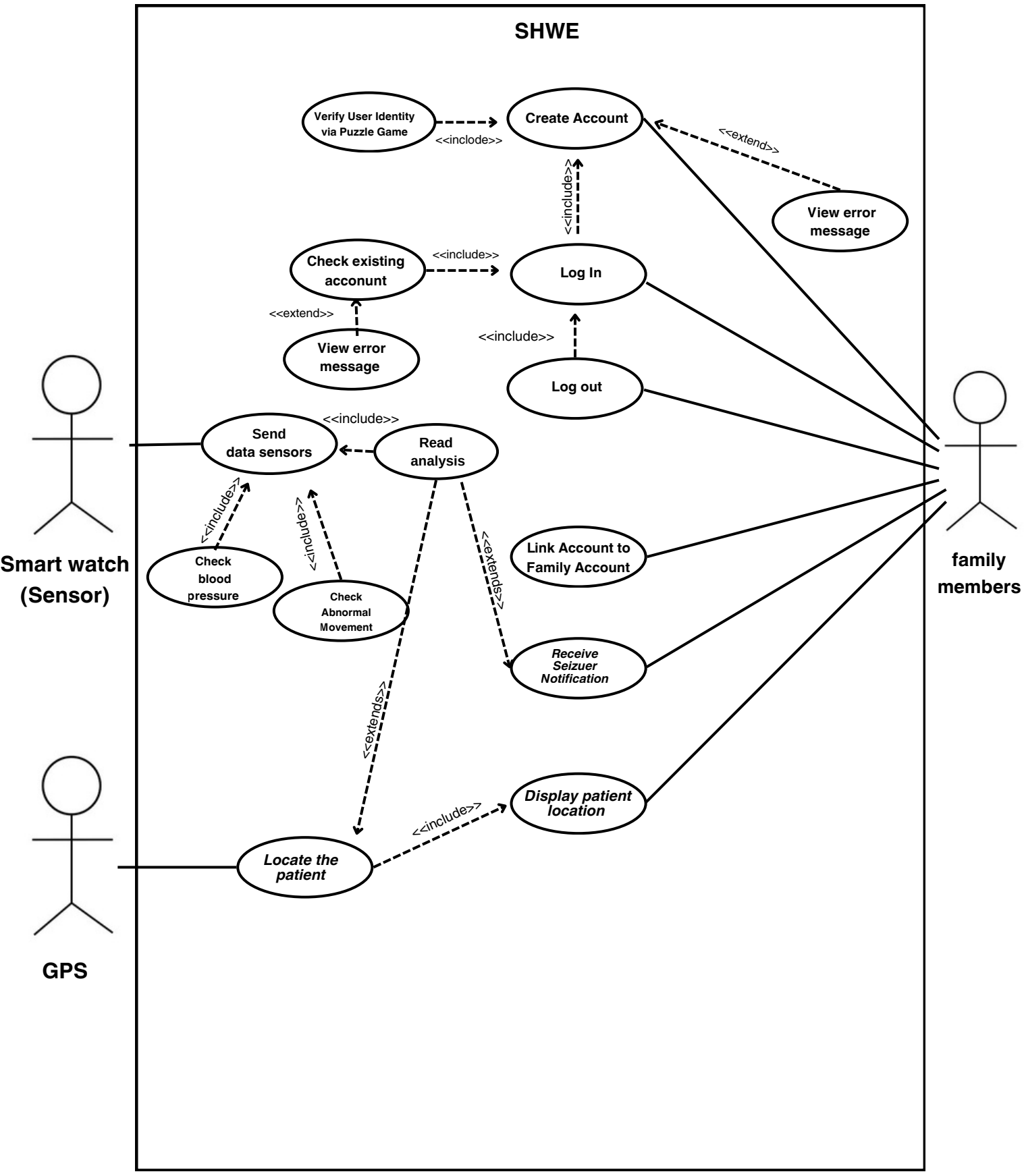
- **Context Diagram:**



- **Use-Case diagram:**



- **Use-Case diagram:**



- ***Case scenario***

	Create Account
Actors	Patient, Family Member
Description	The account creation process begins when the user provides their username or email, along with a password if signing up via email. To verify the authenticity of the user, the system sends a verification code to the provided email and requires the user to solve a simple puzzle to confirm they are not a bot. If the verification is successful, the system creates the account, notifies the user of the successful creation, and securely saves all user information in the database. If incorrect information is entered, the system displays an error message and allows the user to correct their input. However, after a limited number of failed attempts, the system temporarily locks the account and sends an email to notify the user of the lockout. The user can recover their account after a specified period or through additional verification steps.
Data	Email, phone number, password, verification code.
Stimulus	User clicks the “Create Account” button and submits registration details.
Response	A confirmation message is displayed upon successful account creation. In case of errors, the system provides feedback and allows retrying.
Comments	

- ***Case scenario***

	Log In
Actors	Patient, Family Member
Description	The login process begins with the system prompting the user to input their username and password. Once the credentials are submitted, the system checks the database to verify the existence of the account. If the account is found and the credentials are correct, the system grants access and logs the user in successfully. If the credentials do not match an existing account, the system displays an error message to inform the user that the account does not exist. This ensures secure and authorized access to the system.
Data	Email, password
Stimulus	User clicks the “Log In” button and submits their credentials.
Response	The system grants access upon successful validation or displays an error message for incorrect credentials.
Comments	

- ***Case scenario***

	Log Out
Actors	Patient, Family Member
Description	The system provides the user with a clear option to log out of their account. When the user selects this option, the system initiates the log-out process by clearing the session data to maintain security and privacy. After completing the process, the system redirects the user to the login page and displays a confirmation message indicating the log-out was successful. If any issues occur during the process, the system displays an appropriate error message, ensuring the user is aware of the situation and can take corrective actions.
Data	user confirmation
Stimulus	User initiates a log-out request.
Response	The system logs the user out, displays a confirmation message, and redirects them to the login page. Errors are handled with appropriate messages.
Comments	

- ***Case scenario***

Link Account to Family Account	
Actors	Patient, Family Member
Description	To link a family member's account to the patient's account, the system allows the user to send a linking request. The user is required to verify the request by entering a unique number displayed on the patient's screen. The patient has the authority to approve or reject the request. Once the action is completed, the system logs all linking and unlinking activities for security and auditing purposes. Additionally, the system allows the user to unlink their account from the patient's account at any time, ensuring flexibility and control over account connections.
Data	Patient account ID, family member account ID, verification code
Stimulus	Family member submits a linking request.
Response	The system confirms the link upon successful approval or notifies the user of an error if the process fails.
Comments	

- ***Case scenario***

Receive Seizure Notification	
Actors	Family Member
Description	The system detects seizure events using sensors or medical devices and immediately sends alerts to the user. These real-time notifications are delivered through the app, providing critical details about the event. The system also allows the user to respond to the alerts and confirm the patient's condition through the app. This feature ensures a quick and effective response during emergencies, offering reassurance to both patients and their families.
Data	Sensor data, notification message, GPS location
Stimulus	Detection of a seizure event by the sensors.
Response	The system delivers a notification to the linked family members with all critical details.
Comments	

- ***Case scenario***

display Health Report	
Actors	patient
Description	The user shall be able to create and view a health report using monitored data, such as seizure events, heart rate, and activity levels. The system will ask the user to choose the type of data, time range, and style of the report they want to create. After that, it will search the database for the requested data and display the report if the information is found. If no data matches the selected criteria, the system will show an error message: “No data available for the selected range.” The system will arrange and display the data based on the user’s preferences to make it easy to review. It will also allow the user to export the health report in a chosen format, like PDF or CSV.
Data	seizure events, heart rate, and activity levels,style report
Stimulus	The user requests to generate and display a health report
Response	The system displays the health report, allowing for export in the specified format.
Comments	

- ***Case scenario***

Set Medication Reminder	
Actors	patient
Description	*The user shall be able to set reminders for medications, including times and doses and name.* *The system shall allow the user to set medication reminders, including specifying times and doses for each medication,The system shall send notifications to the user at the set times for medication intake.*
Data	User Input for Time and Dosages
Stimulus	The user requests to set medcation reminders
Response	The system confirms the successful setup of medication reminders and provides the user with the details of the reminders
Comments	

- ***Case scenario***

	Edit Mediction Reminder
Actors	patient
Description	*The user shall be able to modify medication reminders, The system shall allow the user to enter the name of the medication they want to modify. The system shall allow the user to modify the reminder time if the medication name exists. The system shall display an error message if the medication name does not exist.*
Data	Medication Name,New Reminder Time
Stimulus	The user enters the Medication Name they wish to modify. The user inputs the New Reminder Time for the medication.
Response	(Success): Display the updated medication name and the new reminder time. (Medication Not Found):The medication name does not exist in the system.
Comments	(Error massges)If the user enters an invalid time format

- ***Case scenario***

Location the patient	
Actors	GPS
Description	
Data	seizure events, heart rate, and activity levels,style report
Stimulus	The user requests to generate and display a health report
Response	The system displays the health report, allowing for export in the specified format.
Comments	

- ***Case scenario***

display Health Report	
Actors	patient
Description	The user shall be able to create and view a health report using monitored data, such as seizure events, heart rate, and activity levels. The system will ask the user to choose the type of data, time range, and style of the report they want to create. After that, it will search the database for the requested data and display the report if the information is found. If no data matches the selected criteria, the system will show an error message: “No data available for the selected range.” The system will arrange and display the data based on the user’s preferences to make it easy to review. It will also allow the user to export the health report in a chosen format, like PDF or CSV.
Data	seizure events, heart rate, and activity levels,style report
Stimulus	The user requests to generate and display a health report
Response	The system displays the health report, allowing for export in the specified format.
Comments	

- ***Case scenario***

	Display patient location
Actors	Family
Description	The system shall display the patient's real-time location during a seizure. The user will be notified of the seizure event and will have the option to access the location map directly through the notification alert. The system will continuously track the patient's movements during the seizure until the alert is resolved.
Data	The location
Stimulus	Patient having epileptic seizure
Response	The system display the location fo the patient
Comments	

- ***Case scenario***

Remove link account	
Actors	patient
Description	The user shall be able to view a list of linked accounts that are receiving notifications during a seizure. The system will allow the user to search for linked accounts by username. It will also enable the user to remove any linked account from the list, stopping notifications for that account. Once an account is successfully removed, the system will notify the user that the account no longer receives seizure notifications.
Data	username for account that user wants to delete
Stimulus	The user requests to remove linked accounts for receiving notifications during a seizure.
Response	The system removes the linked account from receiving notifications during a seizure and notifies the user that the account has been successfully removed.
Comments	

- **Individual task for each member:**

- Shahed: design Layered architecture and Repository pattern
- Mashael:design Layered architecture and Repository pattern
- Lana:design Layered architecture and Repository pattern
- Amal:design Layered architecture and Repository pattern

- **Meeting time:**

Name of member	***Time & Date***
Shahad, attended all meetings	Friday (2hours) Saturday (3hours)
Mashael, attended all meetings	Friday (2hours) Saturday (3hours)
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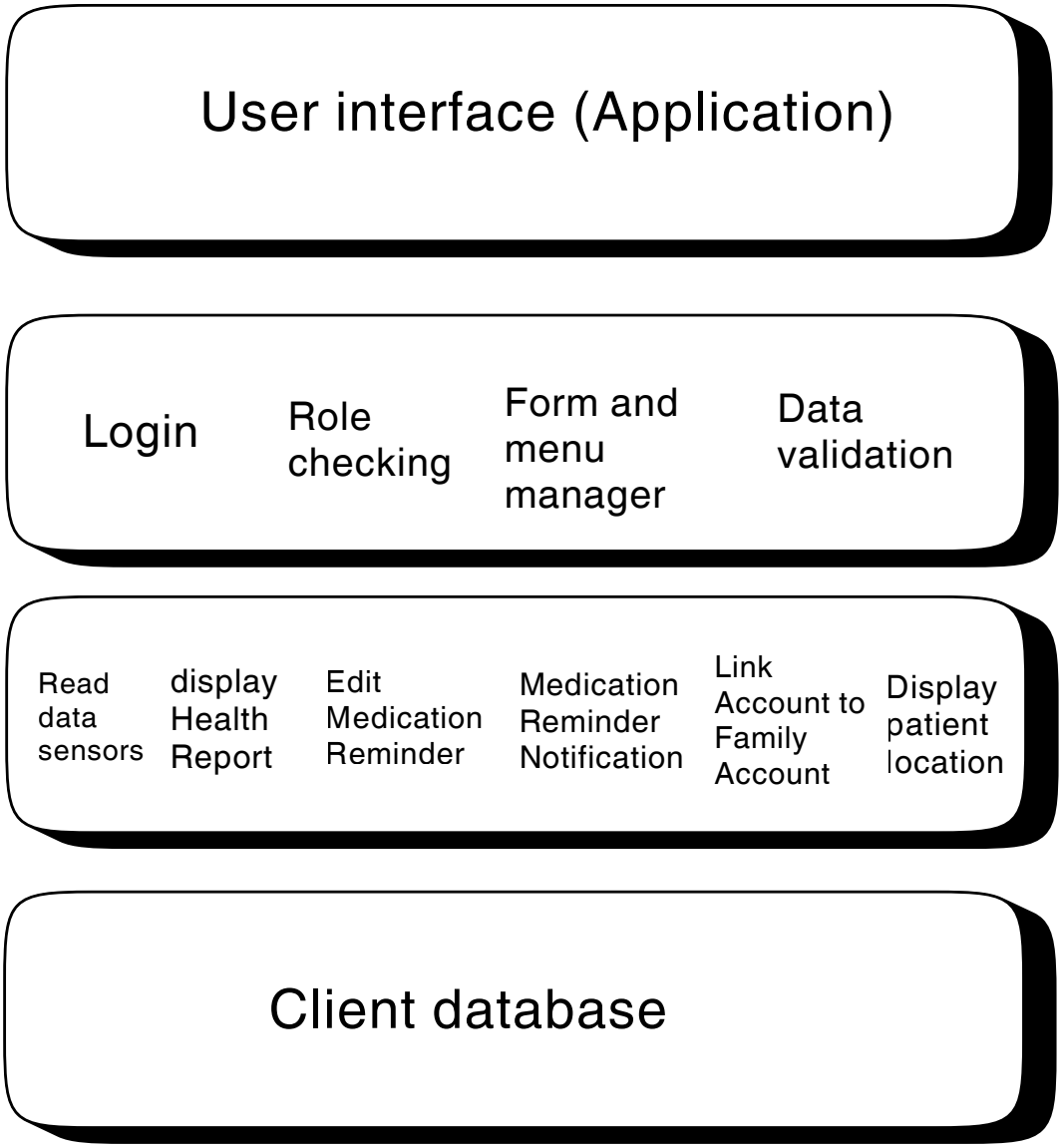
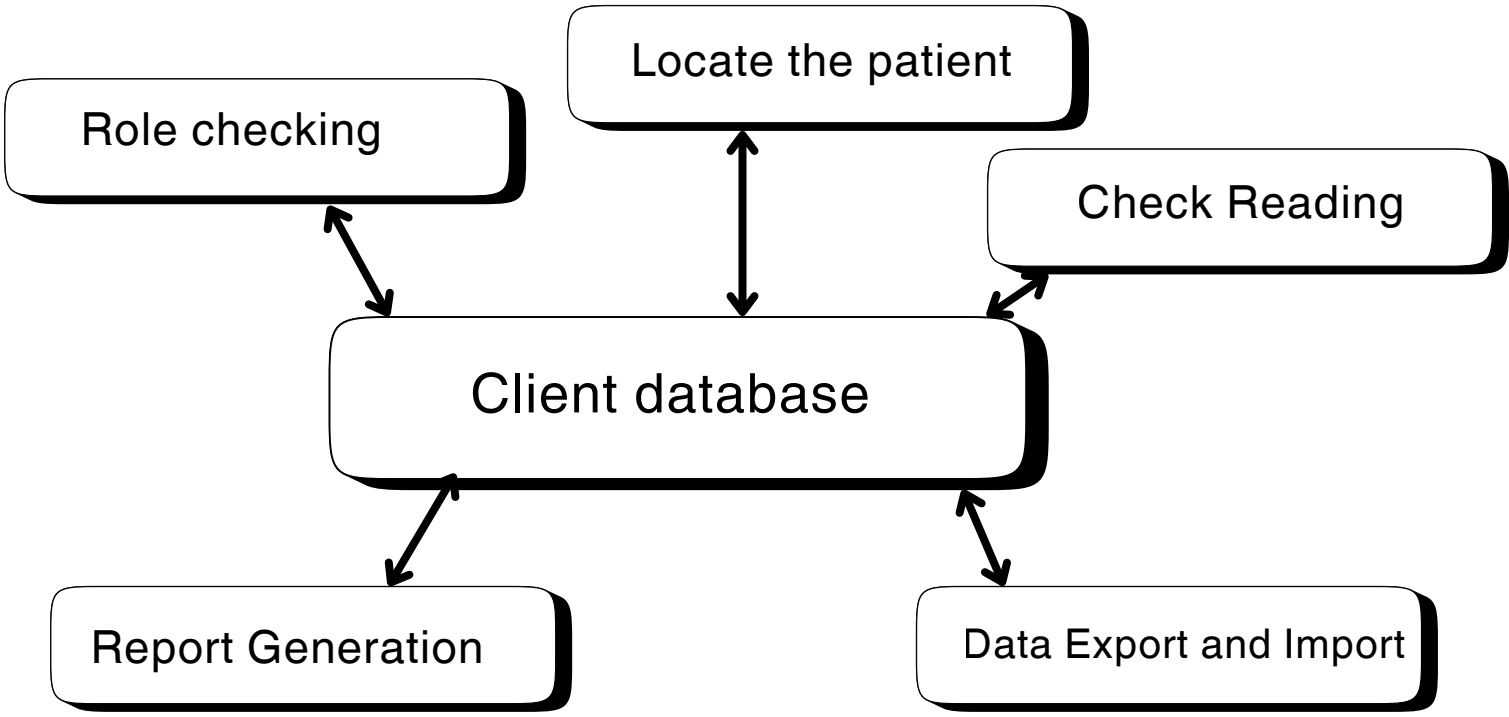
- **Architecture design:**

- Layered architecture pattern:



- **Architecture design:**

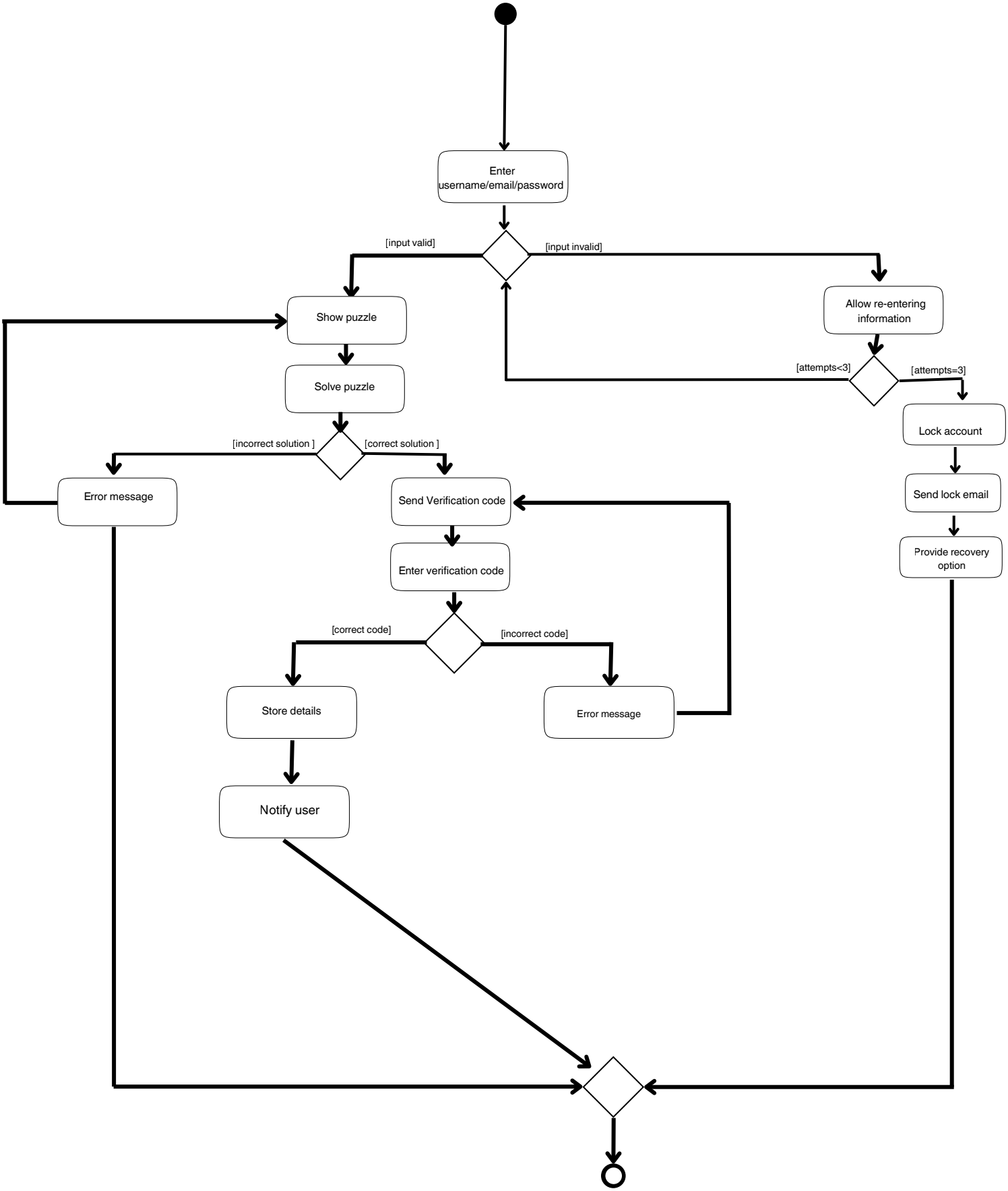
- Repository pattern:



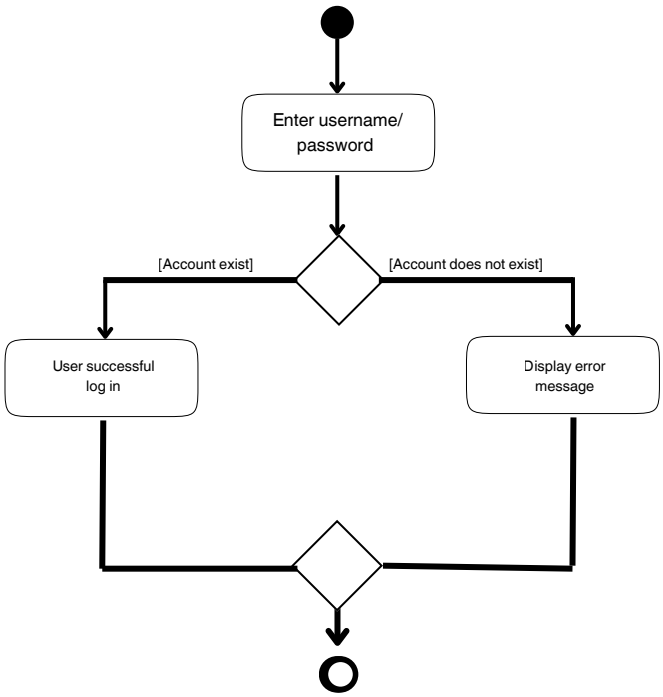
(CHAPTER 7)

Analysis phase- UML System Model

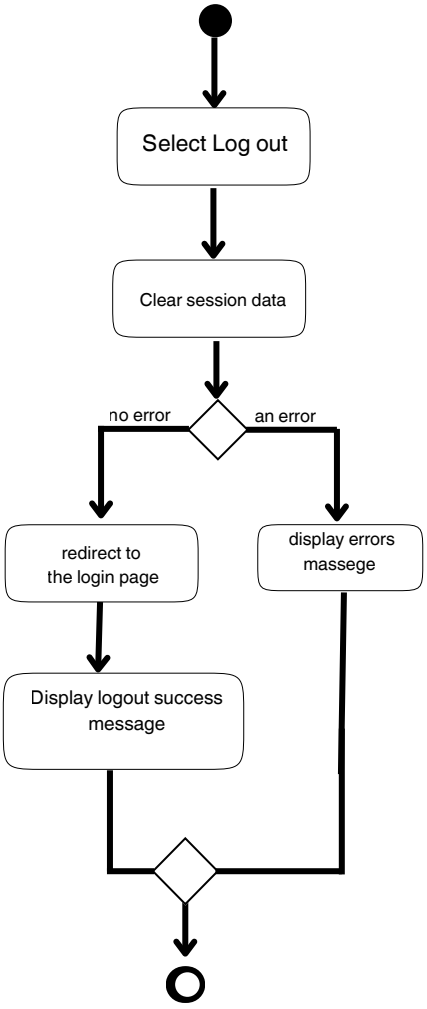
- **Activity Diagram: Create account**



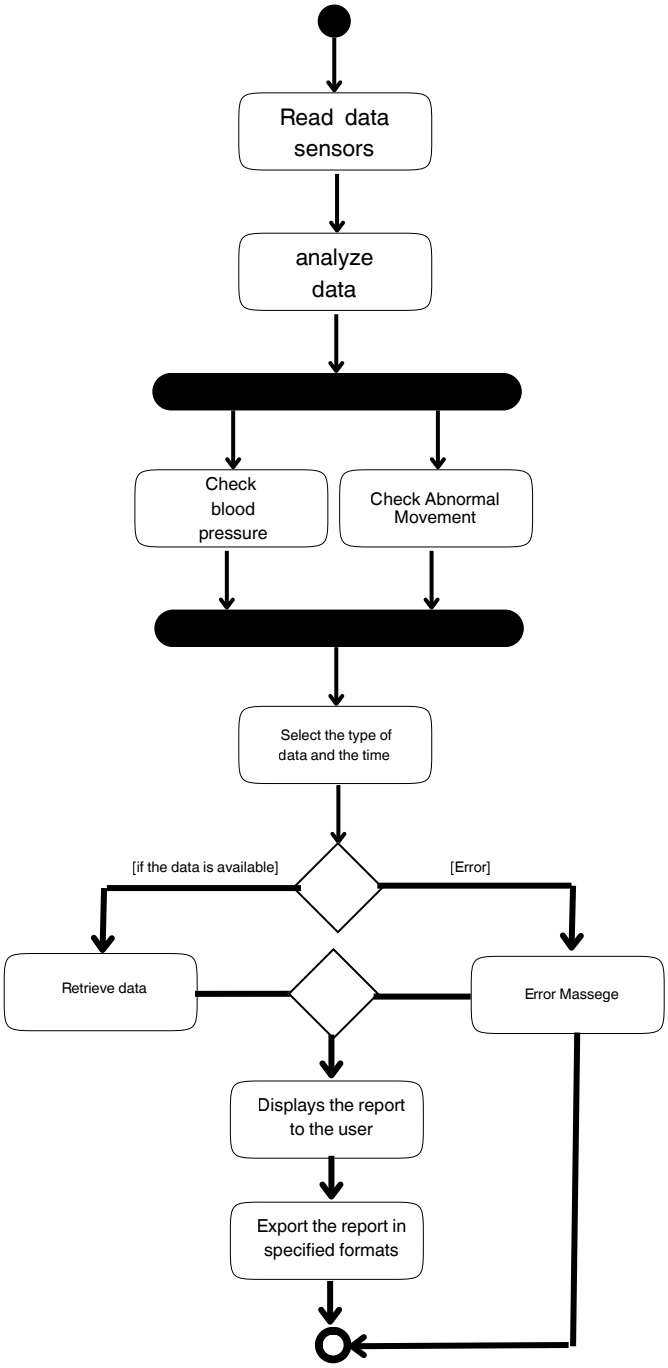
- **Activity Diagram: Log in**



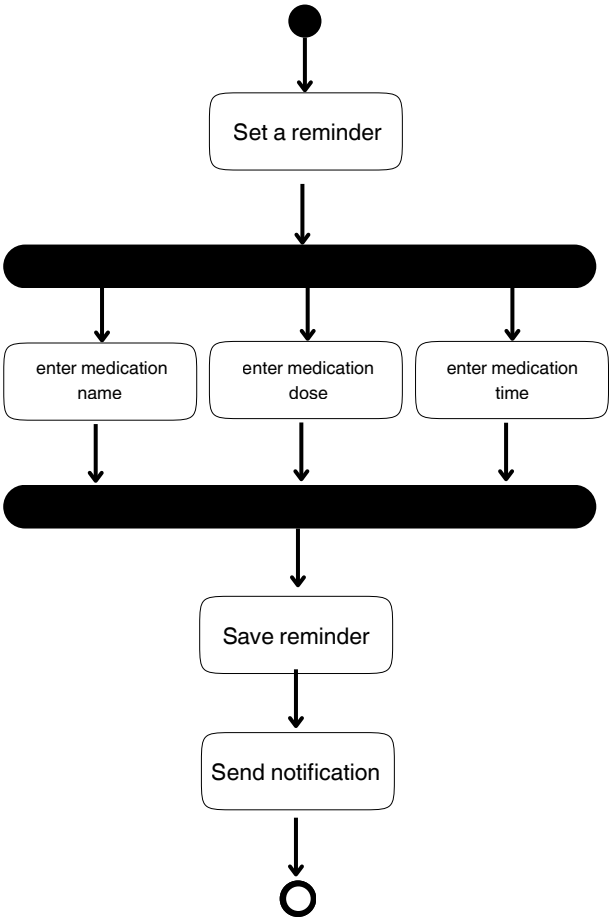
- **Activity Diagram:** ***Log out***



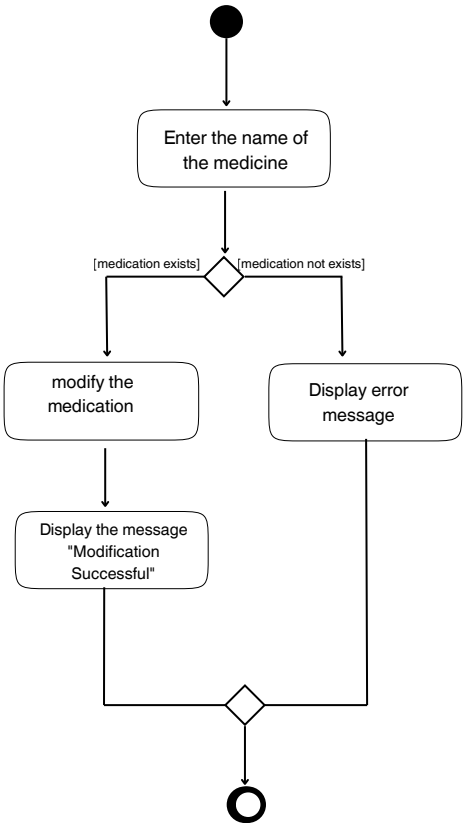
- **Activity Diagram: health report**



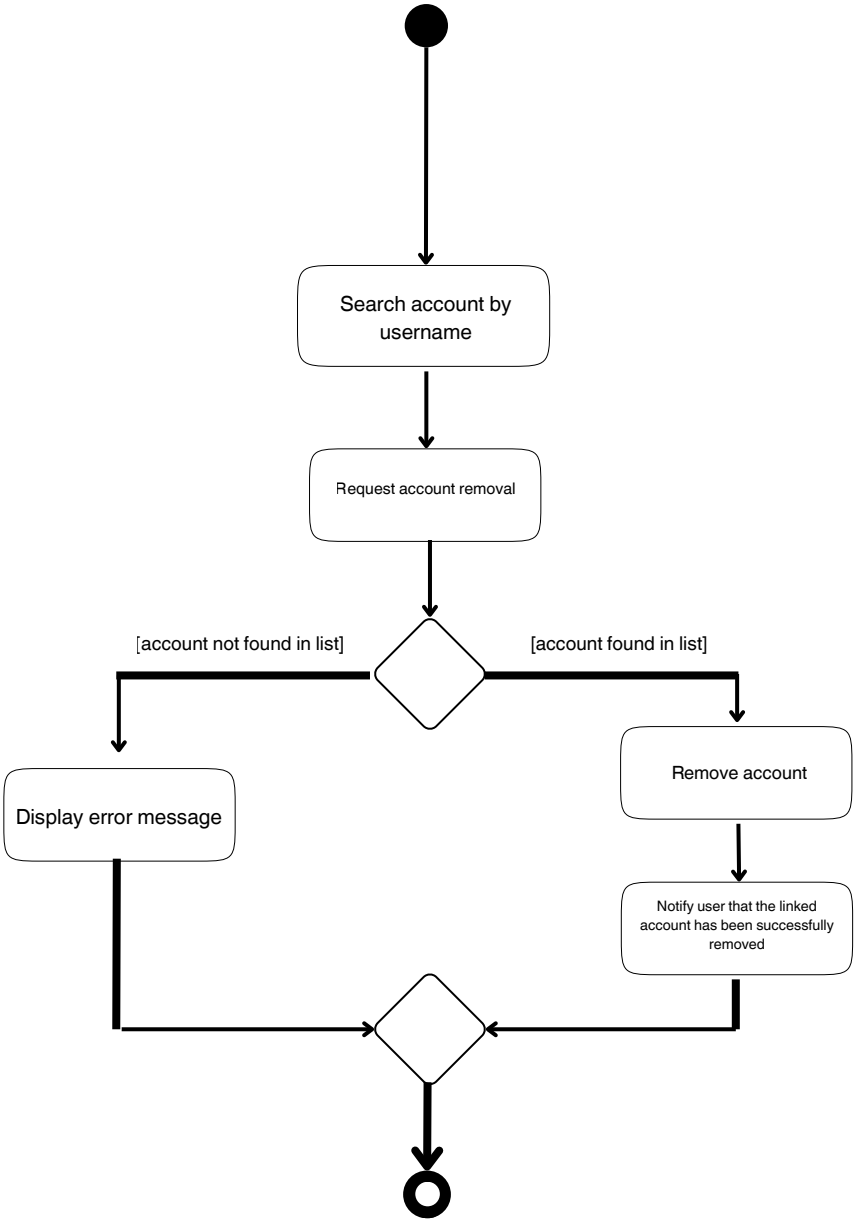
- **Activity Diagram:** ***Set medication reminders***



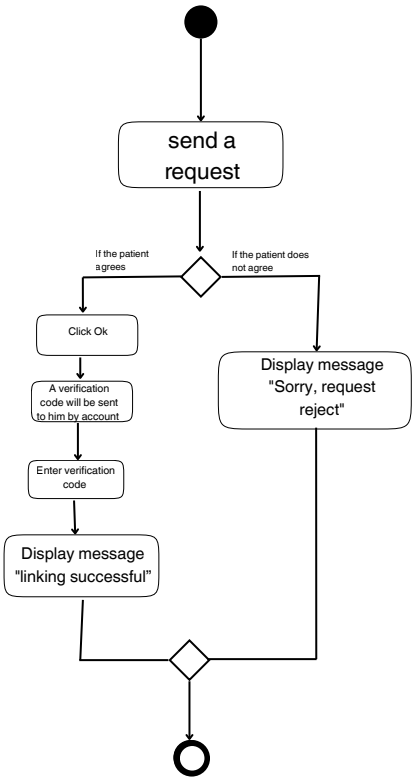
- **Activity Diagram:** ***Edit medication reminders***



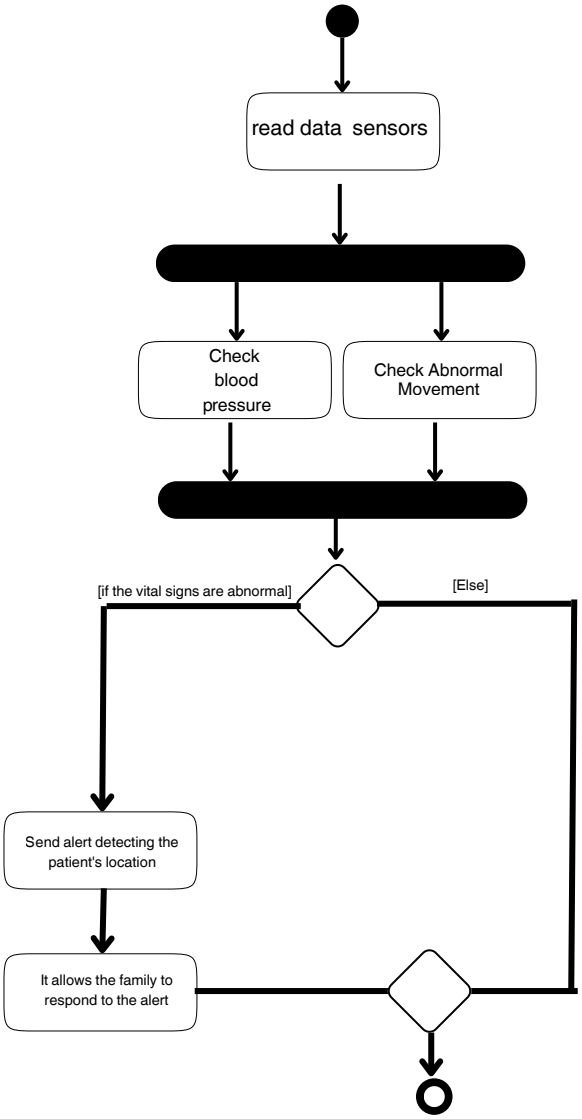
- **Activity Diagram: Remove linked account**



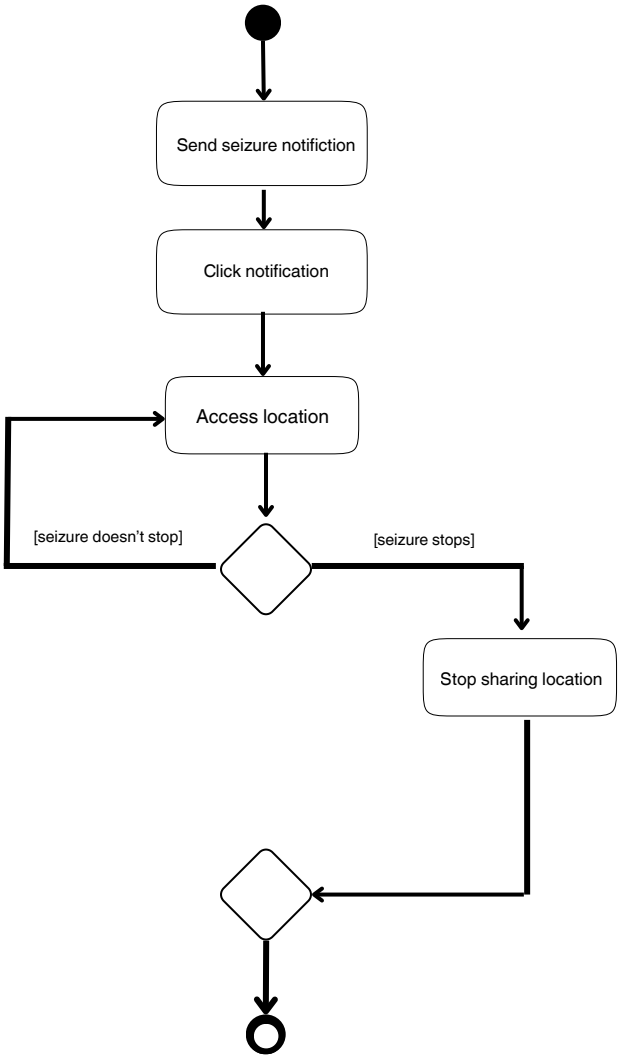
- **Activity Diagram:** ***Link Account to Family Account***



- **Activity Diagram:** ***Receive Seizuer Notification***

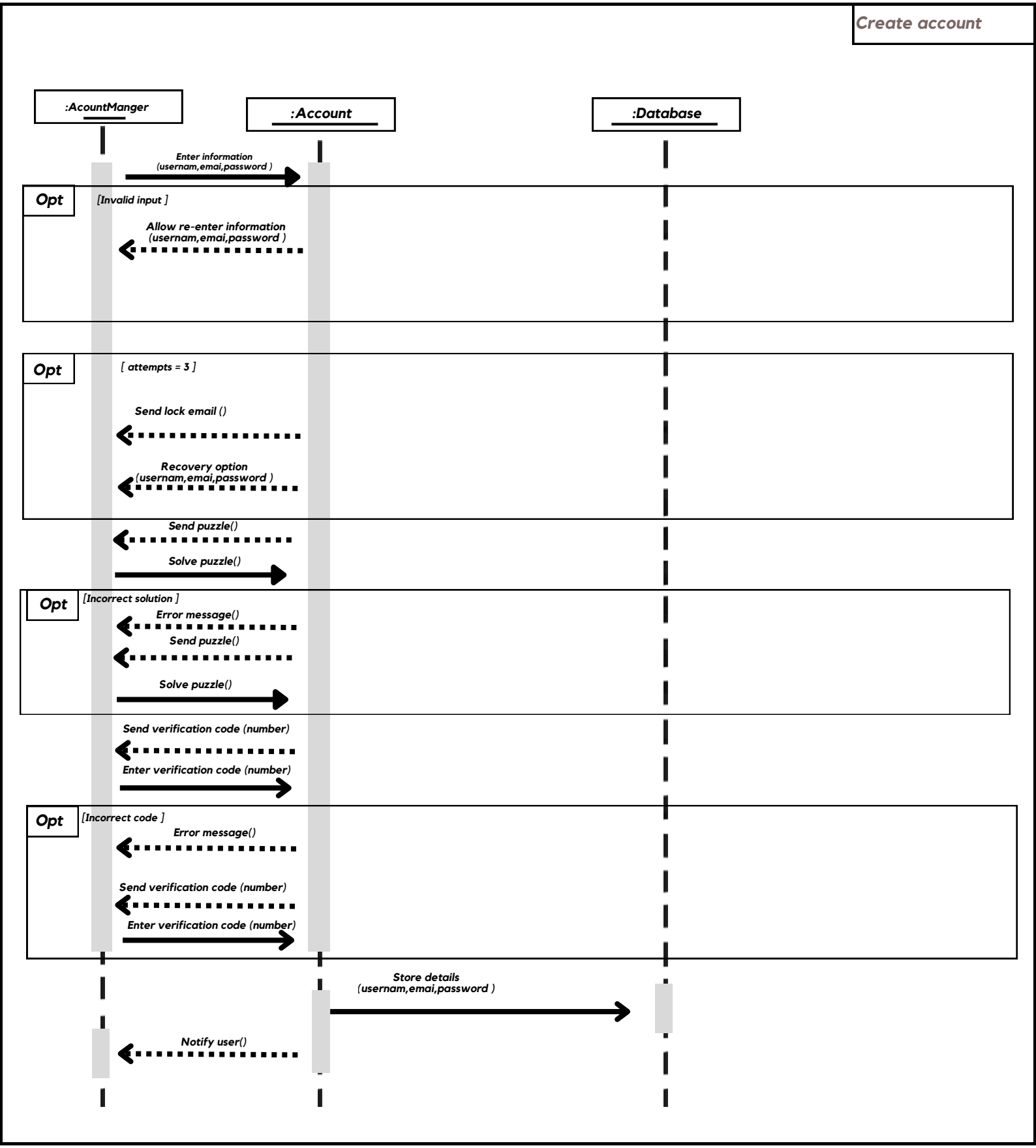


- **Activity Diagram:** **Patient location during seizure**

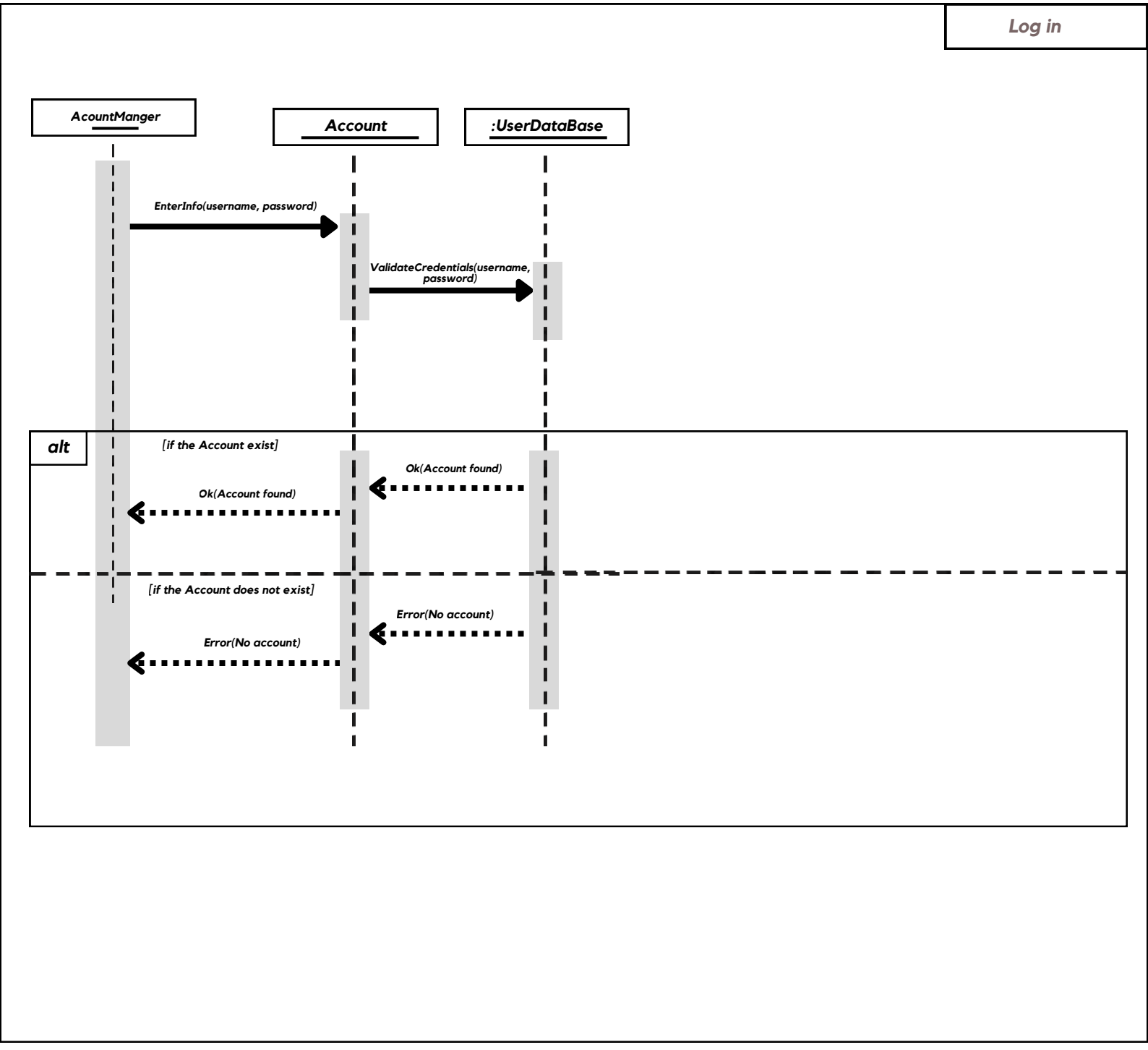


Sequence Diagram Patient

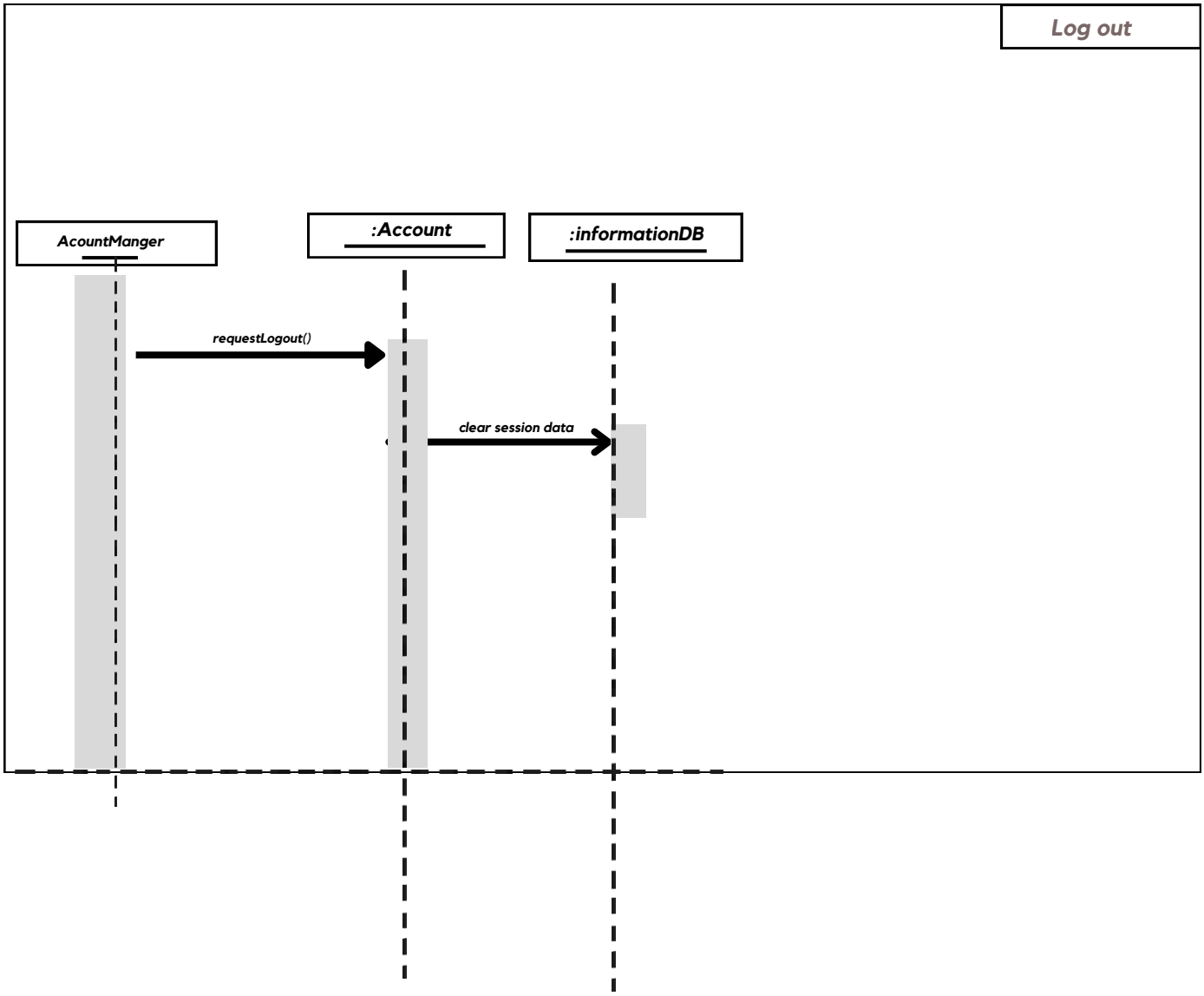
The user should be able to create an account



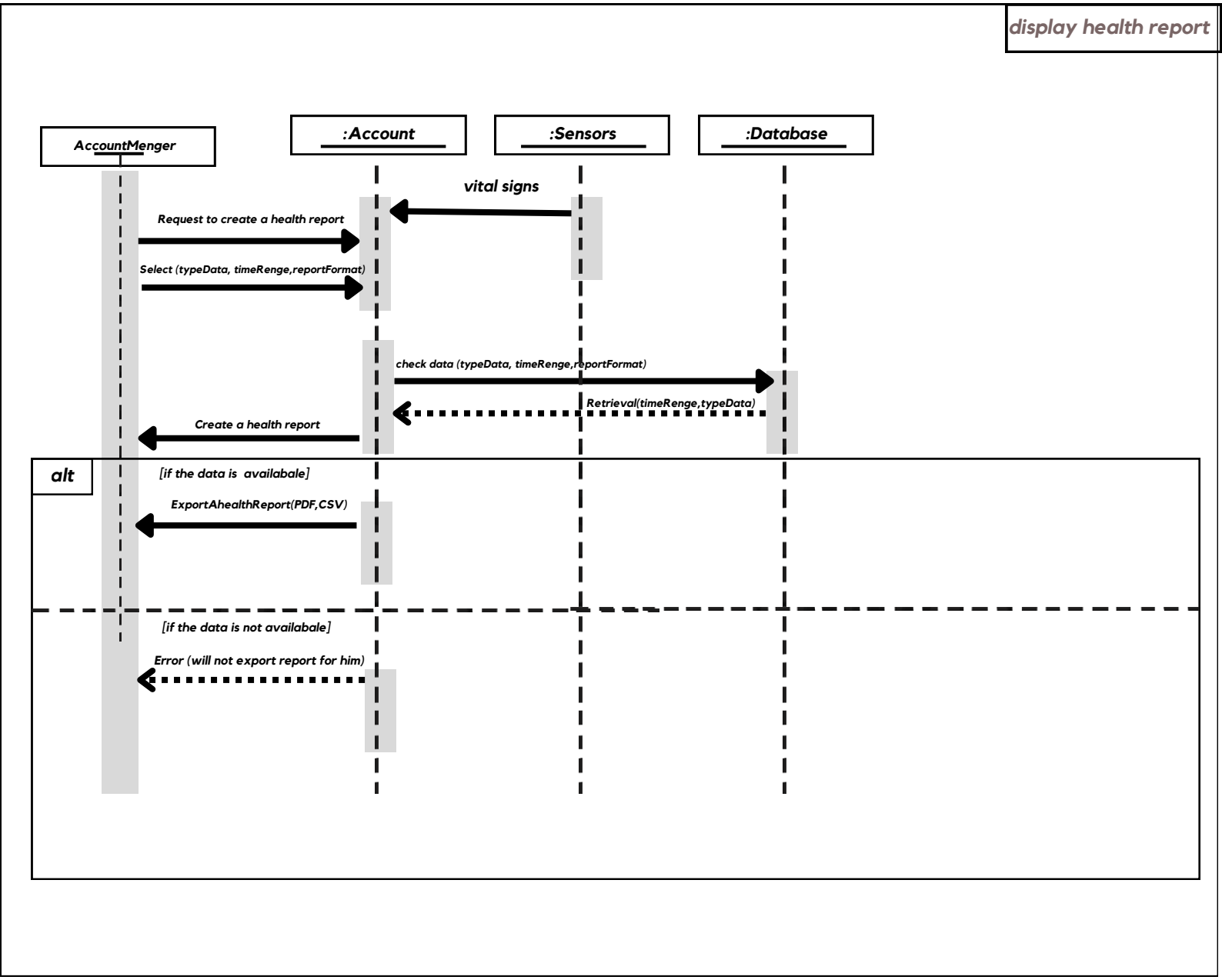
The user should be able to log in their existing account



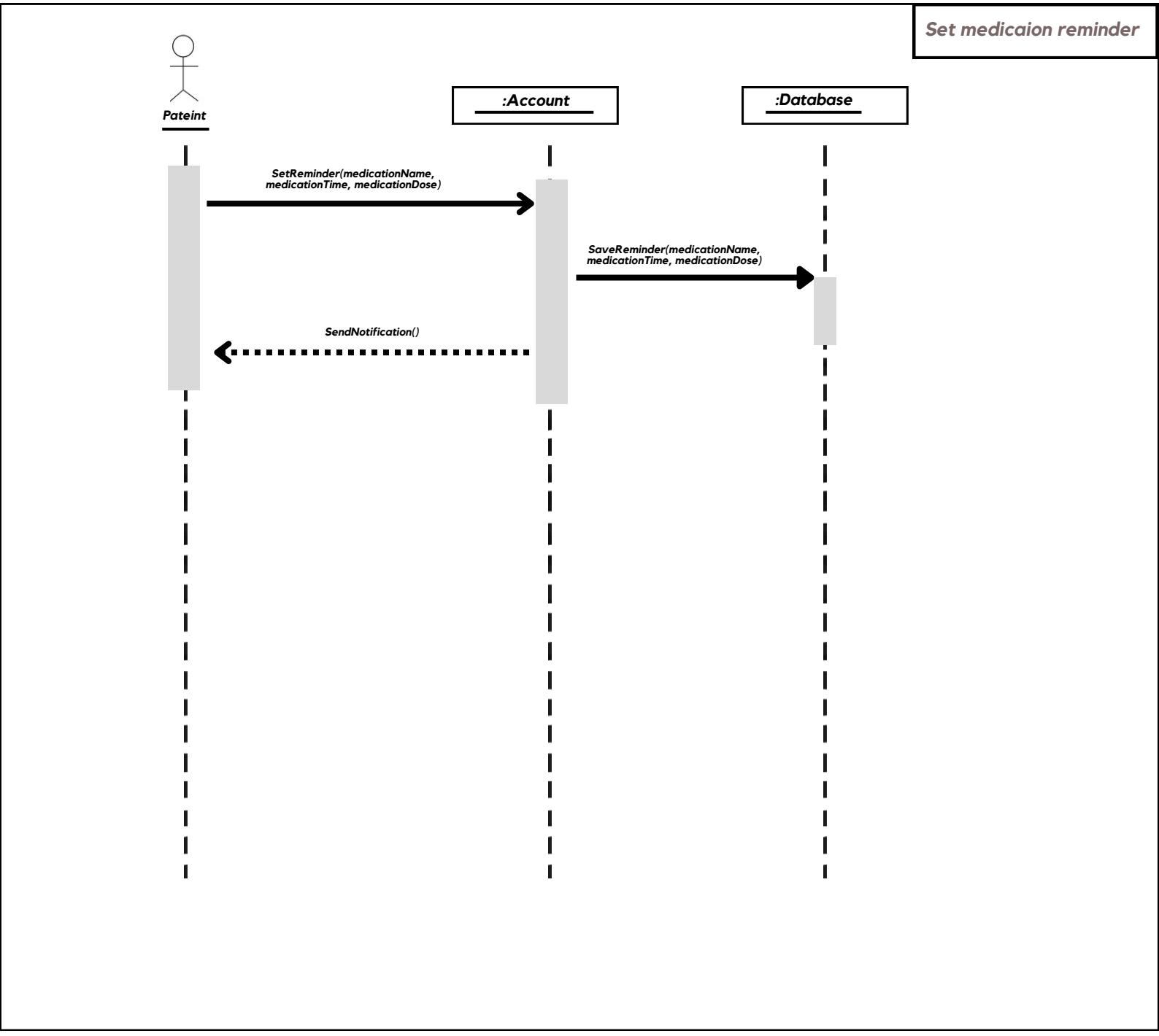
The user should be able to log out of their existing account



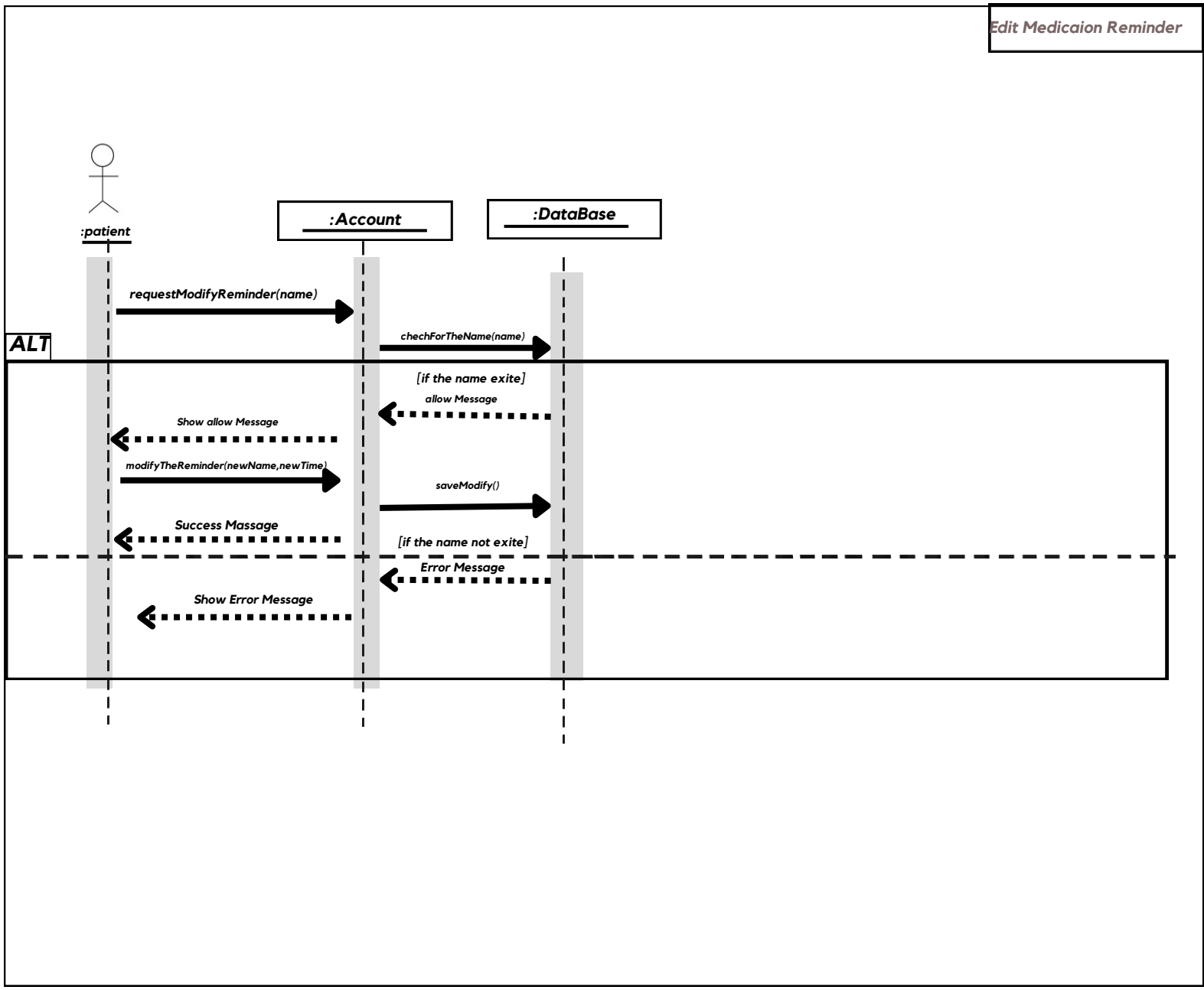
The patient can view the health report



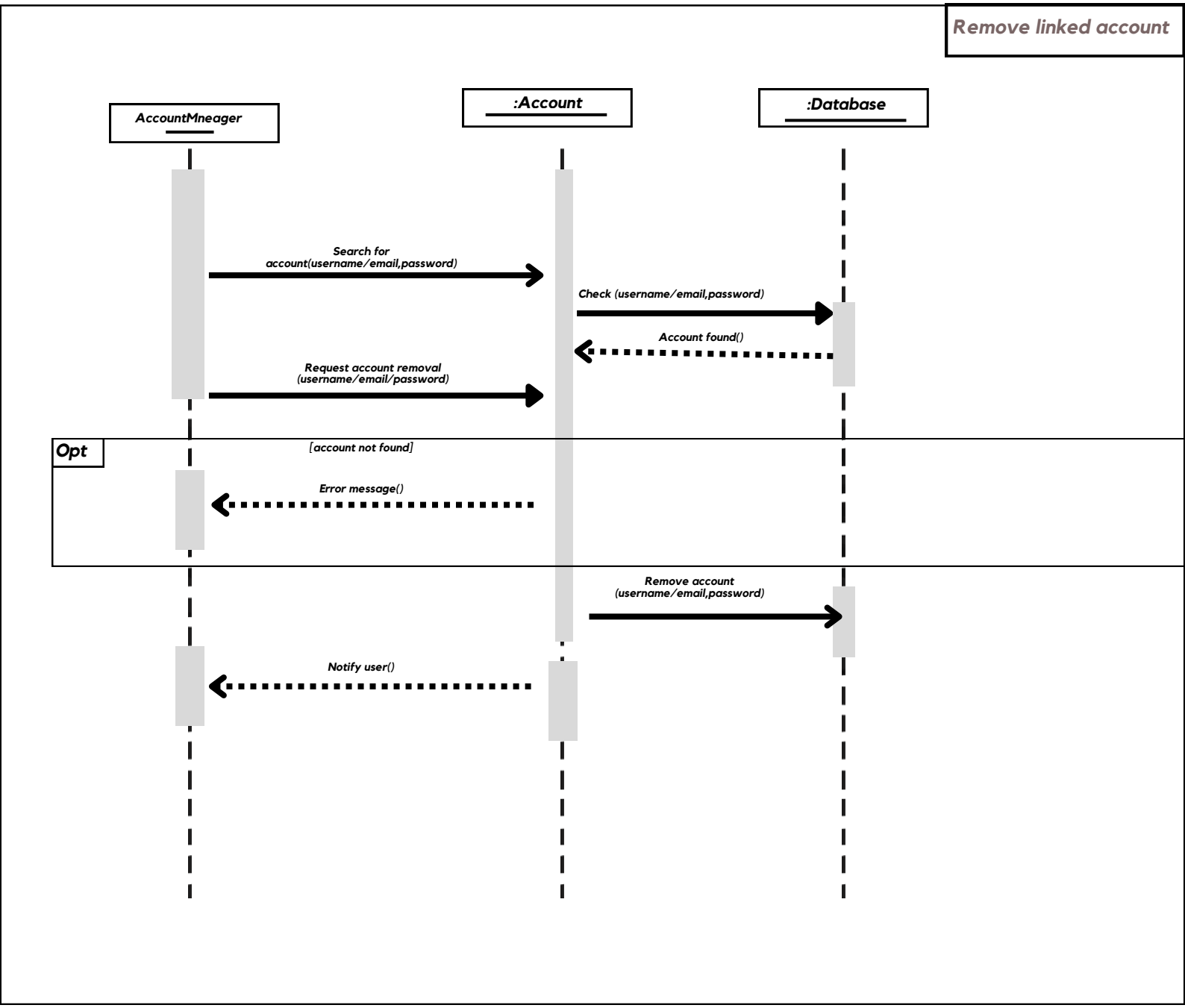
The patient can set reminder for medicaions



The patient can edit Medicaion Reminde

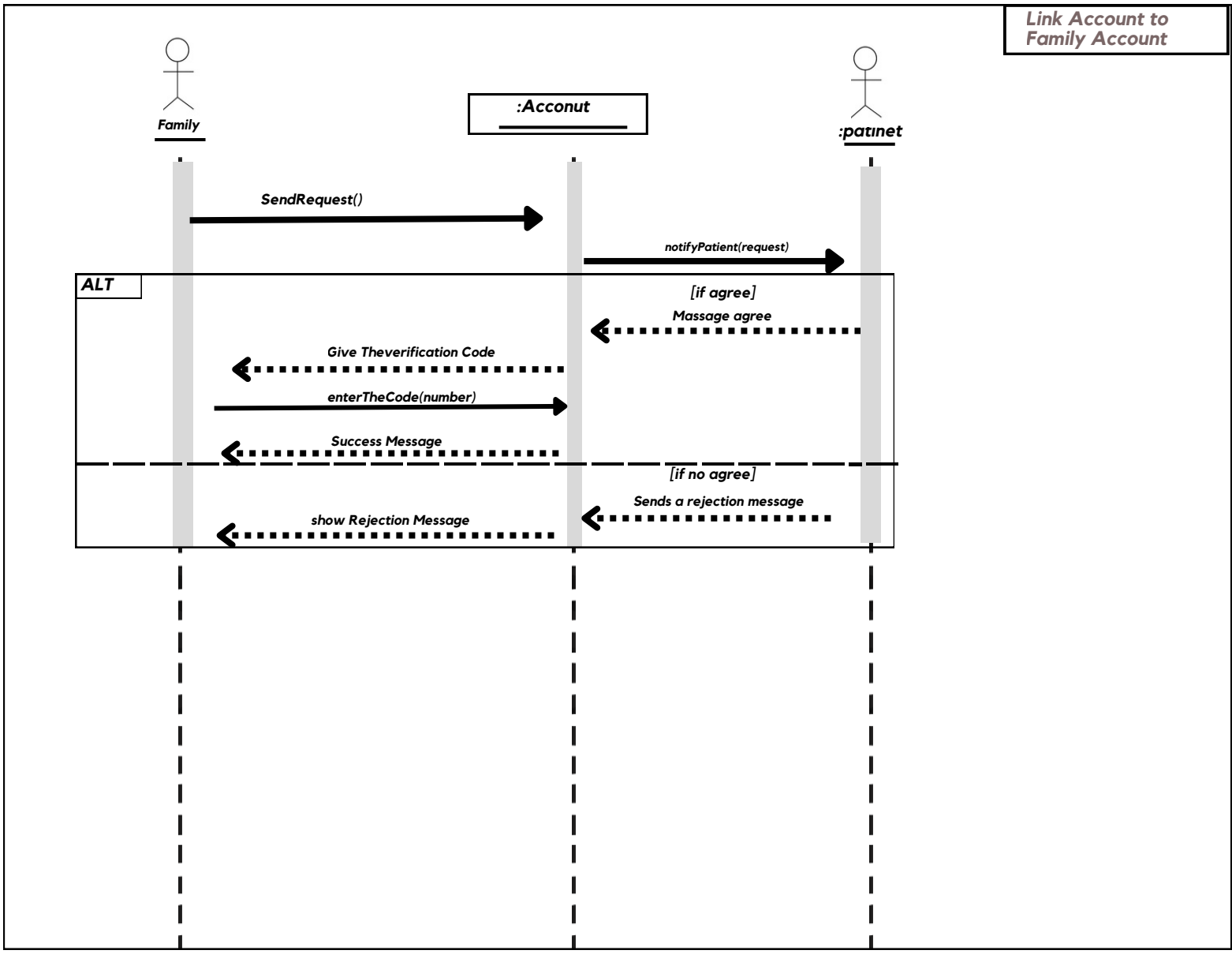


The user shall be able to remove linked accounts

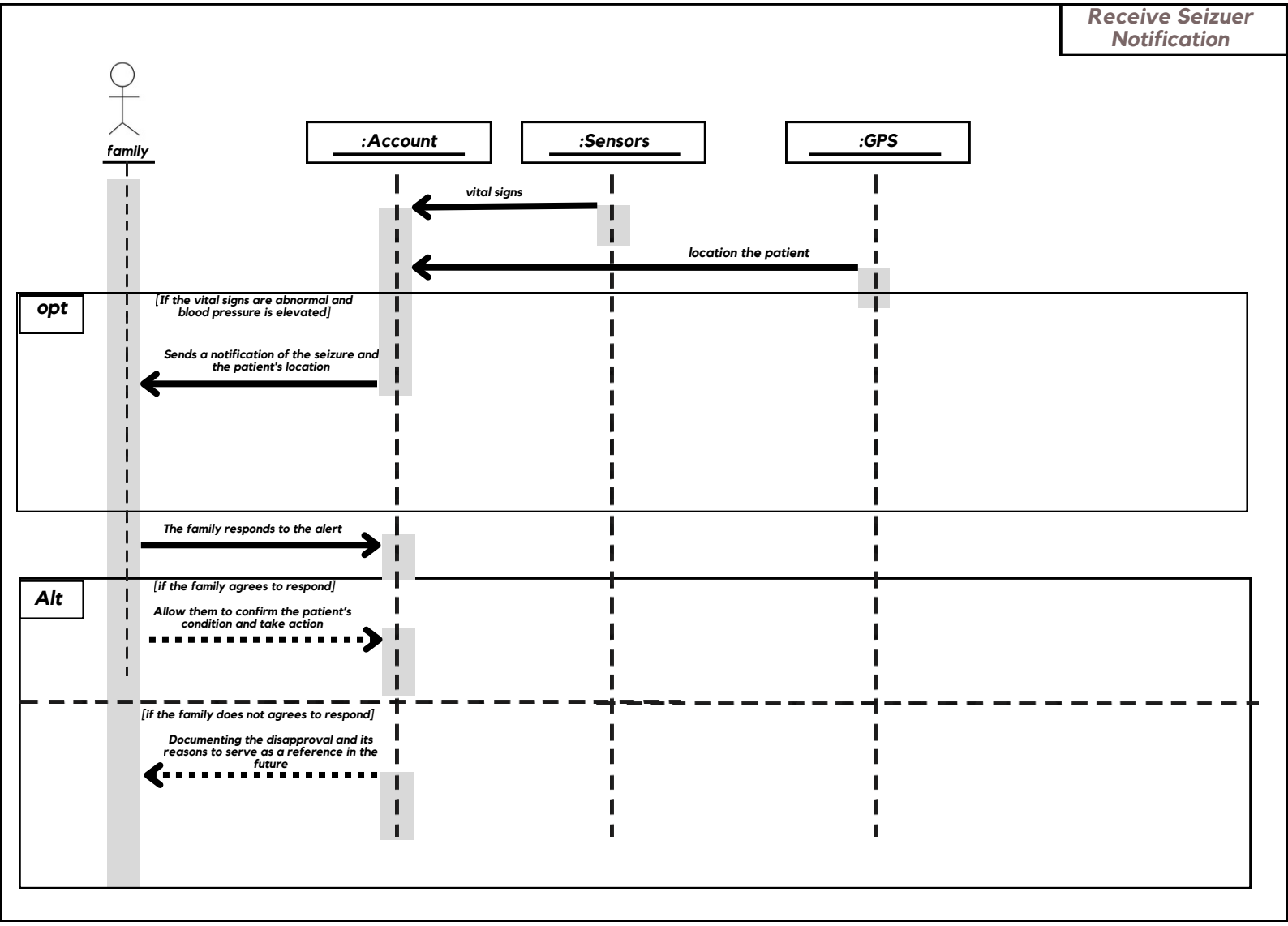


Sequence Diagram family

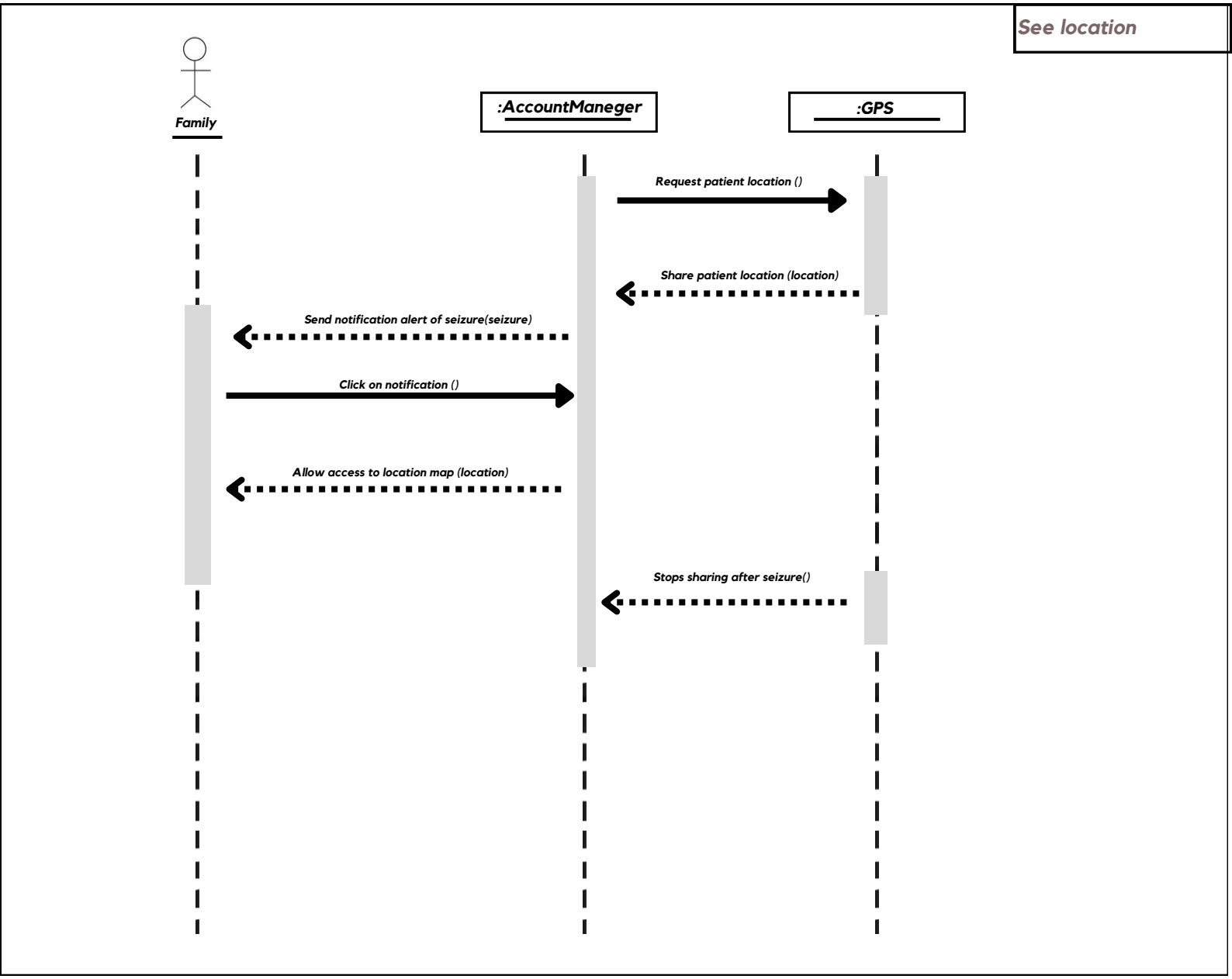
Link Account to Family Account



Sending a notification of a seizure occurrence



The user shall be able to see the patient's location during a seizure.



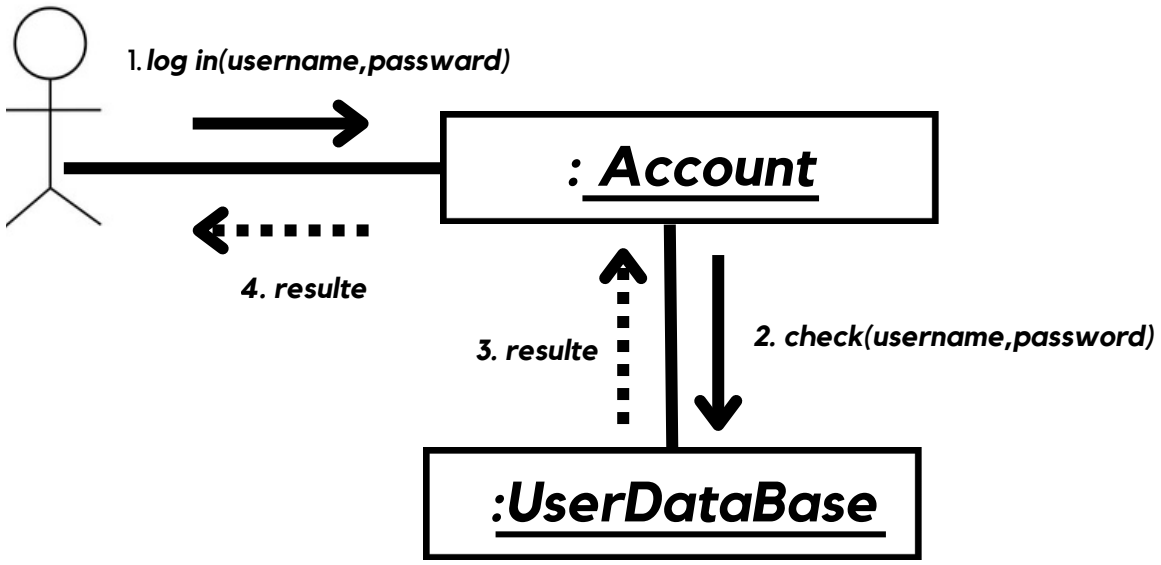
- **Individual task for each member:**

- Refal: Active diagram- sequence diagram
- Walaa:Active diagram- sequence diagram
- Sulafah:Active diagram- sequence diagram
- Amal:Active diagram- sequence diagram

- **Meeting time:**

Name of member	***Time & Date***
Refal, attended all meetings	Friday (2hours) Saturday (3hours)
Walaa, attended all meetings	Friday (2hours) Saturday (3hours)
Sulafah, attended all meetings	Friday (2hours) Saturday (3hours)
Amal, attended all meetings	Friday (2hours) Saturday (3hours)

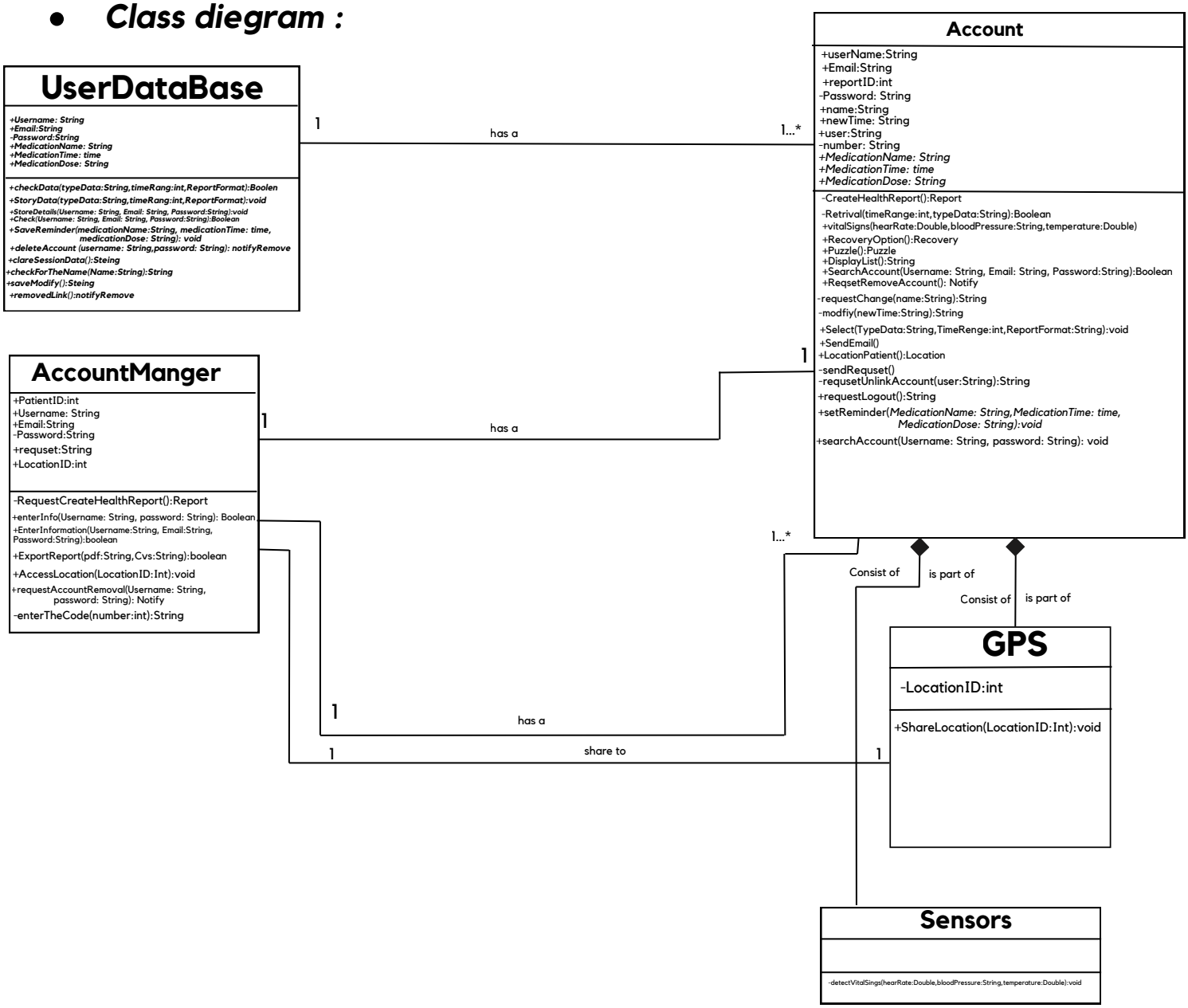
- ***Communication :Log in***

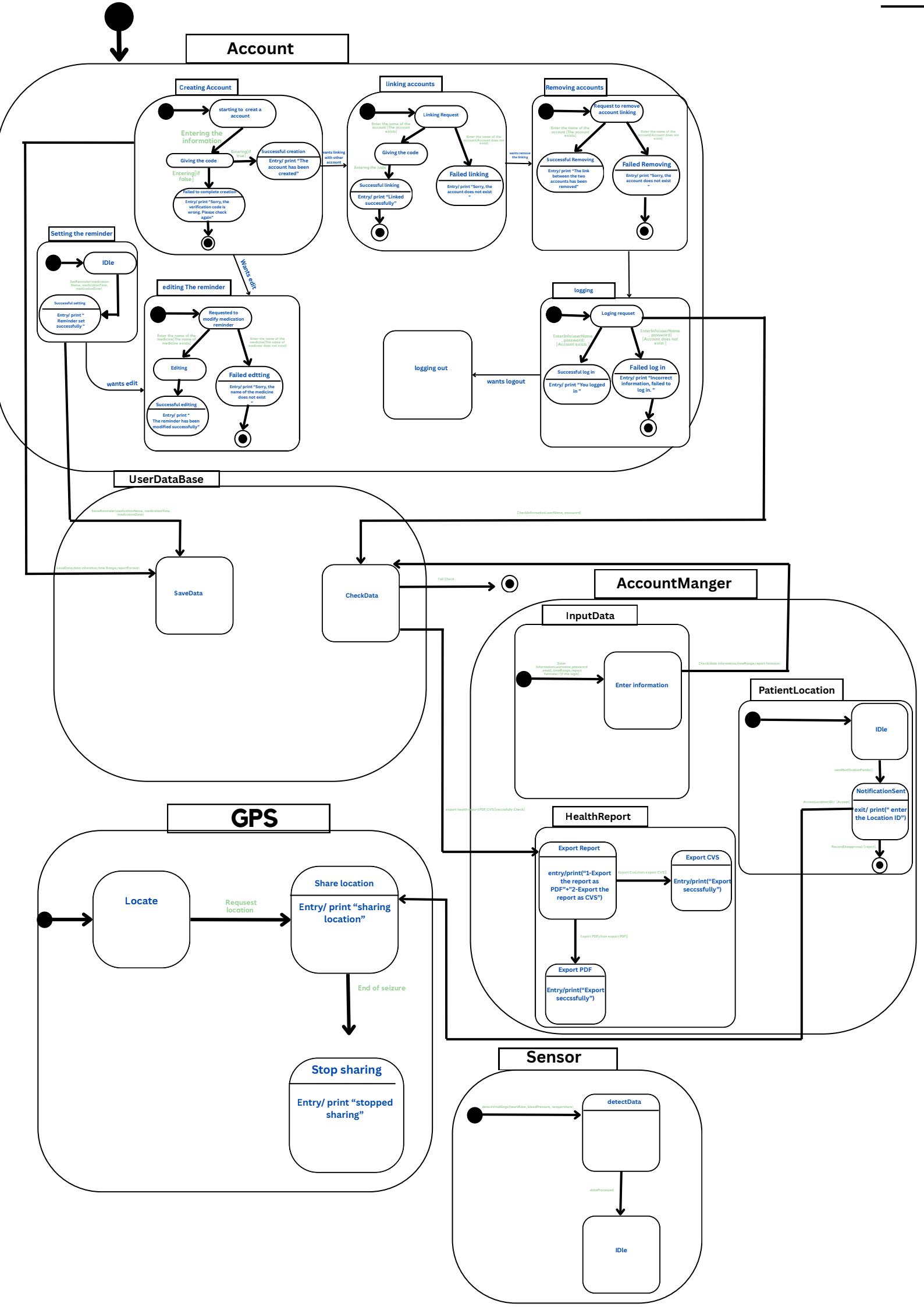


- **Meeting time:**

Name of member	*Time & Date*
Refal, attended all meetings	Friday (2hours) Saturday (3hours)
Walaa, attended all meetings	Friday (2hours) Saturday (3hours)
Sulafah, attended all meetings	Friday (2hours) Saturday (3hours)
Amal, attended all meetings	Friday (2hours) Saturday (3hours)

- ***Class diegram :***




Account
Creating Account
starting to creat a account
Entering the information
Giving the code
Entering[if true]
Entering[if false]
Successful creation
Entry/ print "The account has been created"
Failed to complete creation
Entry/ print "Sorry, the verification code is wrong. Please check again"
wants linking with other account
linking accounts
Linking Request
Giving the code
Entering the code
Successful linking
Entry/ print "Linked successfully"
Failed linking
Entry/ print "Sorry, the account does not exist "
wants remove the linking
Removing accounts
Request to remove account linking
Successful Removing
Entry/ print "The link between the two accounts has been removed"
Failed Removing
Entry/ print "Sorry, the account does not exist "
Setting the reminder
IDle
Successful setting
Entry/ print " Reminder set successfully "
wants edit
editing The reminder
Requested to modify medication reminder
Editing
Successful editing
Entry/ print " The reminder has been modified successfully"
Failed edtting
Entry/ print "Sorry, the name of the medicine does not exist "
Wants edit
logging
Loging requset
Successful log in
Entry/ print "You logged in "
Failed log in
Entry/ print "Incorrect information, failed to log in. "
wants logout
logging out
UserDataBase
SaveData
CheckData
AccountManger
InputData
Enter information
PatientLocation
IDle
NotificationSent
exit/ print(" enter the Location ID")
HealthReport
Export Report
entry/print("1-Export the report as PDF"+"2-Export the report as CVS")
Export CVS
Entry/print("Export seccssfully")
Export PDF
Entry/print("Export seccssfully")
GPS
Locate
Requsest location
Share location
Entry/ print "sharing location"
End of seizure
Stop sharing
Entry/ print "stopped sharing"
Sensor
detectData
IDle

- **Individual task for each member:**

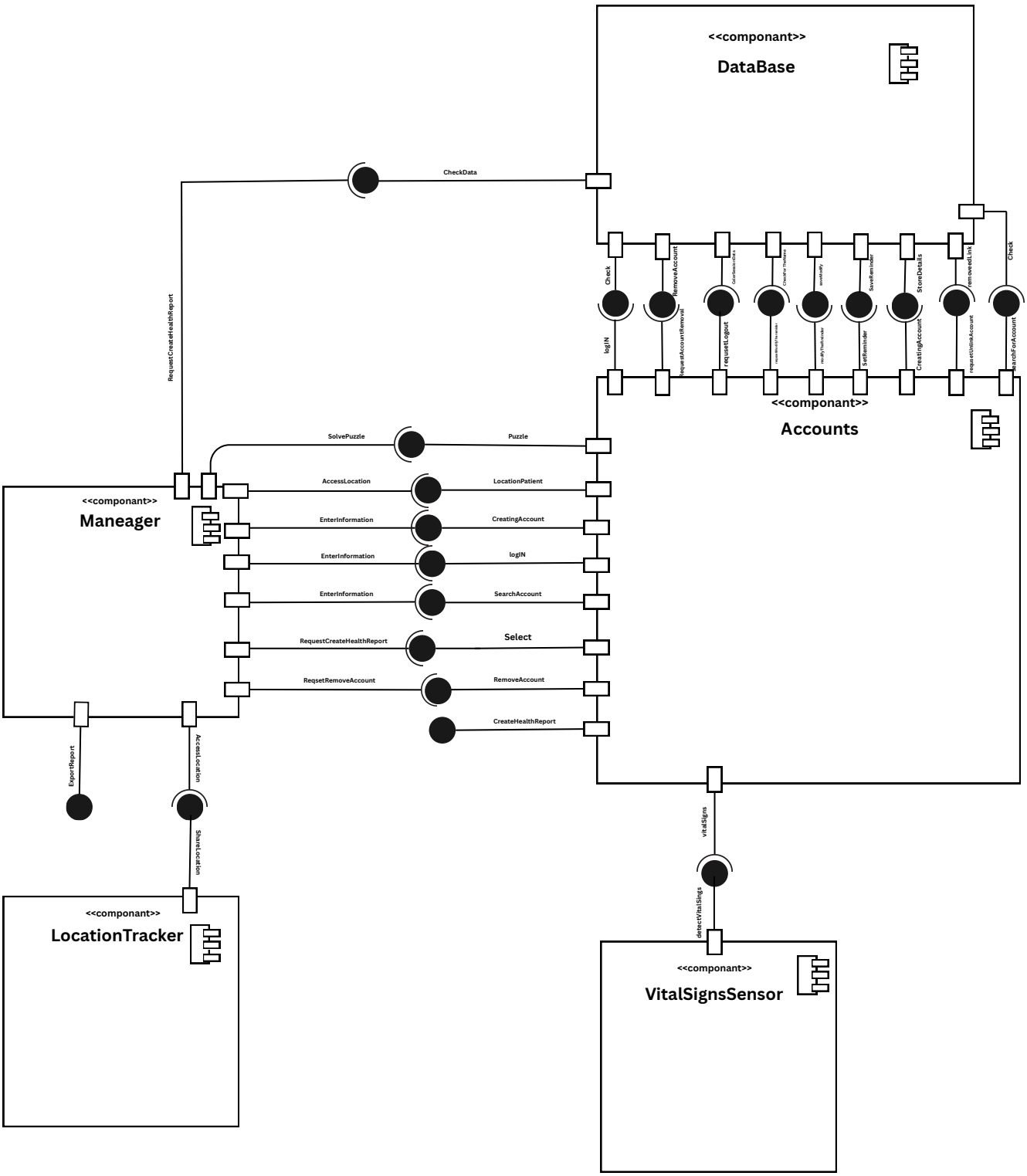
- Refal: Class diagram- State diagram
- Walaa: Class diagram- State diagram
- Sulafah: Class diagram- State diagram
- Amal: Class diagram- State diagram

- **Meeting time:**

Name of member	***Time & Date***
Refal, attended all meetings	Friday (2hours) Saturday (3hours)
Walaa, attended all meetings	Friday (2hours) Saturday (3hours)
Sulafah, attended all meetings	Friday (2hours) Saturday (3hours)
Amal, attended all meetings	Friday (2hours) Saturday (3hours)

(CHAPTER 7)

Design phase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DataBase
CheckData
RequestCreateHealthReport
Check
RemoveAccount
RequestAccountRemoval
logIN
RequsetLogout
StoreDetails
CreatingAccount
Check
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Accounts
SolvePuzzle
Puzzle
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Maneager
AccessLocation
LocationPatient
EnterInformation
CreatingAccount
EnterInformation
logIN
EnterInformation
SearchAccount
RequestCreateHealthReport
Select
ReqsetRemoveAccount
RemoveAccount
CreateHealthReport
ExportReport
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ShareLocation
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detectVitalSings
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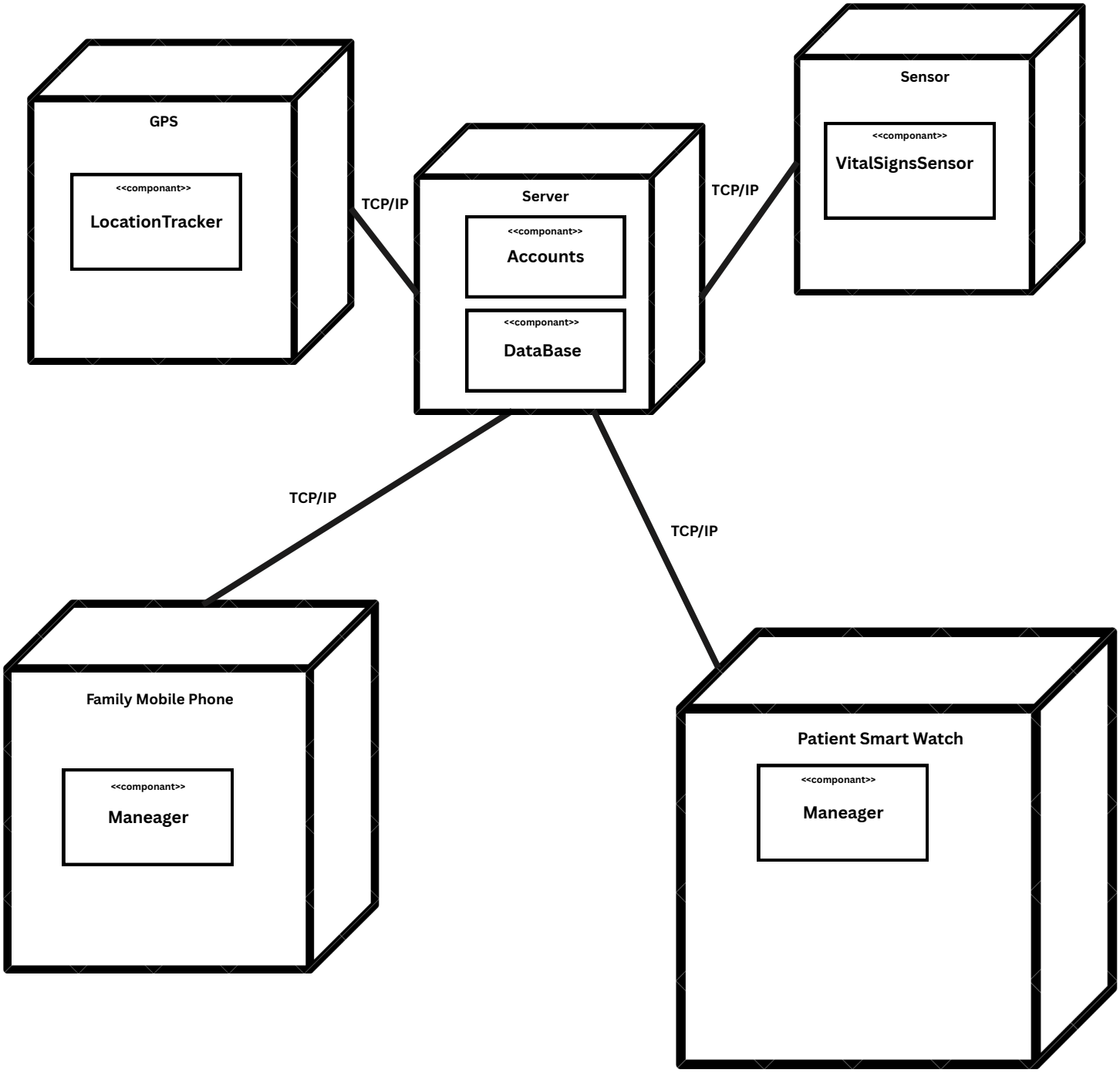
VitalSignsSensor


GPS
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TCP/IP
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DataBase
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Sensor
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VitalSignsSensor
TCP/IP
TCP/IP
Family Mobile Phone
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Maneager
TCP/IP
Patient Smart Watch
<<componant>>
Maneager

- **Individual task for each member:**

- Refal: Component diagram - Development diagram
- Walaa: Component diagram - Development diagram
- Sulafah: Component diagram - Development diagram
- Amal: Component diagram - Development diagram

- **Meeting time:**

Name of member	***Time & Date***
Refal, attended all meetings	Friday (2hours) Saturday (3hours)
Walaa, attended all meetings	Friday (2hours) Saturday (3hours)
Sulafah, attended all meetings	Friday (2hours) Saturday (3hours)
Amal, attended all meetings	Friday (2hours) Saturday (3hours)