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Project Deliverable 3:

==== Use Case 1: Add a Journal Entry ==========

Use Case:

1. Use Case Name: Add a Journal Entry
2. Scope: Journal
    a. The system shall provide a dedicated diary space for the user to submit a journal entry.
3. Level: user goal
4. Primary Actor: user with an account
5. Stakeholders and Interests: users with mental issues who want to express their feelings by writing a journal entry and submitting it to the diary section of the website.
6. Pre-Conditions: the user is successfully logged in
7. Success Guarantee (success end condition):
    - Successfully uploaded text to the main page in the system
    - Successfully displays the user's all published posts

Main Success Scenario:

1. The user navigates to the diary section of the website.
2. The diary interface displays the user's existing journal entries or a blank page if there are none.
3. The user selects the option to add a new entry to the diary.
4. The system displays a space to fill out the entry title, date, and content.
5. The user fills out the available fields.
6. User submits their entry.
7. The system saves the entry to the diary section with the corresponding data
8. The system redirects the user to the diary section with the newly added entry.

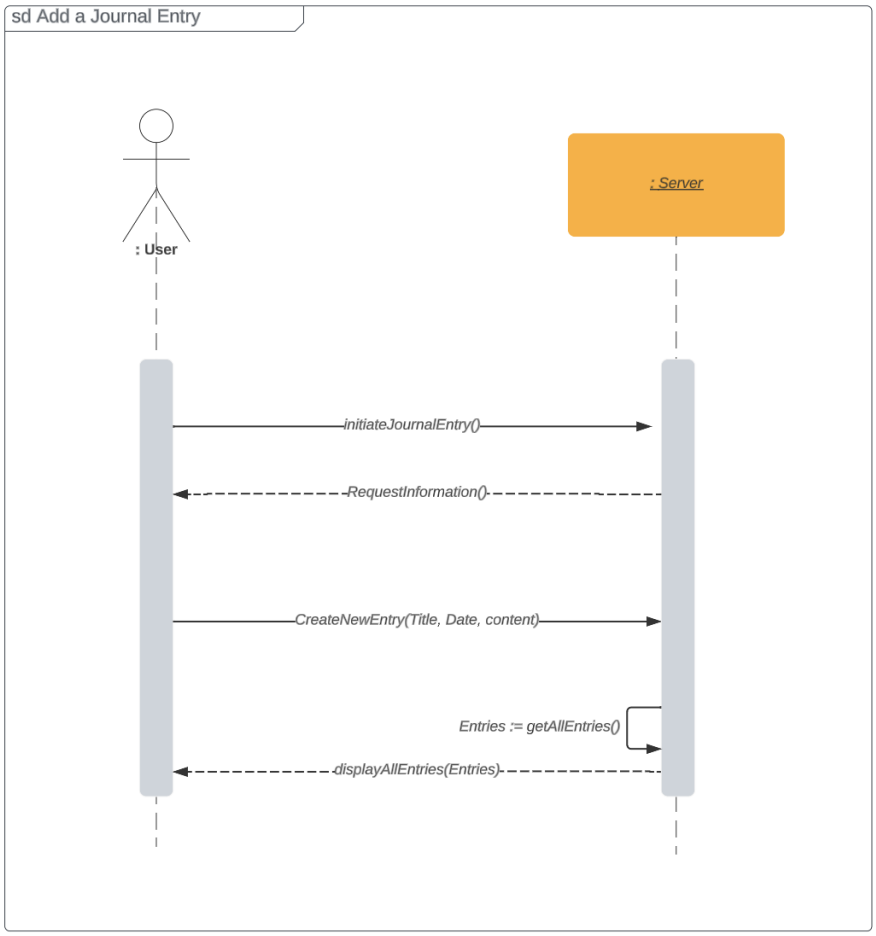
Extensions:

6.1. If the user decides to cancel, they can return to the diary without saving the entry. The following steps don't happen.

7.1. If an error occurs during saving and posting the entry, the system displays an error message and prompts the user to re-submit their entry.

Special Requirements: N/A
Technology & Data Variation List: N/A
Frequency of Occurrence: Whenever the user wants to record something, every frequency depends on the user's need
Open Issues/miscellaneous: none for now

System Sequence Diagram:

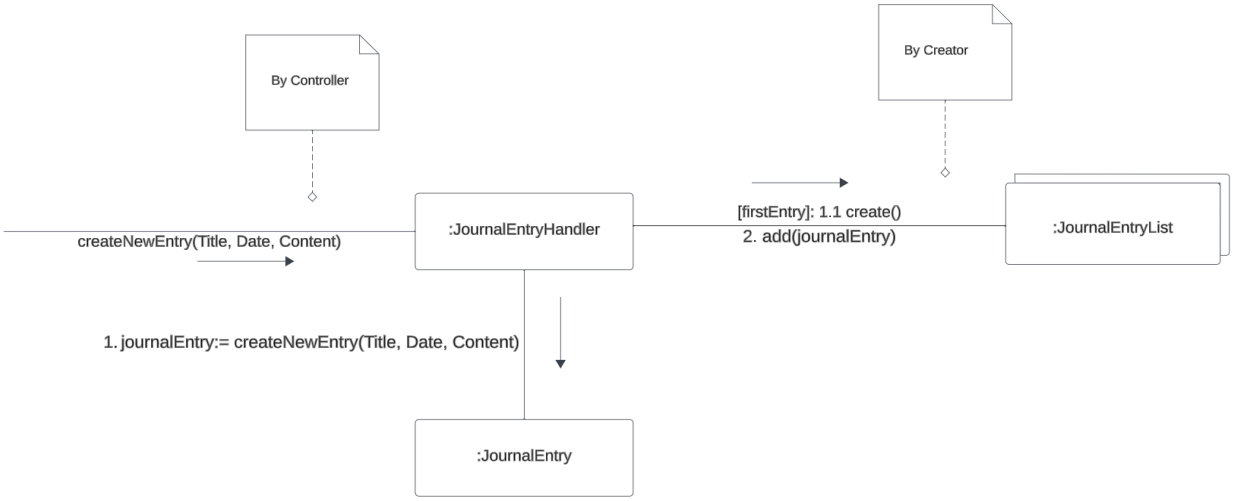


Operation Contract:

1. Name: CreateNewEntry(title, date, content)
2. Responsibilities:
    a. takes the user inputs: title, date, and content, and turns it into an object of class Journal Entry
    b. Stores the journal entry in the database
3. Preconditions:
    a. The user is signed in.
    b. The user locates the journal entry section.

4. Postconditions:
    a. If this was the first journal entry, a JournalEntryList is created
    b. A NewEntry was created (instance creation) with the user's inputted date, content, and entry title
    c. The object is added to the JournalEntryList and stored in the database

Interaction Diagram:



==== Use Case 2: Create New Prescription ====

Use Case:

1. Name: Create New Prescription Log
2. Scope: ClearMyMind
3. Level: User goal
4. Primary Actor: User with an account
5. Stakeholders and Interests: The user enters their new prescription info.
6. Preconditions:
    a. User logged in to their account on the website.
    b. The user buys a new prescription bottle.
7. Success guarantee: A new prescription is created and can be viewed in the active prescriptions list.

Main Success Scenario:

1. The user navigates to the pill monitoring section when they get a new prescription bottle.
2. The system displays all active prescriptions, i.e. any prescription with pills available.
3. The user selects the option to add a new prescription
4. The user is prompted to enter the medicine name, expiry date, and amount of pills in the bottle.
5. A new prescription is created and added to the list of current active prescriptions.

Extensions:

2.1. If the user's medicine expires, the prescription will include a message alerting the user that their medicine has expired.

4.1. If a required field is left blank, the user will be prompted to re-enter the details of this field.

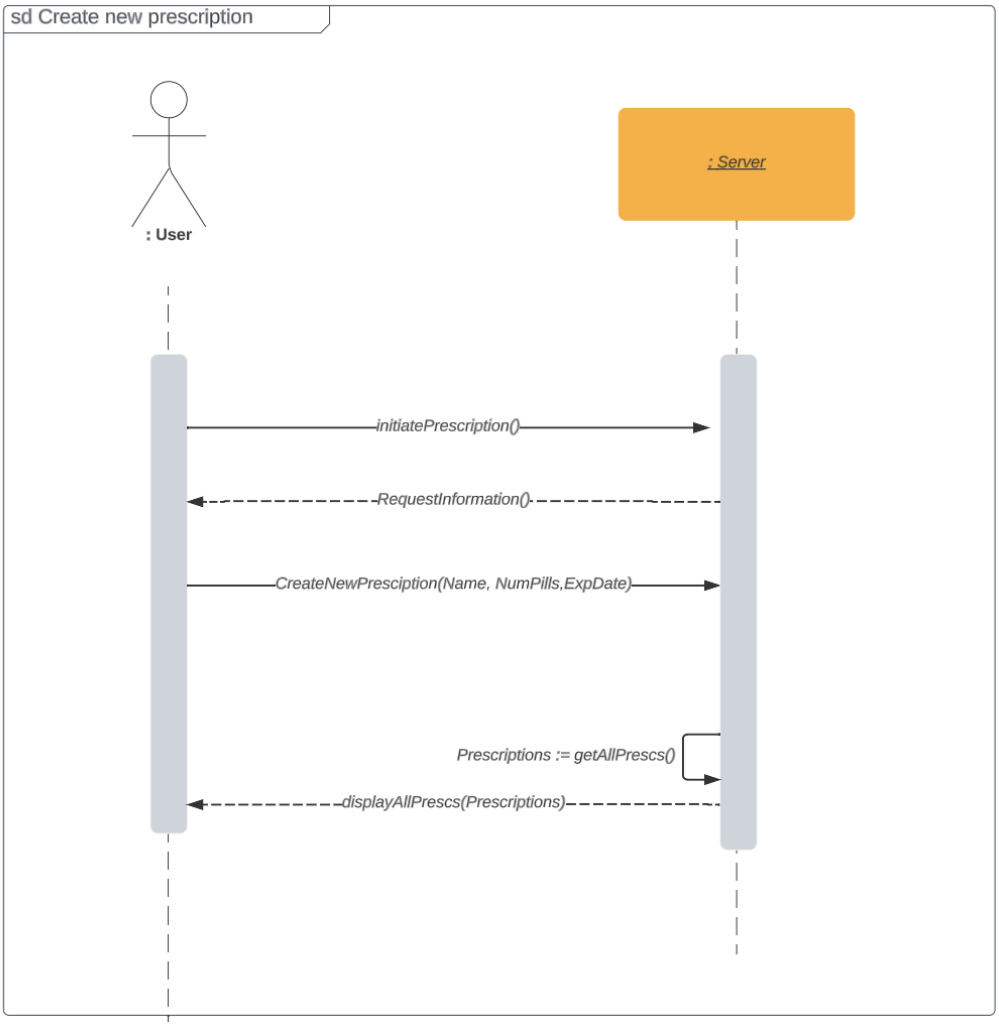
Special Requirements: N/A

Technology & Data Variation List: N/A

Frequency of Occurrence: Whenever the user wants to record something, every frequency depends on the user's need

Open Issues/miscellaneous: none for now

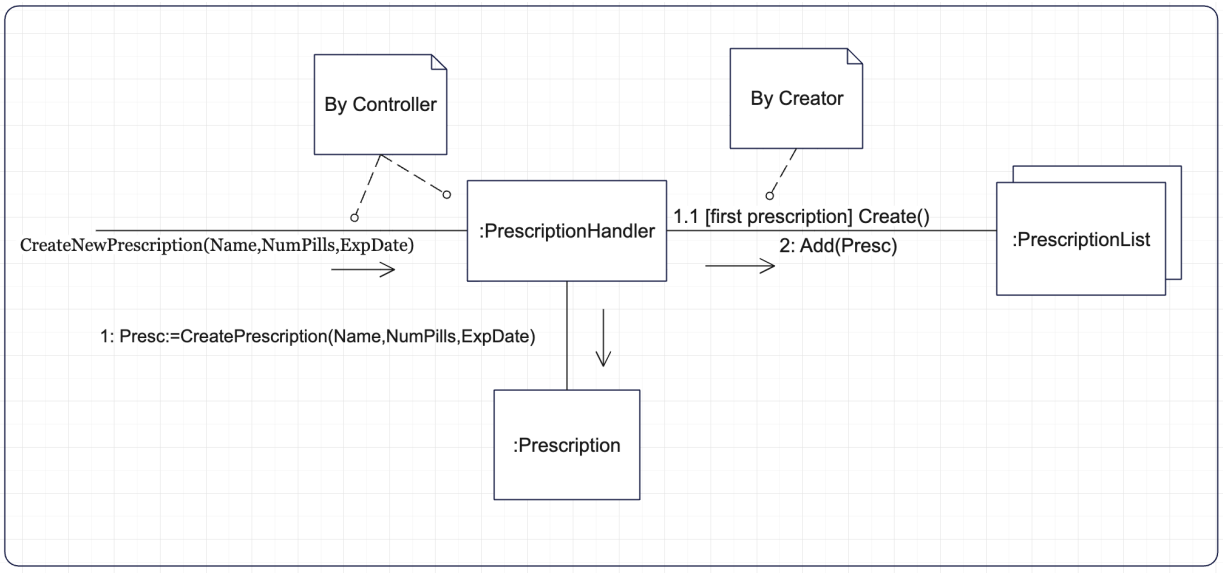
System Sequence Diagram:



Operation Contract :

1. Name: CreateNewPrescription(Name, NumPills, ExpDate)
2. Responsibilities:
    a. Create a new prescription
3. Preconditions:
    a. The user has an account.
    b. The user logs in to their account.
    c. The user locates the Pill monitoring section
4. Postconditions:
    a. A new Prescription Object is created
    b. If it is the first prescription, PrescriptionList is created
    c. Prescription Object added to PrescriptionList

Interaction Diagram:



==== Use Case 3: Use Cases for Log Pill Intake==========

Use Case:

1. Name: Log Pill Intake
2. Scope: ClearMyMind
3. Level: User goal
4. Primary Actor: User with an account
5. Stakeholders and Interests: The user wants to track their medication intake
6. Preconditions:
    a. User logged in to their account on the website.
    b. The user takes a pill.
7. Success guarantee:
    a. Pill intake is logged successfully
    b. The total number of pills in the prescription is updated

Main Success Scenario:

1. The user navigates to the pill monitoring section when they have taken their medication.
2. The system displays all active prescriptions and the option to log pill intake.
3. The user selects the option to log a new pill intake
4. The system displays the choice of all active medications
5. The user selects the corresponding medication and amount of pills taken
6. Pill intake instance is added to the History log
7. The specified medication's pill count on the corresponding prescription is decremented by however many pills the user entered

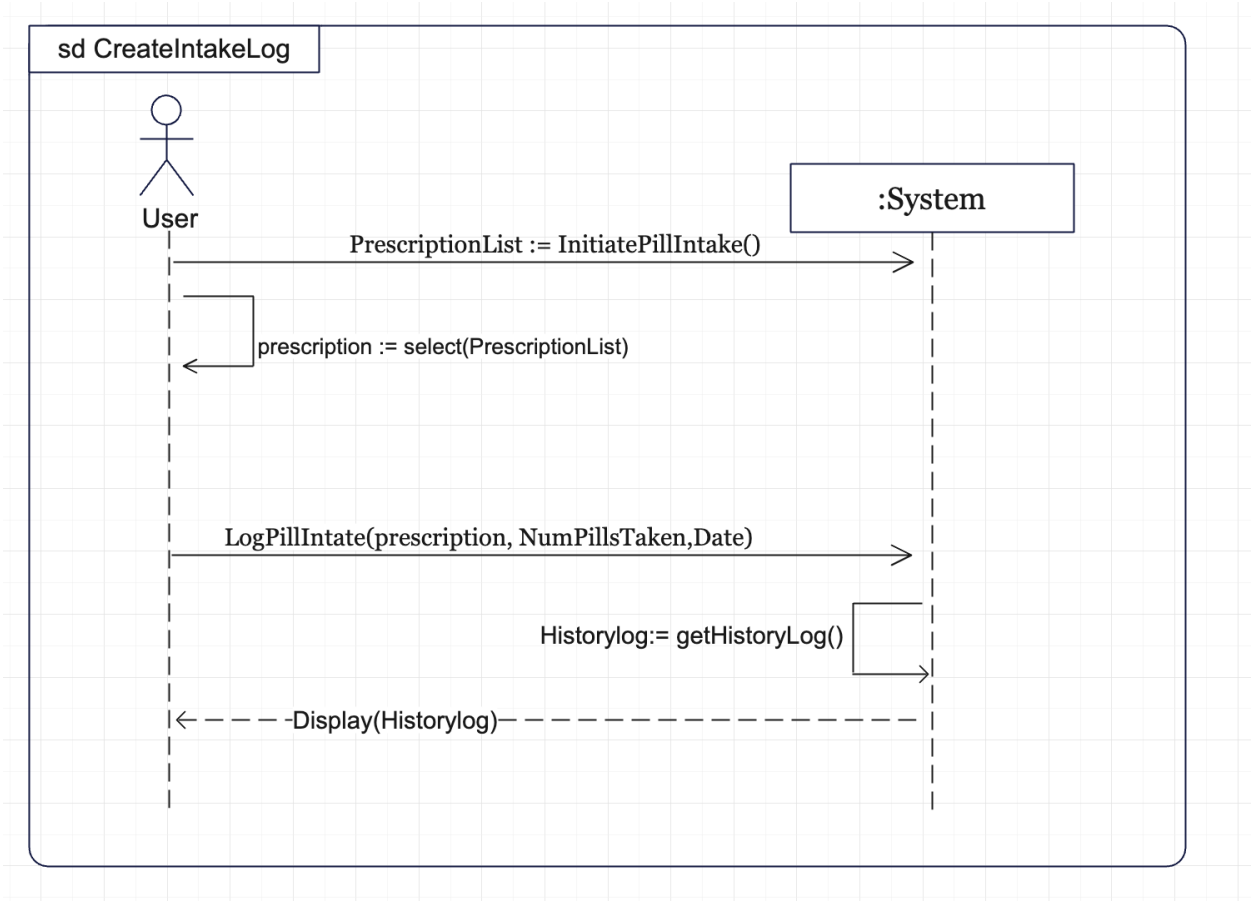
Extensions:

5.1. If a required field is left blank, the user will be prompted to re-enter the details of this field.

6.1. If the total number of pills reaches zero, the system deletes the corresponding prescription as it is no longer active.

Special Requirements: N/A
Technology & Data Variation List: N/A
Frequency of Occurrence: Whenever the user wants to record something, every frequency depends on the user's need
Open Issues/miscellaneous: none for now

System Sequence Diagram:

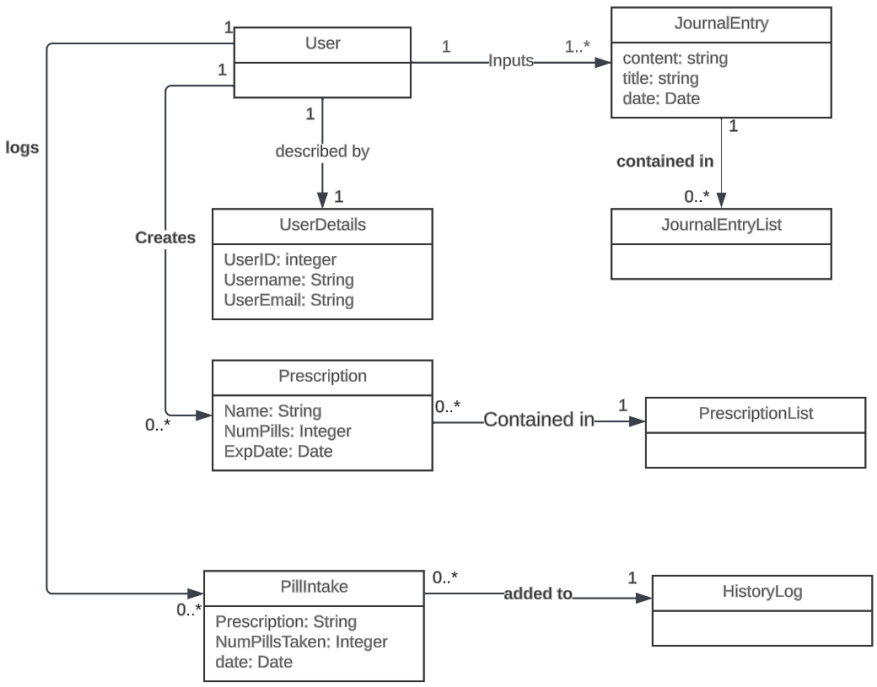
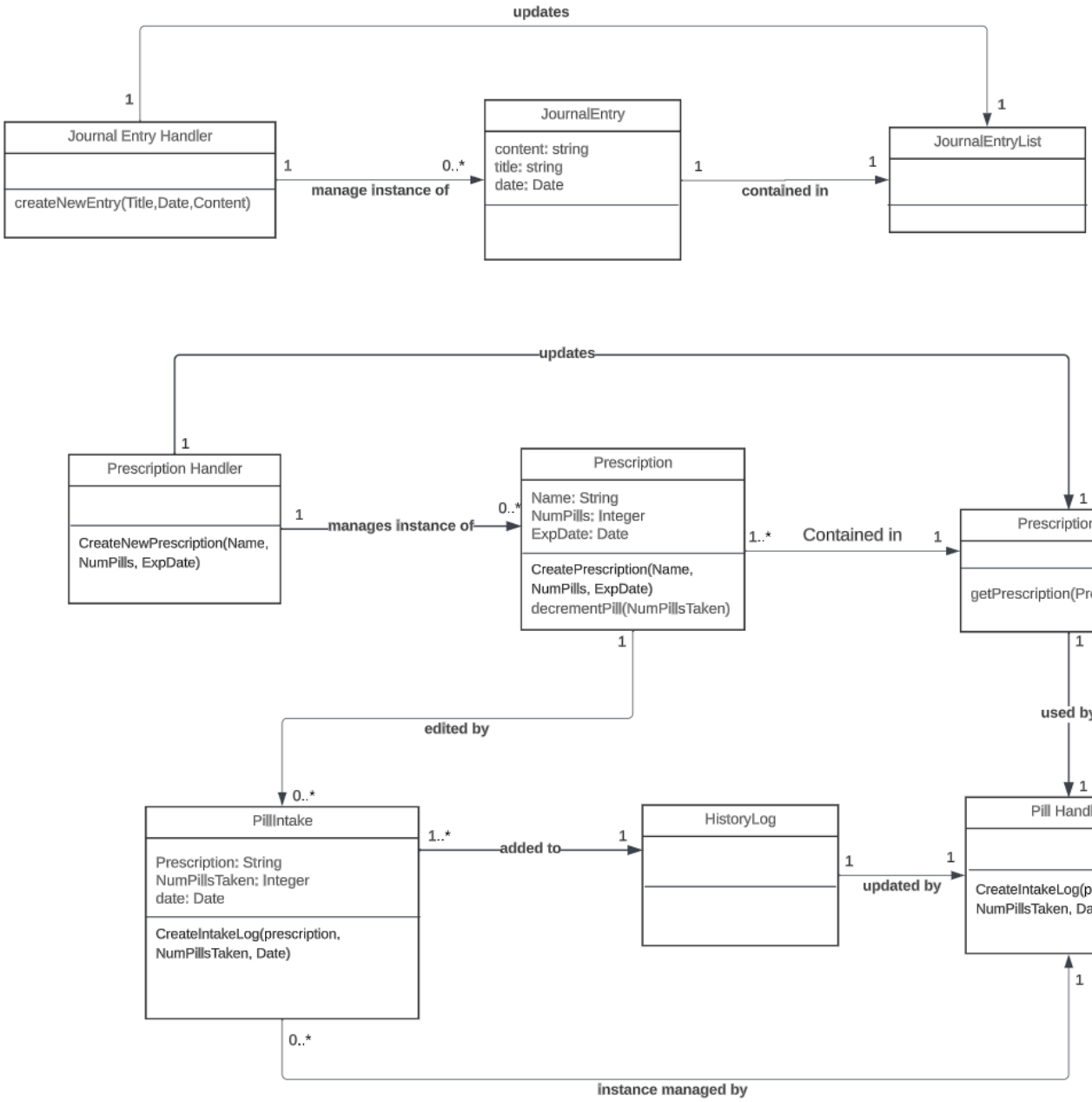


Operation Contract:

1. Name: CreateIntakeLog(prescription, NumPillsTaken, Date)
2. Responsibilities:
    a. Records pill intake in the history log and updates the number of pills
3. Preconditions:
    a. The user logs in to their account.
    b. The user locates the pill monitoring section
    c. The user has created a prescription prior
    d. Prescription is active.
4. Postconditions:
    a. The pillIntake object is created with today's date and added to the history log
    b. NumPills is decreased by the number of pills taken
    c. Prescription is deleted if NumPills reaches zero

Interaction Diagram:

===== Domain Model: ==========



==== Class Diagram ==========