



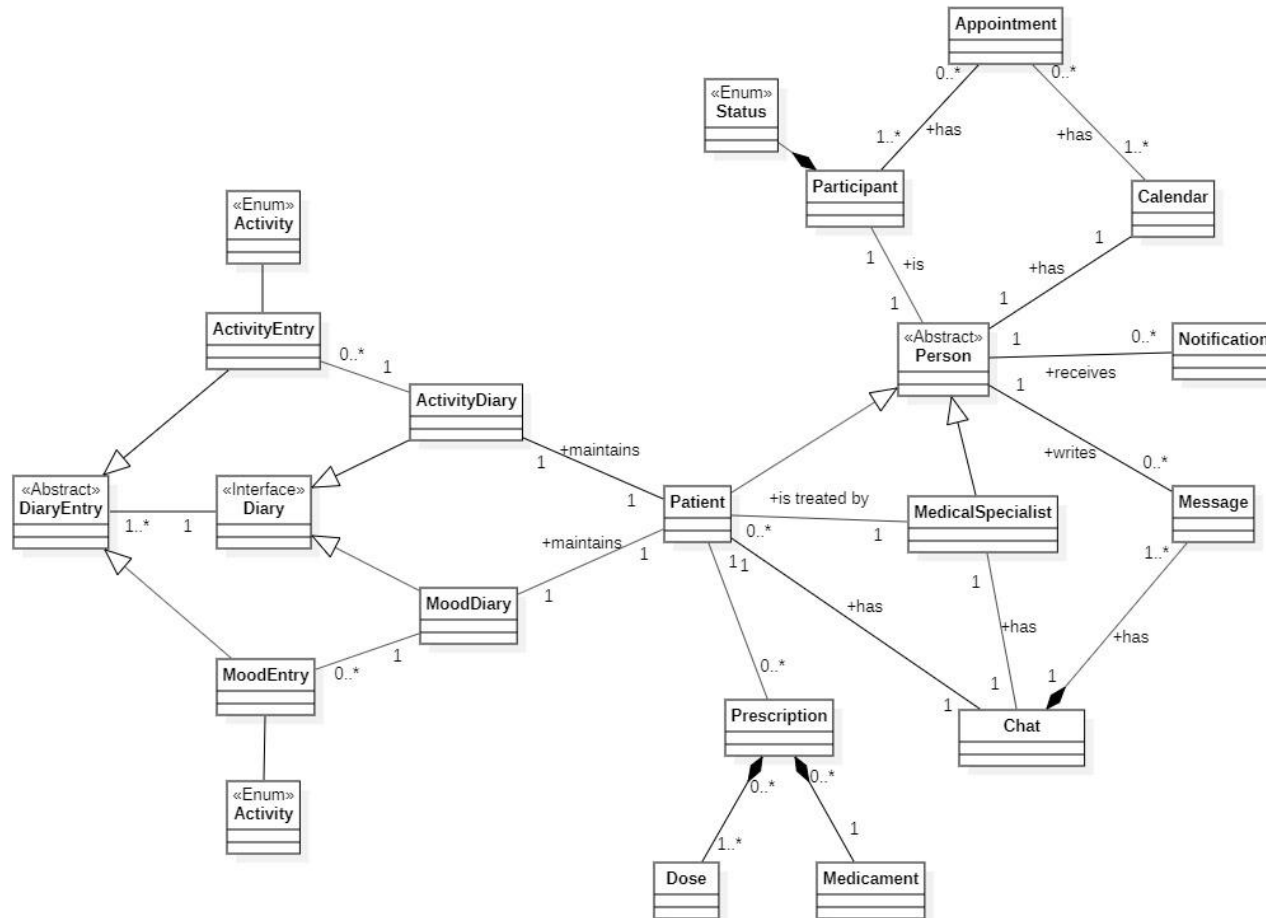
Task 04

# DOMAIN MODEL SEQUENZDIAGRAMM KLASSENDIAGRAMM



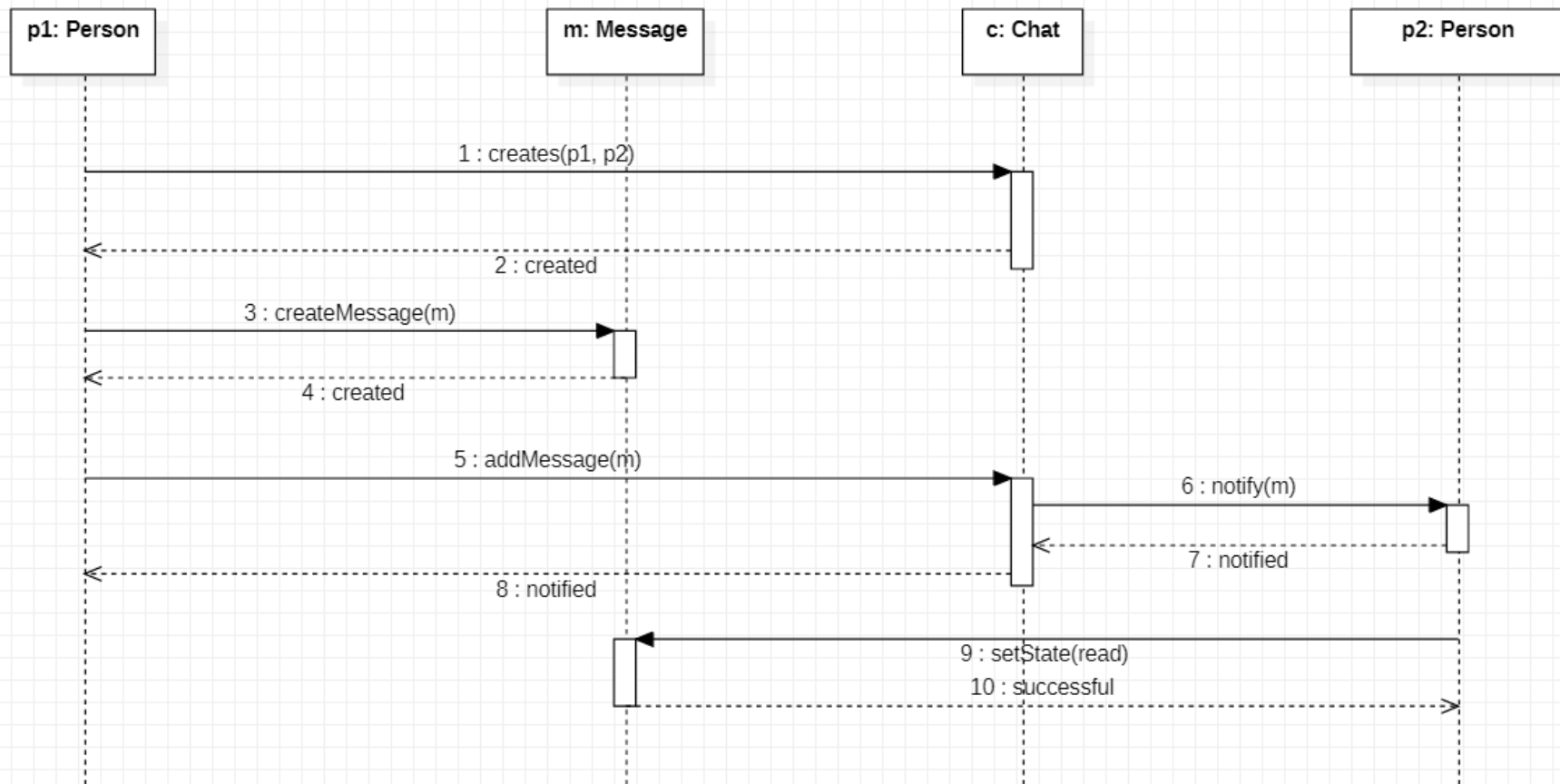
**DOMAIN  
MODEL**

# Domain Model



# SEQUENZ DIAGRAMM

# interaction Chat Funktion



# **KLASSEN DIAGRAMM**

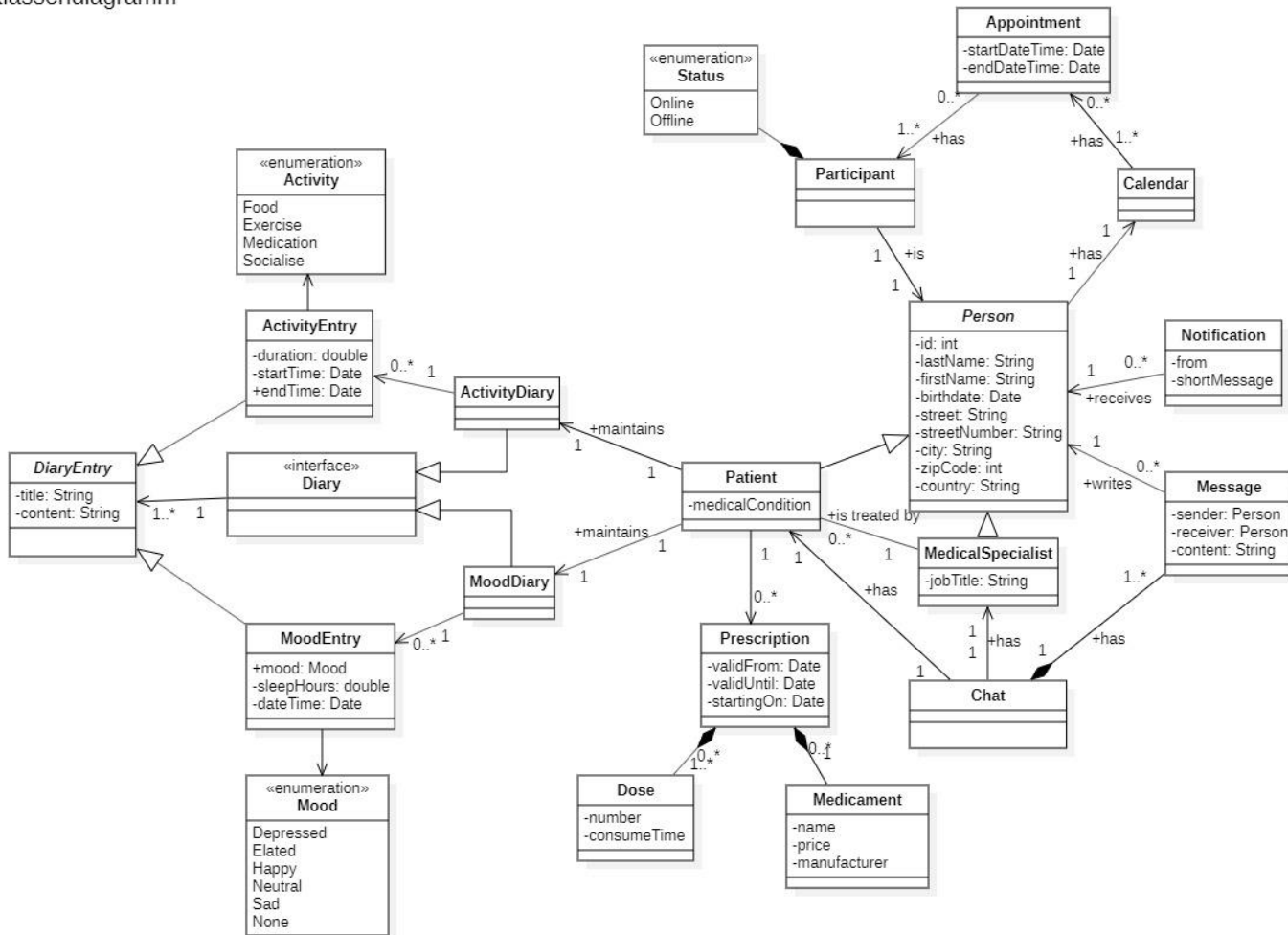
# Klassendiagramm

```

classDiagram
    class Status {
        <<enumeration>>
        Online
        Offline
    }
    class Activity {
        <<enumeration>>
        Food
        Exercise
        Medication
        Socialise
    }
    class Mood {
        <<enumeration>>
        Depressed
        Elated
        Happy
        Neutral
        Sad
        None
    }
    class Appointment {
        -startDateTime: Date
        -endDateTime: Date
    }
    class Participant
    class Calendar
    class Person {
        -id: int
        -lastName: String
        -firstName: String
        -birthdate: Date
        -street: String
        -streetNumber: String
        -city: String
        -zipCode: int
        -country: String
    }
    class MedicalSpecialist {
        -jobTitle: String
    }
    class Chat
    class Diary {
        <<interface>>
    }
    class DiaryEntry {
        -title: String
        -content: String
    }
    class ActivityEntry {
        -duration: double
        -startTime: Date
        -endTime: Date
    }
    class MoodEntry {
        +mood: Mood
        -sleepHours: double
        -dateTime: Date
    }
    class ActivityDiary
    class MoodDiary
    class Patient {
        -medicalCondition
    }
    class Prescription {
        -validFrom: Date
        -validUntil: Date
        -startingOn: Date
    }
    class Dose {
        -number
        -consumeTime
    }
    class Medicament {
        -name
        -price
        -manufacturer
    }
    class Notification {
        -from
        -shortMessage
    }
    class Message {
        -sender: Person
        -receiver: Person
        -content: String
    }

    Status --|> Participant
    Activity --|> ActivityEntry
    Mood --|> MoodEntry
    Appointment "0..*" -- "1..*" Participant : +has
    Appointment "0..*" -- "1..*" Calendar : +has
    Participant "1" -- "1" Person : +is
    Calendar "1" -- "1" Person : +has
    Person "1" -- "0..*" Notification : +receives
    Person "1" -- "0..*" Message : +writes
    MedicalSpecialist "1" -- "0..*" Person : +is treated by
    MedicalSpecialist "1" -- "1" Chat : +has
    Chat "1" -- "0..*" MedicalSpecialist : +has
    Patient "1" -- "0..*" Prescription : +has
    Patient "1" -- "1" ActivityDiary : +maintains
    Patient "1" -- "1" MoodDiary : +maintains
    Prescription "1" -- "10..*" Dose : +has
    Prescription "1" -- "0..1" Medicament : +has
    DiaryEntry <|-- ActivityEntry
    DiaryEntry <|-- MoodEntry
    Diary <|-- ActivityDiary
    Diary <|-- MoodDiary
    
```

The diagram illustrates the relationships between various entities in a health management system. Key classes include **Appointment**, **Participant**, **Calendar**, **Person**, **MedicalSpecialist**, **Chat**, **Diary**, **DiaryEntry**, **ActivityEntry**, **MoodEntry**, **ActivityDiary**, **MoodDiary**, **Patient**, **Prescription**, **Dose**, **Medicament**, **Notification**, and **Message**. Enumerations for **Status**, **Activity**, and **Mood** are also defined. Relationships are shown with multiplicity and direction, such as **Appointment** having **Participant** (0..\* to 1..\*) and **Calendar** (0..\* to 1..\*). **Person** is associated with **Notification** (1 to 0..\*) and **Message** (1 to 0..\*). **Patient** maintains **ActivityDiary** and **MoodDiary** (1 to 1), and has **Prescription** (1 to 0..\*). **Prescription** has **Dose** (1 to 10..\*) and **Medicament** (1 to 0..1). **Diary** is an interface implemented by **ActivityDiary** and **MoodDiary**, with **DiaryEntry** as a base class for **ActivityEntry** and **MoodEntry**.



# FRAGEN?







**DANKE**