Automated
Health Clinic
Management Week 2

Abdellah Sabhi Ruochen Liao (Maomao)



### Project Overview

- Main task:
  - Transitioning a health clinic from paper-based to digital records.
- Week 2 objective:
  - Add the MedicalRecord class to the program.
  - Implement JSON file integration for data persistence.

### Features:

- Patient Management:
- Register and view patients.
- Appointment Booking:
- Schedule and check appointments.
- Medical Records:
- Add and view patient medical history.
- File Storage:
- Save all data into JSON file.

### Key functions

• Register Doctor:

URL: /register\_doctor?name=maomao&specialty=internal&contactInfo=123456

• Register Patient:

URL: /register?name=Abdellah&address=123MainStreet&medicalHistory=Asthma&doctorId=1

• Book Appointment:

URL: /book appointment?patientId=1&date=2024-12-15&time=11:00

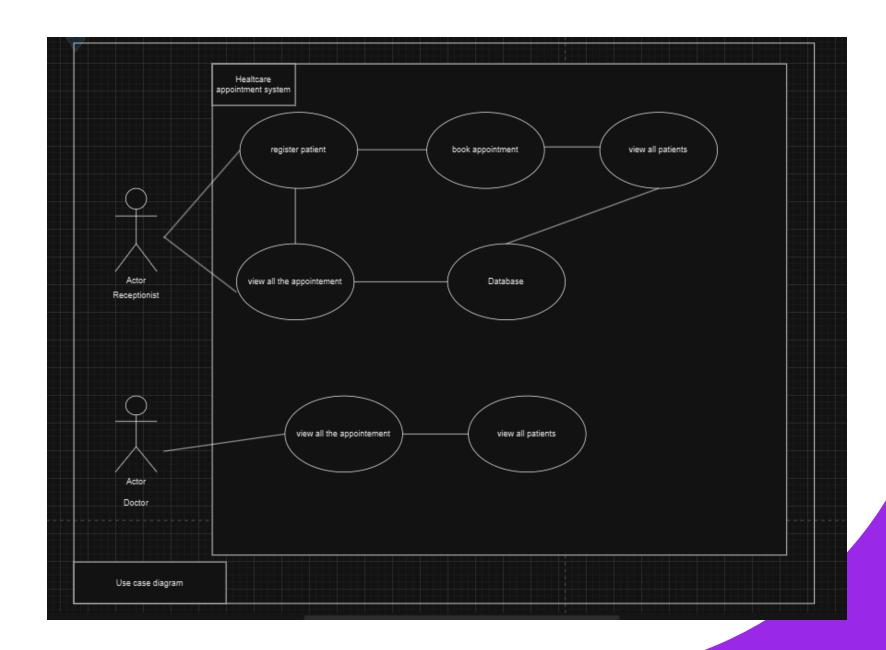
Add Medical Record:

URL: /add\_record?patientId=1&visitDate=2024-12-15&notes=RoutineCheckup&diagnosis=Healthy

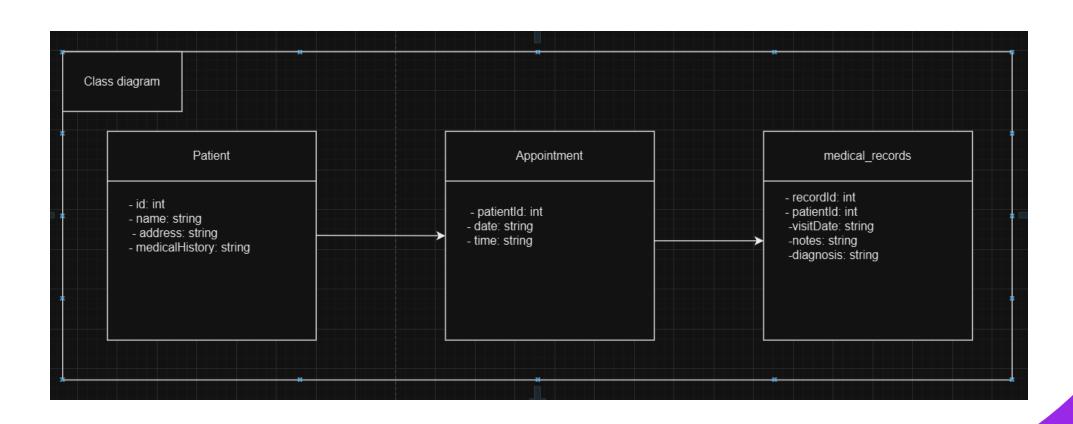
• Retrieve Medical History:

URL: /medical\_history/1

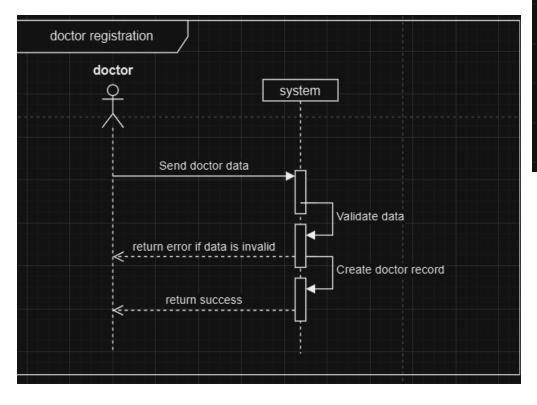
Use Case Diagram

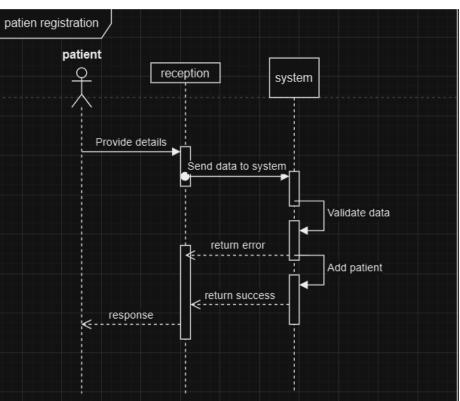


# Class Diagram:

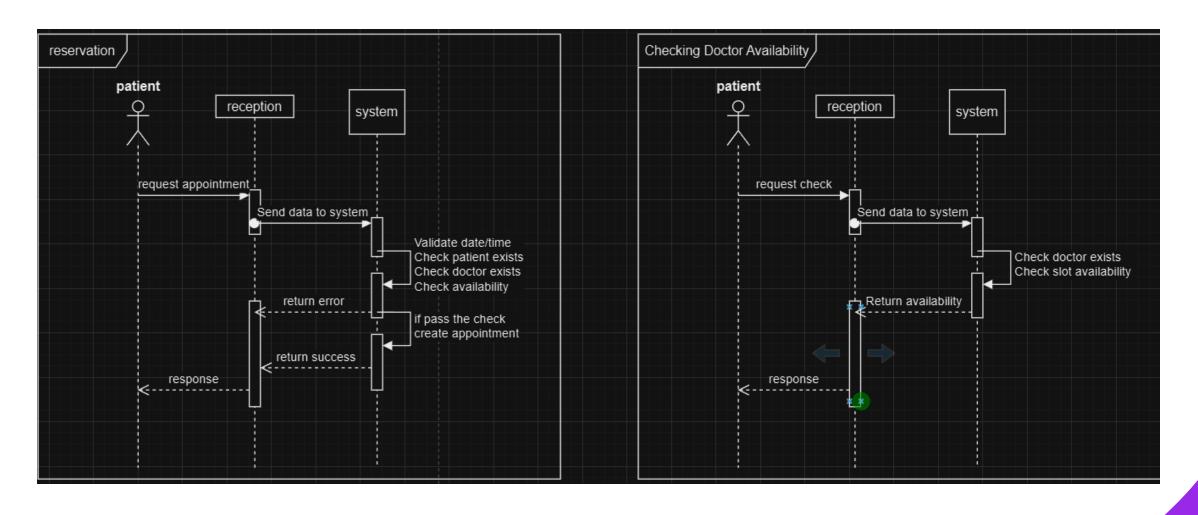


# Sequence diagram

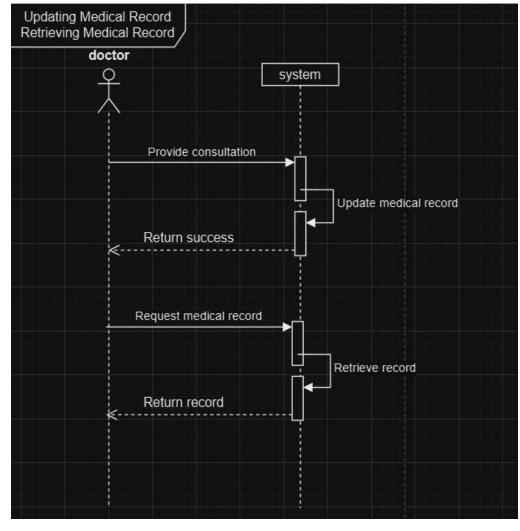




# Sequence diagrams:



## Sequence diagram: Updating data



## Challenges

#### • Challenges:

Transitioning from SQL to JSON storage.

Ensuring thread-safe operations.

#### • Future Plans:

Integrate SQL database.

Add user authentication.

Develop a user-friendly frontend.

## Next Steps

- Expand functionality for Week 2:
- Prescription and Medical Records Handling.
- Add data persistence.