Unit 4 – Compulsory assignment

The hospital has now decided to use MongoDB to manage the data:

1. Define all collections and documents necessary to store the information from the patient (Two collections, patients and doctors)

2. Import the data from the MySQL database (use Hibernate) to the Mongo database

3. Implement the following functionality, using the Mongo Java driver with Bson documents:

1. CRUD of patients (If they have medical records, ask before deleting)
2. Get information of the medications (including dossage) of a specific patient
3. Get the name of the doctors of a given patient
4. Append a new medical record with two medications, including the dossage. The doctor will be "Doctor1"
5. Show all medical records by patient
6. Update a medical record: Add a new medication
7. Delete a medication from a medical record

8. Aggregations:
    a. Get the name of the medication with the highest dossage
    b. Get the medical records of a given patient, showing the name of the patient and the number of appointments
    c. Get the number of medications of each patient
    d. Get the name of the patients prescribed with Amoxicilina
    e. Get the average number of medications per patient
    f. Get the most prescribed medication
    g. Show a list with the medications of a selected patient
    h. Get the most prescribed medication per patient
    i. Get name of the doctors that don't have any patient
    j. Get the name of the doctor with more patients
    k. Get the name of the patient with more medical records