## 

**CLINIC BOOKING**

**Software Requirement Specification**

## 

## 

**– Hanoi, May 2023 –**

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# **I. Overview**

## **1. Code Packages/Namespaces**

## 

***Package descriptions & package class naming conventions***

| No | Package | Description |
| --- | --- | --- |
| 1 | controller | Acts as a go-between for the service layer and the Front-end, passing on different input requests |
| 2 | dal | This component is used to get data directly FROM the database |
| 3 | configs | This component helps define configuration |
| 4 | context | This component helps connect database |
| 5 | model | This component includes interfaces used to receive data retrieved FROM the database and classes used to receive data |
| 6 | view | This component displays the front-end. |

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# **II. Code Designs**

## **1. Common Feature/Login**

### **a.** **Class Diagram**



### **b.** **Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | Login | using to login into the system |
| 2 | check Acc | using to check account in database |
| 3 | enCode | using to encode password |
| 4 | getConnection | using to connect Database |

### **c.** **Sequence Diagram**

### **d.** **Database queries**

| No | Method | Database queries |
| --- | --- | --- |
| 1 | AccountDAO | SELECT \* FROM users where email=? or username=? |

## **2. Common Feature/Register**

### **a.** **Class Diagram**

### 

### **b.** **Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | Register | using to create new user |
| 2 | Check Acc | use to check username or email exist |
| 3 | enCode | using to encode password |
| 4 | capitalizeFirstLetter | using to check full name |
| 5 | getConnection | using to connect Database |

### **c.** **Sequence Diagram**

### 

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### 

### **d.** **Database queries**

| No | Method | Database queries |
| --- | --- | --- |
| 1 | AccountDAO | SELECT \* FROM users WHERE email=? OR username=?  INSERT INTO `doctris\_system`.`users` (`username`, `password`, `email`, `role\_id`) VALUES (?, ?, ?, ?) |

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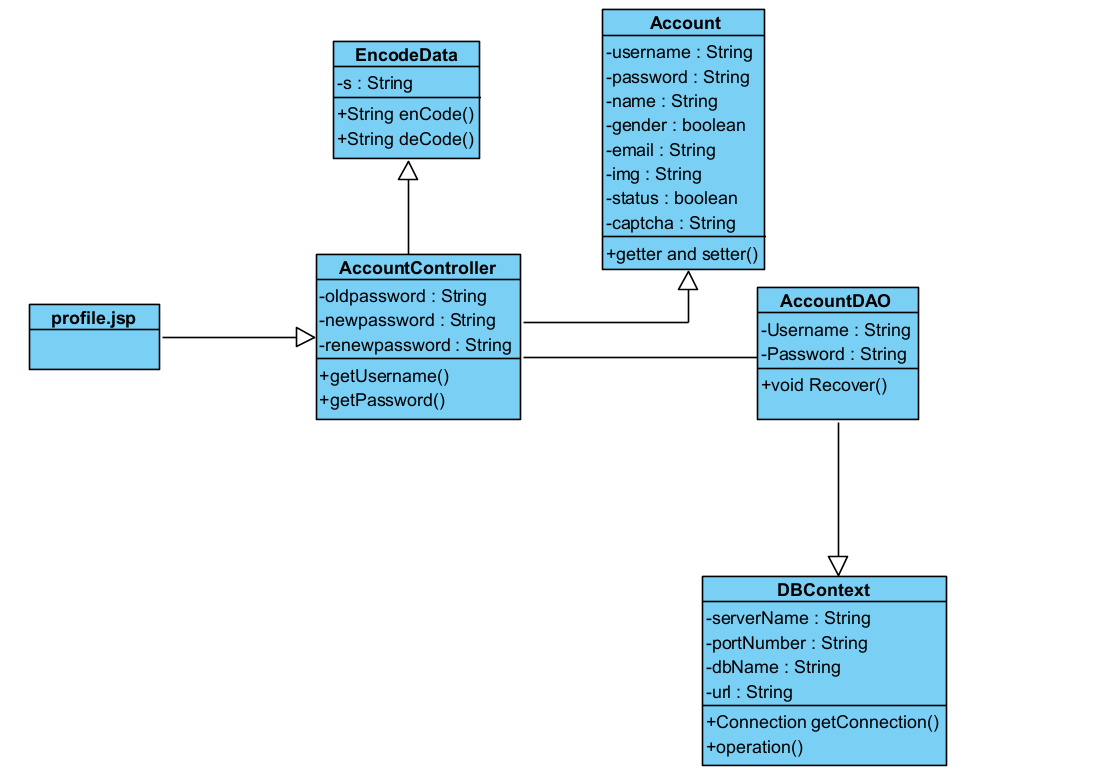
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## **3. Common Feature/Change Password**

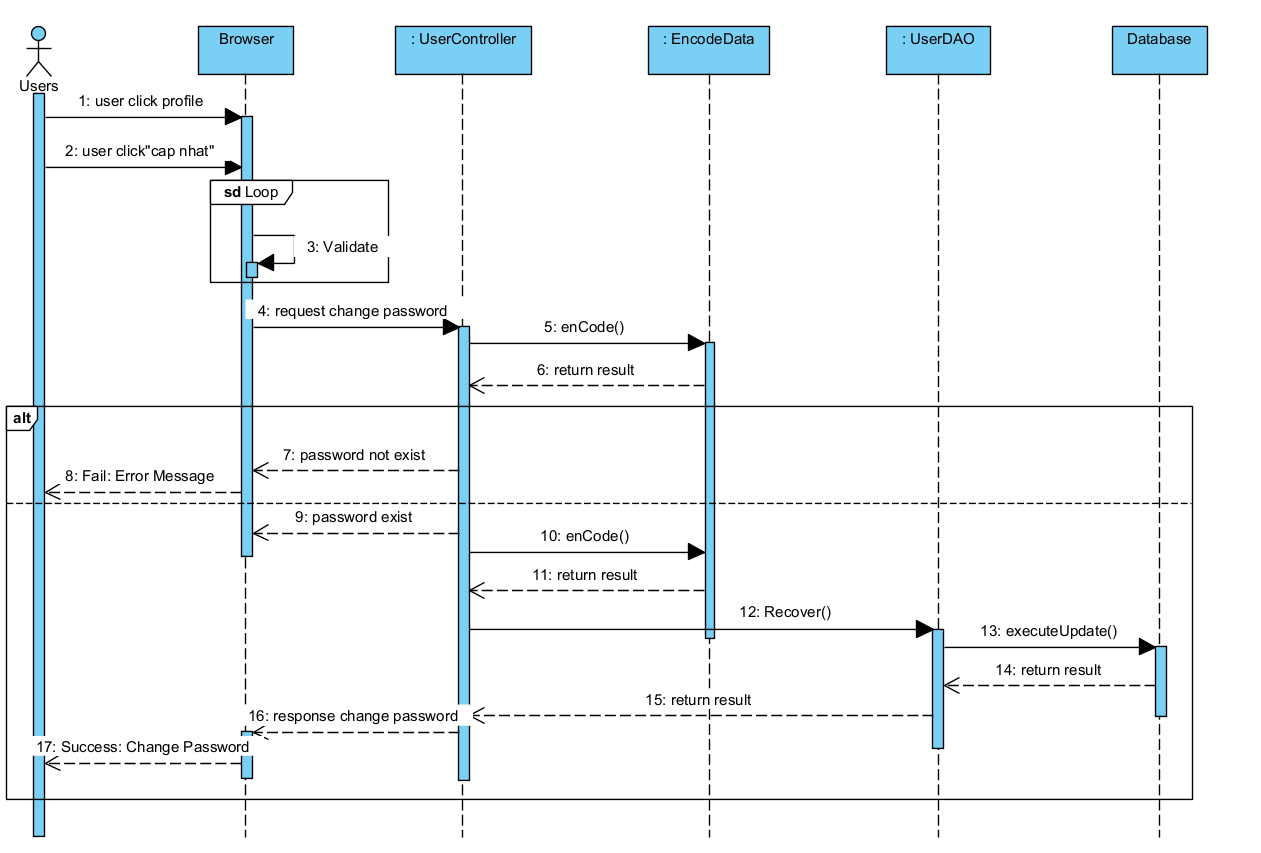
### **a.** **Class Diagram**



### **b.** **Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | getUsername | using to get username from database throw “Recover” method in Account |
| 2 | enCode | This method takes a string 's' as input and returns the encoded string. |
| 3 | deCode | This method takes a string 's' as input and returns the decoded string. |
| 4 | Recover | Method named ‘Recover‘ that is used to update the password of a user in a database. |

### **c.** **Sequence Diagram**

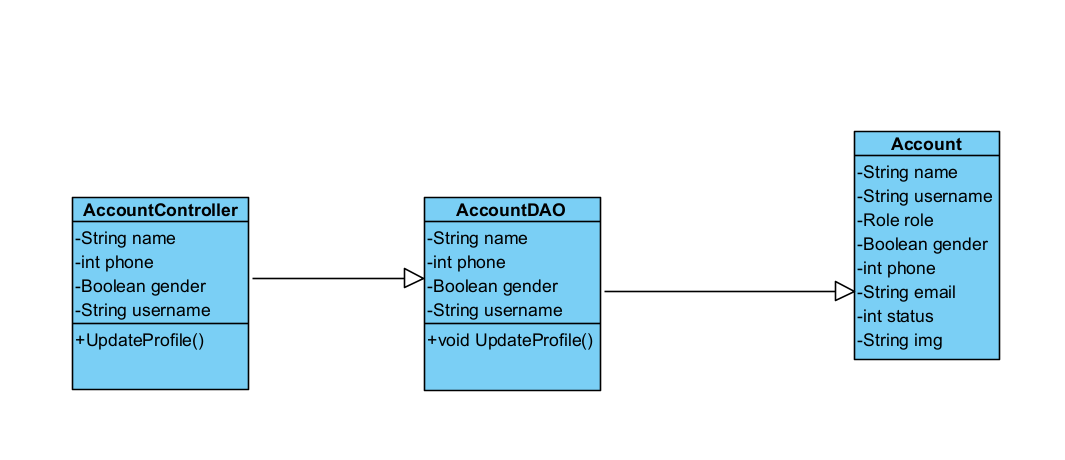


### **d.** **Database queries**

| No | Method | Database queries |
| --- | --- | --- |
| 1 | Recover() | UPDATE `doctris\_system`.`users` SET `password` = ? WHERE (`username` = ?) |

## **4. Common Feature/ User profile**

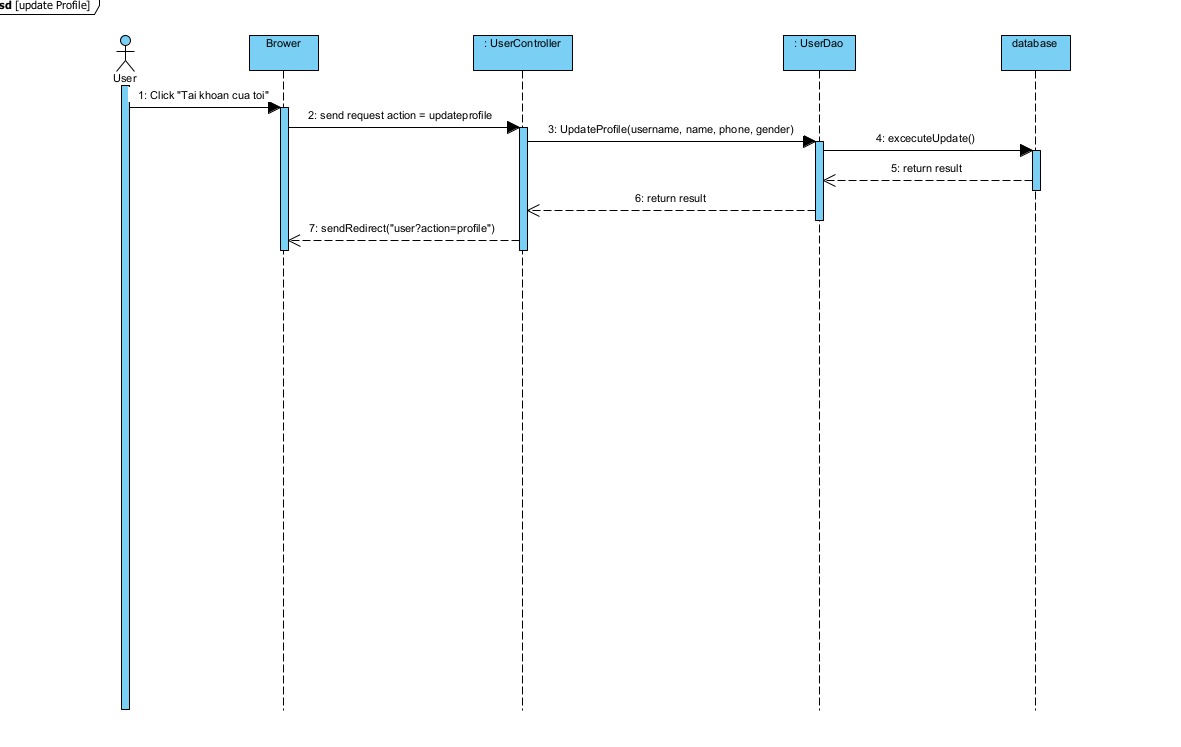
### **a.** **Class Diagram**



### **b.** **Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | UpdateProfile | use to update user’s profile |

### **c.** **Sequence Diagram**



### **d.** **Database queries**

| No | Method | Database Queries |
| --- | --- | --- |
| 1 | UpdateProfile | * UPDATE `doctris\_system`.`users` SET `name` = ?, `phone` = ?, `gender` = ? WHERE (`username` = ?) |

## **5. Public Feature/Web Blog List**

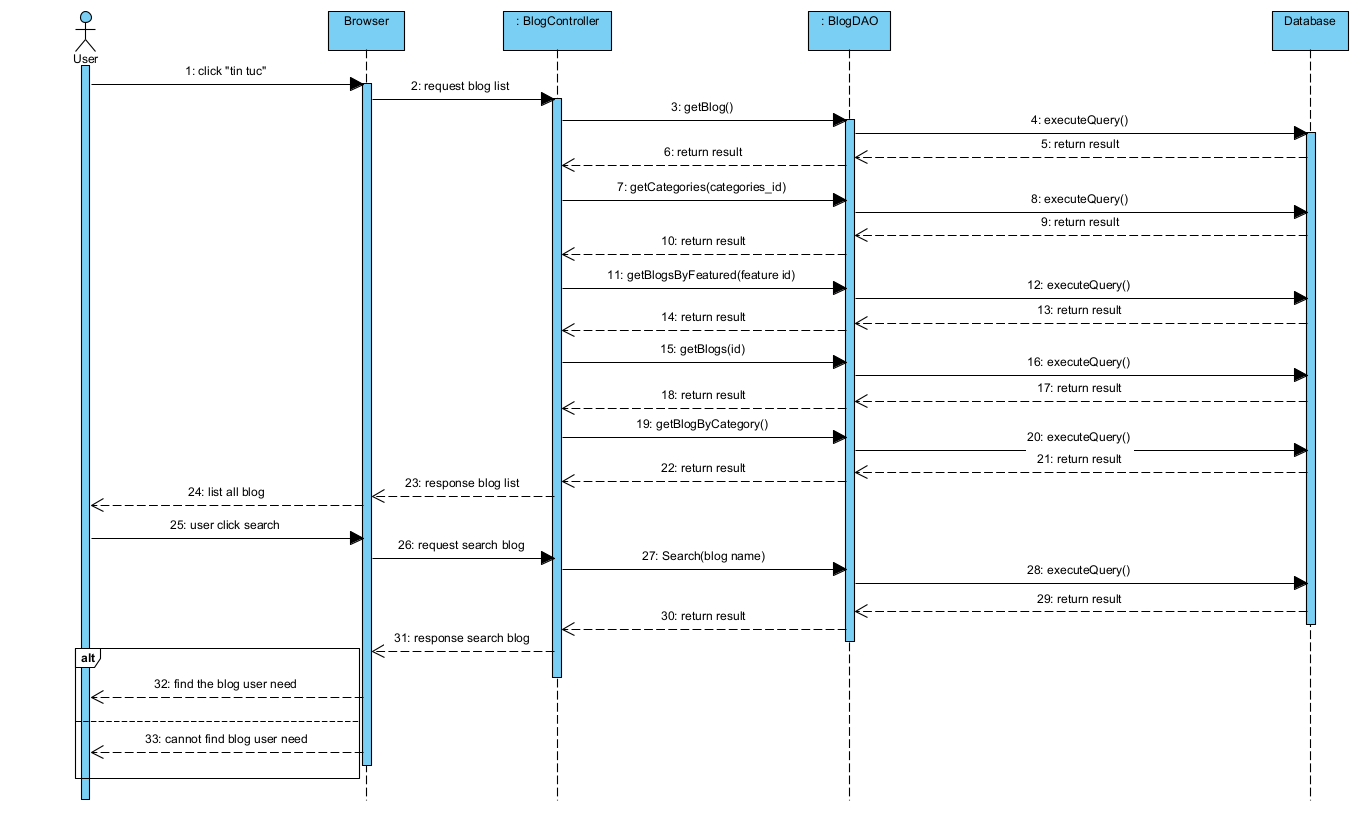
### **a. Class Diagram**

### 

### **b.** **Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | getBlogs | get all blog in database order by date |
| 2 | getCategories | get all categories in database |
| 3 | getBlog | get blog by blog id |
| 4 | getBlogBy Featured | get blog which featured |
| 5 | search | get blog that having or contain keyword in its title |
| 6 | getBlogByCategory | get blog in the same category |

### **c. Sequence Diagram**



### **d.** **Database queries**

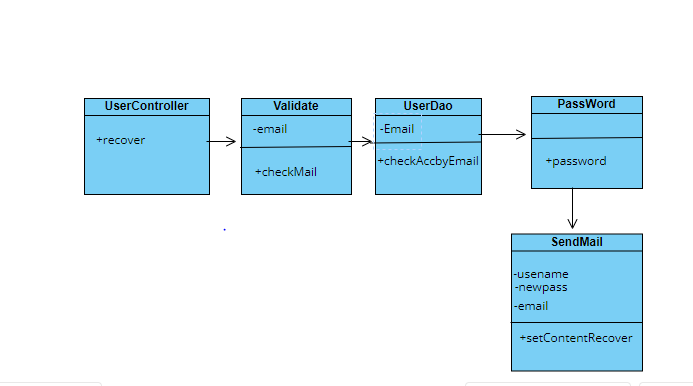
| No | Method | Database Queries |
| --- | --- | --- |
| 1 | getBlogs | SELECT blog.\*, category\_blog.name FROM blog  inner join category\_blog  on blog.category\_id = category\_blog.id  order by date desc |
| 2 | getCategories | SELECT blog.\*, category\_blog.name FROM blog  inner join category\_blog  on blog.category\_id = category\_blog.id  where category\_id = ?  order by date desc |
| 3 | getBlog | SELECT blog.\*, category\_blog.name FROM blog  inner join category\_blog  on blog.category\_id = category\_blog.id  where blog\_id = ?  order by date desc |
| 4 | getBlogBy Featured | Select \* FROM blog where featured = 1 ; |
| 5 | search | SELECT \* FROM blog WHERE title LIKE ? ORDER BY date desc |
| 6 | getBlogByCategory | SELECT \* FROM category\_blog; |

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## **6. Common Feature/Forgot Password**

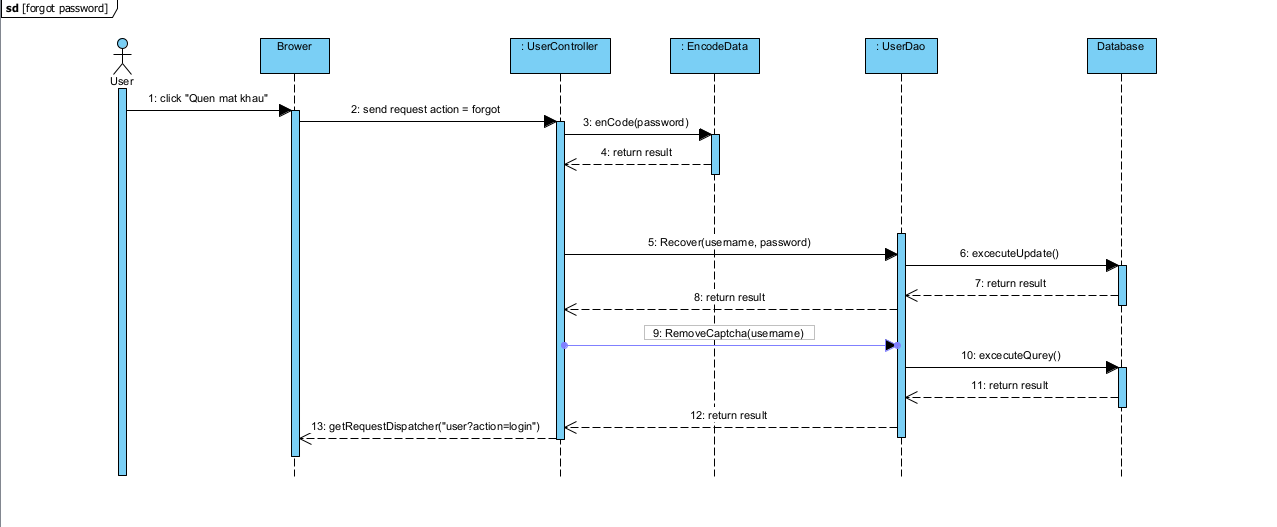
### **a.** **Class Diagram**



### **b.** **Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | recover | using to forgot password |
| 2 | checkEmail | using to check validate email |
| 3 | checkAccByEmail | using to check exist email |
| 4 | getPassword | using to create password randomrandom |
| 5 | setContentRecover | using to send newpassword |

### **c.** **Sequence Diagram**

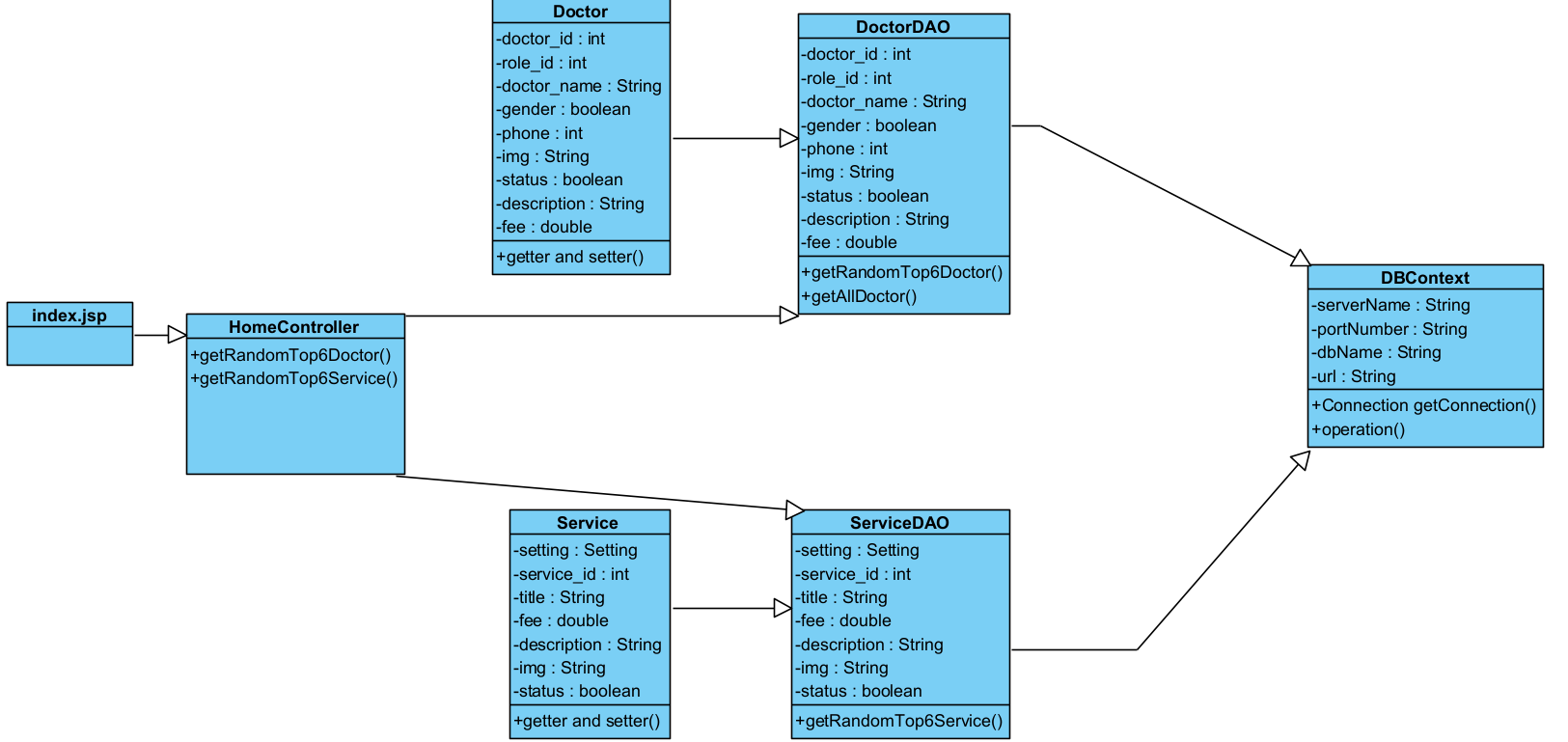


### **d.** **Database queries**

| No | Method | Description |
| --- | --- | --- |
| 1 | recover | String sql = "UPDATE ‘doctris\_system’.’users’ SET ‘password’ = ? WHERE (‘username’ = ?)"; |
| 2 | checkAccByEmail | String sql = "SELECT \* FROM users where email=?"; |

## **7. Public Feature/Home Page**

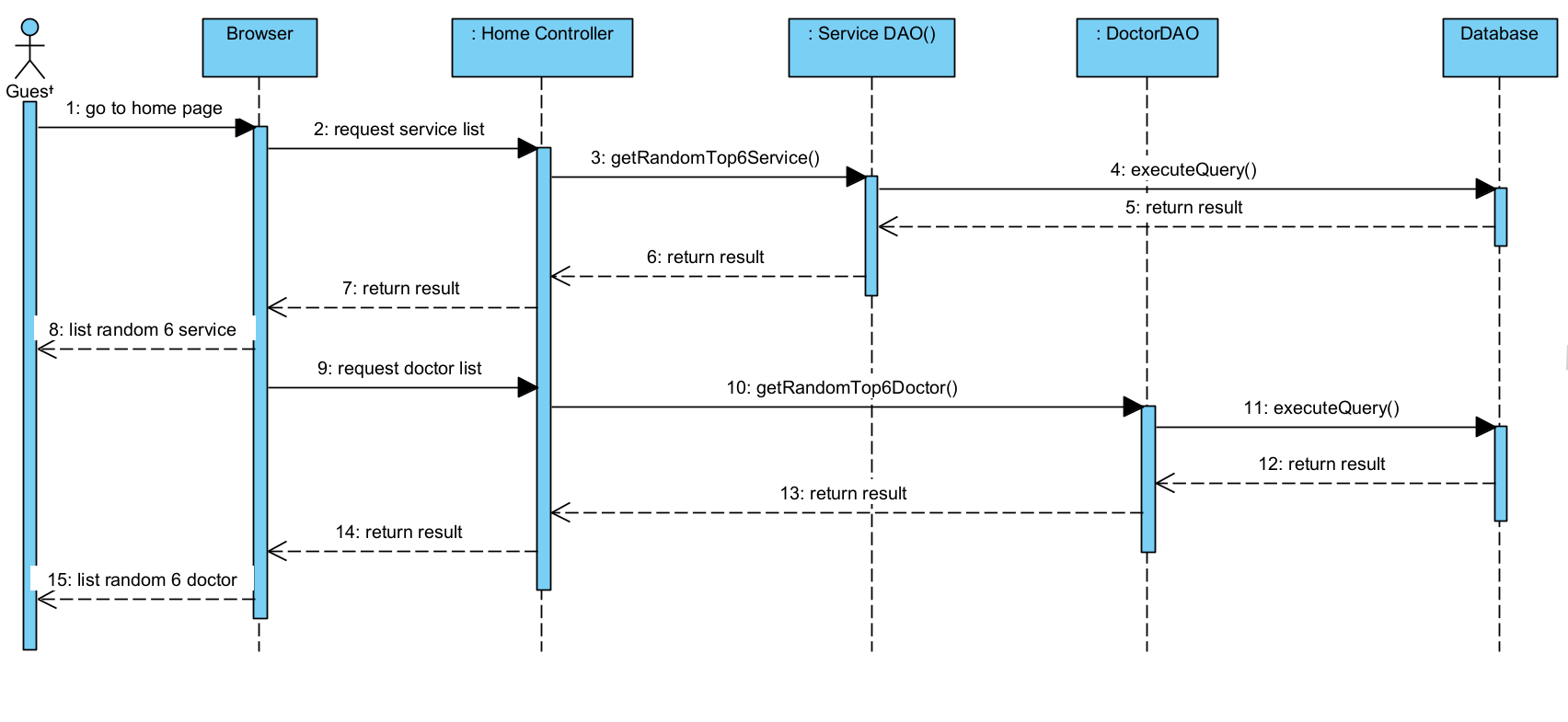
### **a.** **Class Diagram**



### **b.** **Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | getRandomTop6Doctor | Randomly get information of 8 doctors along with the information of the corresponding service list. |
| 2 | getRandomTop6Service | Randomly get information of 6 services along with the information of the respective specialty list. |

### **c. Sequence Diagram**

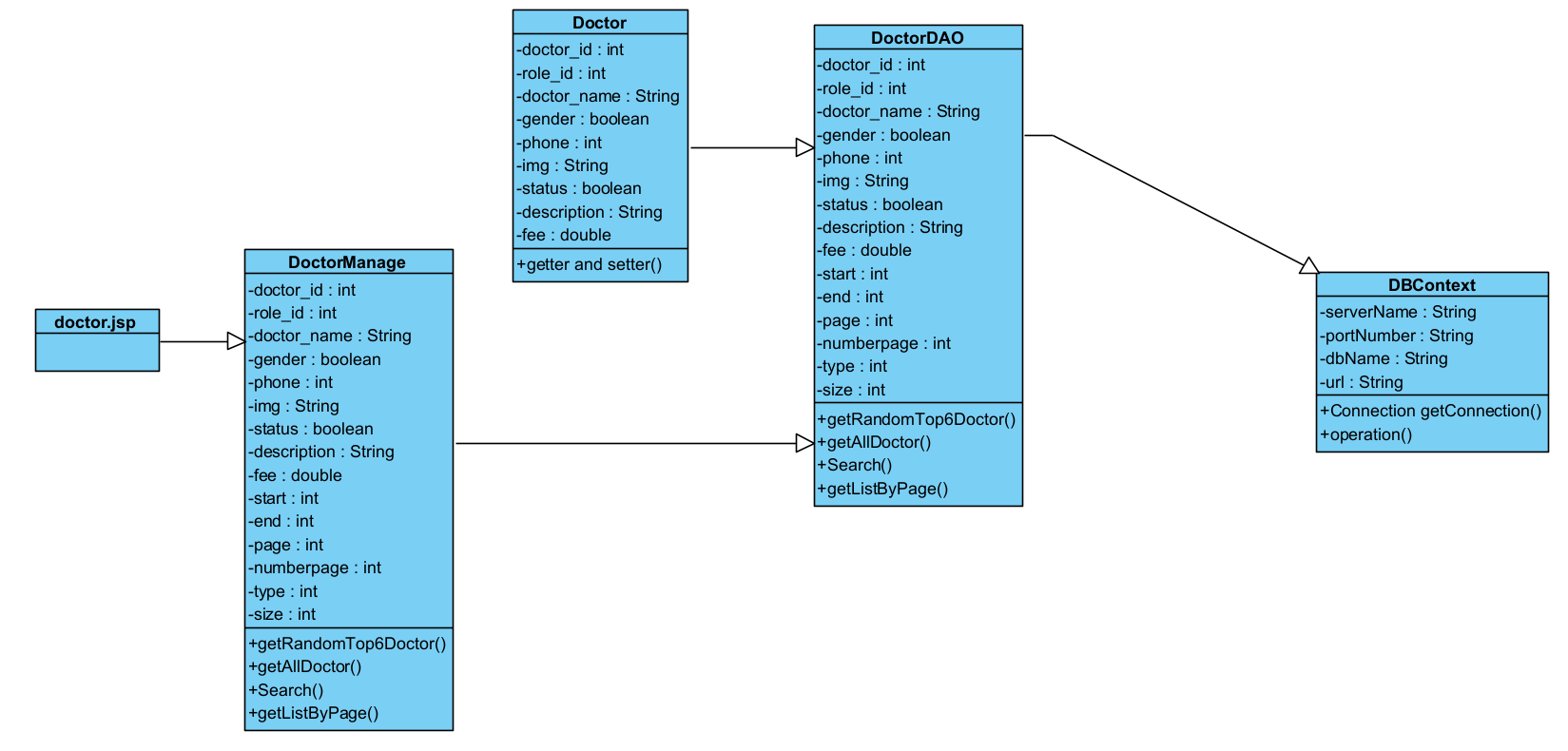


### **d.** **Database queries**

| No | Method | Database queries |
| --- | --- | --- |
| 1 | getRandomTop6Doctor | SELECT concat\_ws(cs.id,d.category\_id)id, cs.name, cs.setting\_id, cs.status, d.doctor\_id,d.role\_id,d.doctor\_name,d.username,  d.gender,d.DOB,d.phone,d.description,d.status,d.img,d.fee,d.position  FROM doctris\_system.doctor d INNER JOIN doctris\_system.category\_service cs  ON d.category\_id = cs.id ORDER BY RAND() LIMIT 8 |
| 2 | getRandomTop6Service | SELECT concat\_ws(cs.id,s.category\_id)id ,cs.name,cs.setting\_id,  cs.status,s.service\_id,s.title,s.fee,s.description,s.img  FROM doctris\_system.service s  INNER JOIN doctris\_system.category\_service cs  ON s.category\_id = cs.id ORDER BY RAND() LIMIT 6 |

## **8. Staff Feature/Doctor List**

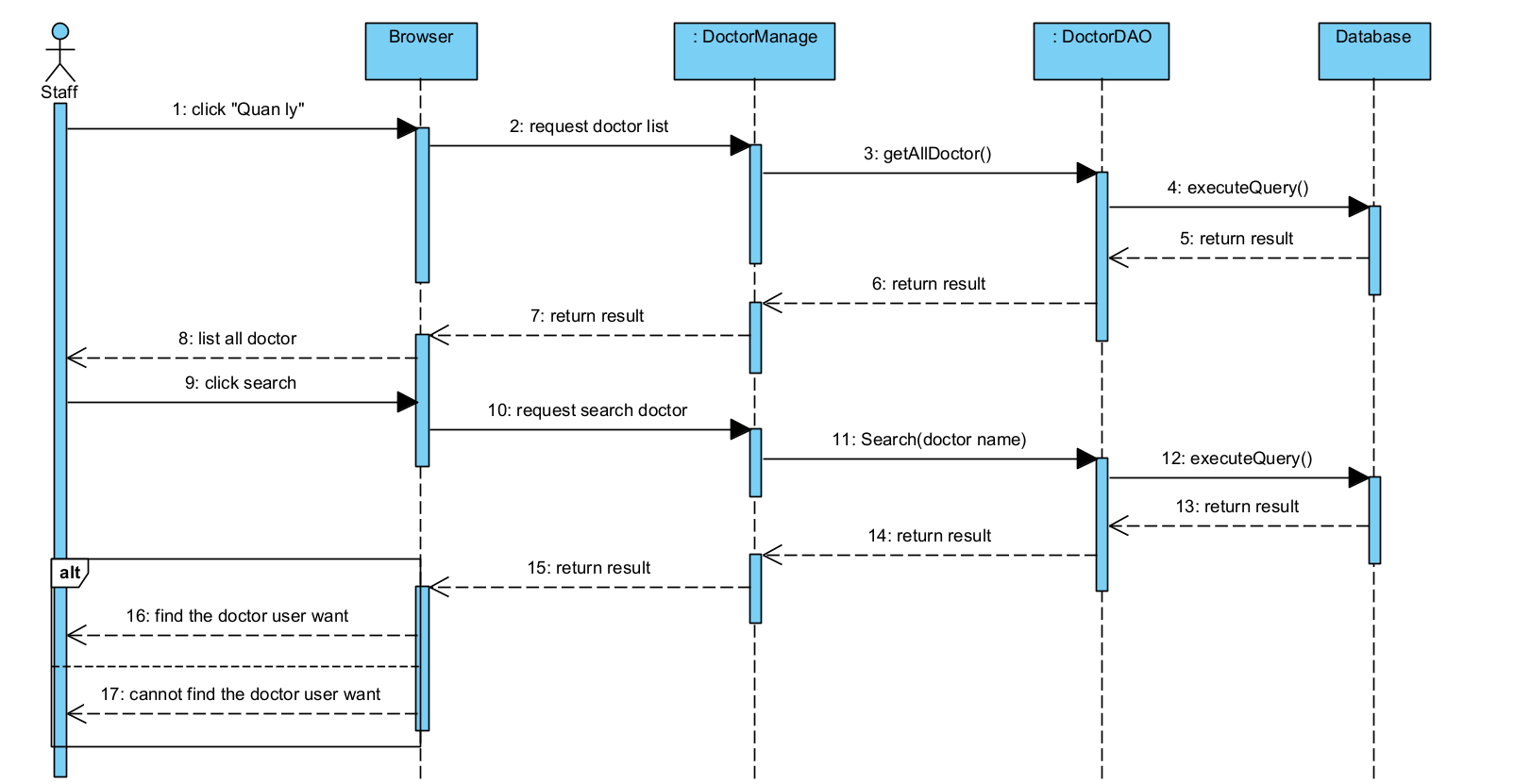
### **a.** **Class Diagram**



### **b.** **Class Specification**

| No | Method | Database queries |
| --- | --- | --- |
| 1 | getAllDoctor() | List all doctor in database to website throw data query: SELECT cs.name, d.doctor\_id,d.doctor\_name,d.gender,d.status  FROM doctris\_system.doctor d  INNER JOIN doctris\_system.category\_service cs  ON d.category\_id = cs.id |
| 2 | Search() | Search doctor by name throw data query :SELECT cs.name, d.doctor\_id,d.doctor\_name,d.gender,d.status  FROM doctris\_system.doctor d  INNER JOIN doctris\_system.category\_service cs  ON d.category\_id = cs.id WHERE d.doctor\_name LIKE ? |
| 3 | getListByPage() | The method getListByPage() above has the function to retrieve a partial list of doctors (Doctor) from a complete list. |

### **c.** **Sequence Diagram**

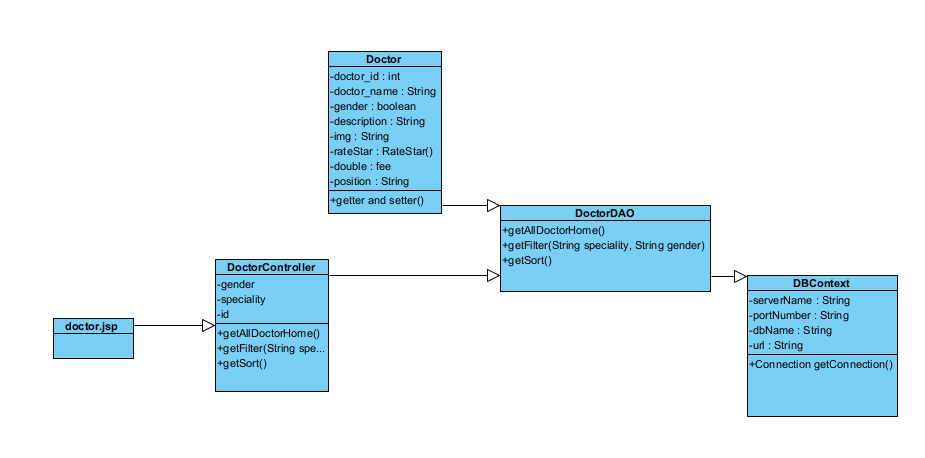


### **d.** **Database queries**

| No | Method | Database queries |
| --- | --- | --- |
| 1 | getAllDoctor() | SELECT cs.name, d.doctor\_id,d.doctor\_name,d.gender,d.status  FROM doctris\_system.doctor d  INNER JOIN doctris\_system.category\_service cs  ON d.category\_id = cs.id |
| 2 | Search() | SELECT cs.name, d.doctor\_id,d.doctor\_name,d.gender,d.status  FROM doctris\_system.doctor d  INNER JOIN doctris\_system.category\_service cs  ON d.category\_id = cs.id WHERE d.doctor\_name LIKE ? |

## **9. Public Feature/Web Doctor List**

### **a.** **Class Diagram**

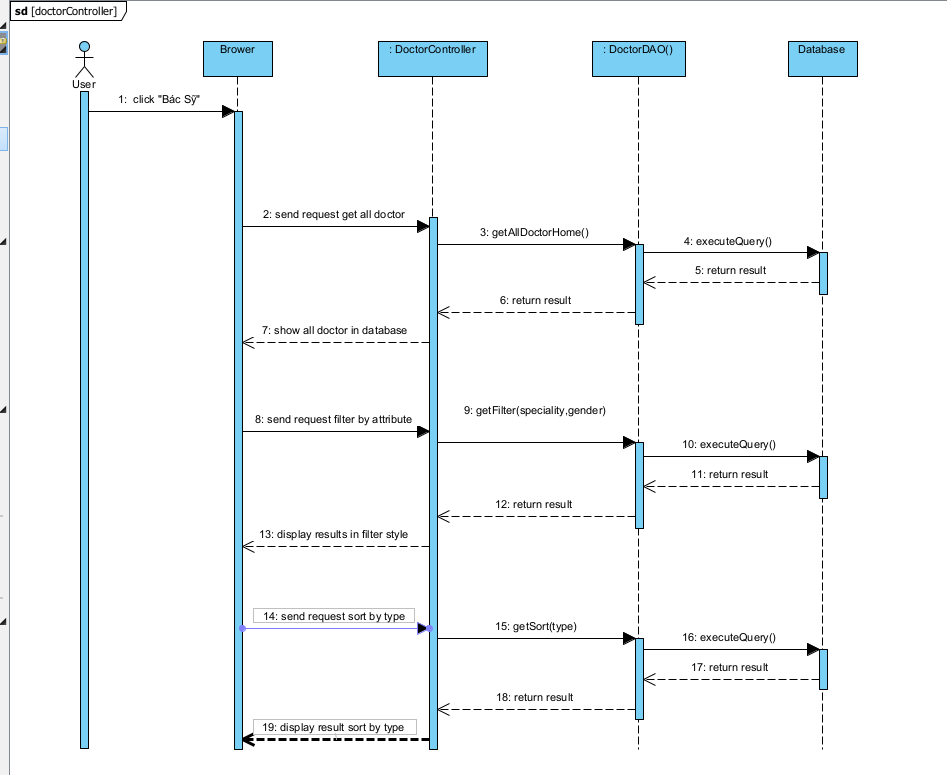


### **b.** **Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | getAllDoctorHome() | used to get information of all doctors from the database. |
| 2 | getFilter(String speciality, String gender) | is used to get a list of doctors based on a filter by specialty (specialty) and gender (gender). |
| 3 | getSort(type) | used to get a list of doctors based on sorting by different criteria (type) |

### 

### **c.** **Sequence Diagram**



### **d.** **Database queries**

| No | Method | Database queries |
| --- | --- | --- |
| 1 | getAllDoctorHome() | SELECT CONCAT\_WS(cs.id, d.category\_id) AS id, cs.name, cs.setting\_id, cs.status, d.doctor\_id, d.role\_id, d.doctor\_name, d.username, d.gender, d.DOB, d.phone, d.description, d.status, d.img, d.fee, d.position  FROM doctris\_system.doctor d  INNER JOIN doctris\_system.category\_service cs ON d.category\_id = cs.id; |
| 2 | getFilter (String speciality, String gender ) | String spec = SELECT CONCAT\_WS(cs.id, d.category\_id) AS id, cs.name, cs.setting\_id, cs.status, d.doctor\_id, d.role\_id, d.doctor\_name, d.username, d.gender, d.DOB, d.phone, d.description, d.status, d.img, d.fee, d.position  FROM doctris\_system.doctor d  INNER JOIN doctris\_system.category\_service cs ON d.category\_id = cs.id  WHERE d.category\_id = ?;  String gen = SELECT CONCAT\_WS( cs.id, d.category\_id) AS id, cs.name, cs.setting\_id, cs.status, d.doctor\_id, d.role\_id, d.doctor\_name, d.username, d.gender, d.DOB, d.phone, d.description, d.status, d.img, d.fee, d.position  FROM doctris\_system.doctor d  INNER JOIN doctris\_system.category\_service cs ON d.category\_id = cs.id  WHERE d.gender = ?;  String filter = SELECT CONCAT\_WS(cs.id, d.category\_id) AS id, cs.name, cs.setting\_id, cs.status, d.doctor\_id, d.role\_id, d.doctor\_name, d.username, d.gender, d.DOB, d.phone, d.description, d.status, d.img, d.fee, d.position  FROM doctris\_system.doctor d  INNER JOIN doctris\_system.category\_service cs ON d.category\_id = cs.id  WHERE d.gender = ? AND d.category\_id = ?; |
|  | getSort(type) | String star = SELECT CONCAT\_WS( cs.id, d.category\_id) AS id, cs.name, cs.setting\_id, cs.status, d.doctor\_id, d.role\_id, d.doctor\_name, d.username, d.gender, d.DOB, d.phone, d.description, d.status, d.img, d.fee, d.position, SUM(ratestar.star) / COUNT(ratestar.star) AS star  FROM doctris\_system.doctor d  INNER JOIN doctris\_system.category\_service cs ON d.category\_id = cs.id  LEFT JOIN ratestar ON d.doctor\_id = ratestar.doctor\_id  GROUP BY id, cs.name, cs.setting\_id, cs.status, d.doctor\_id, d.role\_id, d.doctor\_name, d.username, d.gender, d.DOB, d.phone, d.description, d.status, d.img, d.fee, d.position  ORDER BY star DESC;  String lastest = SELECT CONCAT\_WS(cs.id, d.category\_id) AS id, cs.name, cs.setting\_id, cs.status, d.doctor\_id, d.role\_id, d.doctor\_name, d.username, d.gender, d.DOB, d.phone, d.description, d.status, d.img, d.fee, d.position  FROM doctris\_system.doctor d  INNER JOIN doctris\_system.category\_service cs ON d.category\_id = cs.id  ORDER BY d.doctor\_id DESC;  String popular = SELECT CONCAT\_WS( cs.id, d.category\_id) AS id, cs.name, cs.setting\_id, cs.status, d.doctor\_id, d.role\_id, d.doctor\_name, d.username, d.gender, d.DOB, d.phone, d.description, d.status, d.img, d.fee, d.position, COUNT(appointments.appointment\_id) AS appointment  FROM doctris\_system.doctor d  INNER JOIN doctris\_system.category\_service cs ON d.category\_id = cs.id  LEFT JOIN appointments ON d.doctor\_id = appointments.doctor\_id  GROUP BY id, cs.name, cs.setting\_id, cs.status, d.doctor\_id, d.role\_id, d.doctor\_name, d.username, d.gender, d.DOB, d.phone, d.description, d.status, d.img, d.fee, d.position  ORDER BY appointment DESC;  String fee = SELECT CONCAT\_WS( cs.id, d.category\_id) AS id, cs.name, cs.setting\_id, cs.status, d.doctor\_id, d.role\_id, d.doctor\_name, d.username, d.gender, d.DOB, d.phone, d.description, d.status, d.img, d.fee, d.position  FROM doctris\_system.doctor d  INNER JOIN doctris\_system.category\_service cs ON d.category\_id = cs.id  ORDER BY d.doctor\_id DESC;  String ascending = SELECT CONCAT\_WS(cs.id, d.category\_id) AS id, cs.name, cs.setting\_id, cs.status, d.doctor\_id, d.role\_id, d.doctor\_name, d.username, d.gender, d.DOB, d.phone, d.description, d.status, d.img, d.fee, d.position  FROM doctris\_system.doctor d  INNER JOIN doctris\_system.category\_service cs ON d.category\_id = cs.id  ORDER BY d.doctor\_id DESC;  String decrease = SELECT CONCAT\_WS(cs.id, d.category\_id) AS id, cs.name, cs.setting\_id, cs.status, d.doctor\_id, d.role\_id, d.doctor\_name, d.username, d.gender, d.DOB, d.phone, d.description, d.status, d.img, d.fee, d.position  FROM doctris\_system.doctor d  INNER JOIN doctris\_system.category\_service cs ON d.category\_id = cs.id  ORDER BY d.doctor\_id ASC; |

## **10. Public Feature/Web Doctor Detail**

### **a.** **Class Diagram**

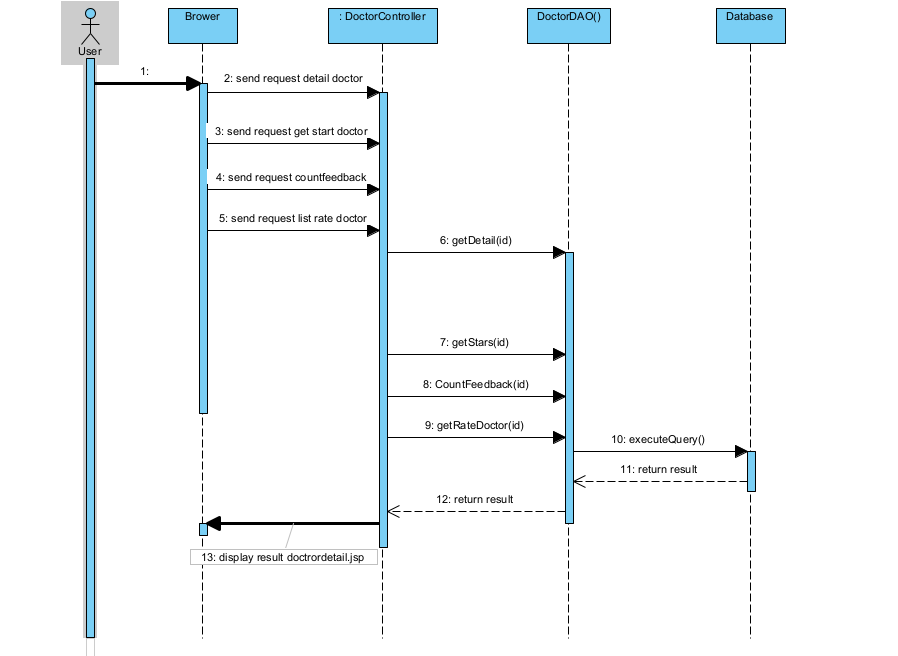
## 

### **b.** **Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | getDetail(int id) | used to get a doctor's details based on that doctor's ID. |
| 2 | getRateDoctor(int id) | used to retrieve the ratings and feedback given by users for a specific doctor. |
| 3 | getStars(int id) | used to calculate and retrieve the average star rating for a specific doctor. |
| 44 | CountFeedback(int id) | used to count the number of feedback entries for a specific doctor. |

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### **c.** **Sequence Diagram**



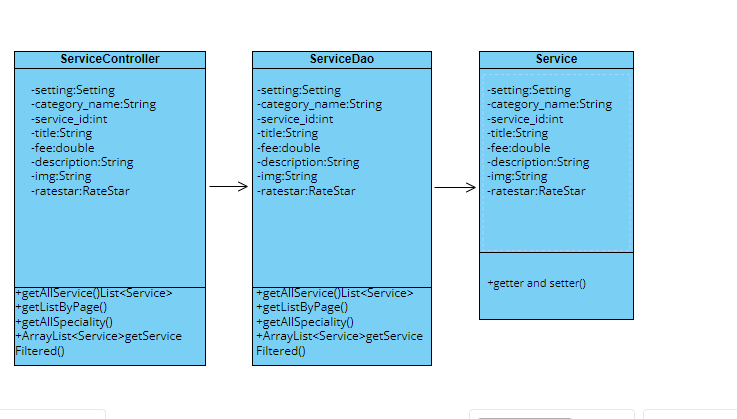
### **d.** **Database queries**

| No | Method | Database queries |
| --- | --- | --- |
| 1 | getDetail(int id) | SELECT CONCAT\_WS(cs.id, d.category\_id) AS id, cs.name, cs.setting\_id, cs.status, d.doctor\_id, d.role\_id, d.doctor\_name, d.username, d.gender, d.DOB, d.phone, d.description, d.status, d.img, d.fee, d.position  FROM doctris\_system.doctor d  INNER JOIN doctris\_system.category\_service cs ON d.category\_id = cs.id  WHERE d.doctor\_id = ? |
| 2 | getRateDoctor(int id) | SELECT users.name, users.img, ratestar.star, ratestar.feedback, ratestar.datetime  FROM ratestar  INNER JOIN users ON ratestar.username = users.username  WHERE ratestar.doctor\_id = ?  ORDER BY ratestar.id DESC |
| 3 | getStars(int id) | SELECT (SUM(star) / COUNT(\*)) as star from ratestar where doctor\_id = ? |
| 4 | CountFeedback(int id) | SELECT COUNT(\*) from ratestar where doctor\_id = ? |

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## **11.Public Feature/Web Service List**

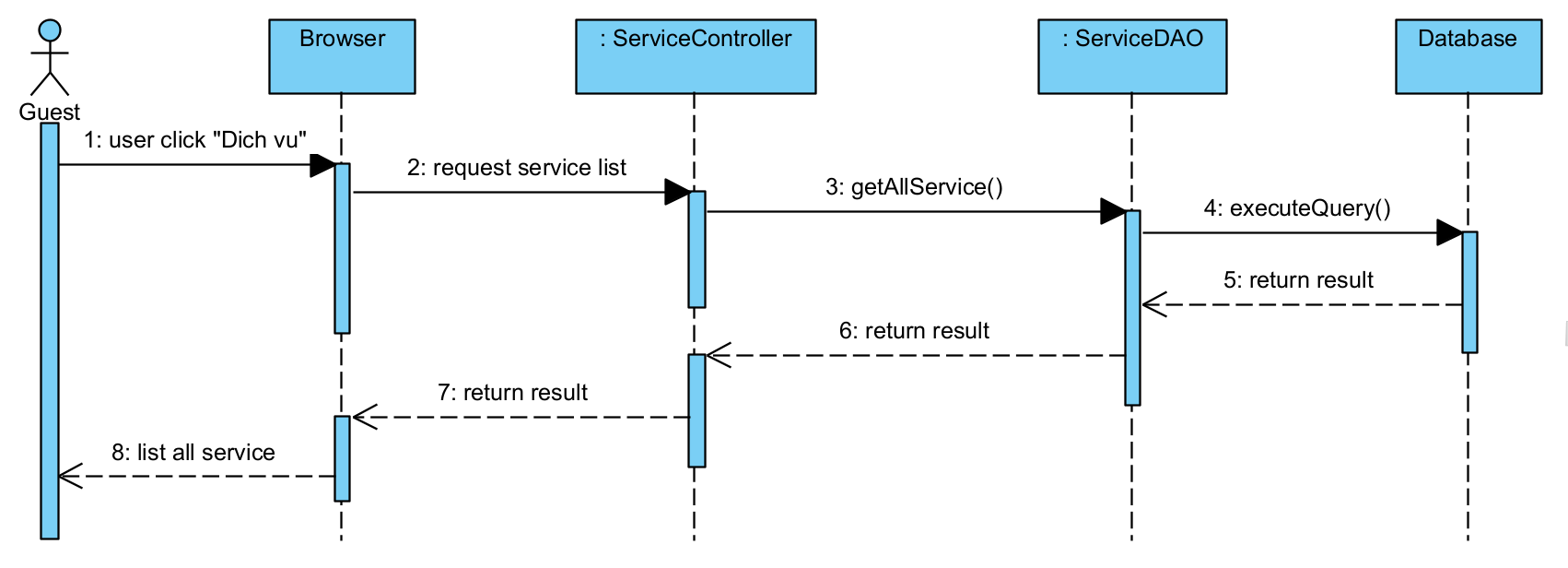
### **a.** **Class Diagram**



### **b.** **Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | getAllService | use to list Services |
| 2 | getServiceById | use to find Service by Id |
| 3 | getListByPage | use to pagination |
| 4 | getAllSpeciality | use to list Speciality |

### **c.** **Sequence Diagram**

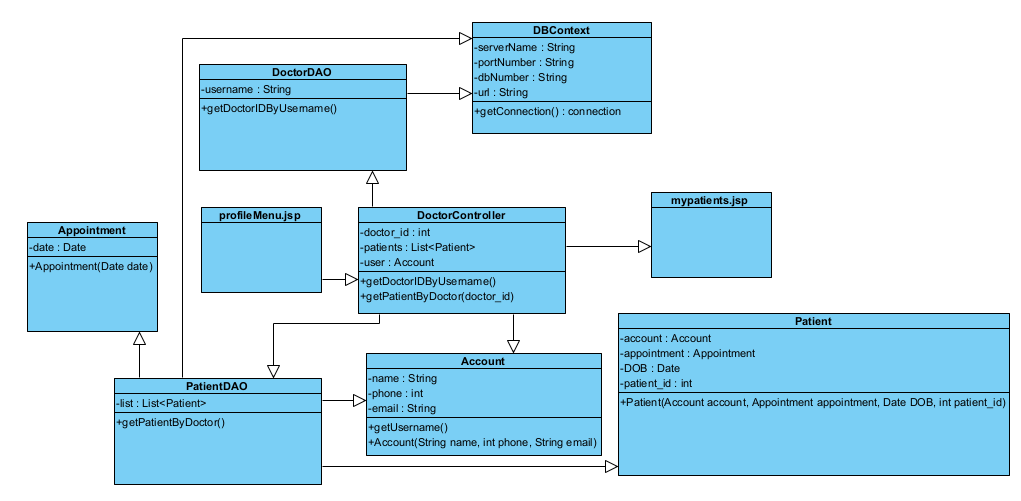


### **d.** **Database queries**

| No | Method | Database Queries |
| --- | --- | --- |
| 1 | getAllService | SELECT s.title, cs.name, sum(r.star)/count(r.star), count(r.feedback), s.fee, s.description, s.service\_id FROM doctris\_system.service s  left join doctris\_system.ratestar r  on s.service\_id = r.service\_id  inner join doctris\_system.category\_service cs  on cs.id = s.category\_id  group by s.title, cs.name, s.fee, s.description, s.service\_id |
| 2 | getServiceById | SELECT s.title, cs.name, sum(r.star)/count(r.star), count(r.feedback), s.fee, s.description, s.service\_id FROM doctris\_system.service s  left join doctris\_system.ratestar r  on s.service\_id = r.service\_id  inner join doctris\_system.category\_service cs  on cs.id = s.category\_id  group by s.title, cs.name, s.fee, s.description, s.service\_id  Having s.service\_id = ? |
| 4 | getAllSpeciality | SELECT cs.name, cs.id FROM doctris\_system.service s  inner join doctris\_system.category\_service cs  on cs.id = s.category\_id  group by cs.name, cs.id |

## **12. Doctor Feature/Patient’s doctor**

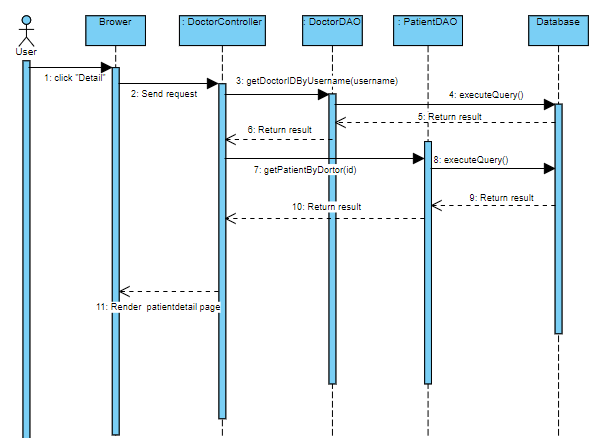
### **a.** **Class Diagram**



### **b.** **Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | getDoctorIDByUsername | Get the doctor's id with the username passed in. |
| 2 | getUsername | get the passed username. |
| 3 | getPatientByDoctor | Retrieve the patients from the passed in doctor's id. |
| 4 | getConnection | using to connect Database. |

### **c.** **Sequence Diagram**

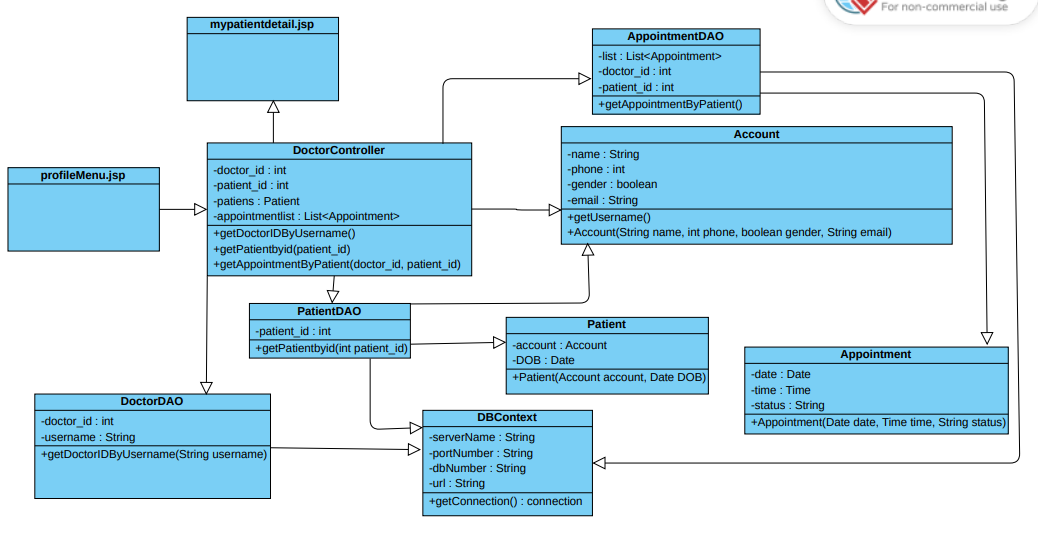


### **d.** **Database queries**

| No | Method | Database queries |
| --- | --- | --- |
| 1  2 | getDoctorIDByUsername(String usename)  getPatientByDoctor(int doctor\_id) | select doctor\_id from doctor where username = ?  select distinct users.name, users.phone, users.email, a.pdate, patient.DOB, patient.patient\_id  as lastbooking from appointments  inner join patient on appointments.patient\_id = patient.patient\_id  inner join users on patient.username = users.username inner join  (select patient\_id as pid , max(date) as pdate from appointments group by patient\_id)  as a on a.pid = appointments.patient\_id where appointments.doctor\_id = ? |

## **13. Doctor Feature/Patient detail**

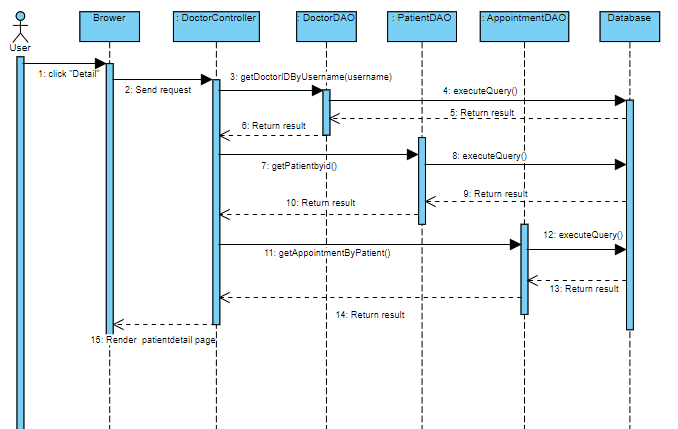
### **a.** **Class Diagram**



### **b.** **Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | getDoctorIDByUsername() | Get the doctor's id with the username passed in. |
| 2 | getPatientbyid() | Get patient information from passed id |
| 3 | getAppointmentByPatient() | Retrieve appointments from passed in doctor id and patient id |
| 4 | getConnection() | using to connect Database. |

### **c.** **Sequence Diagram**



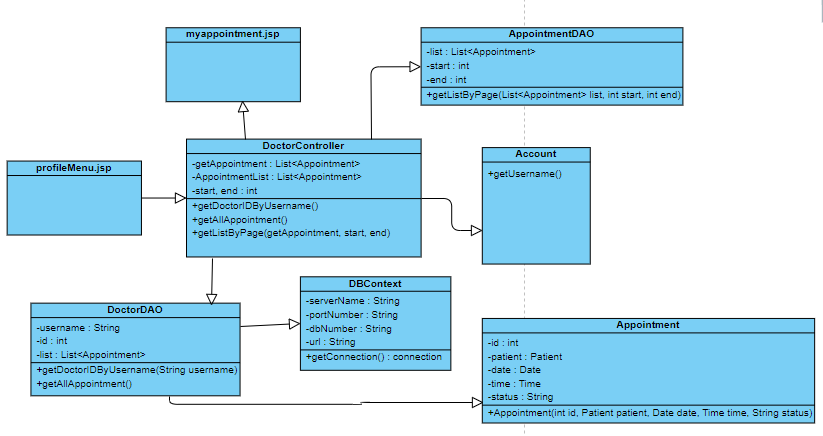
### **d.** **Database queries**

| No | Method | Database queries |
| --- | --- | --- |
| 1  2 | getDoctorIDByUsername(String username)  Patient getPatientbyid(int patient\_id) | select doctor\_id from doctor where username = ?  SELECT u.name,u.email,u.phone,u.gender,p.DOB FROM users u inner join patient p on u.username = p.username where p.patient\_id = ? |
| 3 | getAppointmentByPatient(int doctor\_id, int patient\_id) | select a.date,a.time,a.status from appointments a inner join patient p on a.patient\_id = p.patient\_id where a.doctor\_id = ? and p.patient\_id = ? ORDER BY a.date ASC |

## 

## **14 Doctor Feature/My appointment**

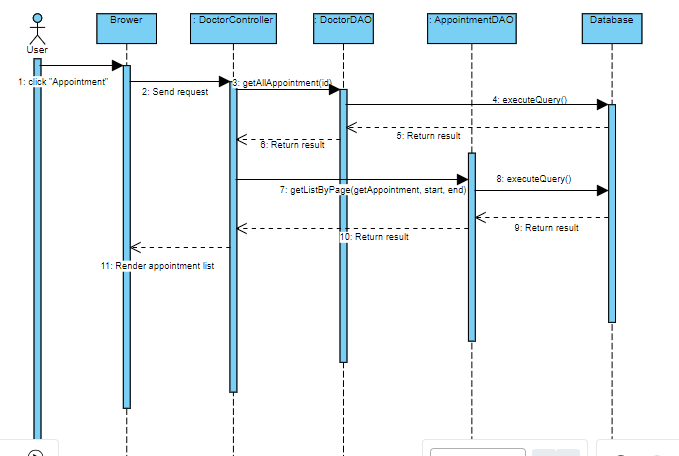
### **a.** **Class Diagram**



### **b.** **Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | getDoctorIDByUsername() | Get the doctor's id with the username passed in. |
| 2 | getAllAppointment() | Retrieve appointments with passed in doctor id |
| 3 | getListByPage() | Get a list of pages |
| 4 | getConnection() | using to connect Database. |

### **c.** **Sequence Diagram**

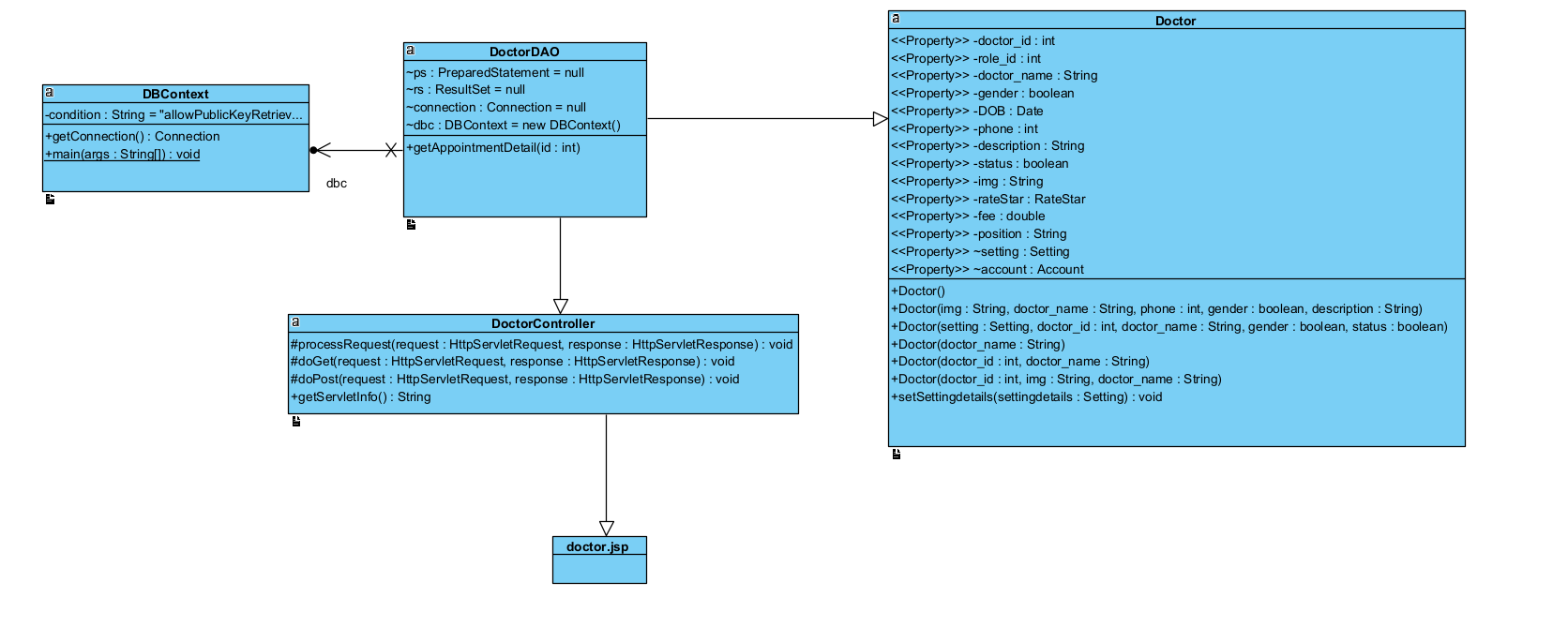


### **d.** **Database queries**

| No | Method | Database queries |
| --- | --- | --- |
| 1 | getDoctorIDByUsername(String username) | select doctor\_id from doctor where username = ? |
| 2 | getAllAppointment(int id) | SELECT a.appointment\_id, p.patient\_id, u.name, a.date, a.time, a.status from appointments a  INNER JOIN patient p ON a.patient\_id = p.patient\_id  INNER JOIN users u ON p.username = u.username  WHERE a.doctor\_id = '19'  group by a.appointment\_id, p.patient\_id, u.name,a.date, a.time,a.status  order by CAST(a.date AS DATETIME) + CAST(a.time AS DATETIME) desc |

## **15. Doctor Feature/My appointment Details**

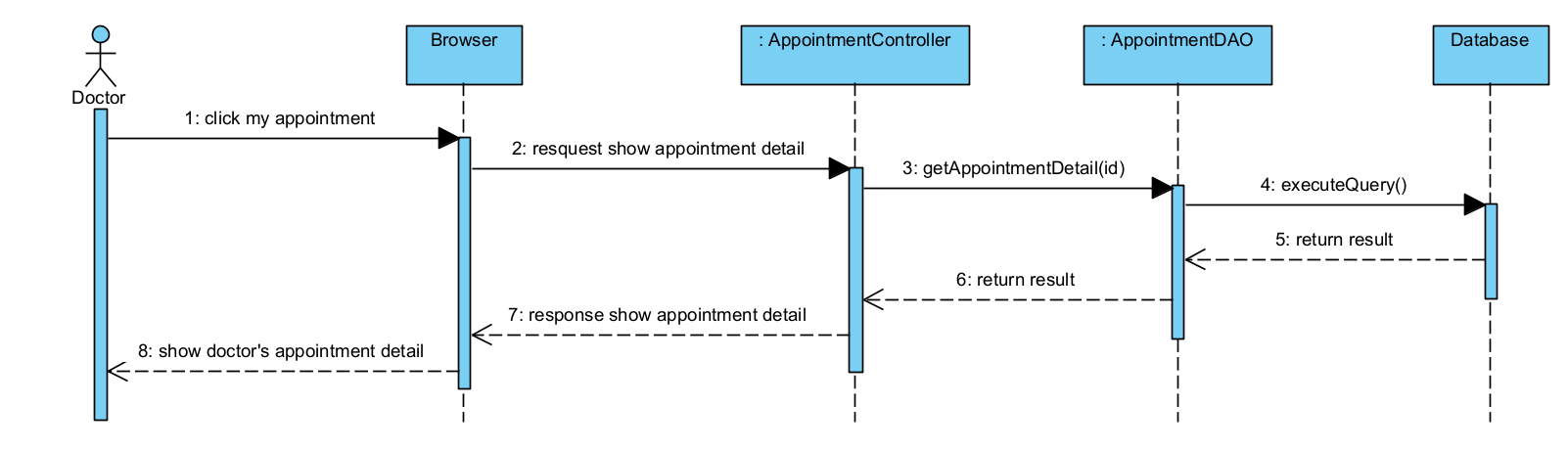
### **a.** **Class Diagram**



### **b.** **Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | getAppointmentDetail() | to get detailed information of an Appointment |

### **c.** **Sequence Diagram**

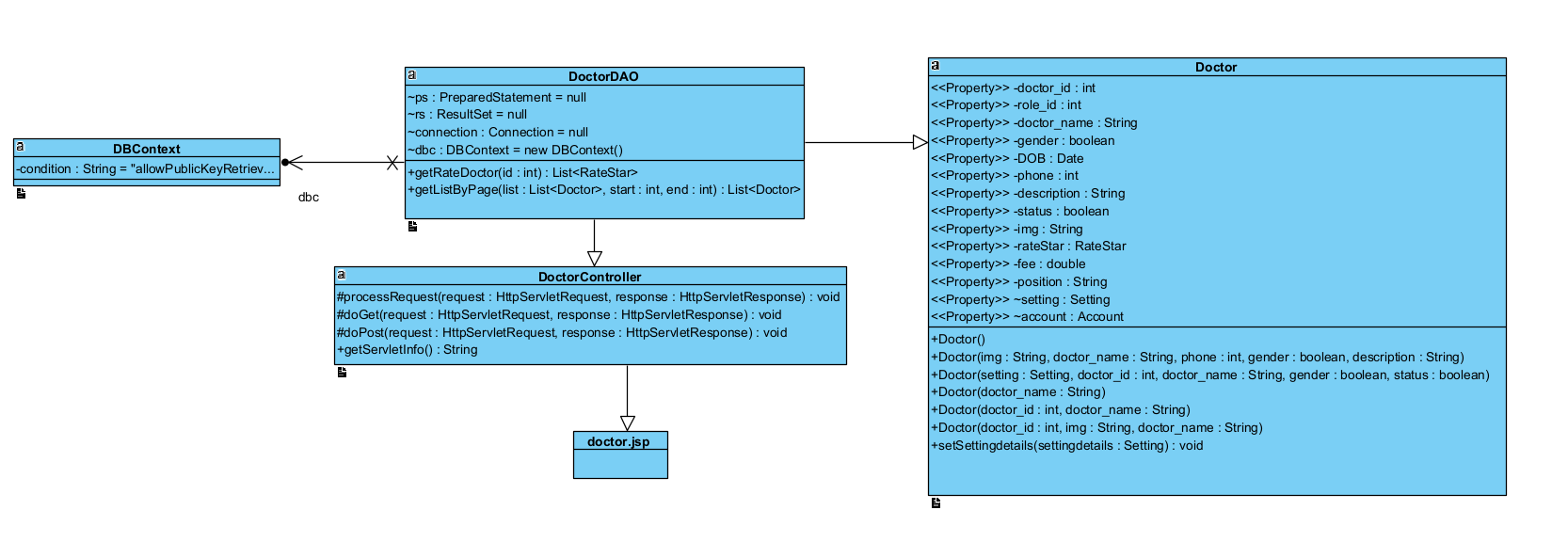


### **d.** **Database queries**

| No | Method | Database Queries |
| --- | --- | --- |
| 1 | getAppointmentDetail() | SELECT a.appointment\_id, p.patient\_id, u.name,a.date, a.time,a.status from appointments a  INNER JOIN patient p  ON a.patient\_id = p.patient\_id  INNER JOIN users u  ON p.username = u.username  WHERE a.appointment\_id = ? |

## **16. Doctor Feature/My Feedback**

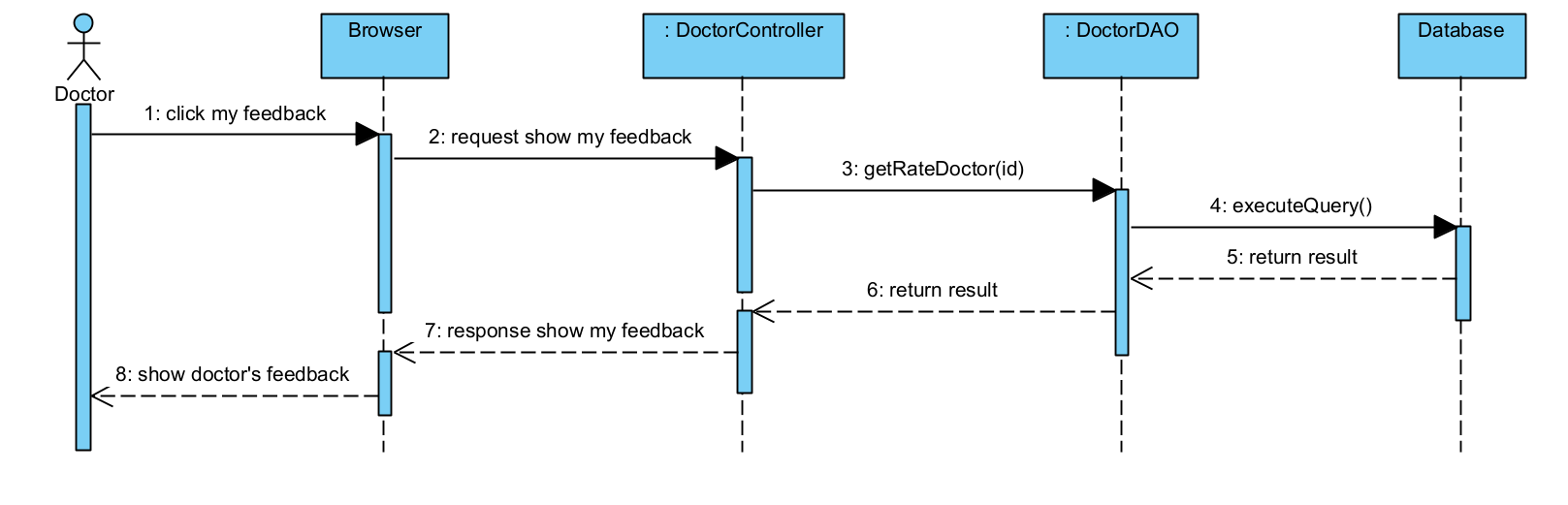
### **a.** **Class Diagram**



### **b.** **Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | getRateDoctor() | show feedback of doctor |
| 2 | getListByPageRate() | pagination feedback |

### **c.** **Sequence Diagram**



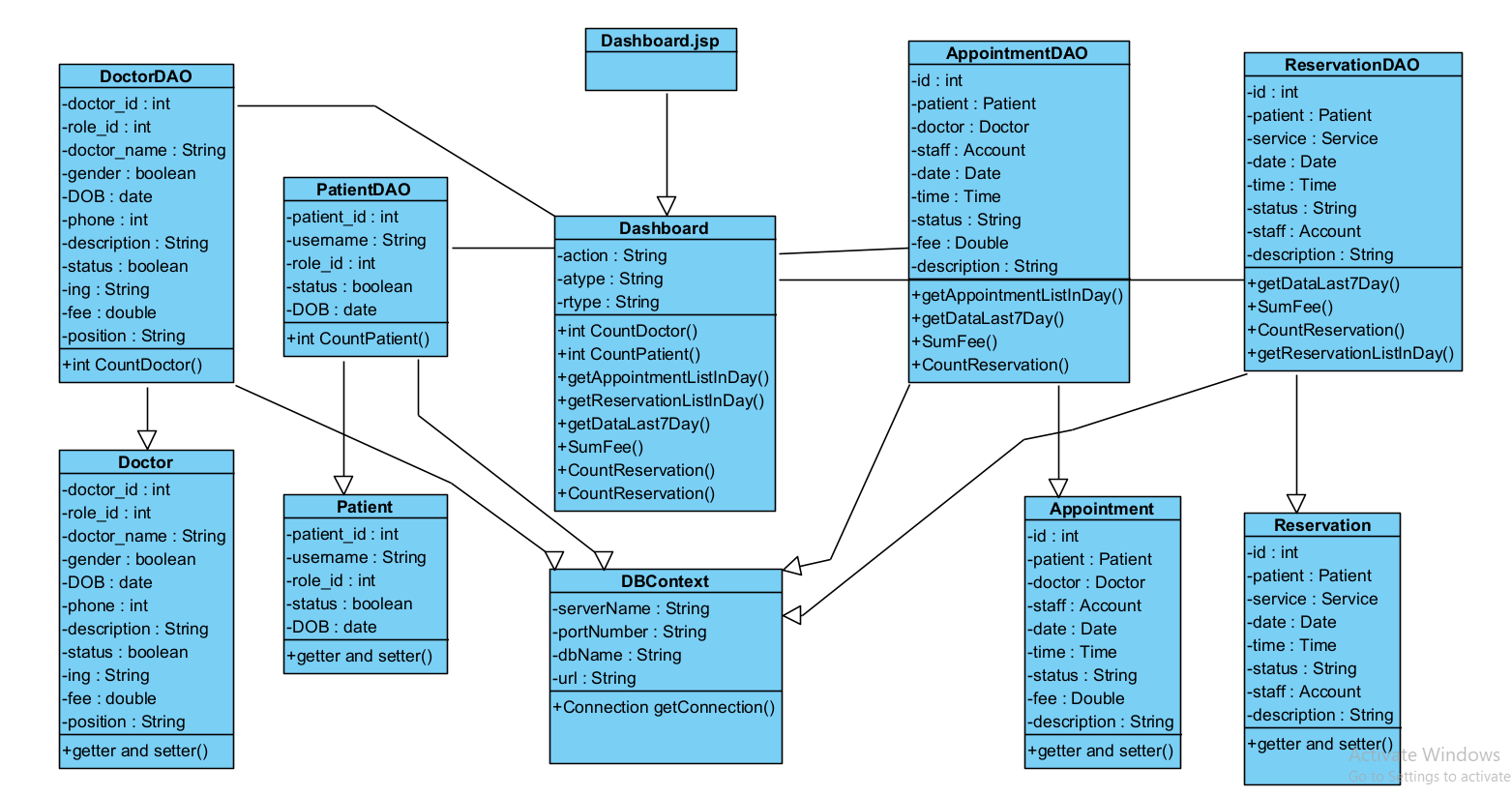
### **d.** **Database queries**

| No | Method | Database queries |
| --- | --- | --- |
| 1 | getRateDoctor() | String sql = "SELECT users.name, users.img, ratestar.star, ratestar.feedback, ratestar.datetime FROM ratestar inner join users on ratestar.username = users.username where ratestar.doctor\_id = ? order by ratestar.id desc |

## 

## **17. Admin Feature/Dashboard**

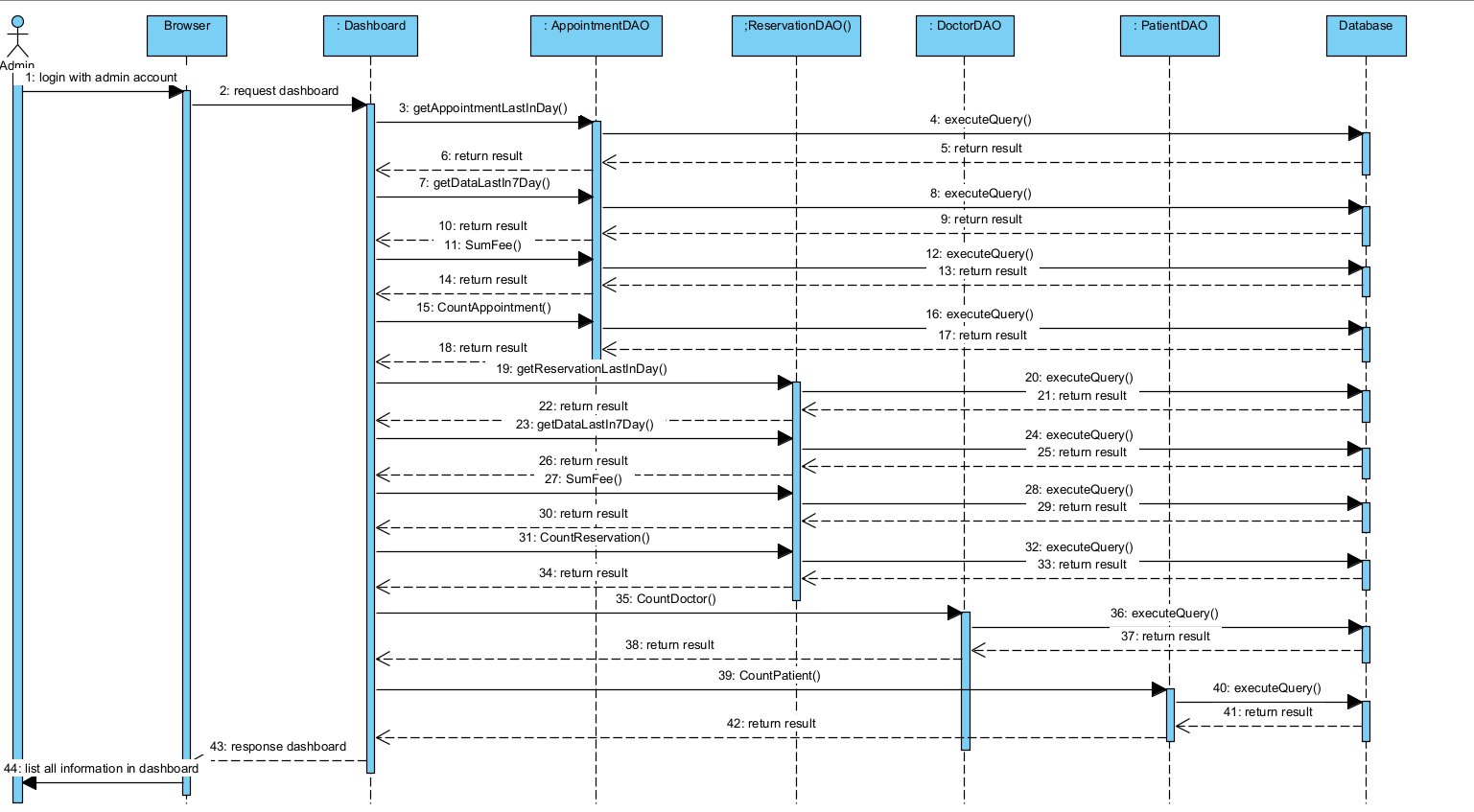
### **Class Diagram**



### **Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | getAppointmentListInDay() | Get the doctor's appointment for the day |
| 2 | getReservationListInDay() | Get service appointment of the day |
| 3 | getDataLast7Day() | statistics in 7 days |
| 4 | CountAppointment() | Count the number of appointments in the latest month |
| 5 | CountReservation() | Count the number of service in the latest month |
| 6 | CountPatient() | number of patient active |
| 7 | CountDoctor() | number of doctors active |
| 8 | SumFee() | get total revenue |

### **Sequence Diagram**

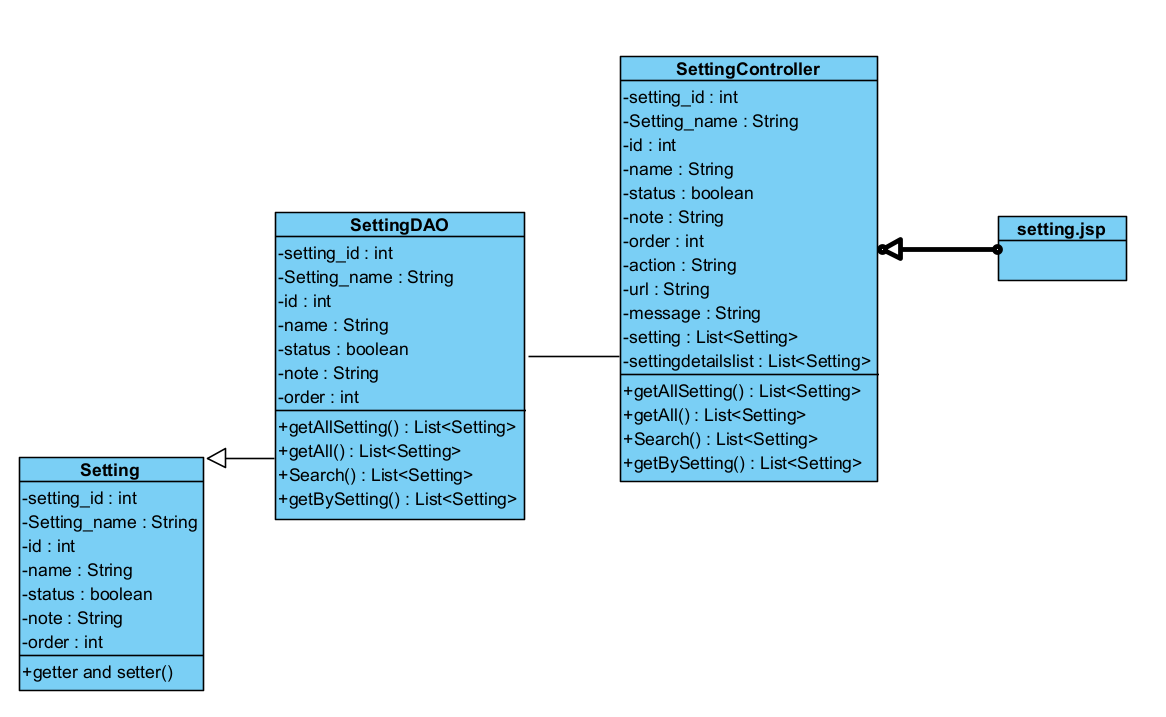


### **Database queries**

| No | Method | Description |
| --- | --- | --- |
| 1 | getAppointmentListInDay | SELECT appointments.appointment\_id, doctor.doctor\_name, users.name,  appointments.date, appointments.time, appointments.status  FROM appointments  INNER JOIN doctor ON appointments.doctor\_id = doctor.doctor\_id  INNER JOIN patient ON appointments.patient\_id = patient.patient\_id  INNER JOIN users ON patient.username = users.username  WHERE DATE(appointments.date) = CURDATE(); |
| 2 | getReservationListInDay | SELECT reservations.reservation\_id, users.name, service.title,  reservations.date, reservations.time, reservations.status  FROM reservations  INNER JOIN service ON reservations.service\_id = service.service\_id  INNER JOIN patient ON reservations.patient\_id = patient.patient\_id  INNER JOIN users ON patient.username = users.username  WHERE reservations.date = CAST(CURDATE() AS DATE); |
| 3 | getDataLast7Day | SELECT p.day, COALESCE(COUNT(u.reservation\_id), 0) AS count  FROM (  SELECT CURDATE() AS day  UNION  SELECT DATE\_SUB(CURDATE(), INTERVAL 1 DAY)  UNION  SELECT DATE\_SUB(CURDATE(), INTERVAL 2 DAY)  UNION  SELECT DATE\_SUB(CURDATE(), INTERVAL 3 DAY)  UNION  SELECT DATE\_SUB(CURDATE(), INTERVAL 4 DAY)  UNION  SELECT DATE\_SUB(CURDATE(), INTERVAL 5 DAY)  UNION  SELECT DATE\_SUB(CURDATE(), INTERVAL 6 DAY)  ) AS p  LEFT JOIN reservations AS u ON p.day = u.date  GROUP BY p.day  ORDER BY p.day ASC; |
| 4 | CountAppointment | select count(\*) from appointments where status = 'Complete' AND month(appointments.date) = month(CURRENT\_DATE) |
| 5 | CountReservation | select count(\*) from reservations where reservations.status = 'Complete' AND month(reservations.date) = month(CURRENT\_DATE) |
| 6 | CountPatient | select count(\*) from patient |
| 7 | CountDoctor | select count(\*) from doctor |
| 8 | SumFee | select sum(fee) from appointments where status = 'Complete' AND month(appointments.date) = month(CURRENT\_DATE) |

## **18. Admin Feature/Setting List**

### **a.** **Class Diagram**

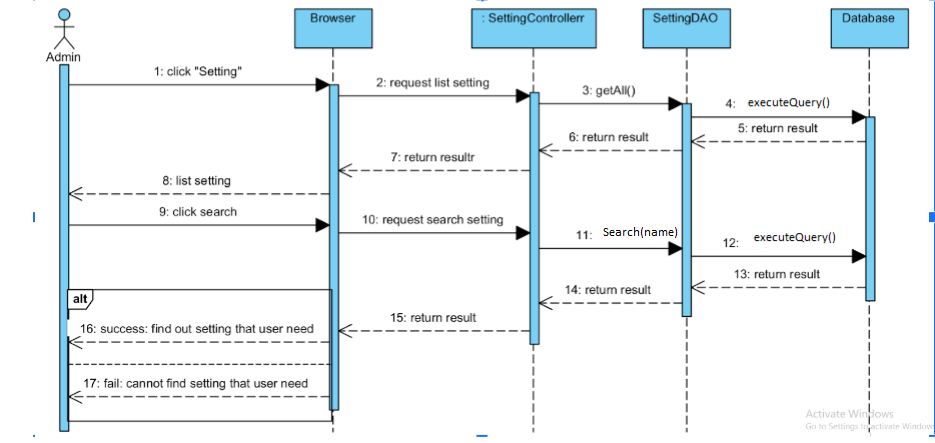


### 

### **b.** **Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | getAllSetting | use to list setting |
| 2 | getListByPage | use to pagination |
| 3 | Search | Search setting |
| 4 | getBySetting | Filter table |

### **c.** **Sequence Diagram**

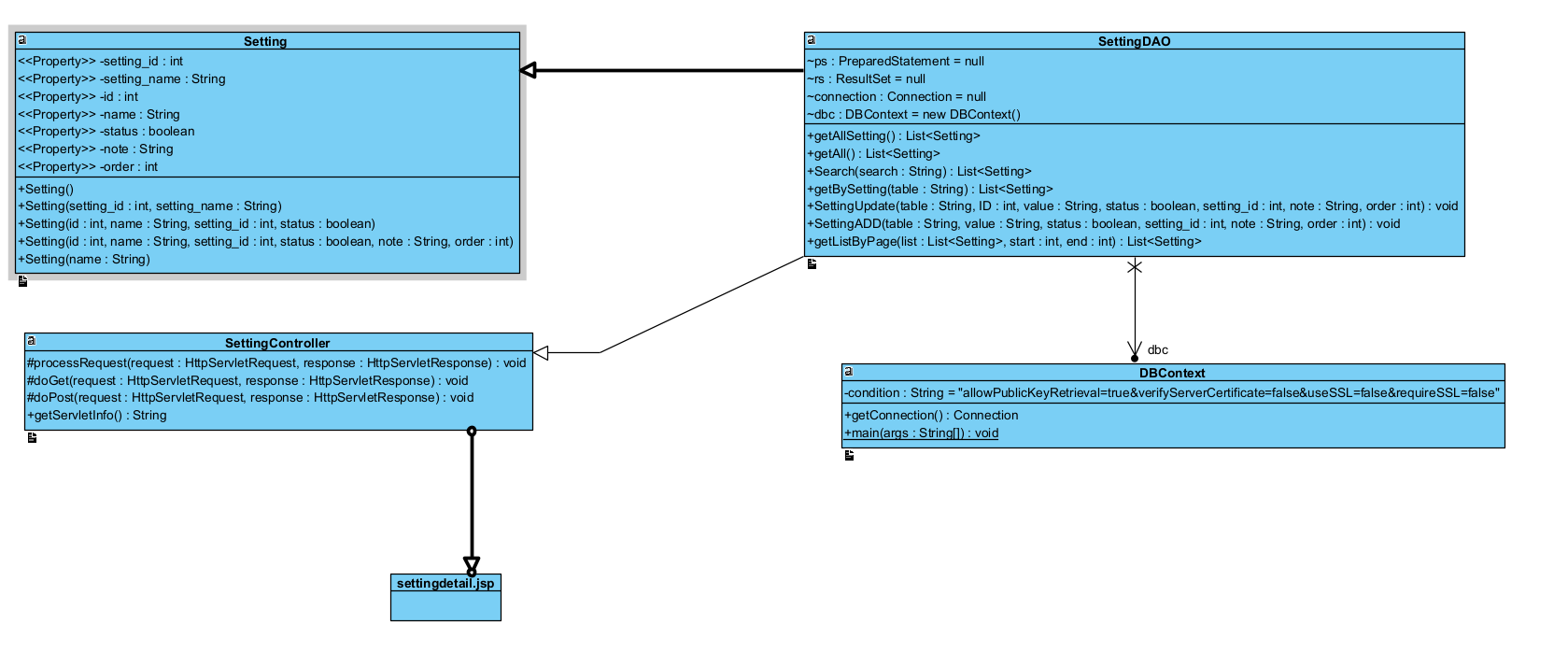


### **d.** **Database queries**

| No | Method | Description |
| --- | --- | --- |
| 1 | getAll | SELECT \* FROM doctris\_system.role  UNION  SELECT \* FROM doctris\_system.category\_blog  UNION  SELECT \* FROM doctris\_system.category\_service; |
| 3 | Search | SELECT \*  FROM doctris\_system.role r  WHERE r.id LIKE '%"+search+"%' OR r.name LIKE '%"+search+"%' OR r.setting\_id LIKE '%"+search+"%' OR r.order LIKE '%"+search+"%' OR r.note LIKE '%"+search+"%' OR r.status LIKE '%"+search+"%'  UNION  SELECT \*  FROM doctris\_system.category\_blog b  WHERE b.id LIKE '%"+search+"%' OR b.name LIKE '%"+search+"%' OR b.setting\_id LIKE '%"+search+"%' OR b.order LIKE '%"+search+"%' OR b.note LIKE '%"+search+"%' OR b.status LIKE '%"+search+"%'  UNION  SELECT \*  FROM doctris\_system.category\_service s  WHERE s.id LIKE '%"+search+"%' OR s.name LIKE '%"+search+"%' OR s.setting\_id LIKE '%"+search+"%' OR s.order LIKE '%"+search+"%' OR s.note LIKE '%"+search+"%' OR s.status LIKE '%"+search+"%'; |
| 4 | getBySetting | select \* from " + table |

## **19. Admin Feature/Setting Details**

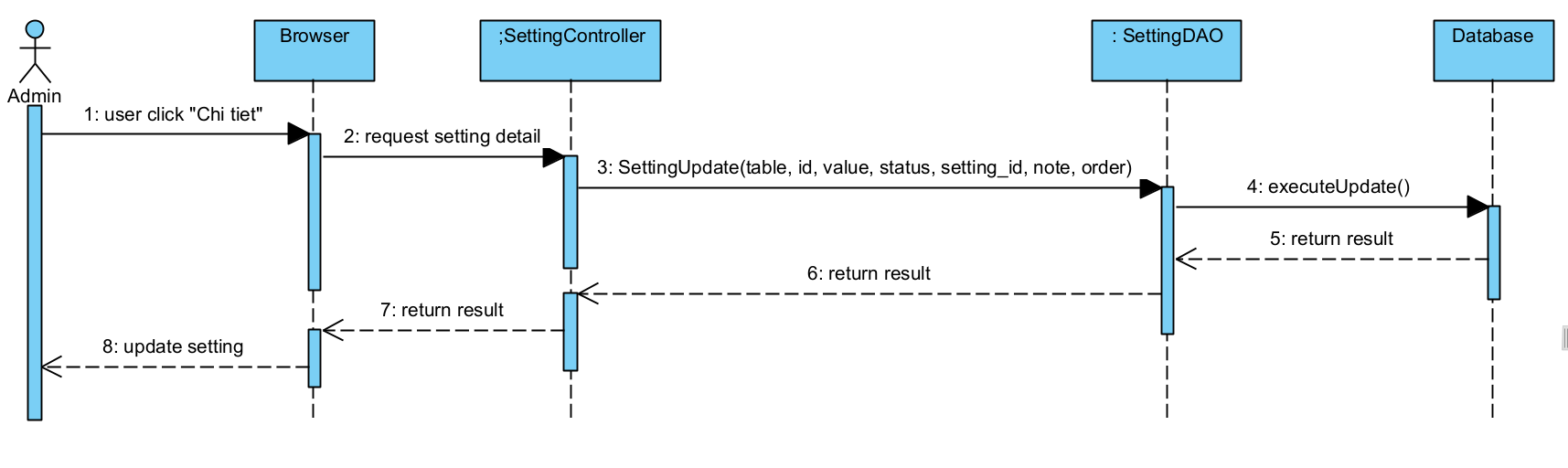
## **a.** **Class Diagram**



## **b.** **Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | SettingUpdate | use to update setting |

## **c.** **Sequence Diagram**

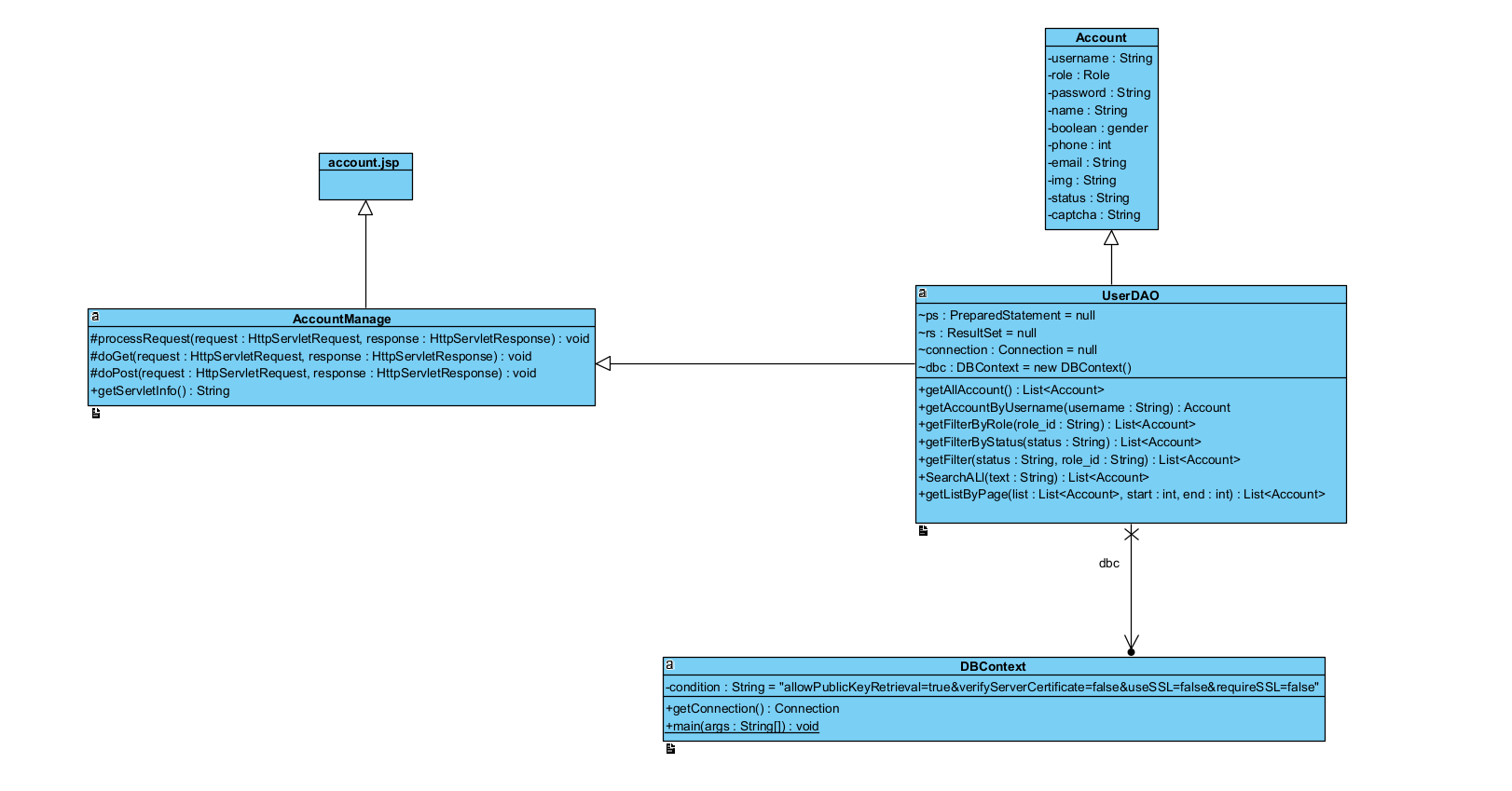


## **d.** **Database queries**

| No | Method | Database queries |
| --- | --- | --- |
| 1 | SettingUpdate | - UPDATE category\_blog SET name = ?, setting\_id = ?, status = ?, note = ? , r.order = ? WHERE (id = ?)  -UPDATE category\_service SET name = ?, setting\_id = ?, status = ?, note = ? , r.order = ? WHERE (id = ?)  - UPDATE role SET name = ?, setting\_id = ?, status = ?, note = ? , r.order = ? WHERE (id = ?) |

## **20. Admin Feature/Account List**

## **a.** **Class Diagram**

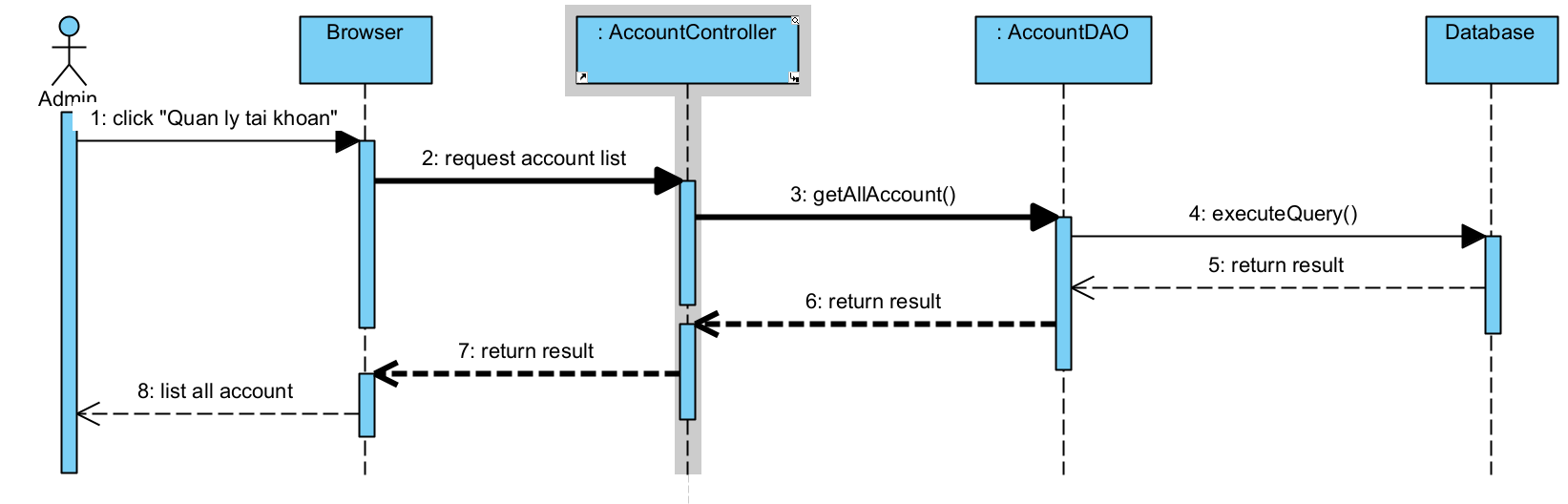


## **b.** **Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | getAllAccount | Show list account of user |
| 2 | getAccountByUseName | Search account by username |
| 3 | getListByPage | Show 8 row in a page |

## **c.** **Sequence Diagram**

Show all account in Account list function

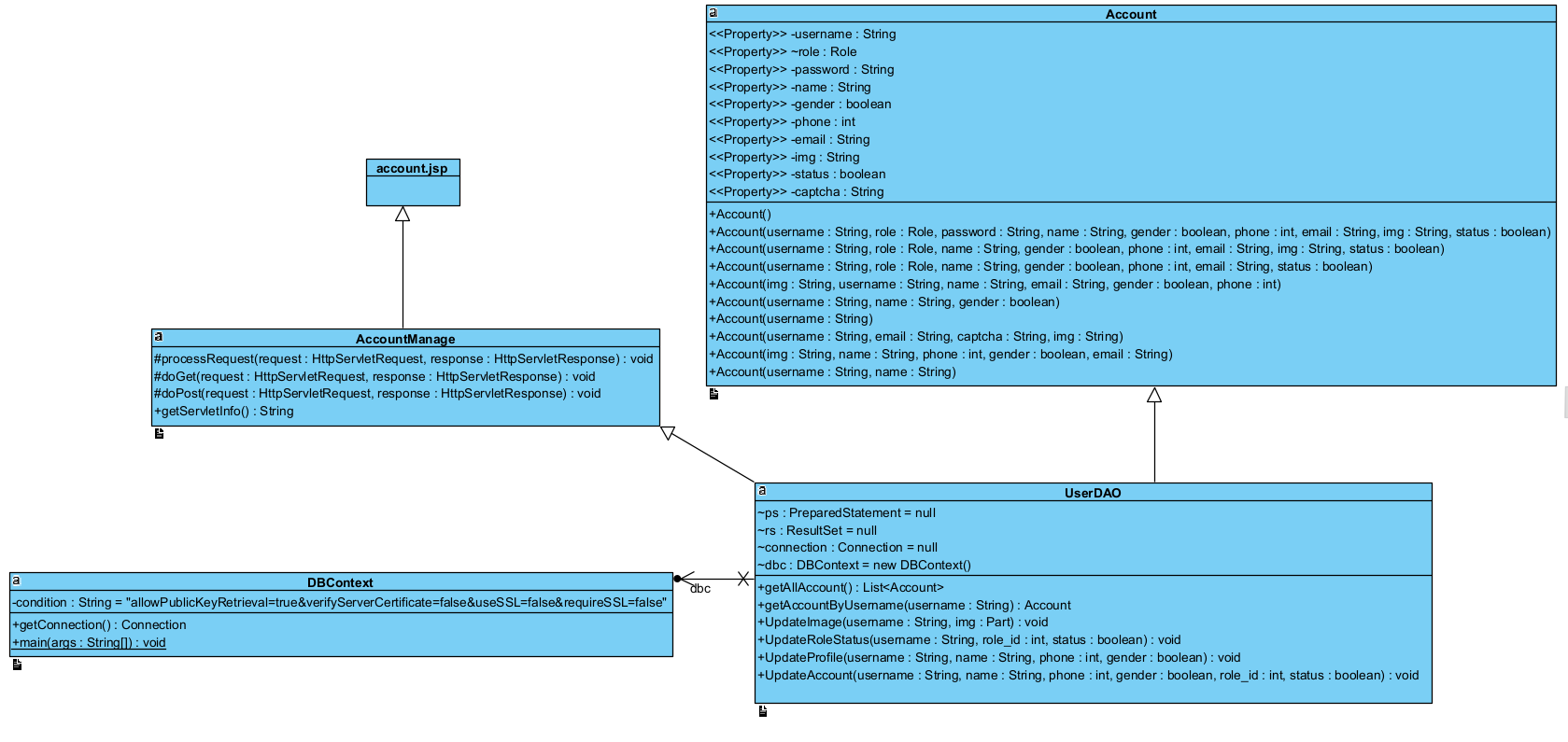


## **d.** **Database queries**

| No | Method | Database queries |
| --- | --- | --- |
| 1 | getAllAccount | SELECT u.username,u.name,u.gender,u.email,u.phone,r.name,u.status,u.img FROM doctris\_system.users u inner join doctris\_system.role r on u.role\_id = r.id |
| 2 | getAccountByUseName | SELECT DISTINCT u.username,u.name,u.gender,u.email,u.phone,r.name,u.status,u.img FROM doctris\_system.users u inner join doctris\_system.role r on u.role\_id = r.id where u.name LIKE ? OR u.email LIKE ? OR u.phone LIKE ? OR u.username LIKE ? |

## **21. Admin Feature/Account Detail**

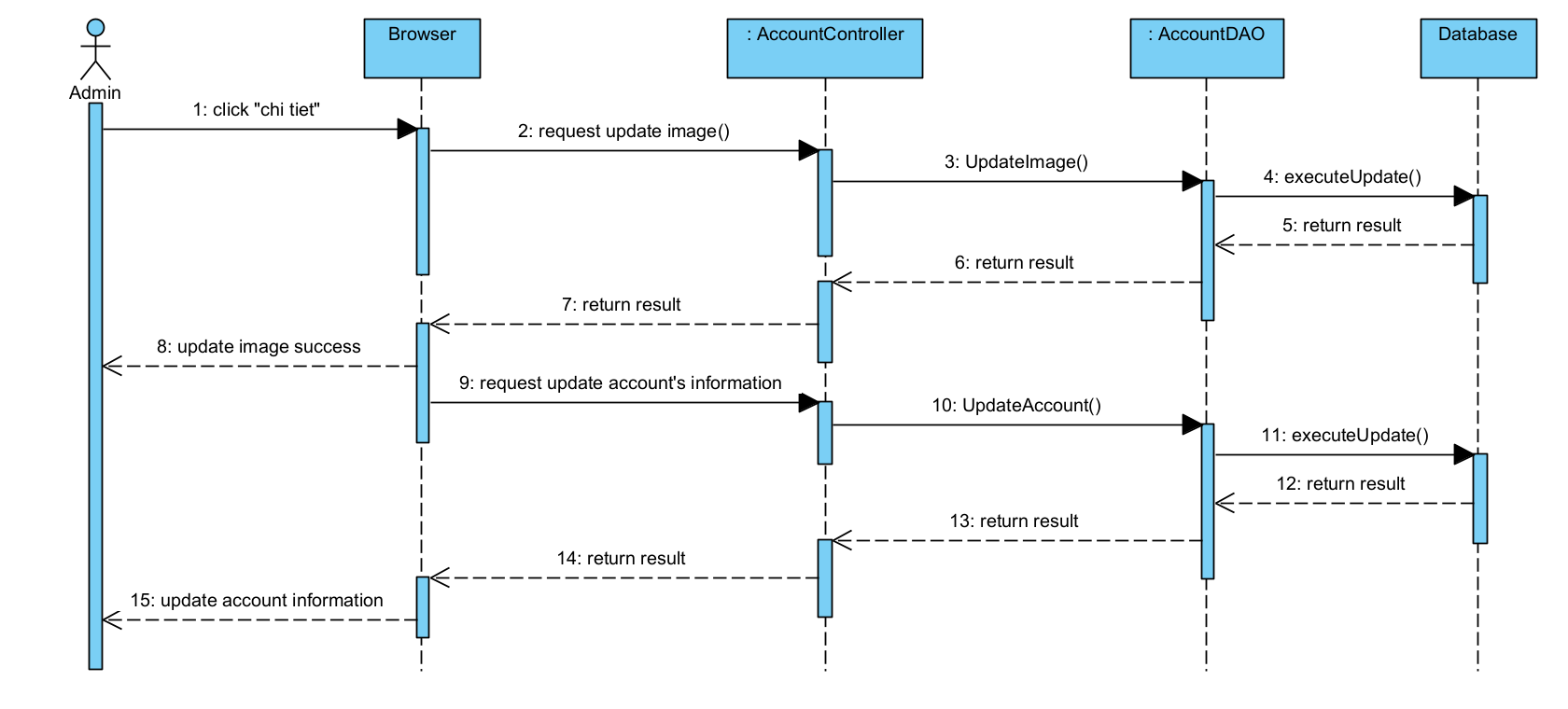
### **a.** **Class Diagram**



### **b. Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | getAccountByUseName | Search account by username |
| 2 | UpdateImage | Update image of user |
| 3 | Updateprofile | Update profile of user in account detail |

### **c. Sequence Diagram**

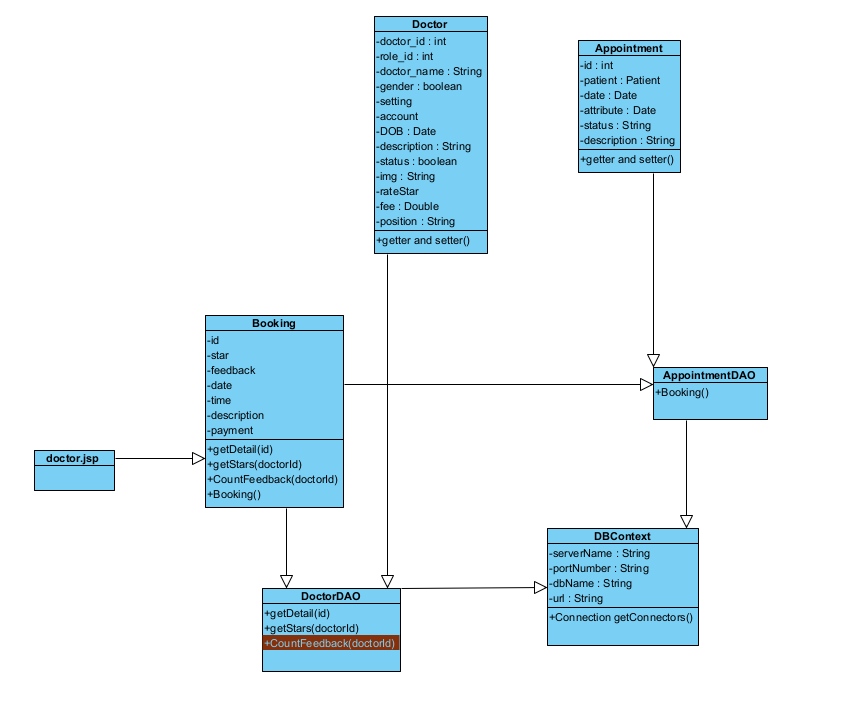


### **d. Database queries**

| No | Method | Database queries |
| --- | --- | --- |
| 1 | getAccountByUseName | SELECT DISTINCT u.username,u.name,u.gender,u.email,u.phone,r.name,u.status,u.img FROM doctris\_system.users u inner join doctris\_system.role r on u.role\_id = r.id where u.name LIKE ? OR u.email LIKE ? OR u.phone LIKE ? OR u.username LIKE ? |
| 2 | UpdateImage | UPDATE `doctris\_system`.`users` SET `img` = ? WHERE (`username` = ?) |
| 3 | Updateprofile | UPDATE `doctris\_system`.`users` SET `name` = ?, `phone` = ?, `gender` = ? WHERE (`username` = ?) |

## **22. Patient Feature/Book Appointment**

### **a.** **Class Diagram**

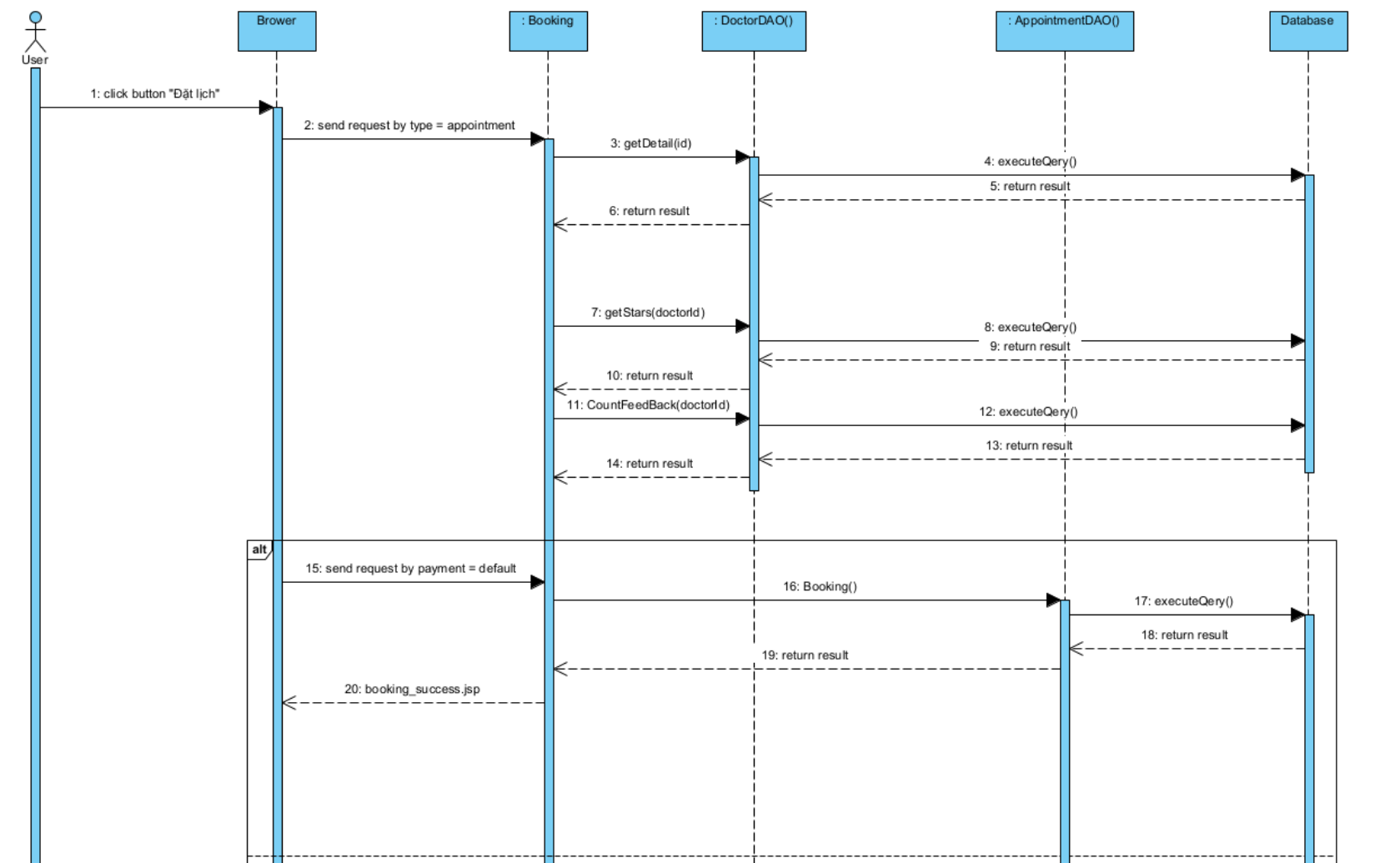


### **b. Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | getDetail(id) | get details of doctor by id from database |
| 2 | getStars(id) | get the rating amount information in star format about the doctor by id from the database |
| 3 | CountFeedback(id) | get information about the number of detailed patient reviews of doctors by id from the database |
| 4 | Booking() | add 1 field value about the information of the scheduler to the appointments table in the database |

### 

### **c. Sequence Diagram**



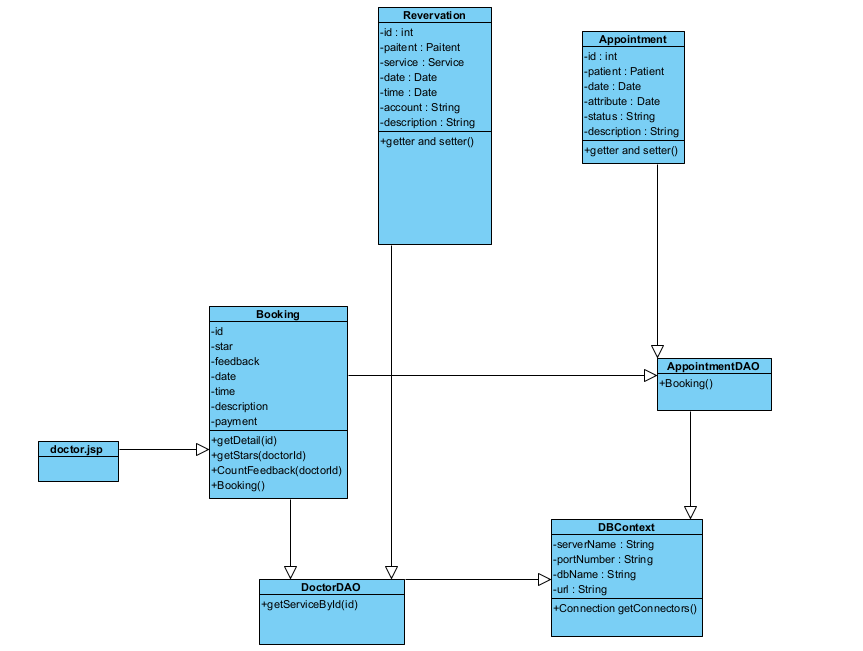
### **d. Database queries**

| No | Method | Database queries |
| --- | --- | --- |
| 1 | getDetail(id) | SELECT CONCAT\_WS(cs.id, d.category\_id) AS id, cs.name, cs.setting\_id, cs.status, d.doctor\_id, d.role\_id, d.doctor\_name, d.username, d.gender, d.DOB, d.phone, d.description, d.status, d.img, d.fee, d.position FROM doctris\_system.doctor d INNER JOIN doctris\_system.category\_service cs ON d.category\_id = cs.id WHERE d.doctor\_id = ? |
| 2 | getStars(id) | SELECT (SUM(star) / COUNT(\*)) as star from ratestar where doctor\_id = ? |
| 3 | CountFeedback(id) | SELECT COUNT(\*) from ratestar where doctor\_id = ? |
| 4 | Booking() | INSERT INTO `reservations` (`patient\_id`, `service\_id`, `staff`, `date`, `time`, `status`, `description`, `payment`) VALUES (?, ?, ?, STR\_TO\_DATE(?,'%d/%m/%Y'), ?, ?, ?, ?) |

## 

## **23. Patient Feature/Reserve**

### **a.** **Class Diagram**

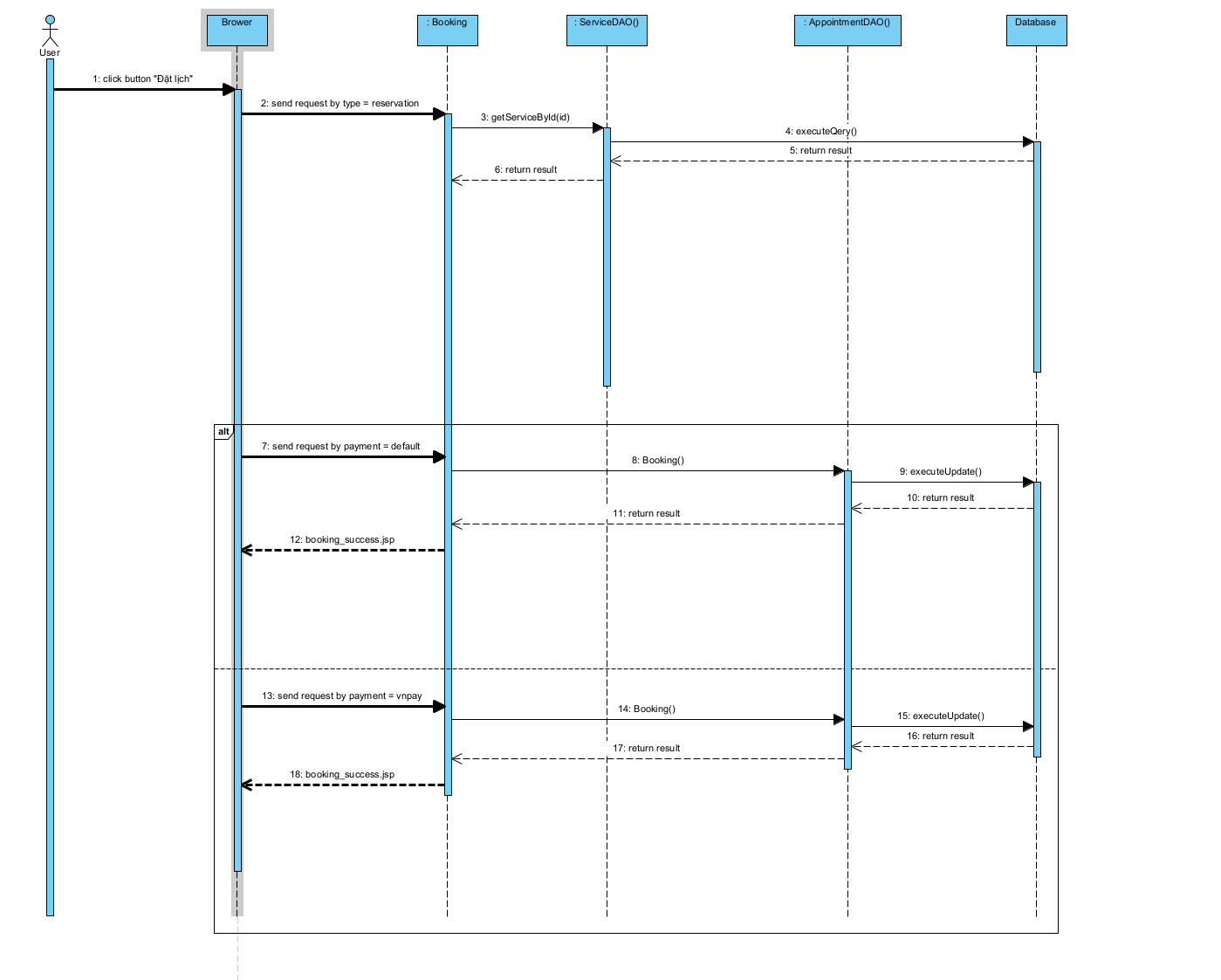


### **b. Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | getServiceById(id) | get details about service information by id from database |
| 22 | Booking() | add 1 field value about the information of the scheduler to the appointments table in the database |

### 

### **c. Sequence Diagram**

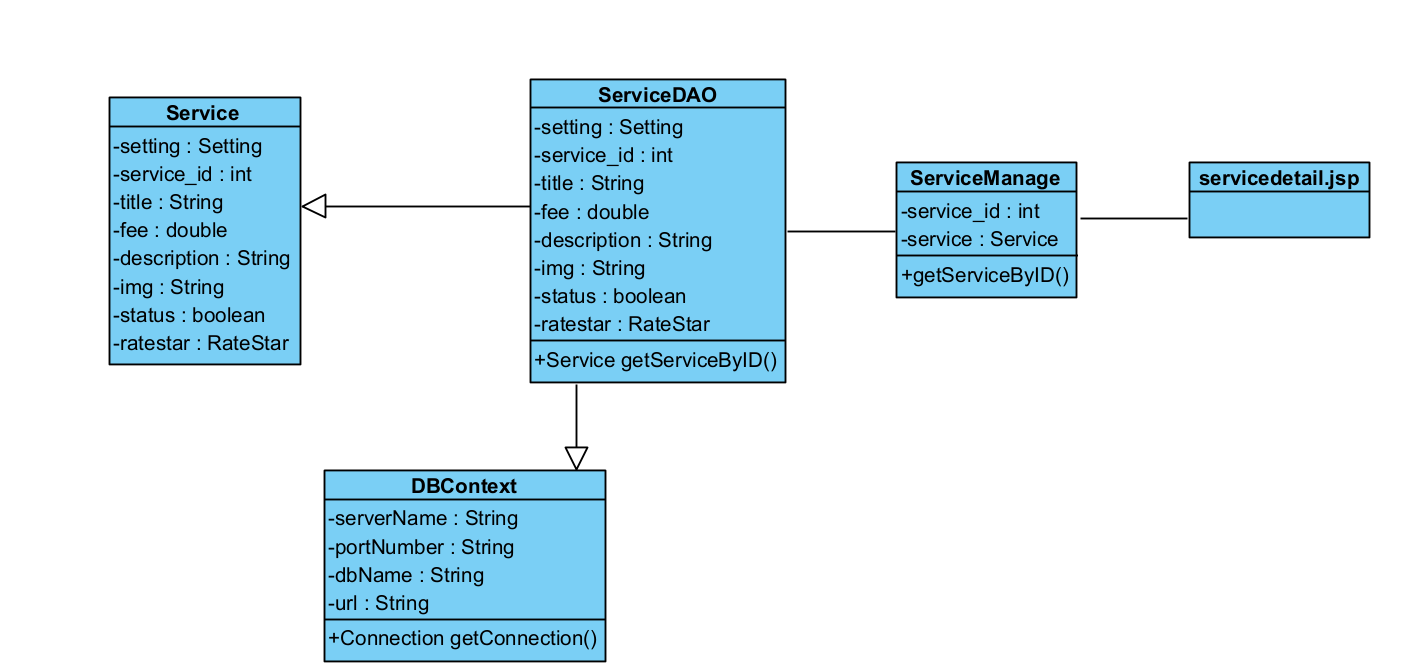


### **d. Database queries**

| No | Method | Database queries |
| --- | --- | --- |
| 1 | getServiceById(id) | SELECT s.title, cs.name, SUM(r.star)/COUNT(r.star), COUNT(r.feedback), s.fee, s.description, s.service\_id, s.img FROM doctris\_system.service s LEFT JOIN doctris\_system.ratestar r ON s.service\_id = r.service\_id INNER JOIN doctris\_system.category\_service cs ON cs.id = s.category\_id GROUP BY s.title, cs.name, s.fee, s.description, s.service\_id HAVING s.service\_id = <id> |
| 2 | Booking() | INSERT INTO `reservations` (`patient\_id`, `service\_id`, `staff`, `date`, `time`, `status`, `description`, `payment`) VALUES (?, ?, ?, STR\_TO\_DATE(?,'%d/%m/%Y'), ?, ?, ?, ?) |

## **24. Marketing Feature/Service Detail**

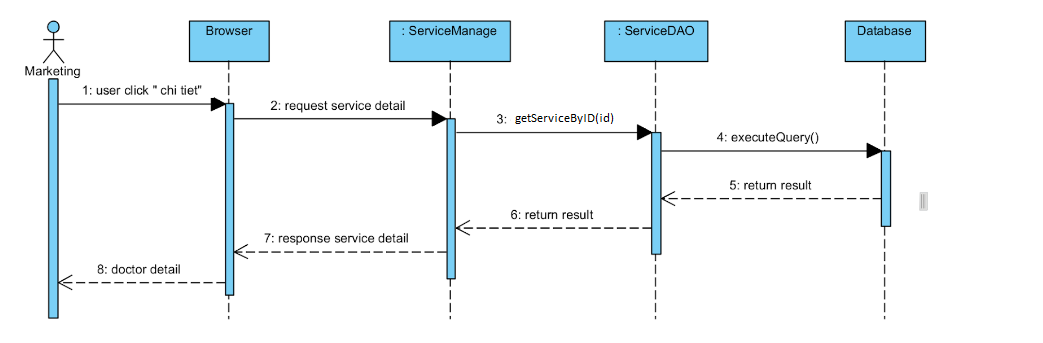
### **a.** **Class Diagram**



### **b.** **Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | getServiceByID() | Using to view detail service by get service\_id throw sql queries: SELECT c.name, s.status, s.service\_id, s.title, s.fee, s.description, s.img  FROM service s  INNER JOIN category\_service c ON s.category\_id = c.id  WHERE s.service\_id = ? |

### **c. Sequence Diagram**



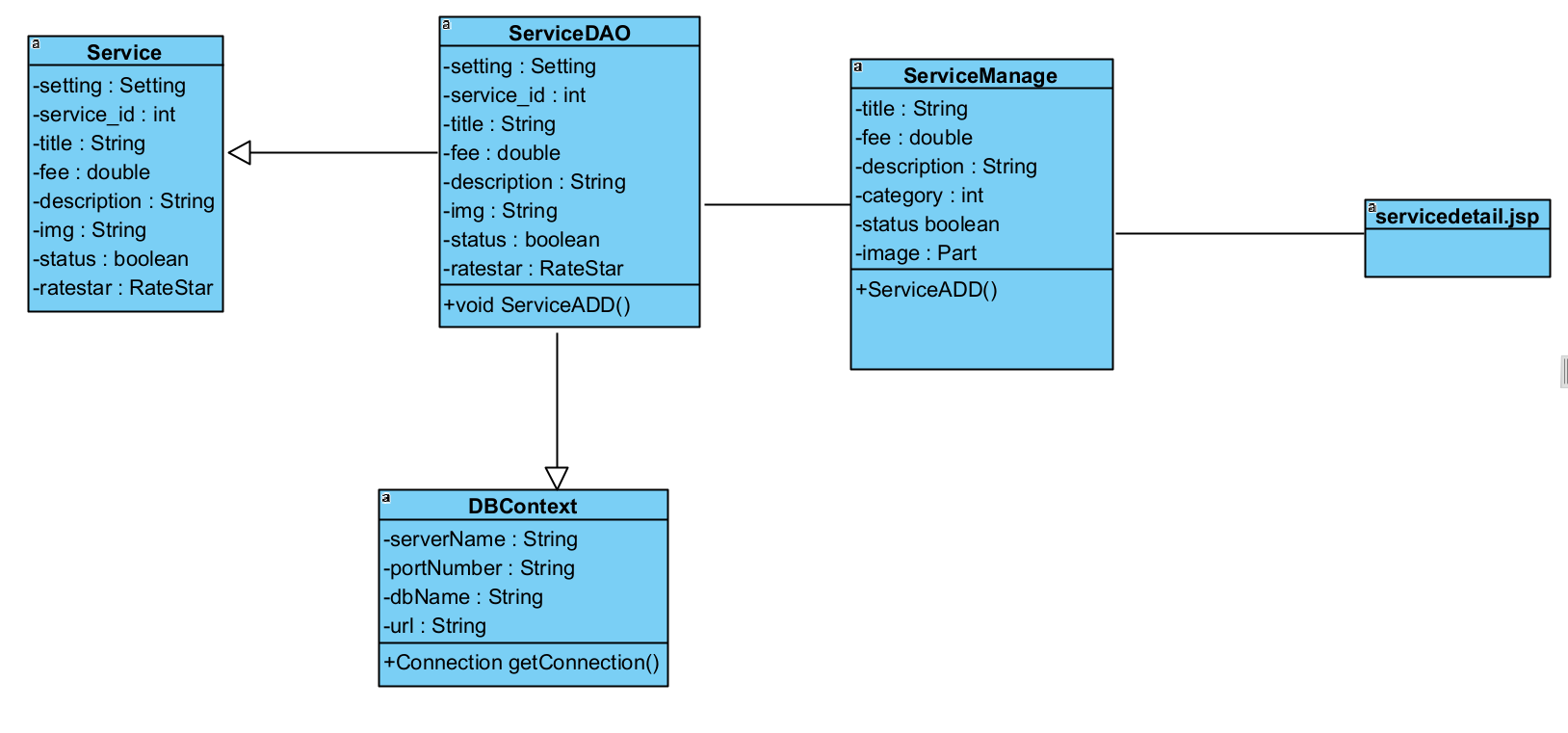
### **d. Database queries**

## 

| No | Method | Description |
| --- | --- | --- |
| 1 | getServiceByID() | SELECT c.name, s.status, s.service\_id, s.title, s.fee, s.description, s.img  FROM service s  INNER JOIN category\_service c ON s.category\_id = c.id  WHERE s.service\_id = ? |

## **25. Marketing Feature/Service Add**

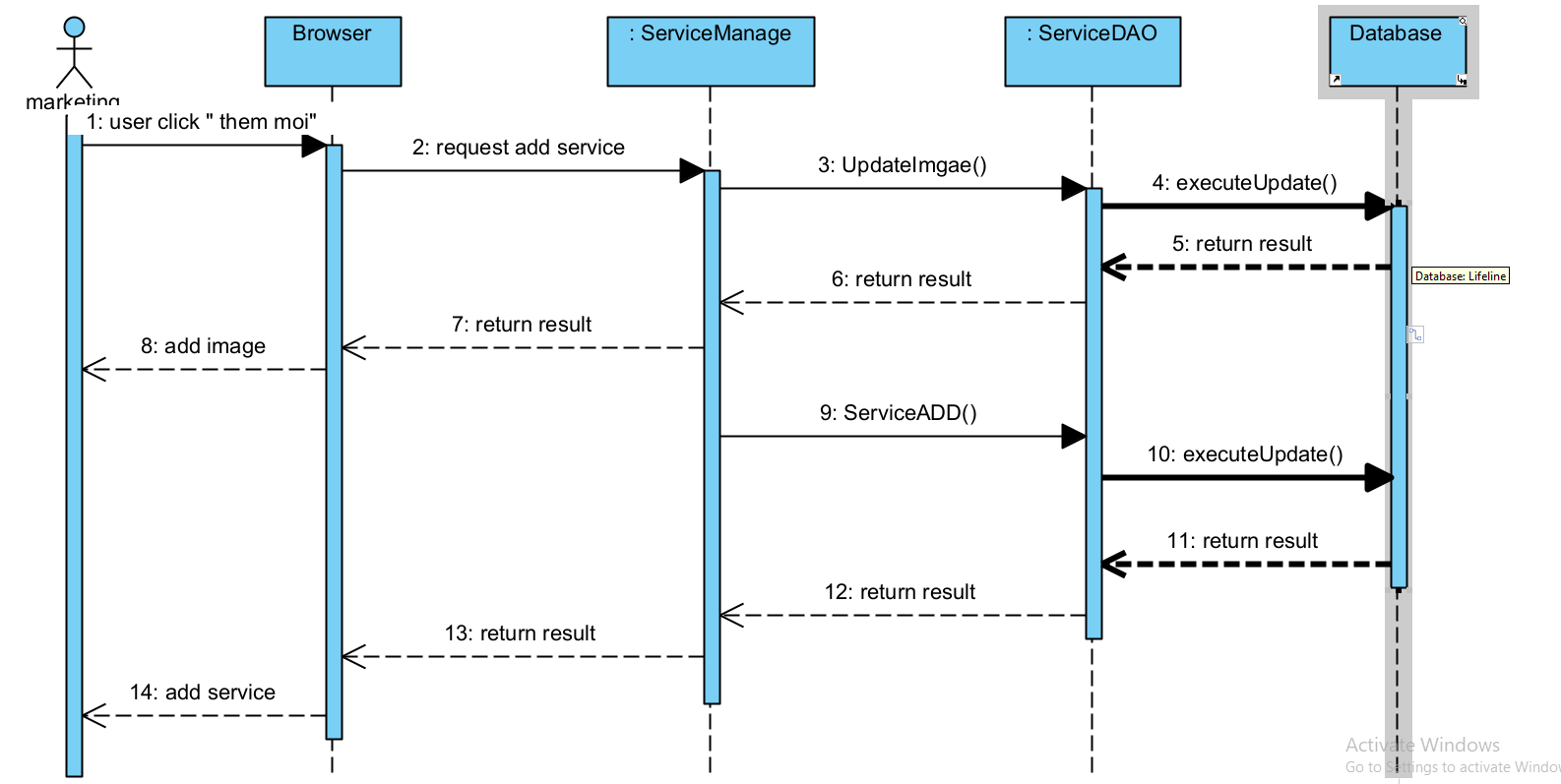
### **a.** **Class Diagram**



### **b.** **Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | ServiceADD() | using to add new service throw sql queries: INSERT INTO `doctris\_system`.`service`  (`category\_id`, `title`, `fee`, `description`, `img`, `status`) VALUES |

### **c. Sequence Diagram**

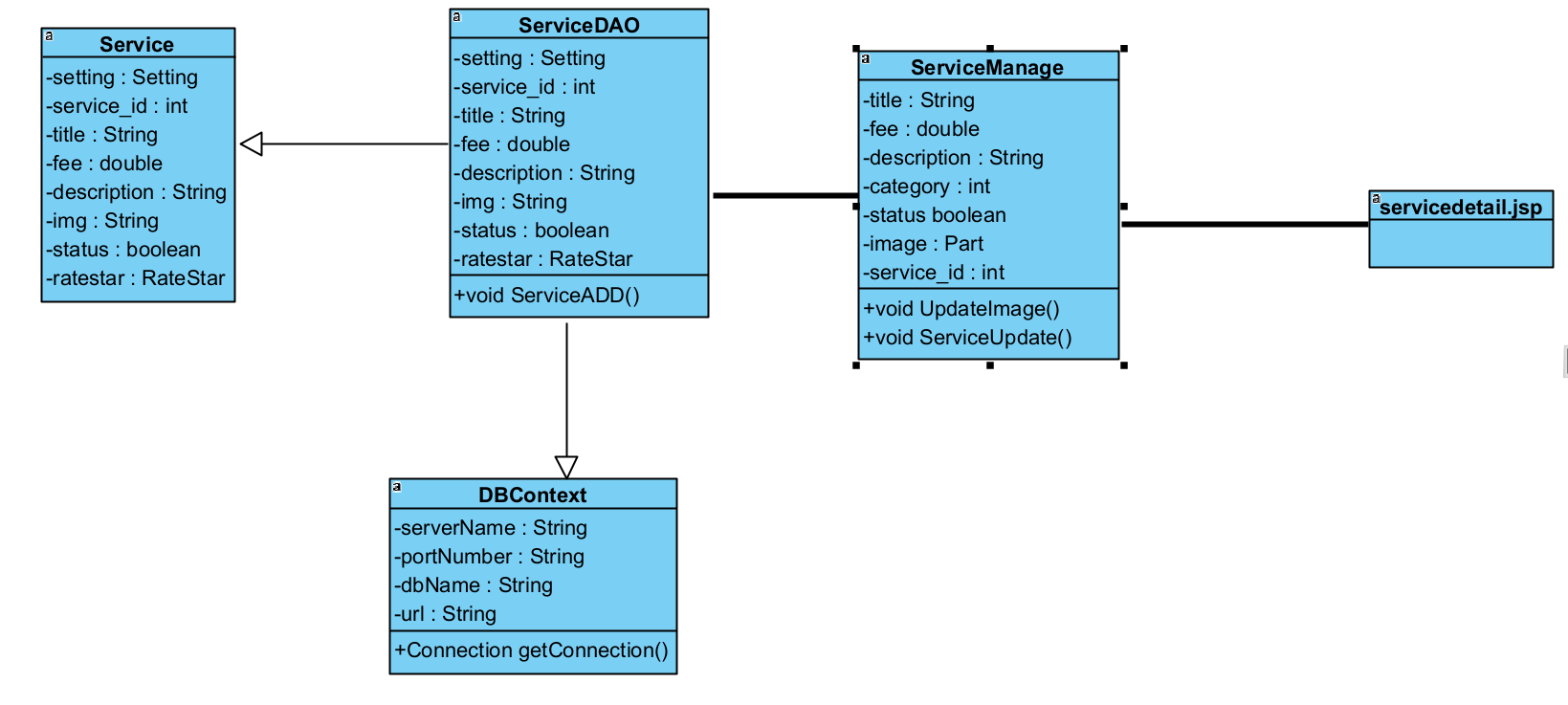


### **d. Database queries**

| No | Method | Database query |
| --- | --- | --- |
| 1 | ServiceADD() | INSERT INTO `doctris\_system`.`service`  (`category\_id`, `title`, `fee`, `description`, `img`, `status`) VALUES |

## **26. Marketing Feature/Service Edit**

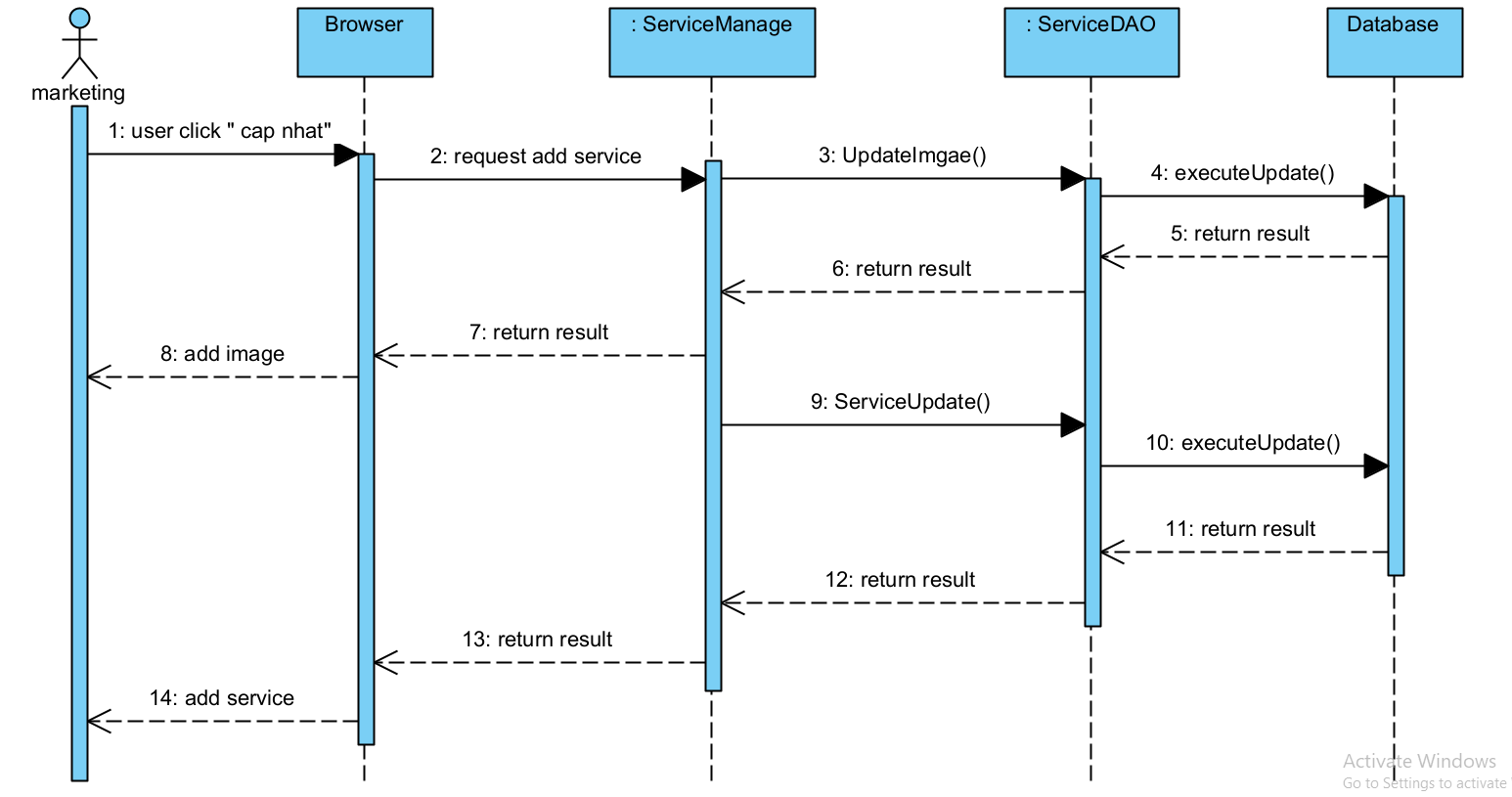
### **a.** **Class Diagram**



### **b.** **Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | ServiceUpdate() | using to update information service throw sql query: UPDATE `doctris\_system`.`service`\n"  + "SET\n"  + "`category\_id` = ?,\n"  + "`title` = ?,\n"  + "`fee` = ?,\n"  + "`description` = ?,\n"  + "`status` = ?\n"  + "WHERE `service\_id` = ?" |
| 2 | UpdateImage() | using to update image service throw sql query: UPDATE `doctris\_system`.`service`  SET  `img` = ?  WHERE `service\_id` = ?; |

### **c. Sequence Diagram**

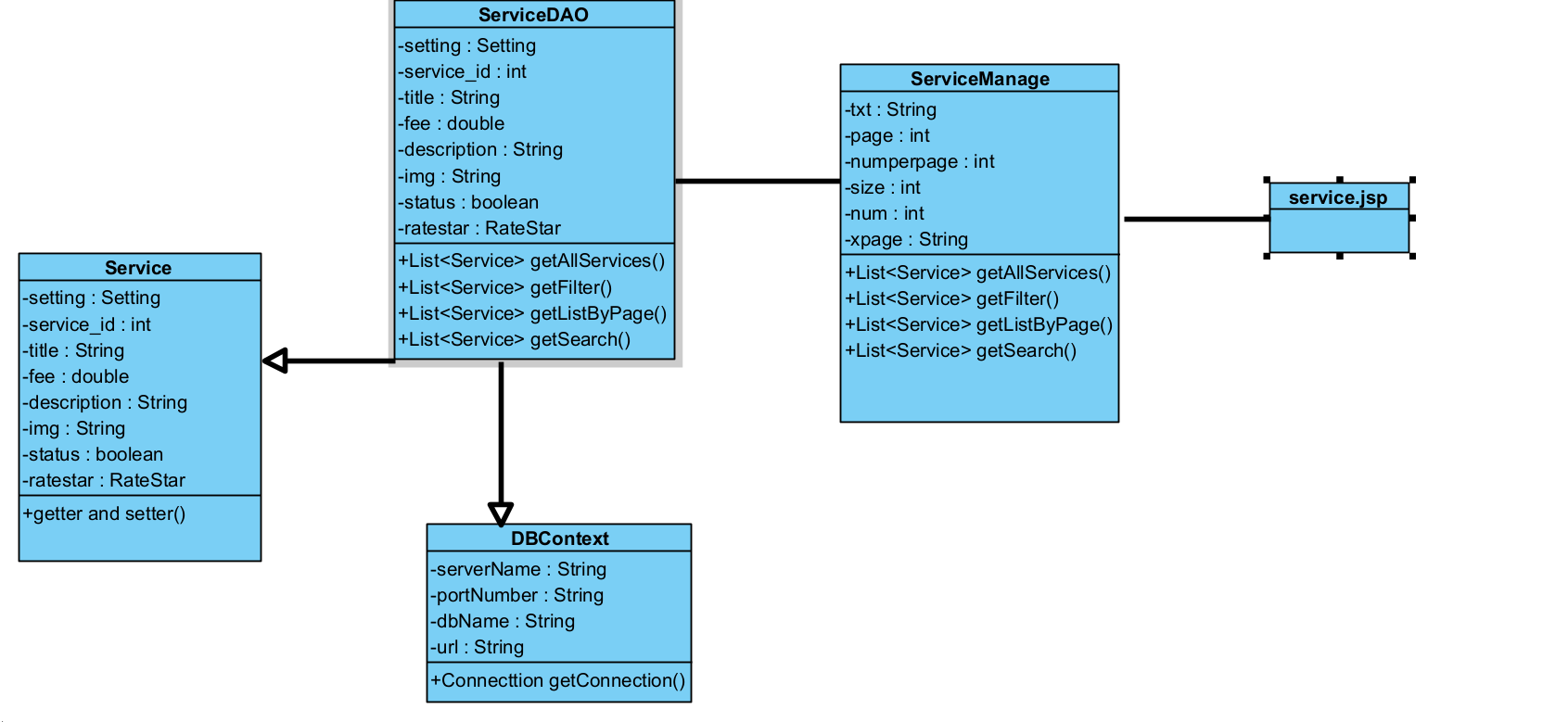


### **d. Database queries**

| No | Method | Description |
| --- | --- | --- |
| 1 | ServiceUpdate() | UPDATE `doctris\_system`.`service`\n"  + "SET\n"  + "`category\_id` = ?,\n"  + "`title` = ?,\n"  + "`fee` = ?,\n"  + "`description` = ?,\n"  + "`status` = ?\n"  + "WHERE `service\_id` = ?" |
| 2 | UpdateImage() | UPDATE `doctris\_system`.`service`  SET  `img` = ?  WHERE `service\_id` = ?; |

## **27. Marketing Feature/Service List**

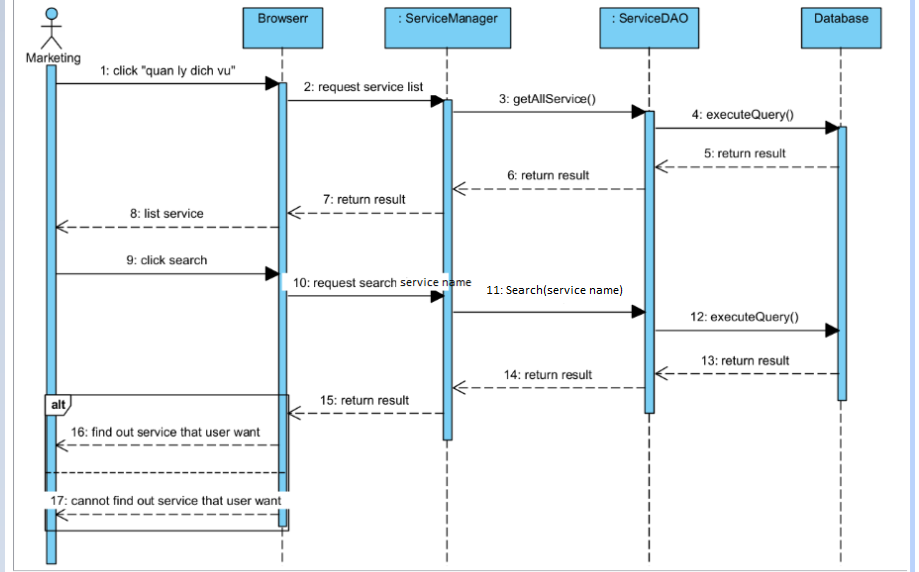
### **a.** **Class Diagram**



### **b.** **Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | getAllService() | List all doctor in database to website throw data query: SELECT service.service\_id, service.title, category\_service.name, service.fee, service.status FROM service  INNER JOIN category\_service ON service.category\_id = category\_service.id ORDER BY service.service\_id ASC; |
| 2 | Search() | Search service by name throw data query :SELECT service.service\_id, service.title, category\_service.name,  service.fee, service.status  FROM service  INNER JOIN category\_service  ON service.category\_id = category\_service.id  WHERE service.title LIKE ?  ORDER BY service.service\_id ASC; |
| 3 | getListByPage() | The method getListByPage() above has the function to retrieve a partial list of services (Services) from a complete list. |
| 4 | getFilter() | Filter service by specialize throw sql query: SELECT service.service\_id, service.title, category\_service.name, service.fee, service.status  FROM service  INNER JOIN category\_service ON service.category\_id = category\_service.id  WHERE service.category\_id = ?  ORDER BY service.service\_id ASC; |

### **c. Sequence Diagram**

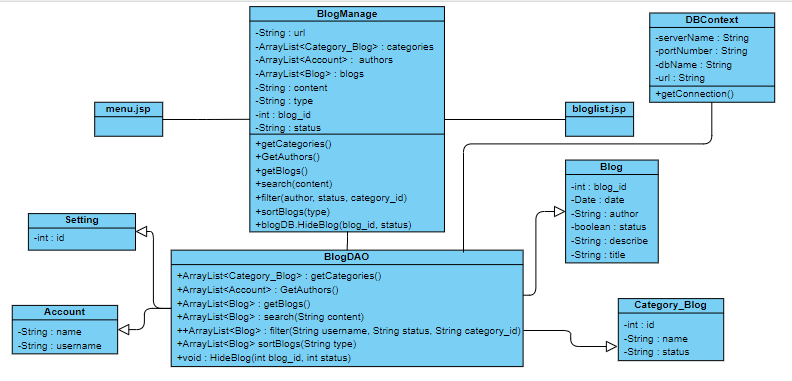


### **d. Database queries**

| No | Method | Database queries |
| --- | --- | --- |
| 1 | getAllService() | SELECT service.service\_id, service.title, category\_service.name, service.fee, service.status FROM service  INNER JOIN category\_service ON service.category\_id = category\_service.id ORDER BY service.service\_id ASC; |
| 2 | Search() | SELECT service.service\_id, service.title, category\_service.name,  service.fee, service.status  FROM service  INNER JOIN category\_service  ON service.category\_id = category\_service.id  WHERE service.title LIKE ?  ORDER BY service.service\_id ASC; |
| 3 | getFilter() | SELECT service.service\_id, service.title, category\_service.name, service.fee, service.status  FROM service  INNER JOIN category\_service ON service.category\_id = category\_service.id  WHERE service.category\_id = ?  ORDER BY service.service\_id ASC; |

## **28. Marketing Feature/Blog list**

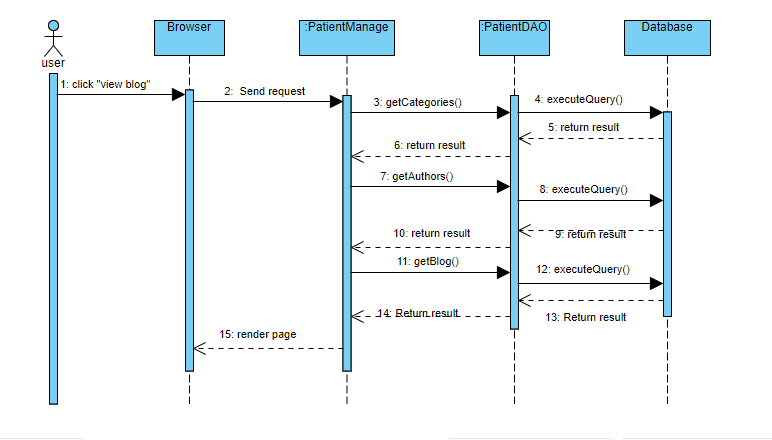
### **a.** **Class Diagram**



### **b. Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | getBlogs | get all blog in database order by date |
| 2 | getCategories | get all categories in database |
| 3 | getBlog | get blog by blog id |
| 4 | filter | The user can filter the post by category, author, status |
| 5 | search | get blog that having or contain keyword in its title |

### **c. Sequence Diagram**



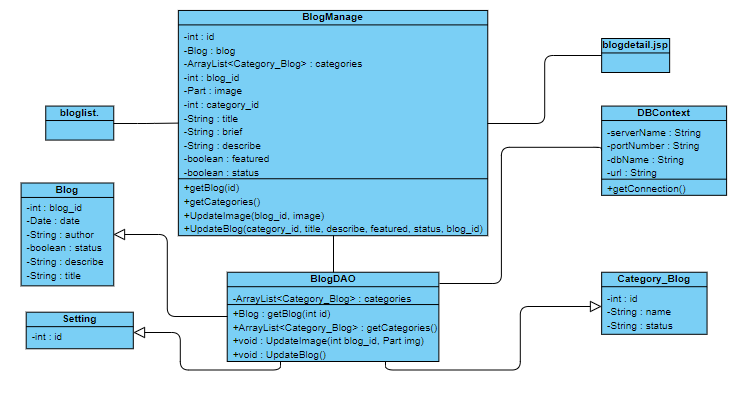
### **d. Database queries**

| No | Method | Database Queries |
| --- | --- | --- |
| 1 | getBlogs | SELECT blog.\*, category\_blog.name FROM blog inner join category\_blog on blog.category\_id = category\_blog.id order by date desc |
| 2 | getCategories | Get \* from category\_blog |
| 3 | search | SELECT \* FROM blog WHERE title LIKE ? ORDER BY date desc |

## 

## **29. Marketing Feature/Blog detail**

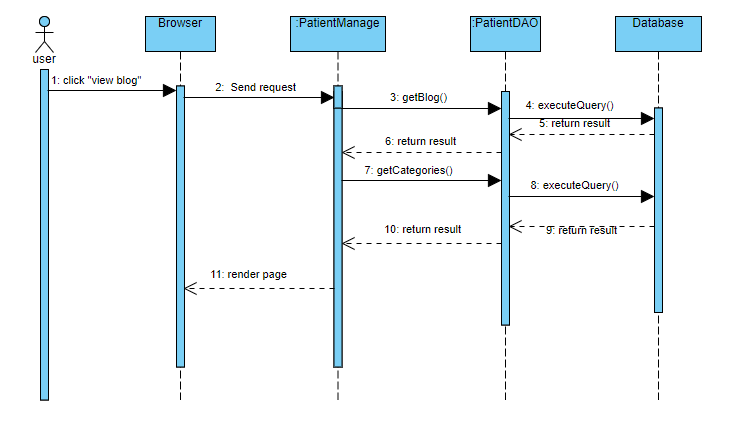
### **a.** **Class Diagram**



### **b. Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | getBlog(id) | Get blog by blog id |
| 2 | getCategories() | Get \* from category\_blog |
| 3 | UpdateBlog(category\_id, title, describe, featured, status, blog\_id) | Update table blog |
| 4 | UpdateImage(blog\_id, image) | Update img with blog\_id in table blog |

### **c. Sequence Diagram**

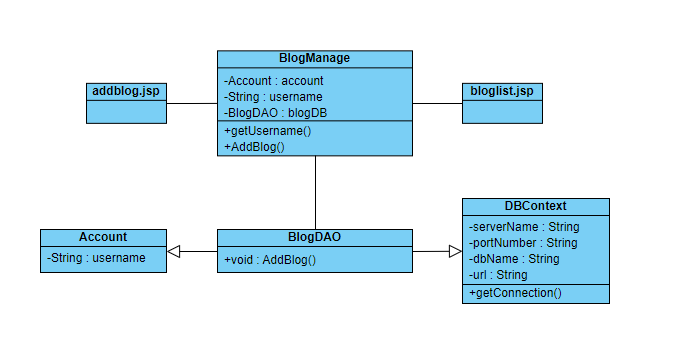


### **d. Database queries**

| No | Method | Database queries |
| --- | --- | --- |
| 1 | getBlog(id) | Select b.\*, u.name as author, c.name as category\_name  from blog as b\n"  Inner join users as u on b.username = u.username  inner join category\_blog c on b.category\_id = c.id  where b.blog\_id = ?  order by b.date desc |
| 2 | getCategories() | SELECT \* FROM category\_blog |
| 3 | UpdateBlog() | UPDATE `doctris\_system`.`blog` SET `category\_id` = ?, `title` = ?, `describe` = ?, `featured` = ?, `status` = ? WHERE `blog\_id` = ? |
| 4 | UpdateImage() | UPDATE `doctris\_system`.`blog` SET `img` = ? WHERE `blog\_id` = ? |

## **30. Marketing Feature/Blog Add**

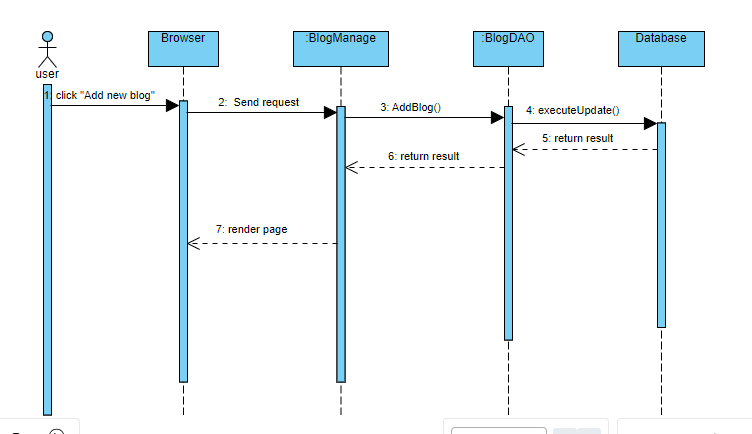
### **a.** **Class Diagram**



### **b. Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | getUsername() | get username from session |
| 2 | AddBlog() | insert into table blog |

### **c. Sequence Diagram**



### **d. Database queries**

| No | Method | Database queries |
| --- | --- | --- |
| 1 | AddBlog() | INSERT INTO `doctris\_system`.`blog` (`category\_id`, `title`, `img`, `describe`, `date`, `featured`, `username`, `status`) VALUES ( ? , ? , ? , ? , curdate(), ? , ? , ? ) |

## 

## 

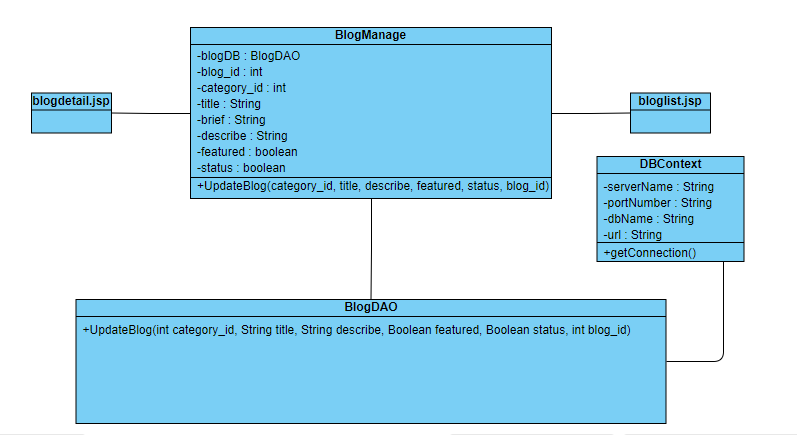
## 

## 

## 

## **31. Marketing Feature/Blog Edit**

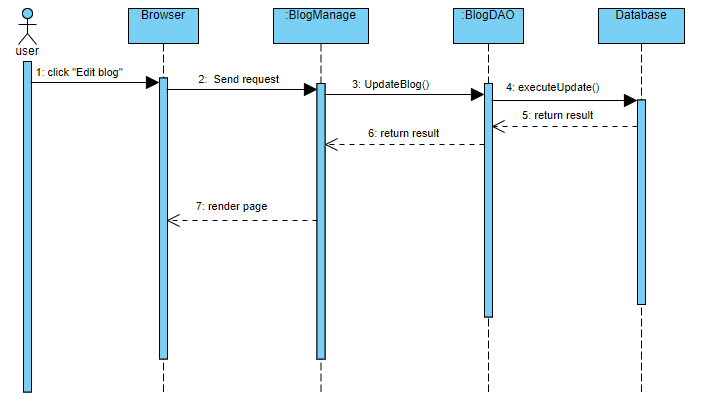
### **a.** **Class Diagram**

****

### **b. Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | UpdateBlog() | update detail blog in database |

### **c. Sequence Diagram**

****

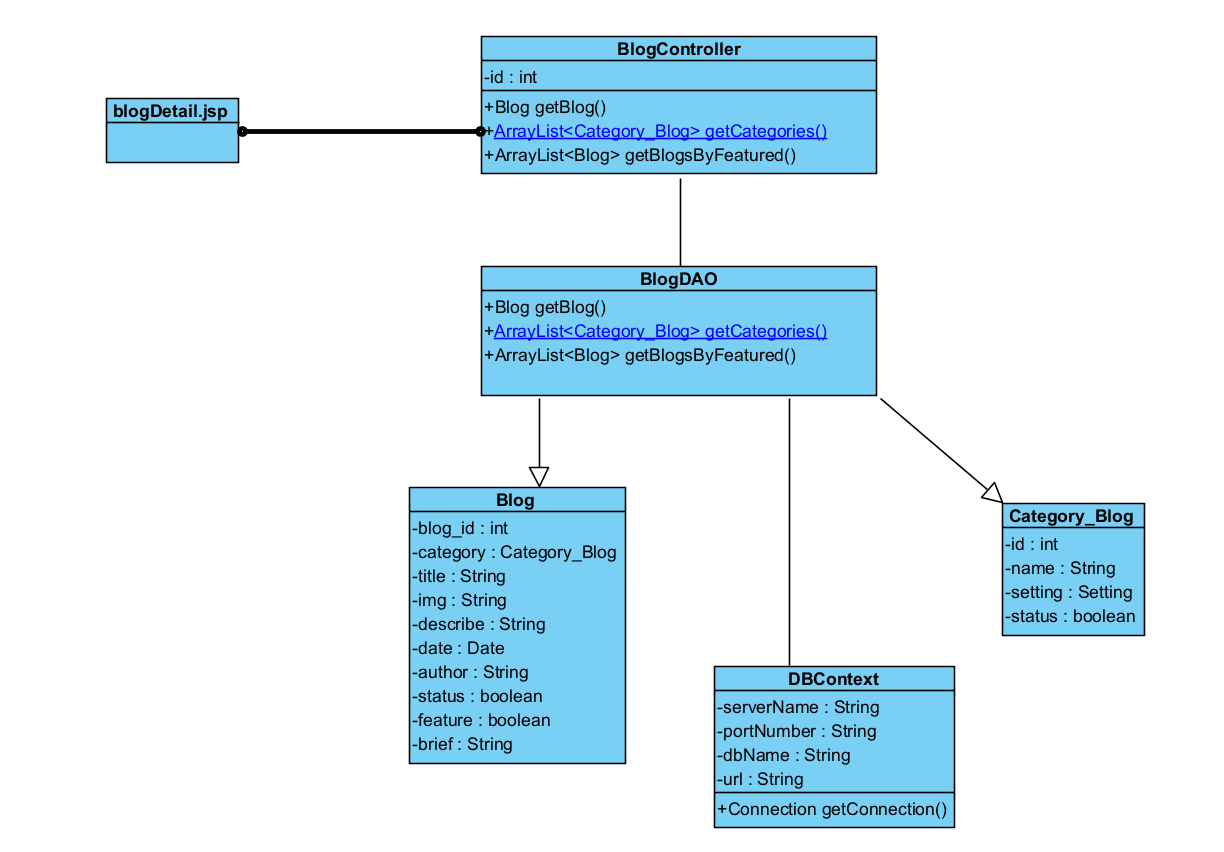
### **d. Database queries**

| No | Method | Database queries |
| --- | --- | --- |
| 1 | UpdateBlog(int category\_id, String title, String describe, Boolean featured, Boolean status, int blog\_id) | UPDATE `doctris\_system`.`blog`  SET  `category\_id` = ?,  `title` = ?,  `describe` = ?,  `featured` = ?,  `status` = ?  WHERE `blog\_id` = ? |

## 

## **32. Common Feature/Web Blog Detail**

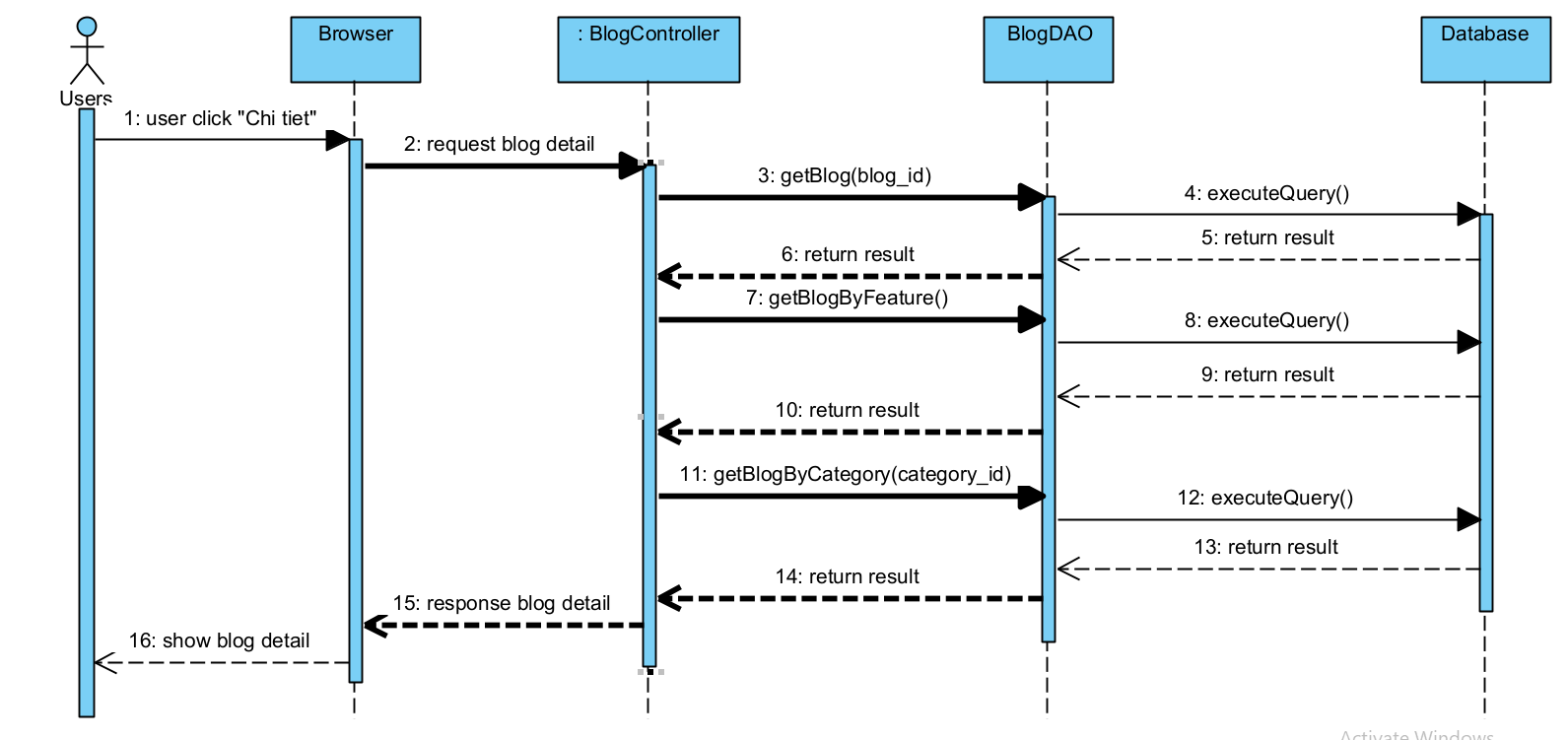
### **a.** **Class Diagram**



### **b. Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | getBlog() | get blog by blog id |
| 2 | getBlogByFeatured() | get blog which featured |
| 3 | getBlogByCategory() | get blog in the same category |

### **c. Sequence Diagram**



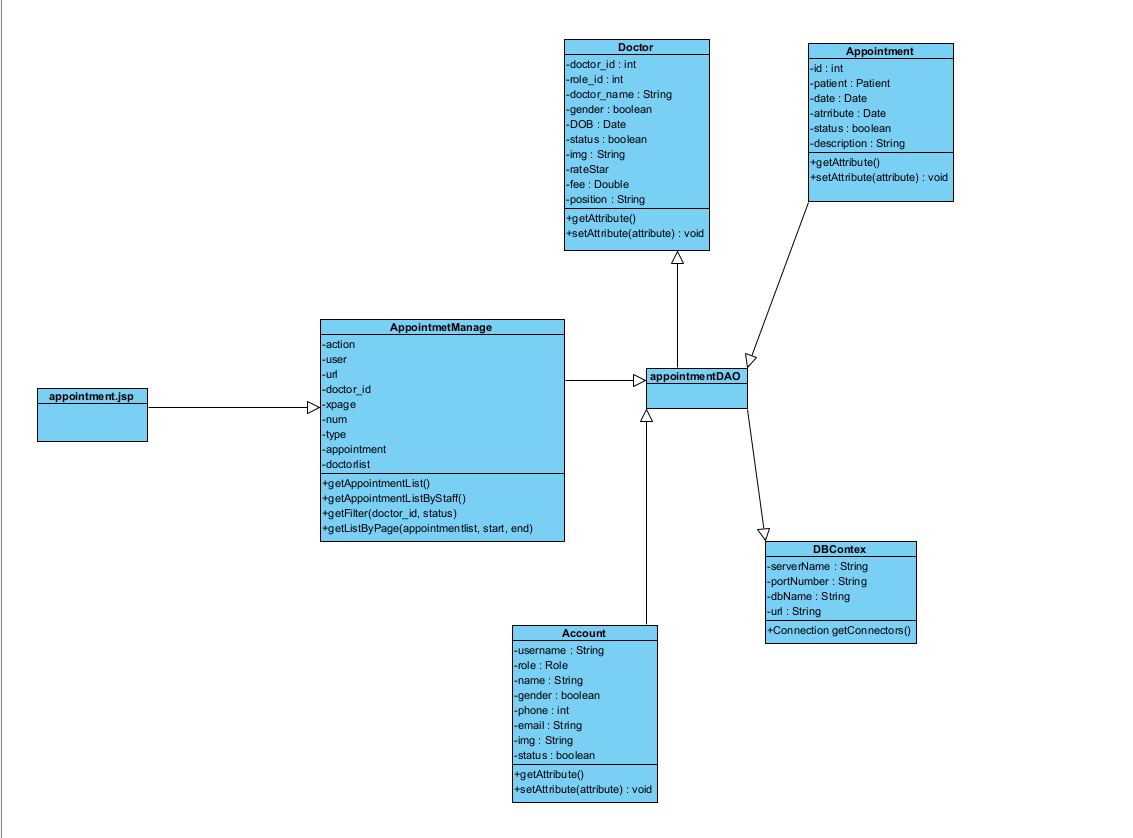
### **d. Database queries**

| No | Method | Database Queries |
| --- | --- | --- |
| 1 | getBlog() | SELECT b.\*, u.name AS author, c.name AS category\_name  FROM blog AS b  INNER JOIN users AS u ON b.username = u.username  INNER JOIN category\_blog AS c ON b.category\_id = c.id  WHERE b.blog\_id = ?  ORDER BY b.date DESC |
| 2 | getBlogByFeatured() | Select \* from blog where featured = 1 and status = 1; |
| 3 | getBlogByCategory() | SELECT b.\*, c.name AS category\_name  FROM blog AS b  INNER JOIN category\_blog AS c ON b.category\_id = c.id  WHERE category\_id = ? AND b.status = 1  ORDER BY date DESC |

## 

## **33. Staff Feature/Appointments List**

## **a.** **Class Diagram**

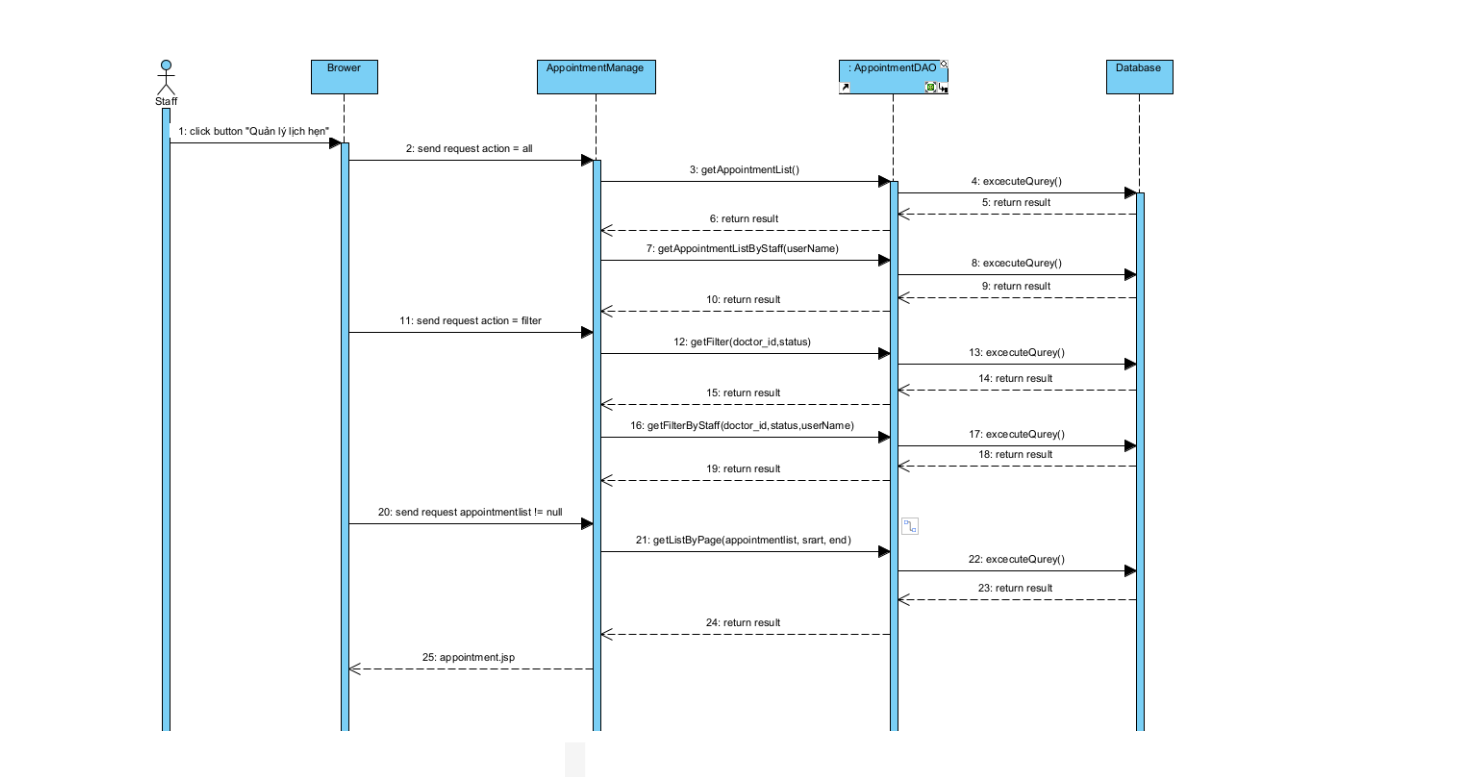


### **b. Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | getAppointmentListByStaff(user.getUsername()) | get appointment list by staff name |
| 2 | getDoctorNameAndID() | get list doctor by name and id |
| 3 | getFilterByStaff(doctor\_id, status, user.getUsername(),date) | get filter staff by id, status, name, datedate |
| 4 | getListByPage(appointmentlist, start, end) | get list page by appointmentlist, start, end |

### 

### **c. Sequence Diagram**



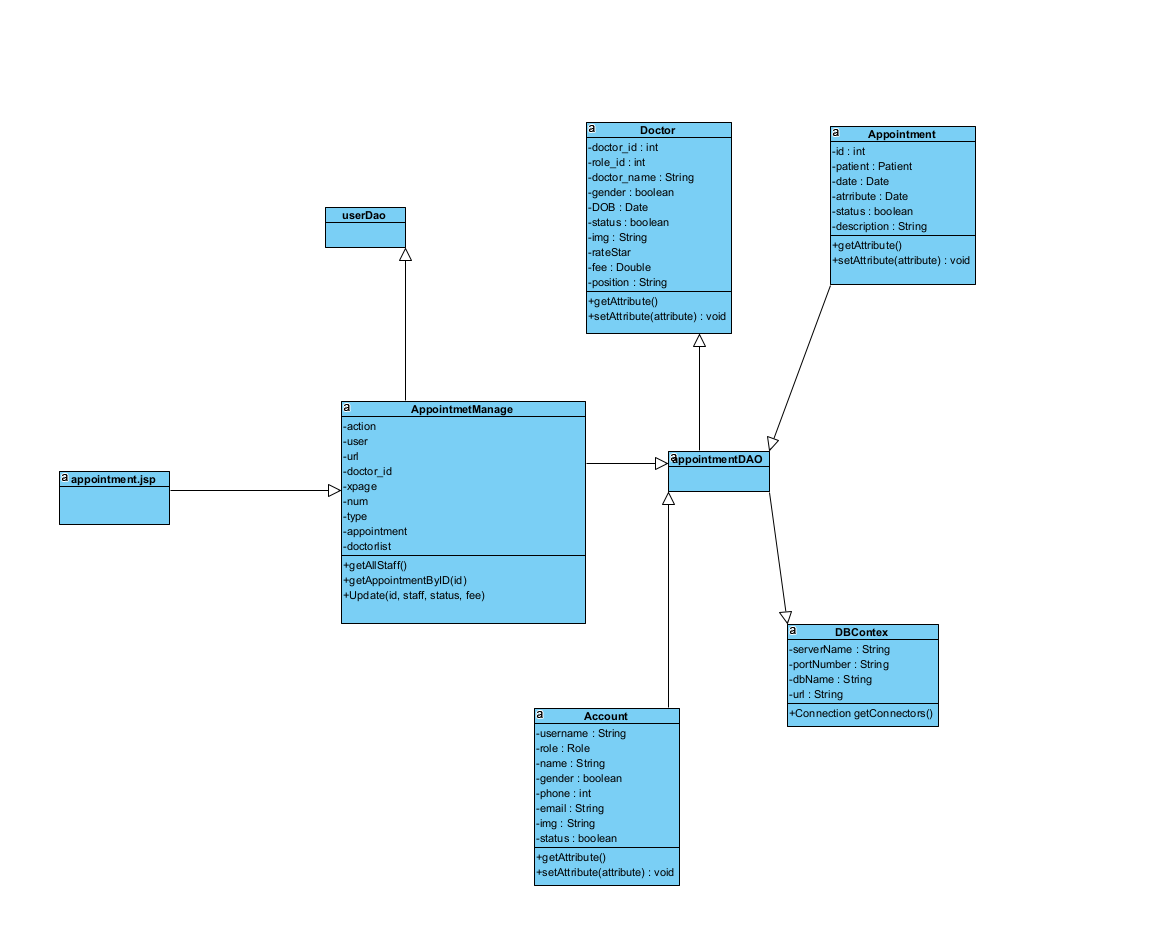
### **d. Database queries**

| No | Method | Database Queries |
| --- | --- | --- |
| 1 | getAppointmentListByStaff(user.getUsername()) | SELECT appointments.appointment\_id, doctor.doctor\_name, users.name, appointments.date, appointments.time, appointments.status  FROM appointments  INNER JOIN doctor ON appointments.doctor\_id = doctor.doctor\_id  INNER JOIN patient ON appointments.patient\_id = patient.patient\_id  INNER JOIN users ON patient.username = users.username  WHERE appointments.staff = ?; |
| 2 | getDoctorNameAndID() | select doctor\_id, doctor\_name from doctris\_system.doctor |
| 3 | getFilterByStaff(doctor\_id, status, user.getUsername(),date) | -- filterStatus  SELECT appointments.appointment\_id, doctor.doctor\_name, users.name, appointments.date, appointments.time, appointments.status  FROM appointments  INNER JOIN doctor ON appointments.doctor\_id = doctor.doctor\_id  INNER JOIN patient ON appointments.patient\_id = patient.patient\_id  INNER JOIN users ON patient.username = users.username  WHERE appointments.status = ? AND appointments.staff = ?;  -- filterDoctor  SELECT appointments.appointment\_id, doctor.doctor\_name, users.name, appointments.date, appointments.time, appointments.status  FROM appointments  INNER JOIN doctor ON appointments.doctor\_id = doctor.doctor\_id  INNER JOIN patient ON appointments.patient\_id = patient.patient\_id  INNER JOIN users ON patient.username = users.username  WHERE appointments.doctor\_id = ? AND appointments.staff = ?;  -- filterDate  SELECT appointments.appointment\_id, doctor.doctor\_name, users.name, appointments.date, appointments.time, appointments.status  FROM appointments  INNER JOIN doctor ON appointments.doctor\_id = doctor.doctor\_id  INNER JOIN patient ON appointments.patient\_id = patient.patient\_id  INNER JOIN users ON patient.username = users.username  WHERE appointments.date = ? AND appointments.staff = ?;  -- filter  SELECT appointments.appointment\_id, doctor.doctor\_name, users.name, appointments.date, appointments.time, appointments.status  FROM appointments  INNER JOIN doctor ON appointments.doctor\_id = doctor.doctor\_id  INNER JOIN patient ON appointments.patient\_id = patient.patient\_id  INNER JOIN users ON patient.username = users.username  WHERE appointments.doctor\_id = ? AND appointments.status = ? AND appointments.staff = ? AND appointments.date = ?; |
| 4 | getListByPage(appointmentlist, start, end) | for (int i = start; i < end; i++) {  arr.add(list.get(i));  } |

## 

## **34. Staff Feature/Appointments Detail**

### **a. Class Diagram**

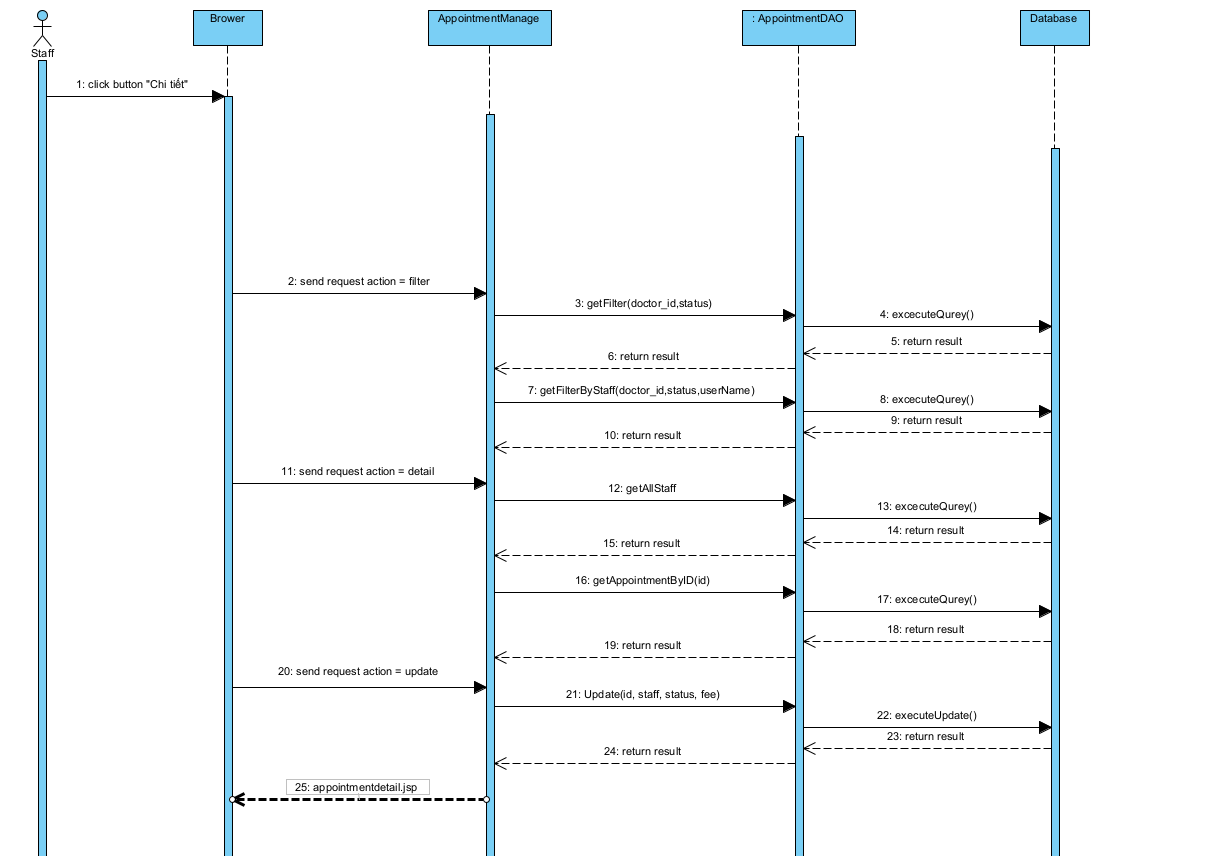


### **b. Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | getAllStaff() | get all staff |
| 2 | getAppointmentByID(id) | get all appointment by id |
| 3 | Update(id, staff, status, fee) | update information by id, staff, status,fee |

### 

### **c. Sequence Diagram**



### **d. Database queries**

| No | Method | Database Queries |
| --- | --- | --- |
| 1 | getAllStaff() | SELECT username,name FROM doctris\_system.users where role\_id = 4 and status = 1 |
| 2 | getAppointmentByID(id) | SELECT doctor.img, doctor.doctor\_name, doctor.phone, doctor.gender, category\_service.name,  users.img, users.name, users.phone, users.gender, patient.DOB, appointments.date,  appointments.time, appointments.status, appointments.description, staff.name,  appointments.fee, appointments.appointment\_id, staff.username  FROM appointments  INNER JOIN doctor ON appointments.doctor\_id = doctor.doctor\_id  INNER JOIN patient ON appointments.patient\_id = patient.patient\_id  INNER JOIN users ON patient.username = users.username  INNER JOIN users staff ON appointments.staff = staff.username  INNER JOIN category\_service ON doctor.category\_id = category\_service.id  WHERE appointments.appointment\_id = ?; |
| 3 | Update(id, staff, status, fee) | UPDATE `doctris\_system`.`appointments` SET `staff` = ?, `status` = ?, `fee` = ? WHERE (`appointment\_id` = ?) |

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## **35. Staff Feature/Doctor Edit**

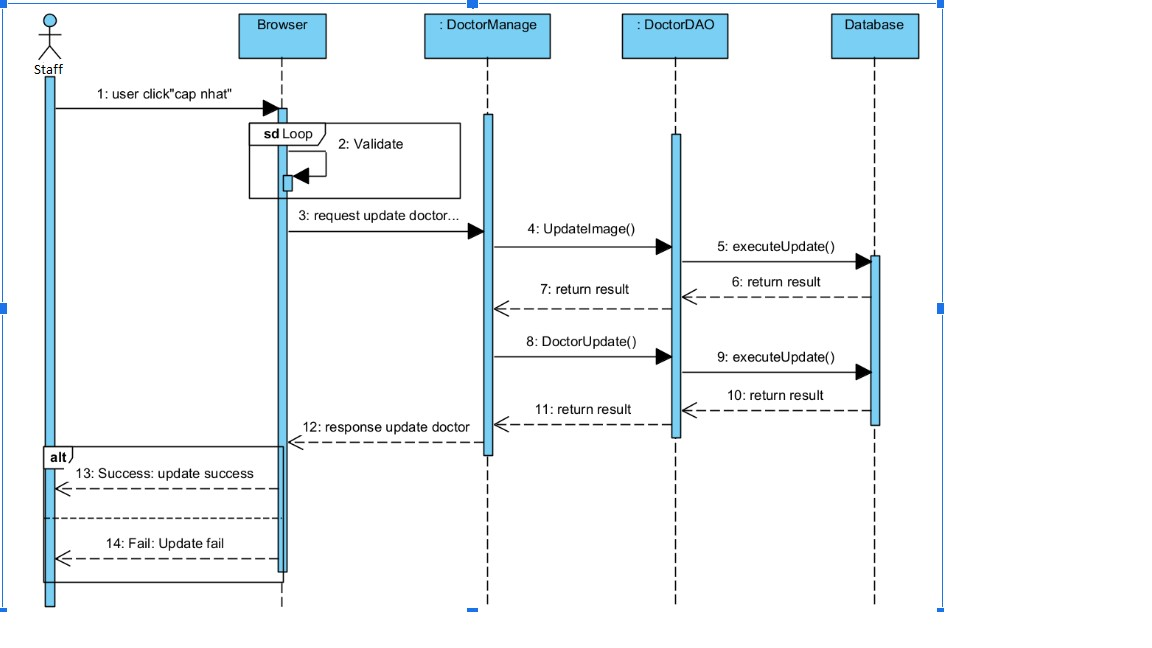
### **a.** **Class Diagram**

# 

### **b. Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | UpdateImage() | Update new image of doctor |
| 2 | DoctorUpdate() | Update new information of doctor |

### **c. Sequence Diagram**

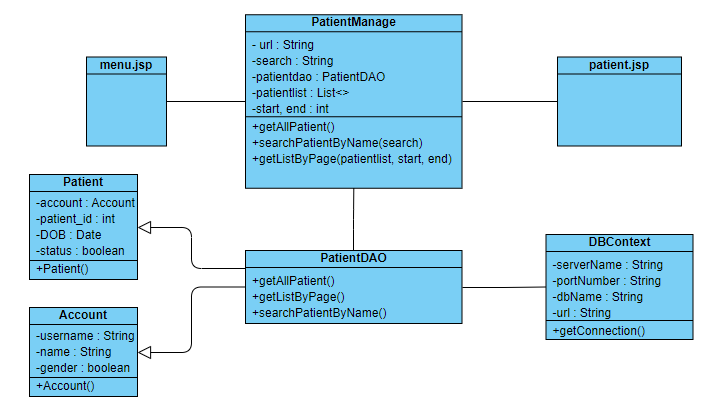


### **d. Database queries**

| No | Method | Database queries |
| --- | --- | --- |
| 1 | UpdateImage() | UPDATE `doctris\_system`.`doctor` SET `img` = ? WHERE (`doctor\_id` = ?) |
| 2 | DoctorUpdate() | UPDATE `doctris\_system`.`doctor` SET `Category\_id` = ?, `doctor\_name` = ?, `gender` = ?, `DOB` = ?, `phone` = ?, `description` = ?, `status` = ? WHERE (`doctor\_id` = ?) |

## **36. Staff Feature/Patients list**

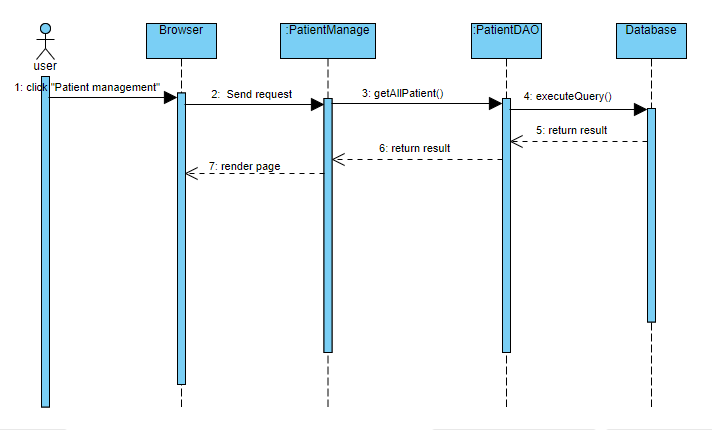
### **a.** **Class Diagram**



### **b. Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | getAllPatient() | get all patient in database |
| 2 | searchPatientByName() | search patient by name |
| 3 | getListByPage | Display page |

### **c. Sequence Diagram**



### **d. Database queries**

| No | Method | Database queries |
| --- | --- | --- |
| 1 | getAllPatient() | select p.patient\_id,u.username,u.name,u.gender,p.DOB,p.status from doctris\_system.patient p  inner join doctris\_system.users u  on p.username = u.username |
| 2 | searchPatientByName(String name) | select p.patient\_id,u.username,u.name,u.gender,p.DOB,p.status from doctris\_system.patient p  inner join doctris\_system.users u\n"  on p.username = u.username\n"  WHERE u.name LIKE N'%" + name + "%' |

## 

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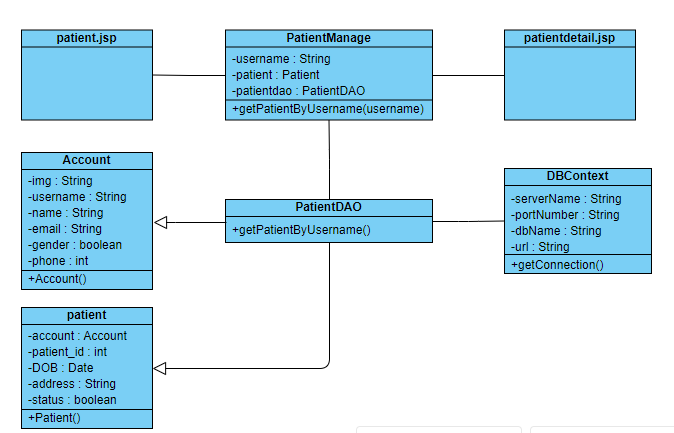
## 

## 

## 

## **37. Staff Feature/Patient details**

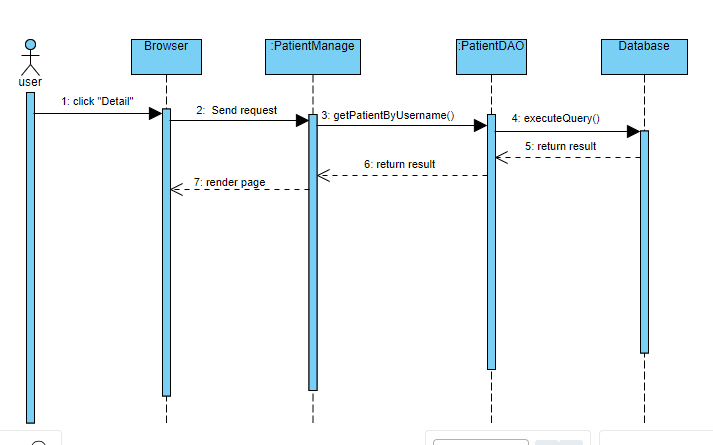
### **a.** **Class Diagram**

****

### **b. Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | getPatientByUsername() | get patient by username in database |

### **c. Sequence Diagram**



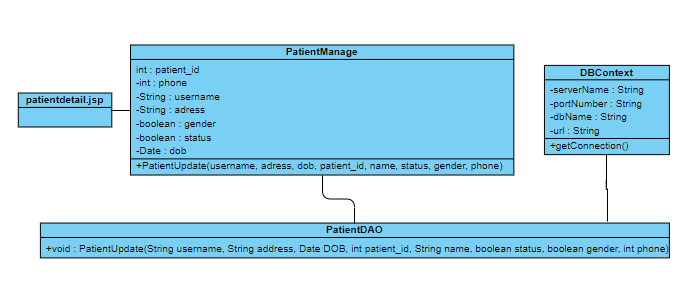
### **d. Database queries**

| No | Method | Database queries |
| --- | --- | --- |
| 1 | getPatientByUsername(String username) | select u.img, u.username,u.name,u.email,u.gender,u.phone,p.patient\_id,p.DOB,p.address,p.status from patient p inner join users u  on p.username = u.username  where u.username = ? |

## 

## **38. Staff Feature/Patient edit**

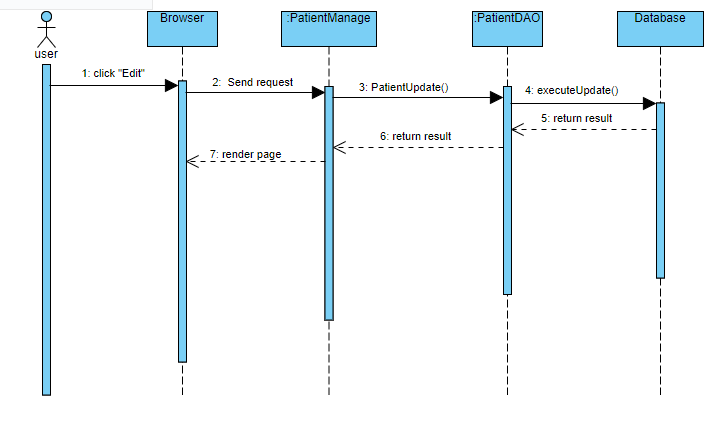
### **a.** **Class Diagram**



### **b. Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | PatientUpdate() | update in table patient and users |

### **c. Sequence Diagram**



### **d. Database queries**

| No | Method | Database queries |
| --- | --- | --- |
| 1 | PatientUpdate() | UPDATE `doctris\_system`.`patient` SET `address` = ?, `DOB` = ?, `status` = ? WHERE `patient\_id` = ?  String sql2 = "UPDATE `doctris\_system`.`users` SET `name` = ?, `gender` = ?, `phone` = ? WHERE `username` = ? |

## 

## **39. Staff Feature/Doctor Detail**

### **a.** **Class Diagram**

## 

### **b. Class Specification**

| No | Method | Description |
| --- | --- | --- |
| 1 | getDoctorByID() | get doctor by doctor id in database |
| 2 | getAppointmentByDoctor() | get appointment list by doctor id in database |

### **c. Sequence Diagram**

# 

# 

### **d. Database queries**

| No | Method | Database queries |
| --- | --- | --- |
| 1 | getAppointmentByDoctor() | SELECT appointments.appointment\_id, doctor.doctor\_name, users.name, appointments.date, appointments.time, appointments.status  FROM appointments  INNER JOIN doctor ON appointments.doctor\_id = doctor.doctor\_id  INNER JOIN patient ON appointments.patient\_id = patient.patient\_id  INNER JOIN users ON patient.username = users.username  WHERE doctor.doctor\_id = ? |
| 2 | getRateDoctor() | SELECT users.name, users.img, ratestar.star, ratestar.feedback, ratestar.datetime  FROM ratestar  INNER JOIN users ON ratestar.username = users.username  WHERE ratestar.doctor\_id = ?  ORDER BY ratestar.id DESC |
| 3 | getDoctorByID() | SELECT cs.name, d.doctor\_id, d.role\_id, d.doctor\_name, d.username, d.gender, d.DOB, d.phone, d.description, d.status, d.img, u.email, d.fee, d.position  FROM doctris\_system.doctor d  INNER JOIN doctris\_system.category\_service cs ON d.category\_id = cs.id  INNER JOIN doctris\_system.users u ON d.username = u.username  WHERE d.doctor\_id = ? |

## 

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# **III. Database Design**

## **1. Database Schema**

## 

## **2. Table Description**

| No | Table | Description |
| --- | --- | --- |
| 1 | User | username: VARCHAR  role\_id: INT  password: VARCHAR  name: VARCHAR  gender: TINYINT  phone: INT  email: VARCHAR  - Primary keys: username  - Foreign keys: role\_id |
| 2 | patient | patient\_id: INT  username: VARCHAR  role\_id: INT  patient\_name:VARCHAR  gender:INT  DOB: DATE  phone: BIGINT  status: BIT  - Primary keys: patient\_id  - Foreign keys: role\_id |
| 3 | doctor | doctor\_id: INT  role\_id: INT  doctor\_name: VARCHAR  username: VARCHAR  gender: BIT  DOB:DATE  phone:BIGINT  descriptionLONGTEXT  status:TINYINT  img:VARCHAR  - Primary keys: doctor\_id  - Foreign keys: role\_id |
| 4 | setting | setting\_id: INT  setting\_name:VARCHAR  description:LONGTEXT  - Primary keys: setting\_id |
| 5 | service | service\_id: INT  category\_id: INT  title: VARCHAR  fee:DOUBLE  description: LONGTEXT  - Primary keys: service\_id |
| 6 | blog | blog\_id: INT  category\_id: INT  title: VARCHAR  img: VARCHAR  describe: LONGTEXT  date: DATE  - Primary keys: blog\_id |
| 7 | like\_blog | username: VARCHAR  blog\_id: INT  isLike: BIT  - Foreign keys: username |
| 8 | category\_blog | id: INT  name: VARCHAR  setting\_id: INT  status: TINYINT  - Primary keys: id  - Foreign keys: setting\_id |
| 9 | comment\_blog | username: VARCHAR  blog\_id: INT  date: DATE  describe: LONGTEXT  - Foreign keys: setting\_id |
| 10 | role | id: INT  name: VARCHAR  setting\_id: INT  status:TINYINT  - Primary keys: id |
| 11 | category\_service | id: INT  name: VARCHAR  setting\_id: INT  status: TINYINT  - Primary keys: id  - Foreign keys: setting\_id |
| 12 | reservations | reservation\_id: INT  patient\_id: INT  service\_id: INT  price: DOUBLE  date: DATE  status: BIT  description: LONGTEXT  - Primary keys: reservation\_id  - Foreign keys: patient\_id, service\_id |
| 13 | doctor\_service | doctor\_id: INT  service\_id: INT  -Foreign - keys: doctor\_id, service\_id |
| 14 | ratestar | username: VARCHAR  doctor\_id: INT  service\_id: INT  star : INT  feedback: LONGTEXT  -Foreign - keys: username |
| 15 | appointments | appointment\_id:INT  doctor\_id: INT  patient\_id: INT  date: DATE  status: BIT  description: LONGTEXT  - Primary keys: appointment\_id  - Foreign keys: patient\_id, doctor\_id |
| 16 | timetable | service\_id: INT  doctor\_id: INT  date: DATE  start: TIME  end: TIME |