LOGIN ARCHITECTURE

```
FXApp.java
    |
    | 1
    v
LOGIN.fxml
LOGIN.java ──────── 5 ──────────> [UserRole].fxml
                                   [UserRole].java
EncryptDecrypt.java <── 2 ──> LOGIN.java
    |
    | 3
    v
User Repository
    |
    | 4
    v
Role Repository ──── 4 ──> LOGIN.java
```
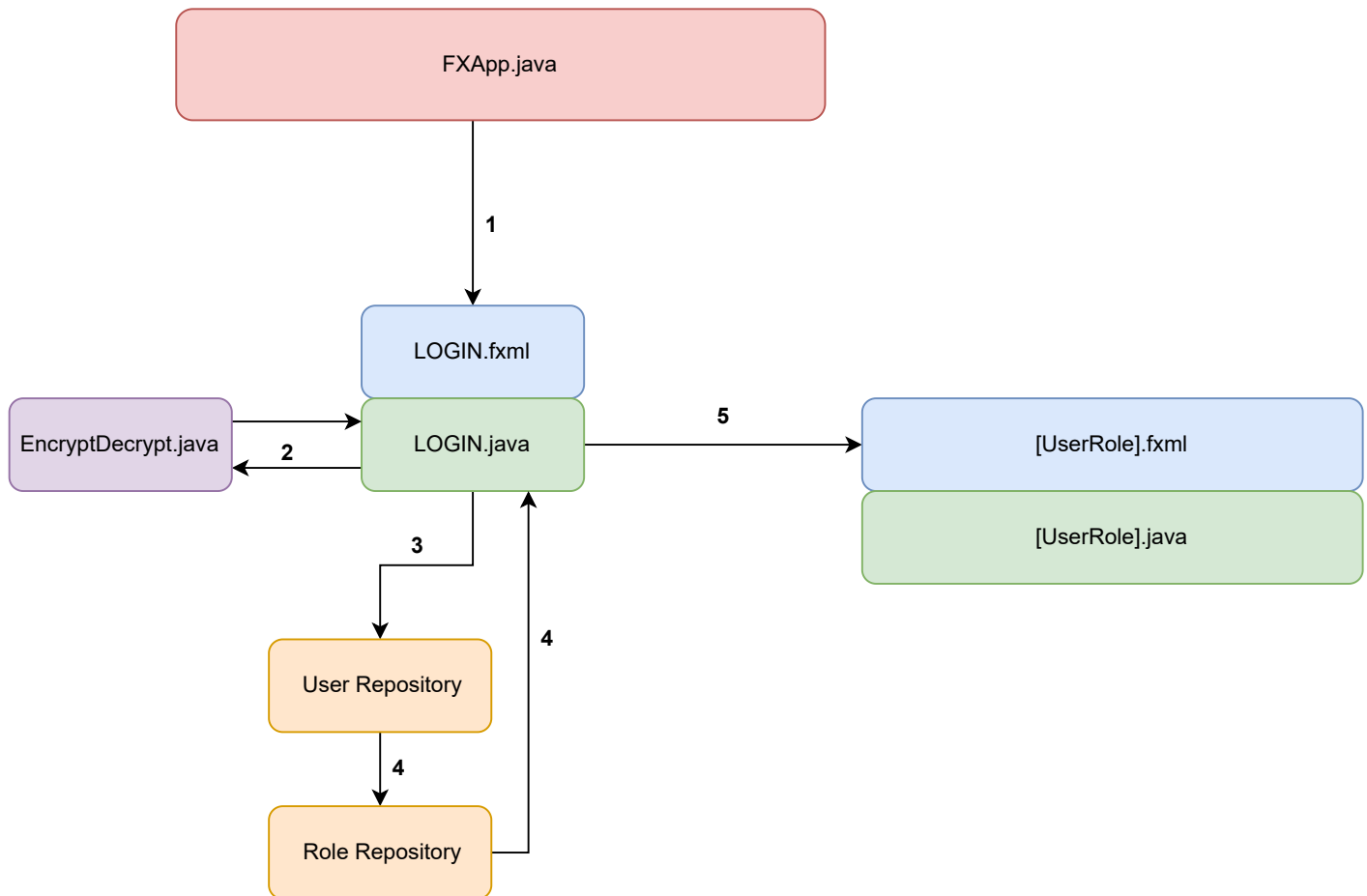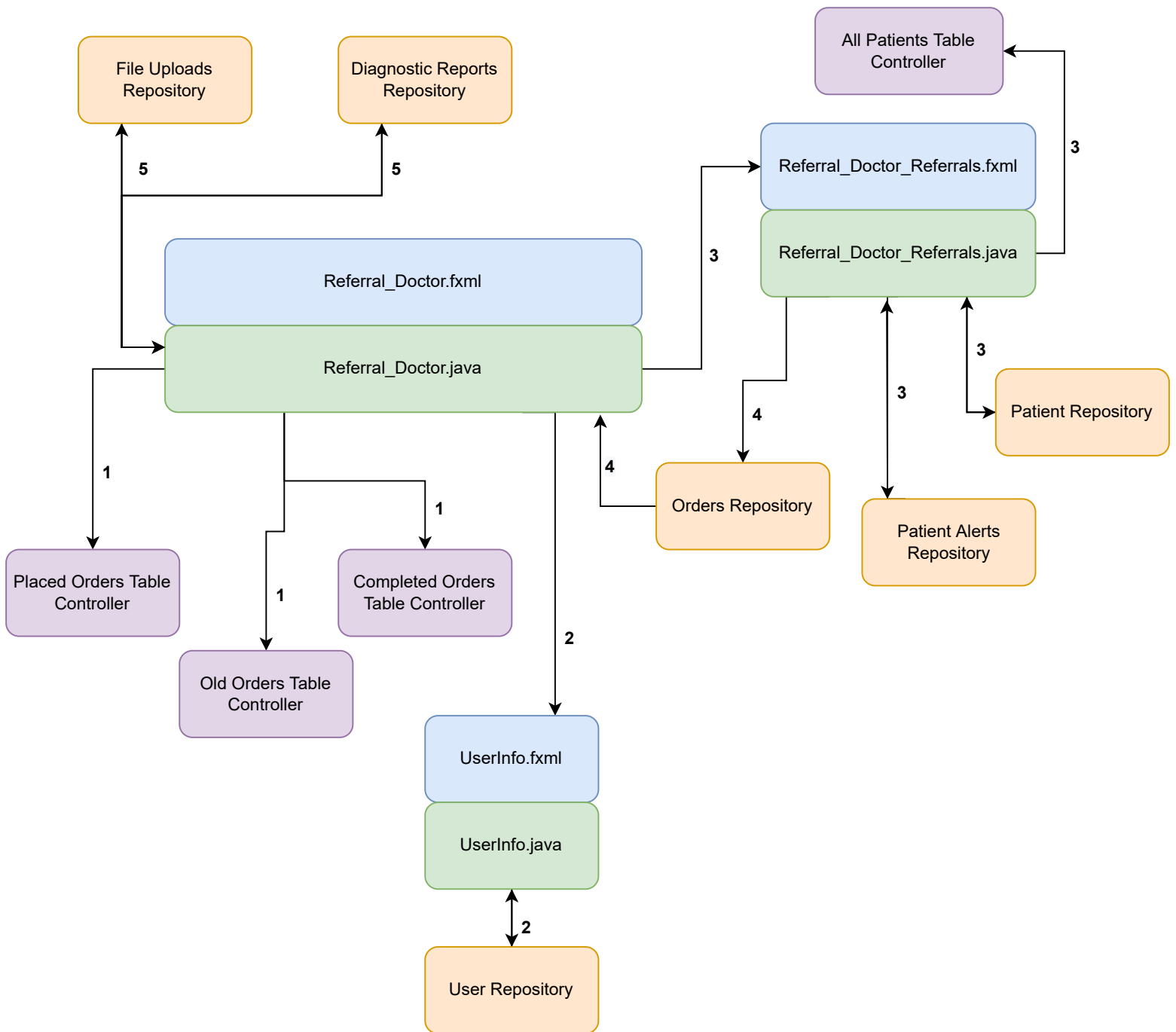
1. App launches to login page

2. Credentials are encrypted

3. Credentials compared to users in database

4. After successful authentication, user role is taken from database and returned to login.java controller
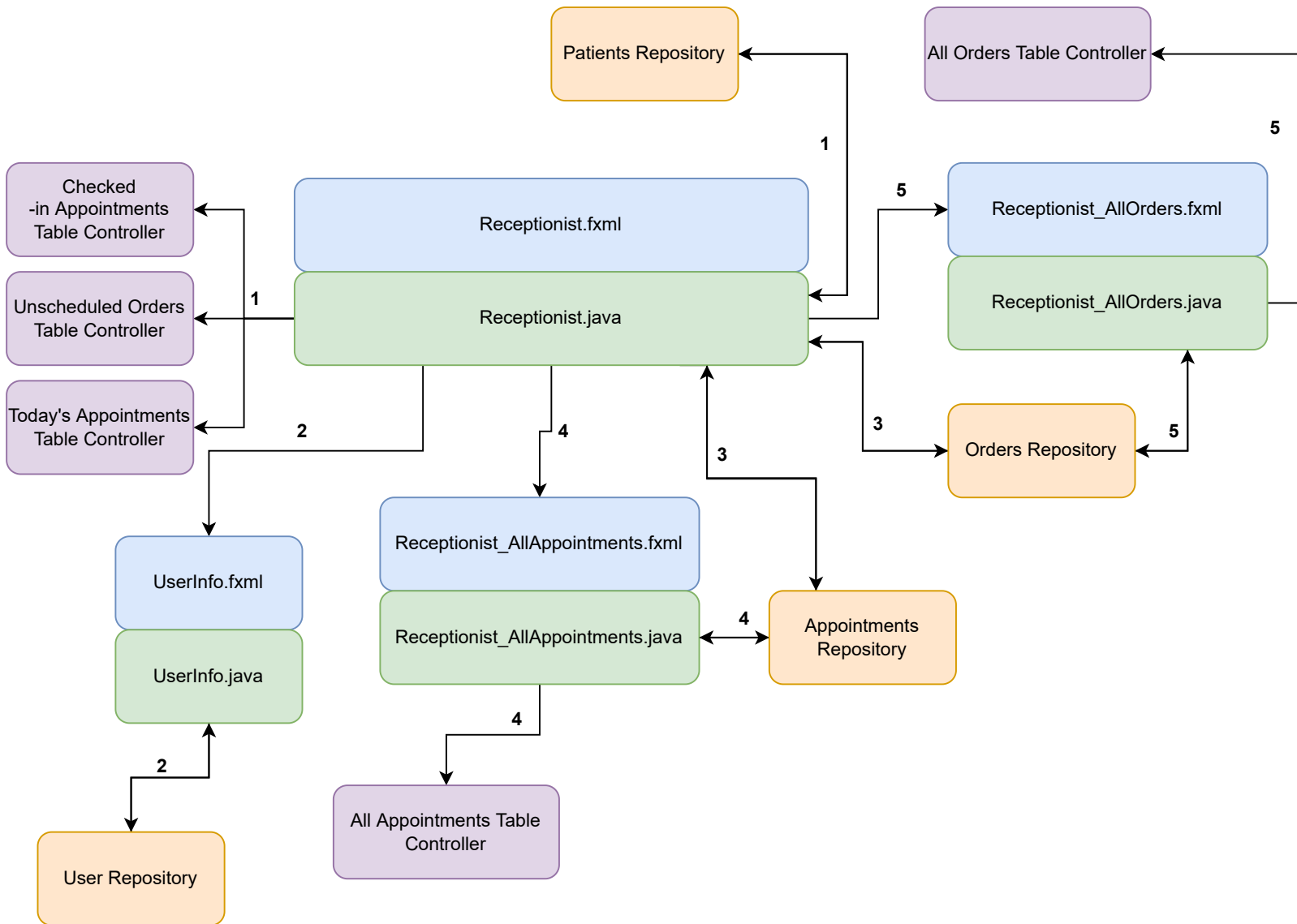
5. User redirected to role specific home page

REFERRAL_DOCTOR ARCHITECTURE

File Uploads Repository

Diagnostic Reports Repository

All Patients Table Controller

5

5

Referral_Doctor.fxml

Referral_Doctor_Referrals.fxml

3

Referral_Doctor_Referrals.java

Referral_Doctor.java

3

3

Patient Repository

1

1

3

1

Placed Orders Table Controller

4

4

Completed Orders Table Controller

Orders Repository

Patient Alerts Repository

1

Old Orders Table Controller

2

UserInfo.fxml

UserInfo.java

2

User Repository

1. **Tables on home page are populated**

2. **Redirect to and populate user info page with user credentials from database, allow for modification of user credentials**

3. **Redirect to and populate referrals page from database, allow for creation of new patients**

4. **Query database to create new order**

5. **Query database for images and reports**

RECEPTIONIST ARCHITECTURE

Patients Repository

All Orders Table Controller

Checked -in Appointments Table Controller

Receptionist.fxml

5

Receptionist_AllOrders.fxml

5

1

Unscheduled Orders Table Controller

1

Receptionist.java

Receptionist_AllOrders.java

Today's Appointments Table Controller

2

4

3

3

Orders Repository

5

UserInfo.fxml

Receptionist_AllAppointments.fxml

UserInfo.java

Receptionist_AllAppointments.java

4

Appointments Repository

2

4

User Repository
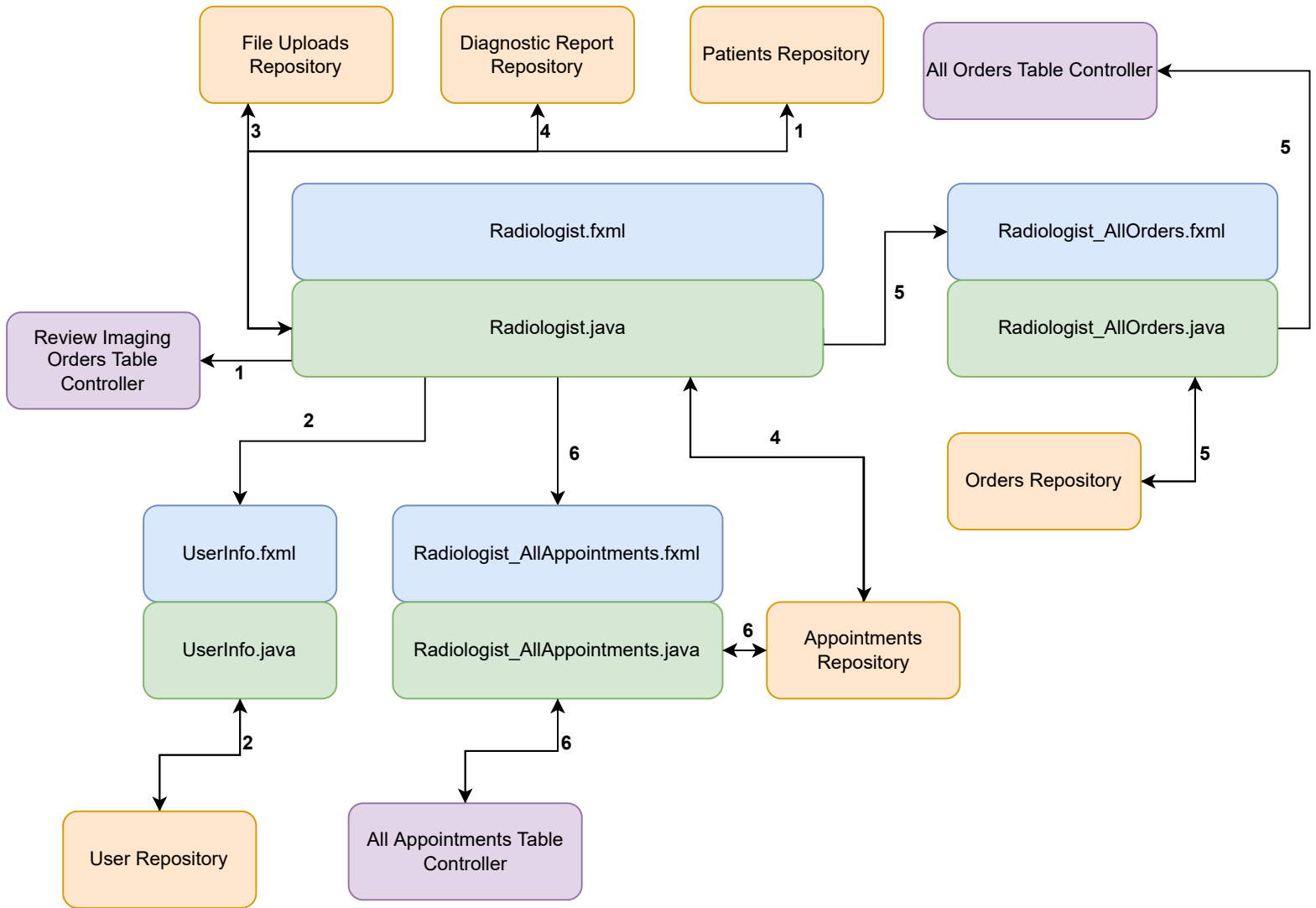
All Appointments Table Controller

1. **Tables on home page populate**
2. **Redirect to and populate user info from database, allow for modifying credentials**
3. **Query database to create appointments from orders and check appointments in**
4. **Redirect to all appointments page and query database to populate table**
5. **Redirect to all orders page and query database to populate table**
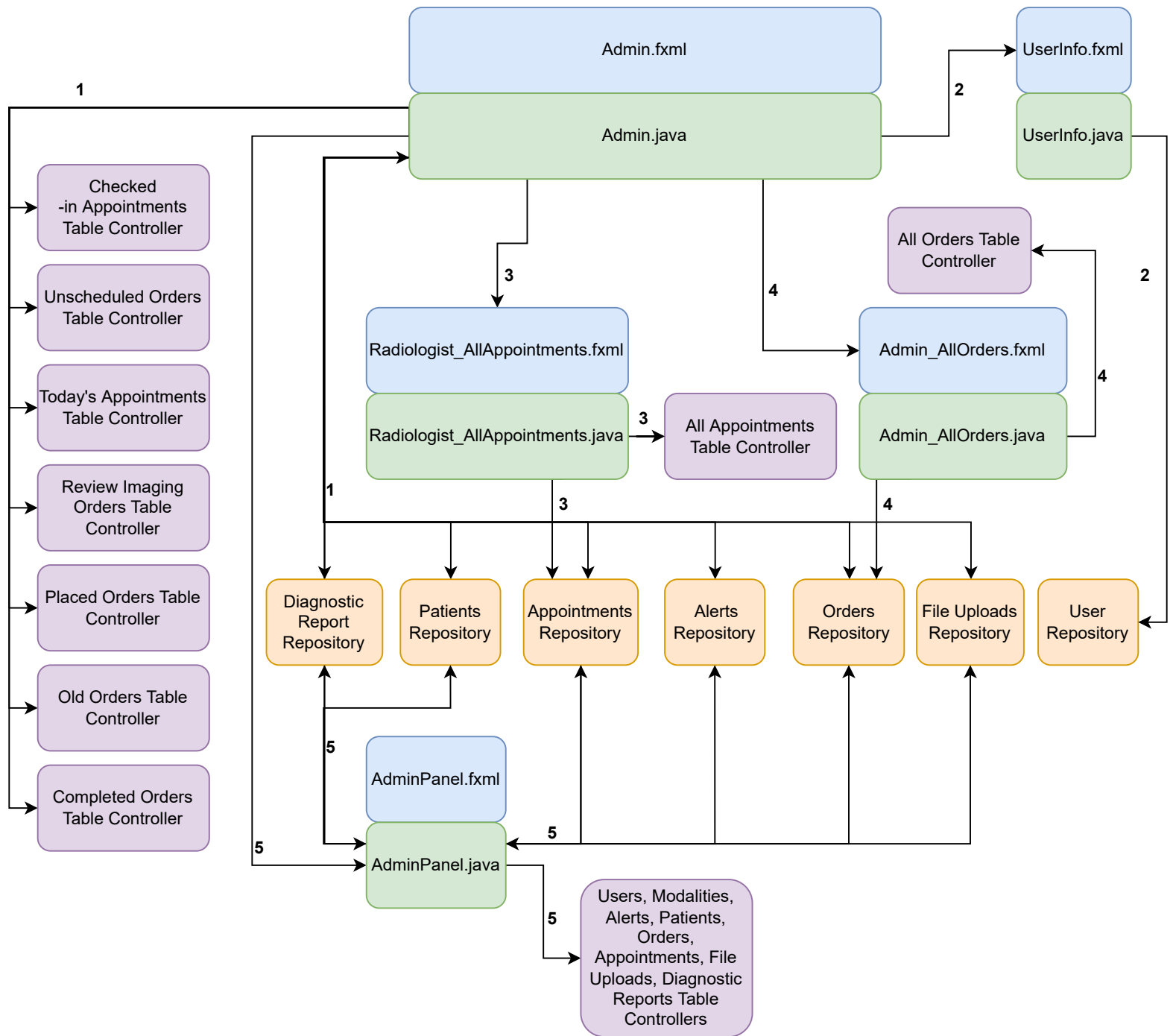
TECHNICIAN ARCHITECTURE
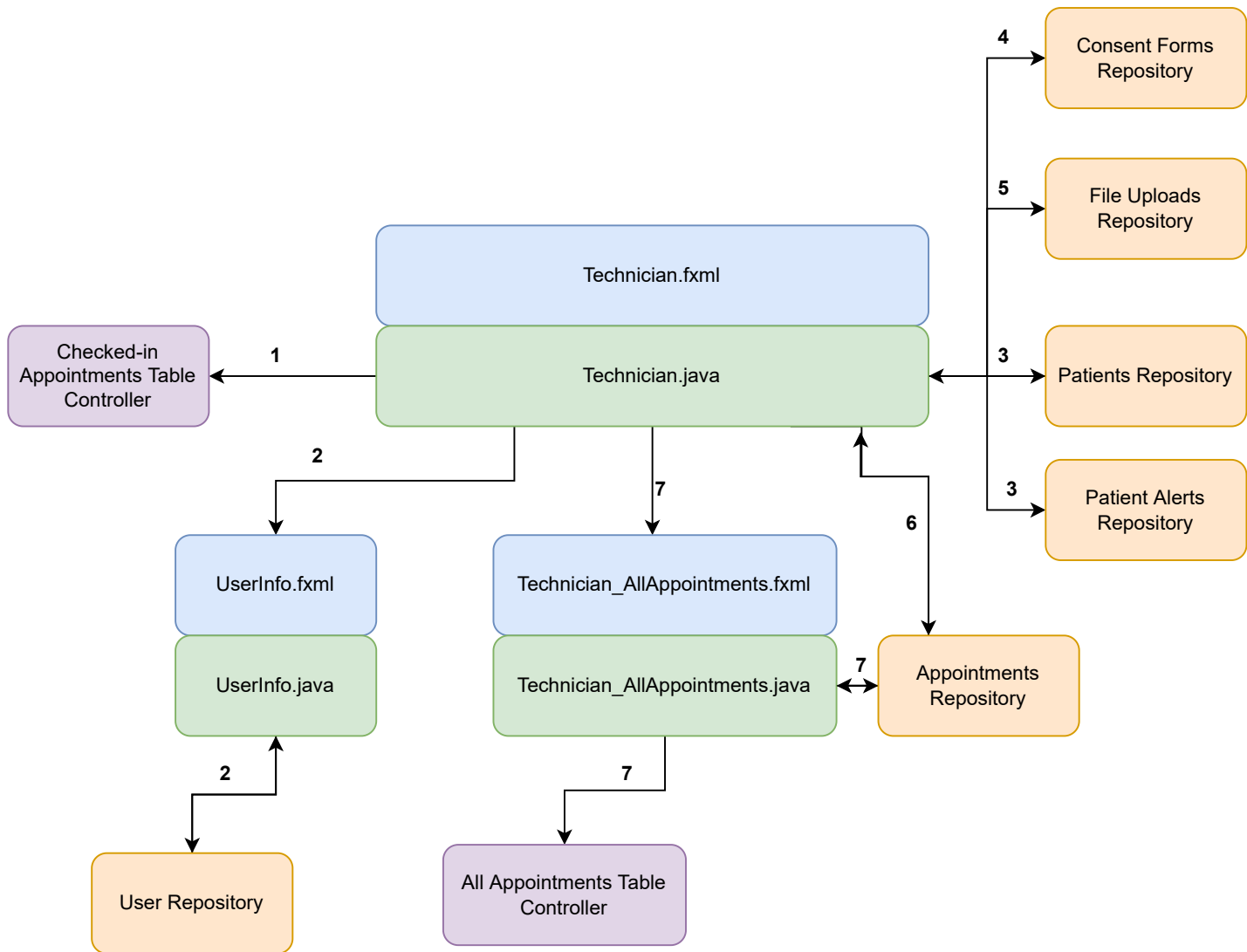
1. **Tables on home page populate**
2. **Redirect to and populate user info from database, allow for modifying credentials**
3. **Query any patient alerts connected to patients from database**
4. **Upload consent form and add to database**
5. **Upload scan images and add to database**
6. **Query database to push appointment to radiologist**
7. **Redirect to all appointments page and query database to fill table**

RADIOLOGIST ARCHITECTURE

1. **Tables on home page populate**
2. **Redirect to and populate user info from database, allow for modifying credentials**
3. **Query database to view uploaded images**
4. **Write diagnostic report and query database to add report and complete order**
5. **Redirect to all orders page and query database to populate table**
6. **Redirect to all appointments page and query database to populate table**

ADMIN ARCHITECTURE

1. Tables on home page populate
2. Redirect to and populate user info from database, allow for modifying credentials
3. Redirect to all orders page and query database to populate table
4. Redirect to all appointments page and query database to populate table
5. Redirect to admin panel and allow for creation or modification of users, modalities, alerts, patients, orders, appointments, file uploads, and diagnostic reports