Software Design Specification for JU Transport Requisition System.

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Fig 1: Use Case Diagram of JU Transport Requisition System.

3 Extended Use Cases

Use case ID: UC1.1
Use case Name: Register clients employee id,email and phone number

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Actor: Registration office
Description:
      1. Take Employee name, ID,email.
      2. Save Employee name, ID,emai
Exception:
      1. Page not found.
      2. No database connection.
Precondition:
      1. URL of login page from web browser.
Post Condition:
      1. Successful account creation – Logging in to system.
      2. Unsuccessful creation – Stay in same page.
      3. Exception - Stay in same page if possible.

Use case ID: UC1.2
Use case Name: Creates account for client

Actor: Transport office
Description:
      1. Input employee ID,email and password.
      2. Check User ID and password (User authentication).
      3. Save ID and Password (Cookies).
      4.Remember Password.
Exception:
      1. Page not found.
      2. No database connection.
Precondition:
      1. URL of login page from web browser.
Post Condition:
      1. Successful stored information– Logging in to system.
      2. Unsuccessful didn't store – Stay in same page.
      3. Exception - Stay in same page if possible.

Use case ID: UC1.3
Use case Name: Add or remove car

Actor: Transport office
Description:
      1. Input user ID and password
      2. Add and remove any trip/transport
      3. Save status
Exception:
      1. Page not found.
      2. No database connection.
Precondition:
      1. URL of login page from web browser.
Post Condition:
      1. Successful login – Logging in to system.
      2. Unsuccessful login – Stay in same page.
      3. Exception - Stay in same page if possible.

Use case ID: UC1.4
Use case Name: Update Transport Information

Actor: Transport office
Description:
      1. Input ID and password
      2. Add and remove any trip/transport.Add customer/driver information
      3. Save status
Exception:
      1. Page not found.
      2. No database connection.
Precondition:
      1. URL of login page from web browser.
Post Condition:
      1. Successful login – Updating system.
      2. Unsuccessful login – Stay in same page.
      3. Exception - Stay in same page if possible.

Use case ID: UC1.5
Use case Name: View all Trip schedule

Actor: Transport office
Description:
      1. Input ID and password to login
      2. View information with all Trip information.
      3. Save status
Exception:
      1. Page not found.
      2. No database connection.
Precondition:
      1. URL of login page from web browser.
Post Condition:
      1. Successful login –All the trip schedule viewed succefuly..
      2. Unsuccessful login – Stay in same page.
      3. Exception - Stay in same page if possible.

Use case ID: UC1.6
Use case Name: Confirm Reservation

Actor: Transport office
Description:
      1. Input ID and password to login
      2.If Available then Confirm The reservation.
      3. Save status
Exception:
      1. Page not found.
      2. No database connection.
Precondition:
      1. URL of login page from web browser.
Post Condition:
      1. Successful login – Reservation Confirmed.
      2. Unsuccessful login – Stay in same page.
      3. Exception - Stay in same page if possible.

Use case ID: UC1.7
Use case Name: Cancel Reservation

Actor: Transport office
Description:
      1. Input user ID and password
      2. Cancel any reservation.
      3. Save status
Exception:
      1. Page not found.
      2. No database connection.
Precondition:
      1. URL of login page from web browser.
Post Condition:
      1. Successful login – Reservation cancelled.
      2. Unsuccessful login – Stay in same page.
      3. Exception - Stay in same page if possible.

Use case ID: UC1.8
Use case Name: Login

Actor: Client
Description:
      1. Input user ID and password
      2.Save the ID and Password.
Exception:
      1. Page not found.
      2. No database connection.
Precondition:
      1. URL of login page from web browser.
Post Condition:
      1. Successful login – Logging in to system.
      2. Unsuccessful login – Stay in same page.
      3. Exception - Stay in same page if possible.

Use case ID: UC1.9
Use case Name: Request for a Reservation

Actor: Transport Office
Description:
      1. Input user ID and password to login
      2. Check if any available trip
      3. Save status
Exception:
      1. Page not found.
      2. No database connection.
Precondition:
      1. URL of login page from web browser.
Post Condition:
      1. Successful login – Successfully requested.
      2. Unsuccessful login – Stay in same page.
      3. Exception - Stay in same page if possible.

Use case ID: UC1.10
Use case Name: Get Your reservation

Actor: client
Description:
    1. Input user ID and password
    2. Got a reservation after confirmation
    3. Save status
Exception:
    1. Page not found.
    2. No database connection.
Precondition:
    1. URL of login page from web browser.
Post Condition:
    1. Successful login –Getting a new reservation.
    2. Unsuccessful login – Stay in same page.
    3. Exception - Stay in same page if possible.

Use case ID: UC1.11
Use case Name: See Your profile

Actor: Client
Description:
    1. Input user ID and password
    2. View Profile
    3. Save status
Exception:
    1. Page not found.
    2. No database connection.
Precondition:
    1. URL of login page from web browser.
Post Condition:
    1. Successful login – Viewing Profile
    2. Unsuccessful login – Stay in same page.
    3. Exception - Stay in same page if possible.

Use case ID: UC1.12
Use case Name: Login

Actor: Client
Description:
    1. Input user ID and password
    2. Save status
Exception:
    1. Page not found.
    2. No database connection.
Precondition:
    1. URL of login page from web browser.
Post Condition:
    1. Successful login – Logging in the system.
    2. Unsuccessful login – Stay in same page.
    3. Exception - Stay in same page if possible.

Use case ID: UC1.13
Use case Name: View all Trip schedule

Actor: Driver
Description:
      1. Input user ID and password
      2. Successful Login
      3.View all trip schedule.
      4. Save status
Exception:
      1. Page not found.
      2. No database connection.
Precondition:
      1. URL of login page from web browser.
Post Condition:
      1. Successful login – Viewing Profile
      2. Unsuccessful login – Stay in same page.
      3. Exception - Stay in same page if possible.

Use case ID: UC1.14
Use case Name: See Your profile

Actor: Driver
Description:
      1. Input user ID and password
      2. View Profile
      3. Save status
Exception:
      1. Page not found.
      2. No database connection.
Precondition:
      1. URL of login page from web browser.
Post Condition:
      1. Successful login – Viewing Profile
      2. Unsuccessful login – Stay in same page.
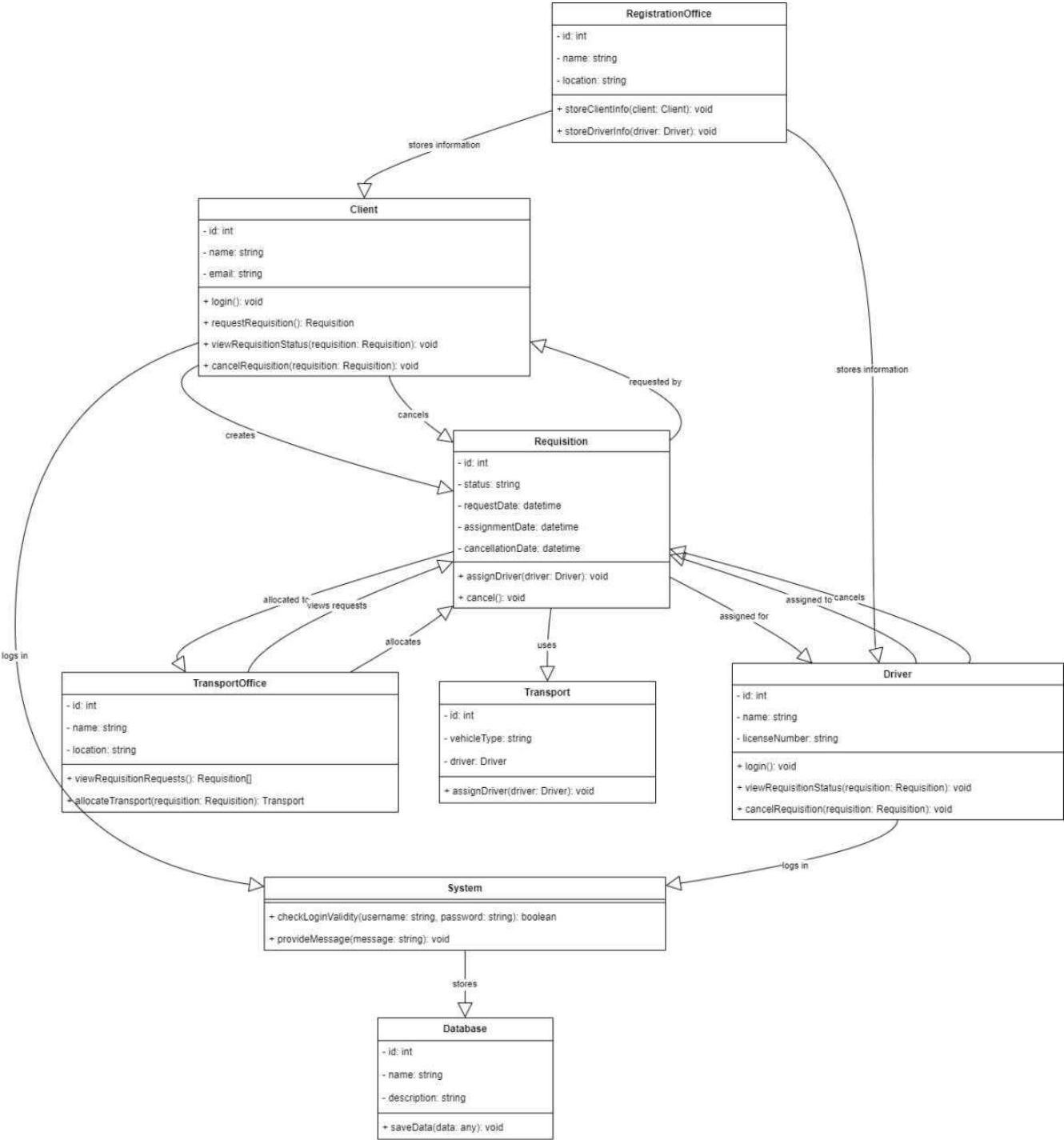   3. Exception - Stay in same page if possible.

4 Class Diagram

Fig 2: Class Diagram of JU Transport Requisition System.
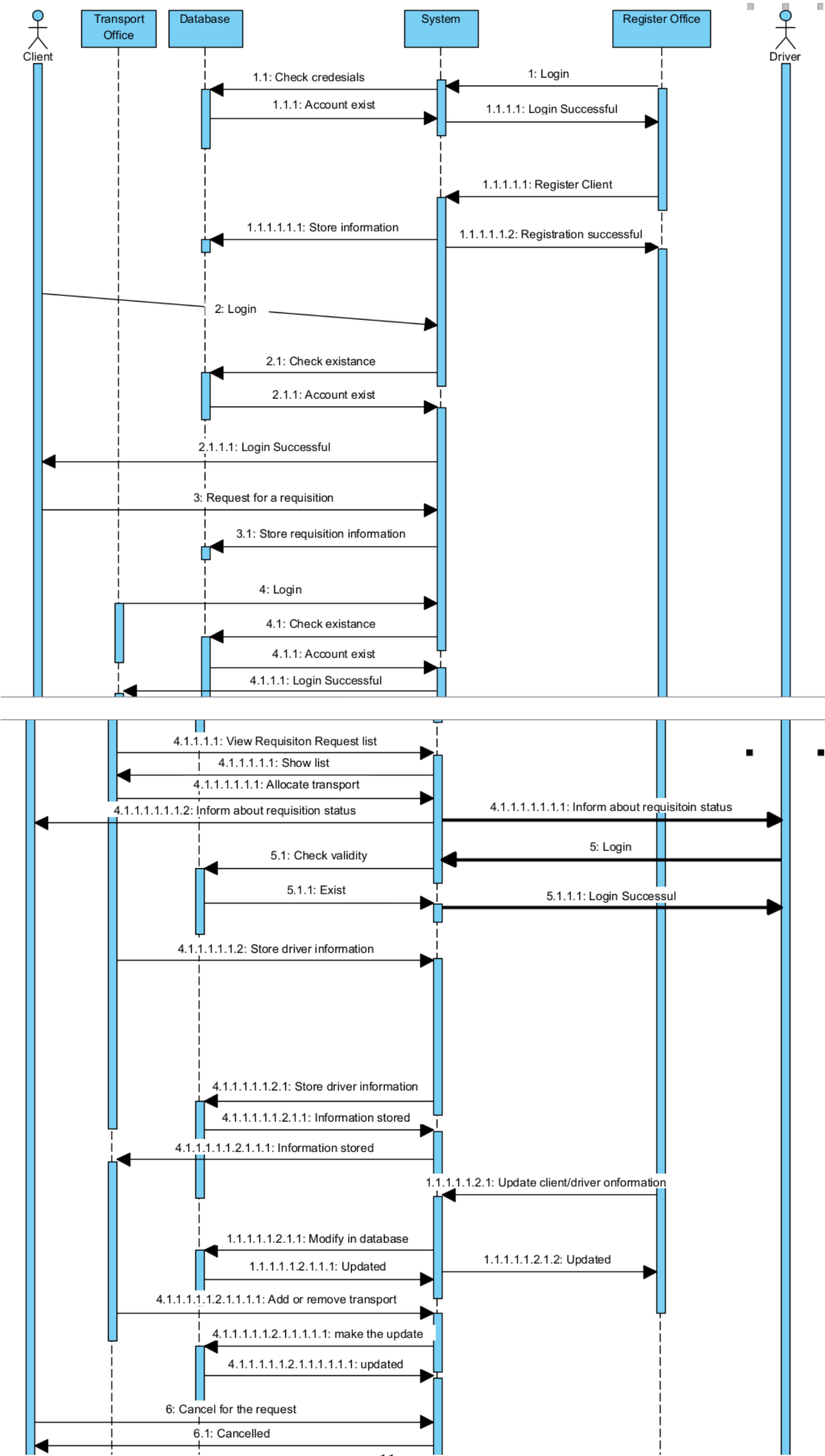
5 Sequence Diagram

Figure 1: Fig 3: Sequence Diagram of JU Transport Requisition System.
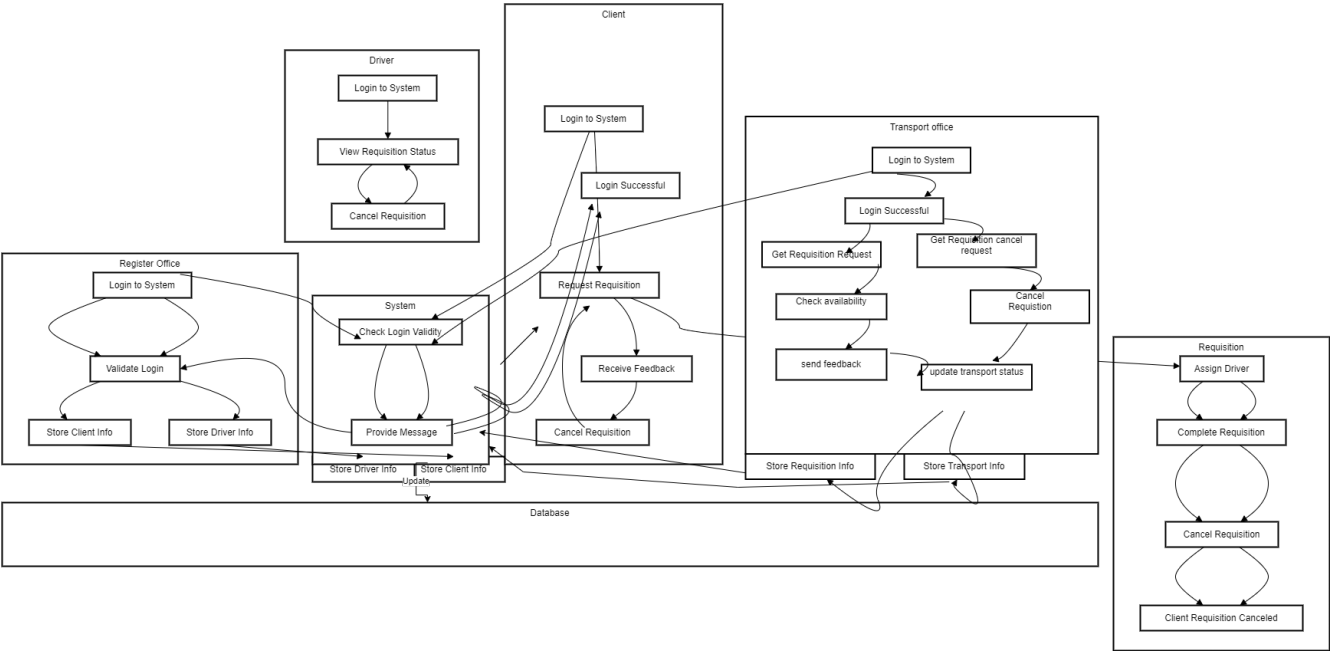
6 Activity Diagram

Fig 4: Activity Diagram of JU Transport Requisition System.
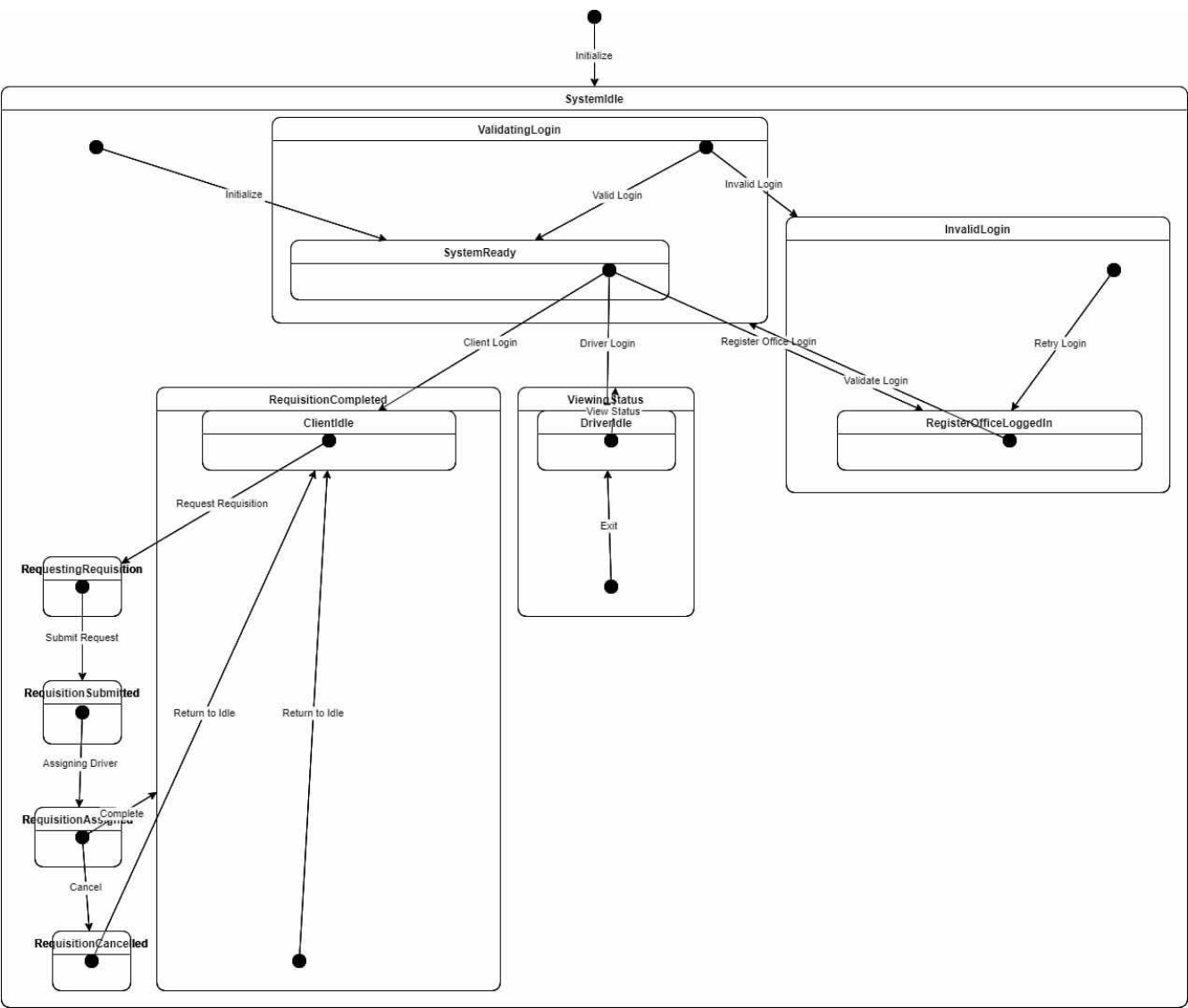
7 State Chart Diagram

Fig 5: State Diagram of JU Transport Requisition System.

8   Database Schema

Client

PK	id INT
	name VARCHAR(255) NOT NULL
	email VARCHAR(255) UNIQUE NOT NULL
	registration_office_id INT
	FOREIGN KEY (registration_office_id) REFERENCE

Driver

PK	id INT
	name VARCHAR(255) NOT NULL
	license_number VARCHAR(20) UNIQUE NOT NULL
	registration_office_id INT
	FOREIGN KEY (registration_office_id) REFERENCE

RegistrationOffice

PK	id INT
	name VARCHAR(255) NOT NULL
	location VARCHAR(255) NOT NULL

Requisition

PK	id INT
	client_id INT
	driver_id INT
	status VARCHAR(50) NOT NULL
	request_date DATETIME NOT NULL
	assignment_date DATETIME
	cancellation_date DATETIME
	transport_office_id INT
	system_id INT
	database_id INT
	FOREIGN KEY (client_id) REFERENCES Client(id)
	FOREIGN KEY (driver_id) REFERENCES Driver(id)
	FOREIGN KEY (transport_office_id) REFERENCES
	FOREIGN KEY (system_id) REFERENCES System(
	FOREIGN KEY (database_id) REFERENCES Databa

TransportOffice

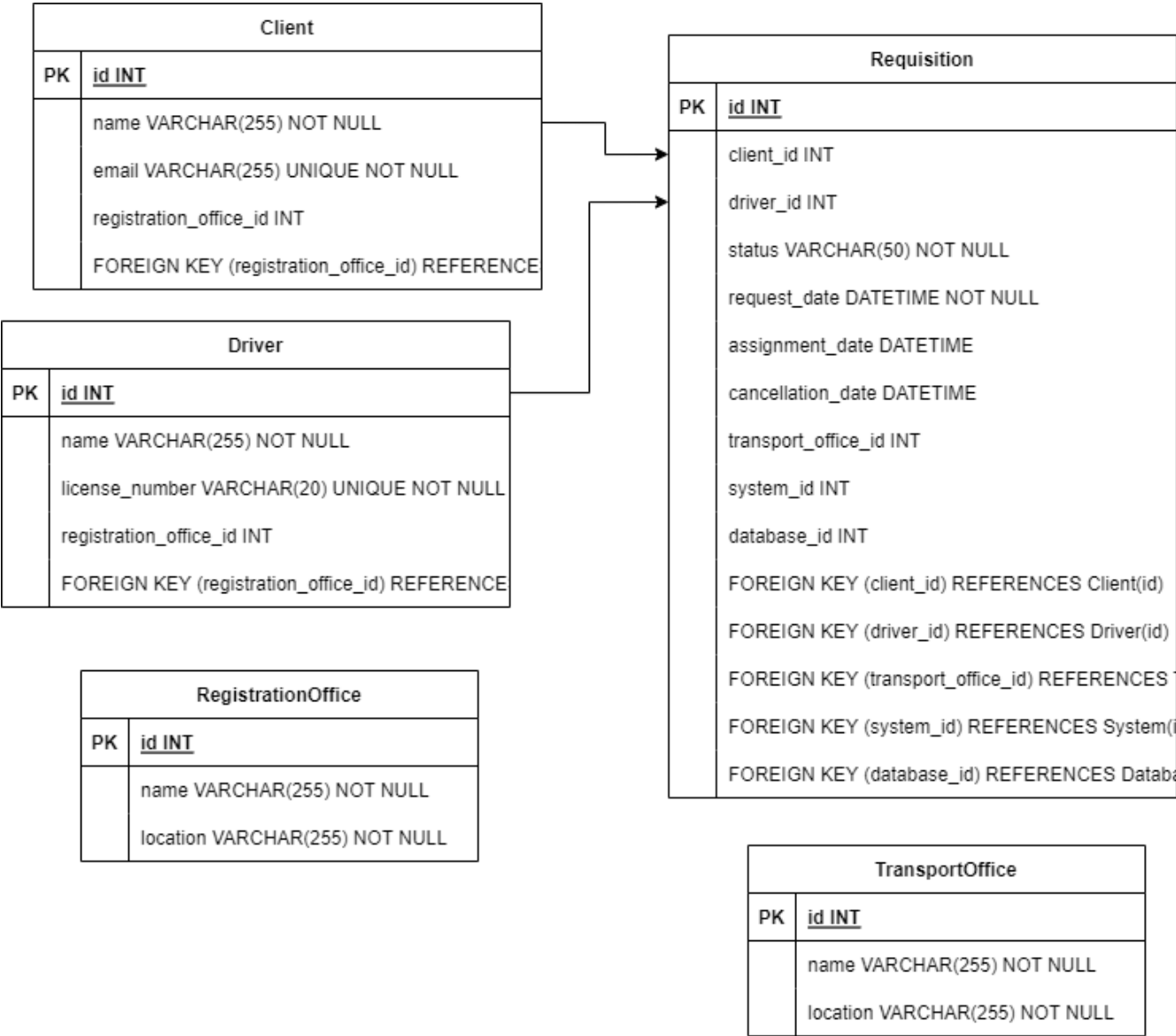| PK	id INT
	name VARCHAR(255) NOT NULL
	location VARCHAR(255) NOT NULL

Fig 6: Database Schema of JU Transport Requisition System.