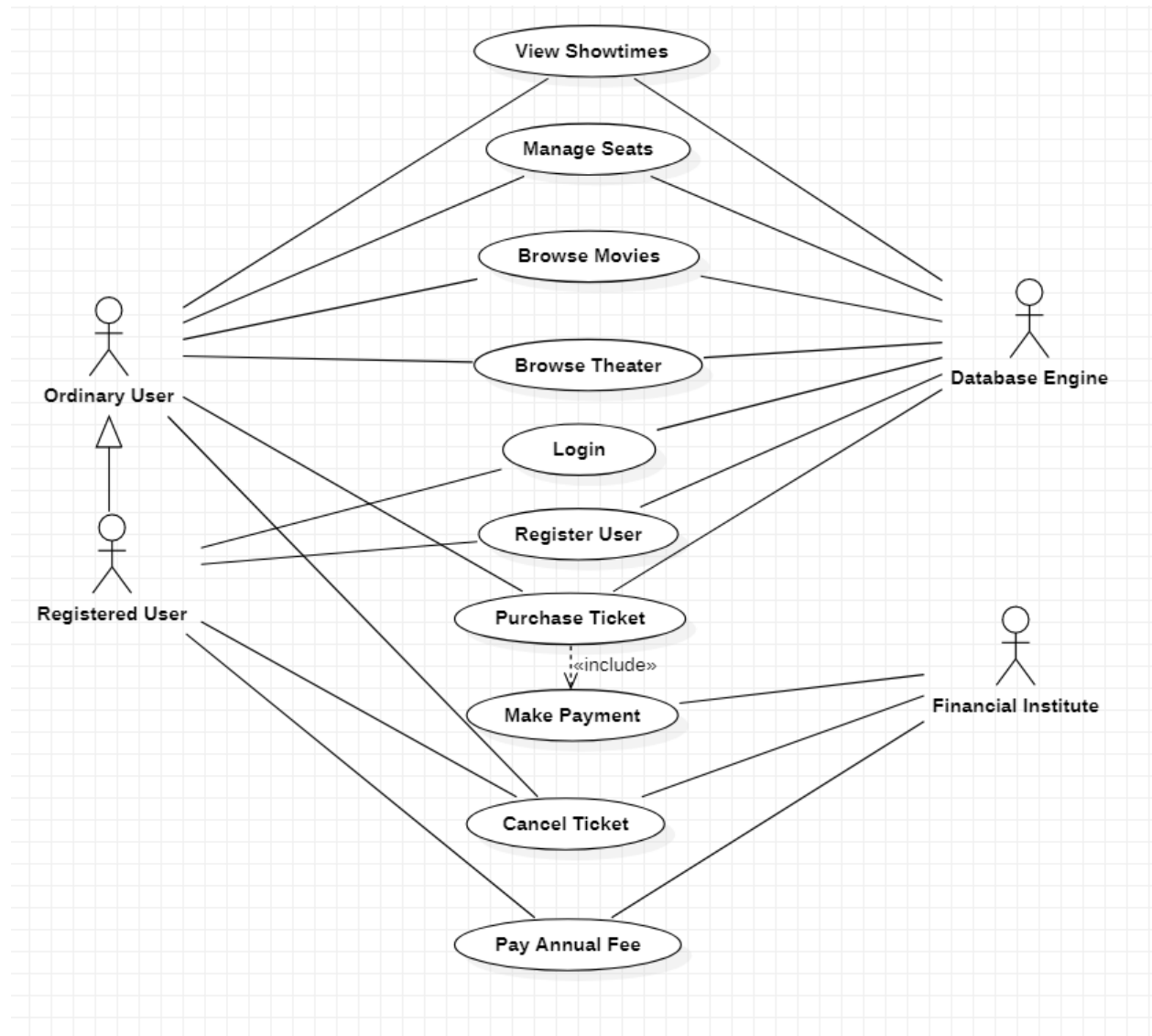


ENSF 619 Term Project - Group 1

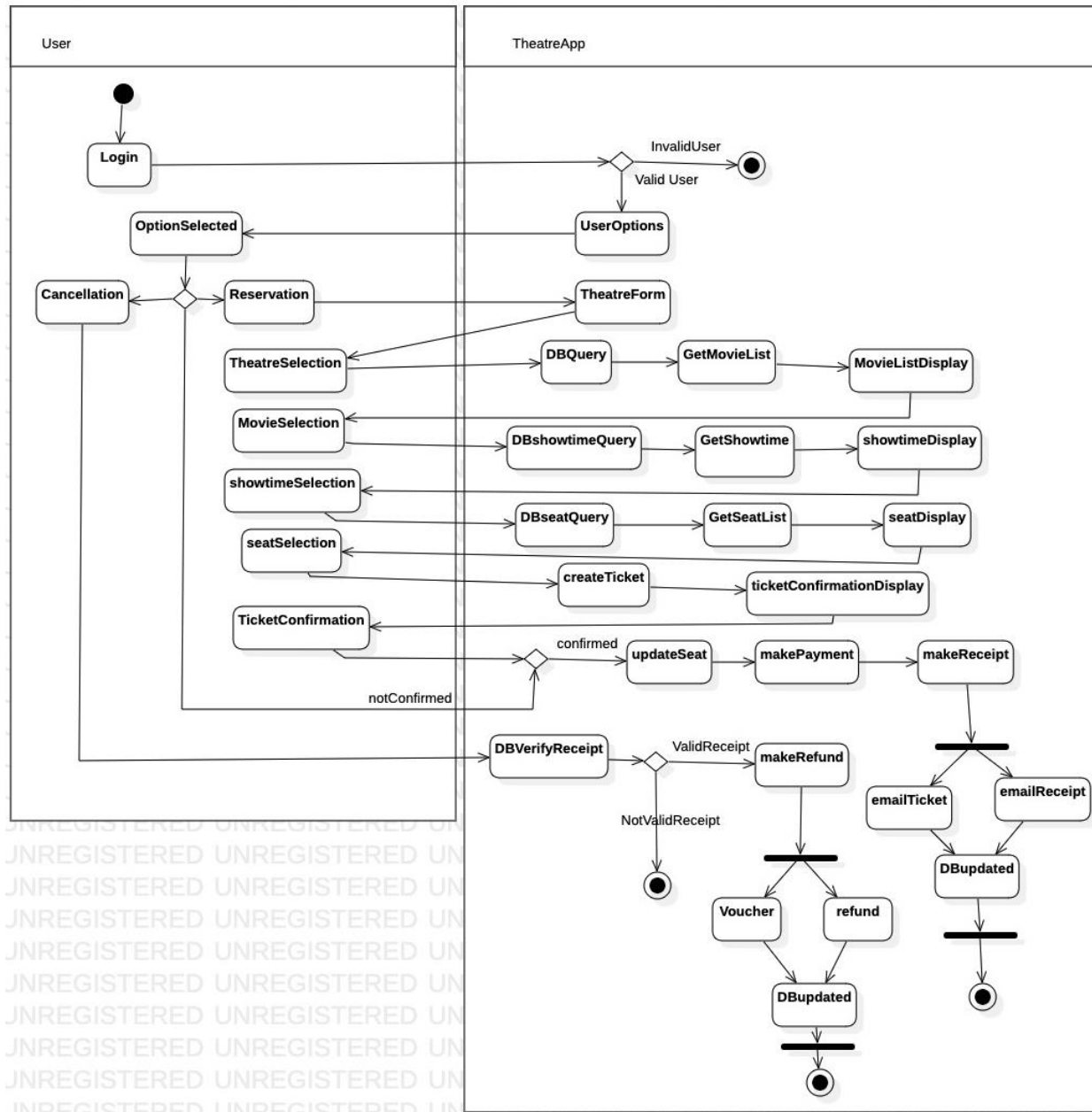
Design Document

Michael Adelure
Davis Allan
Bright Anorchie
Khaled Behairy

System Use Case Diagram

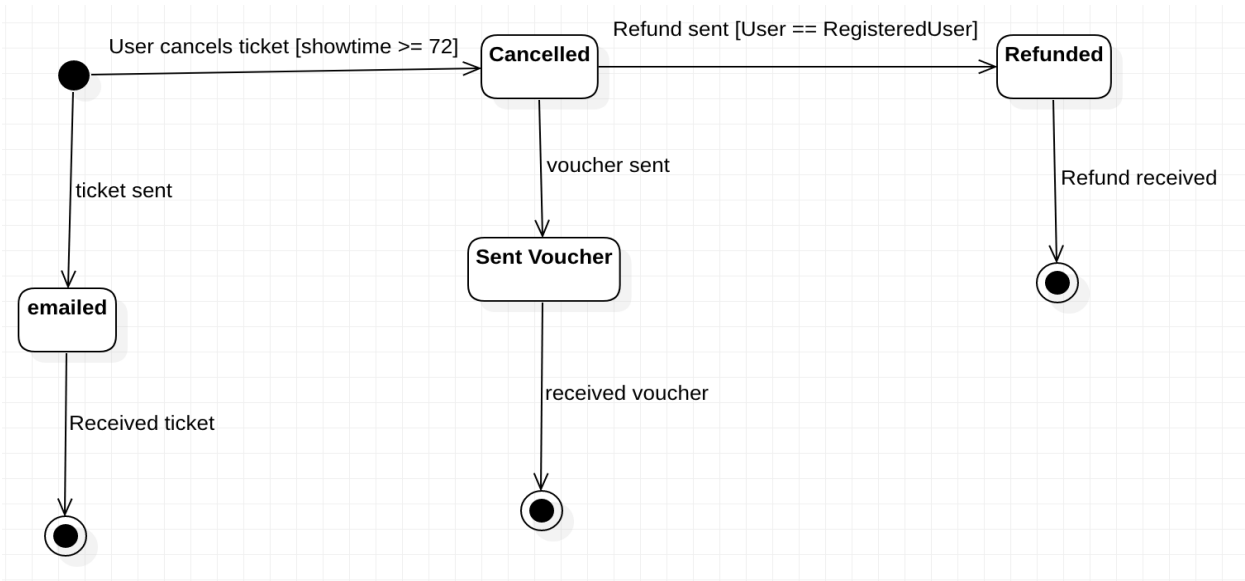


System Activity Diagram

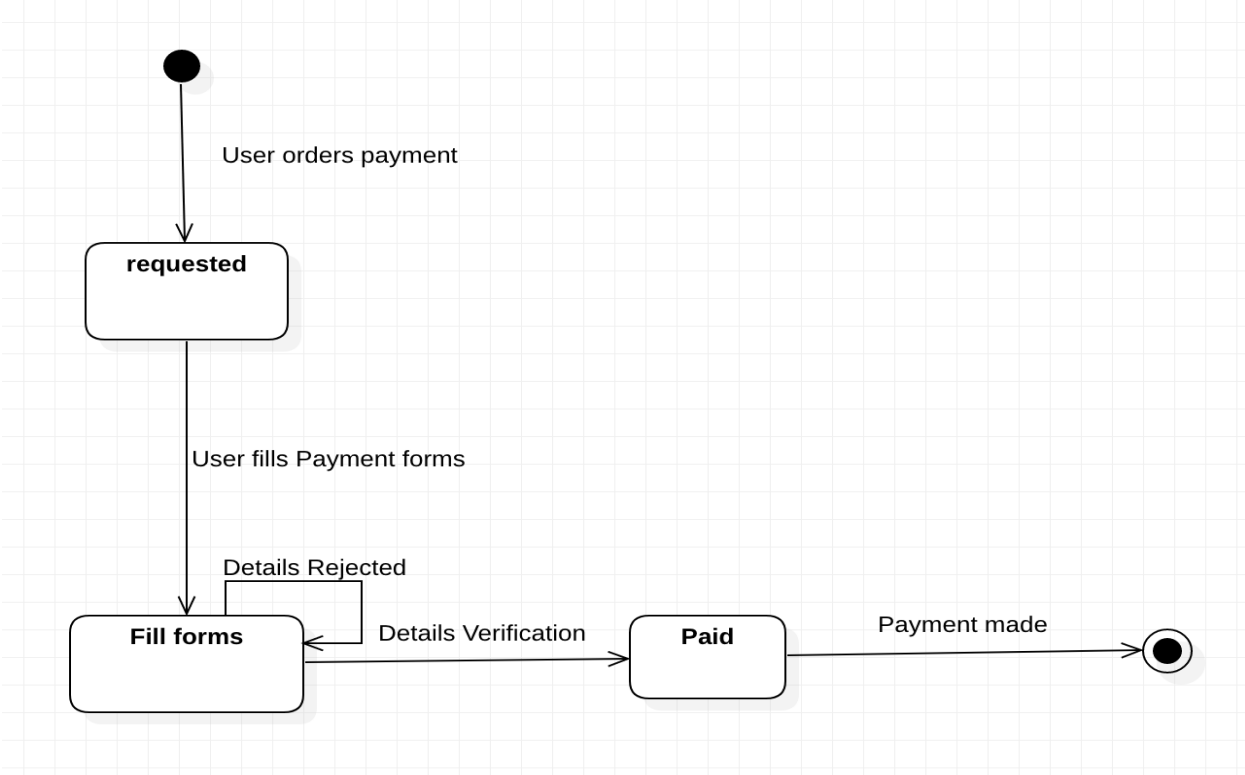


State Transition Diagram

Ticket Object



Payment Object



Scenarios

Login

In this scenario, this is the first screen that the user will be presented with upon launching the application. If the user is registered, they will be able to login as a registered user by providing their email and password, or they have the option to proceed as a regular user. Finally there will be an option for them to click to sign up to become a registered user.

Assuming they are a registered user, after entering their email and password, the system will then validate the credentials entered with the database and if they are valid, allow the user to login into the system. If the registered user has made an error when entering either the username or password, they will be shown an error message and prompted to try entering their credentials again

Register User

In this scenario, a user wishes to register. After selecting this option, the system will prompt them to enter their user-information such as name, email, address, and card-information as means of payment. Then it will trigger the Pay Annual Fee use case.

Browse Theater

In this scenario, the system will query the database for all theaters and present this list to the user. From here, the user will then select the desired theater and then this will trigger the Browse Movies use case.

Browse Movies

In this scenario, a user has already selected the theater, and the system will now query the database to gather the list of movies that are currently playing. This will then be presented to the user where they will be able to view the relevant information about the movie such as title. The user will then be able to select the desired movie and then this will trigger the View Showtimes use case.

View Showtimes

This scenario should be available to users after selecting a Movie from the Browse Movies scenario. Selecting the movie should trigger a query from the database and retrieve all showtimes for the specified movie on the specified date. Showtimes will be displayed as a list to the user. Once the user selects a showtime, this should trigger Manage Seats use case.

Manage Seats

In this scenario, a user has already selected a theater, movie, and showtime and is currently looking to manage the seats for this reservation. At this point, the system will graphically display the theater seats for the given auditorium and show which seats are available and which are already reserved for this showtime. After the user has selected their desired seats, they will be able to select the confirmation that will initiate the next step in the checkout process, Make Payment.

Purchase Ticket

In this scenario, a user has selected their desired movie, seats, and showtime and has decided to proceed to checkout. At this point, the system will present the user with the reservation details and the make payment option. Assuming the user is satisfied with their selection, they can select the make payment option to continue the checkout process.

Make Payment

This scenario is initiated after the Purchase Ticket scenario. This is the step where the system interacts with the bank to send the payment request and receive confirmation from the bank. In this scenario, a user has selected their theater, movie, showtime, and seat(s) and then proceeds to the checkout interface to make payment to complete their reservation. The user is prompted to enter their method of payment and submits this to the system, the system will then confirm the completion of the process. After successfully making the payment, the user is sent the ticket and the receipt to their email. The reservation is then saved in the Movie Theatre Database.

Cancel Ticket

In this scenario, a user has already purchased a ticket and wishes to cancel their reservation, upon selecting the cancel ticket option, a user will be prompted for their reservation number. The system verifies the ticket purchase, and whether the user is a registered user or not, and if at the time of requesting the cancellation it is more than 72 hours from the showtime. If the request is within 72 hours of the showtime, the system will not allow the user to cancel their ticket. Otherwise, if the user is a regular user, they are required to pay a 15% admin fee, and they will receive a voucher for a discount on a future ticket purchase with a 1 year expiration date. If the user is a registered user, they will receive a full refund of their ticket purchase and are not required to pay the 15% admin fee.

Once the ticket is cancelled, the selected seats should be released and become available for other users to reserve. This change should be reflected in the Manage Seats use case.

Pay Annual Fee

In this scenario, the registered user has successfully created their account, and is now required to sign up for the annual subscription. The user will be required to pay \$20 per year to maintain their subscription. At this point the system will prompt the user if they agree to the terms of the subscription, and if they do, it will submit the payment and confirm the completion of the process. Note: at this point, user has already entered their banking information as part of the registration use case. Upon successfully completing, the user will now become a Registered User.

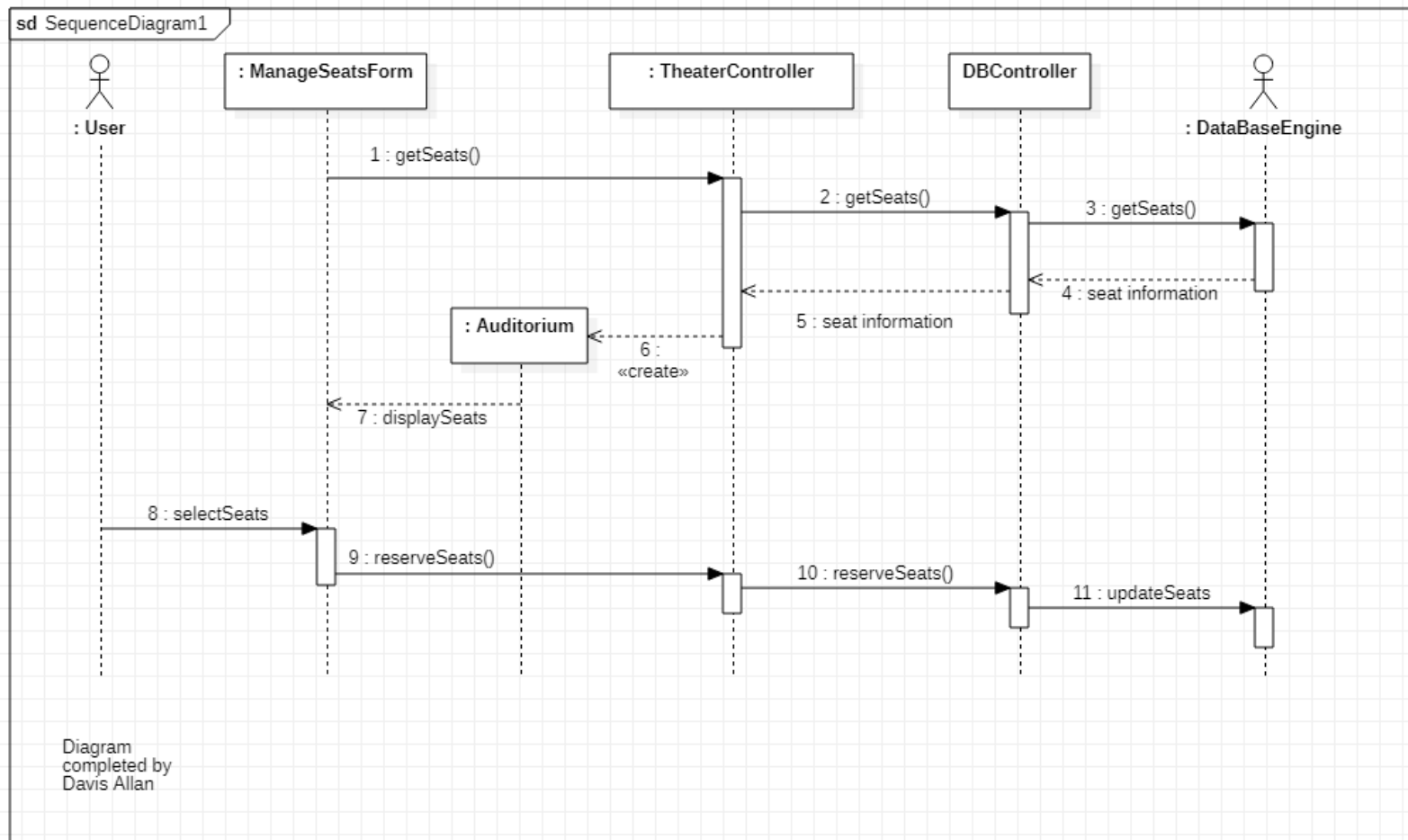
List of good-candidate objects

Candidate Object	Operations on candidate object
System	Validate login Query database for theater list Query database for movie list Query database for showtime list Verify ticket purchase
Theater	Get/Display Theatre Get movie list
Auditorium	Get/Display Auditorium Get seats Graphically display seats
Movie	Get list of showtimes Reserve a seat(s)
Showtime	Display Showtime
Seat	Manage seat(s)
User	Register Cancel ticket Purchase ticket Checkout Make payment
Registered User	Login Purchase/cancel ticket Make payment
Ticket	Email ticket
Payment	Send payment Confirm payment
Voucher	Email voucher

Cancellation Confirmation	Email confirmation
Purchase Confirmation	Email Purchase Confirmation
Refund	Email Refund

System Interaction Diagrams

Manage Seats



Purchase Ticket

sd SequenceDiagram1

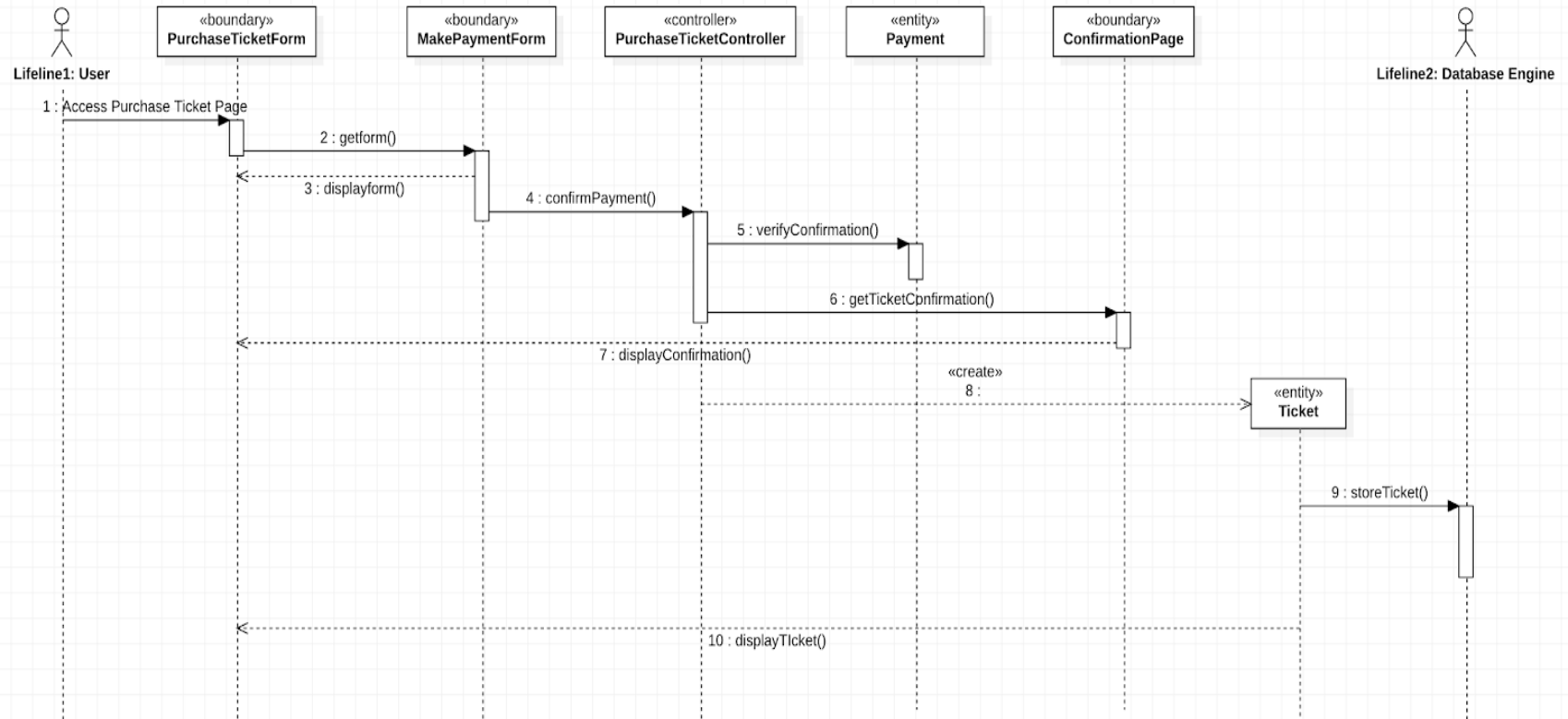
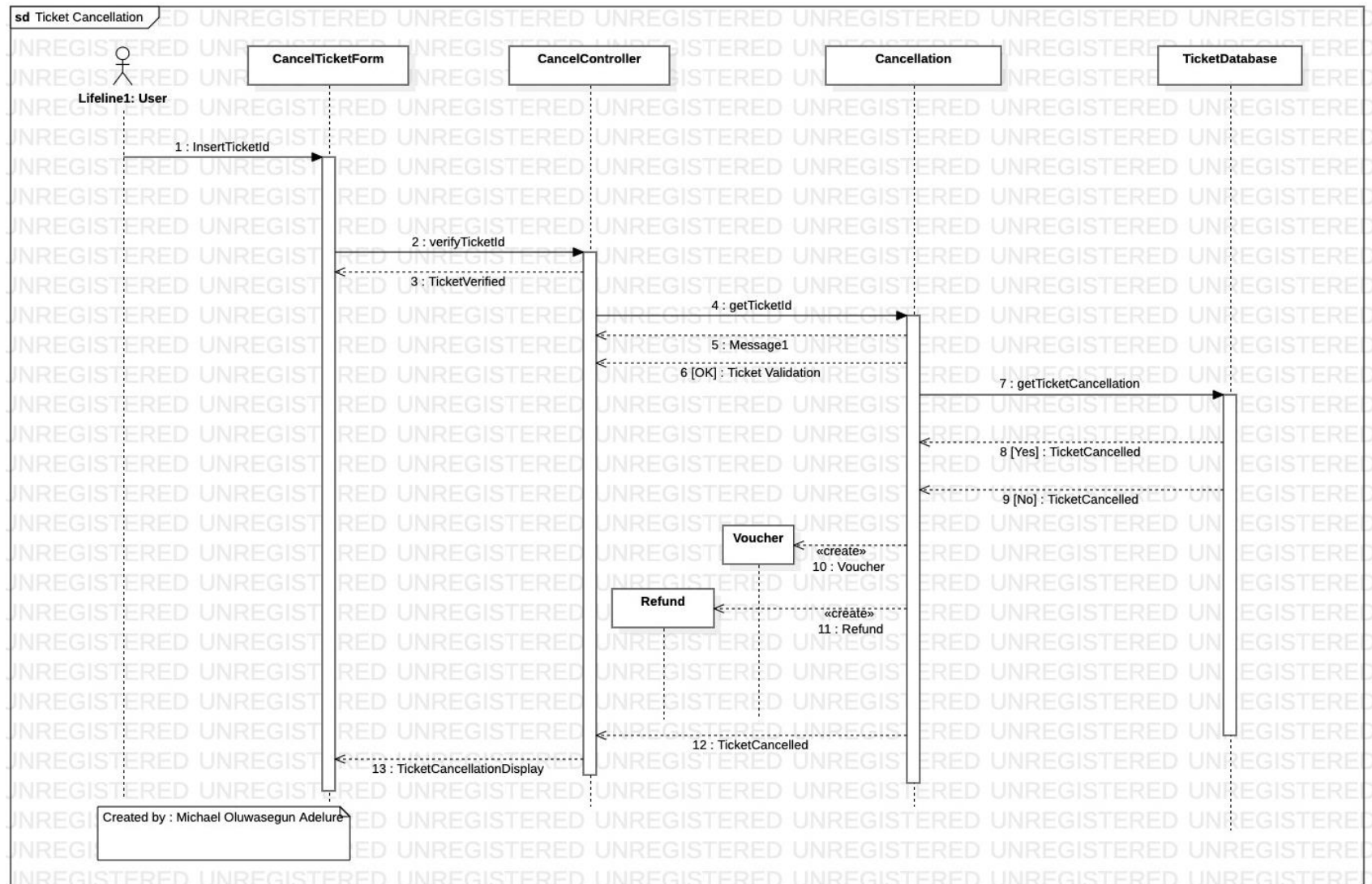
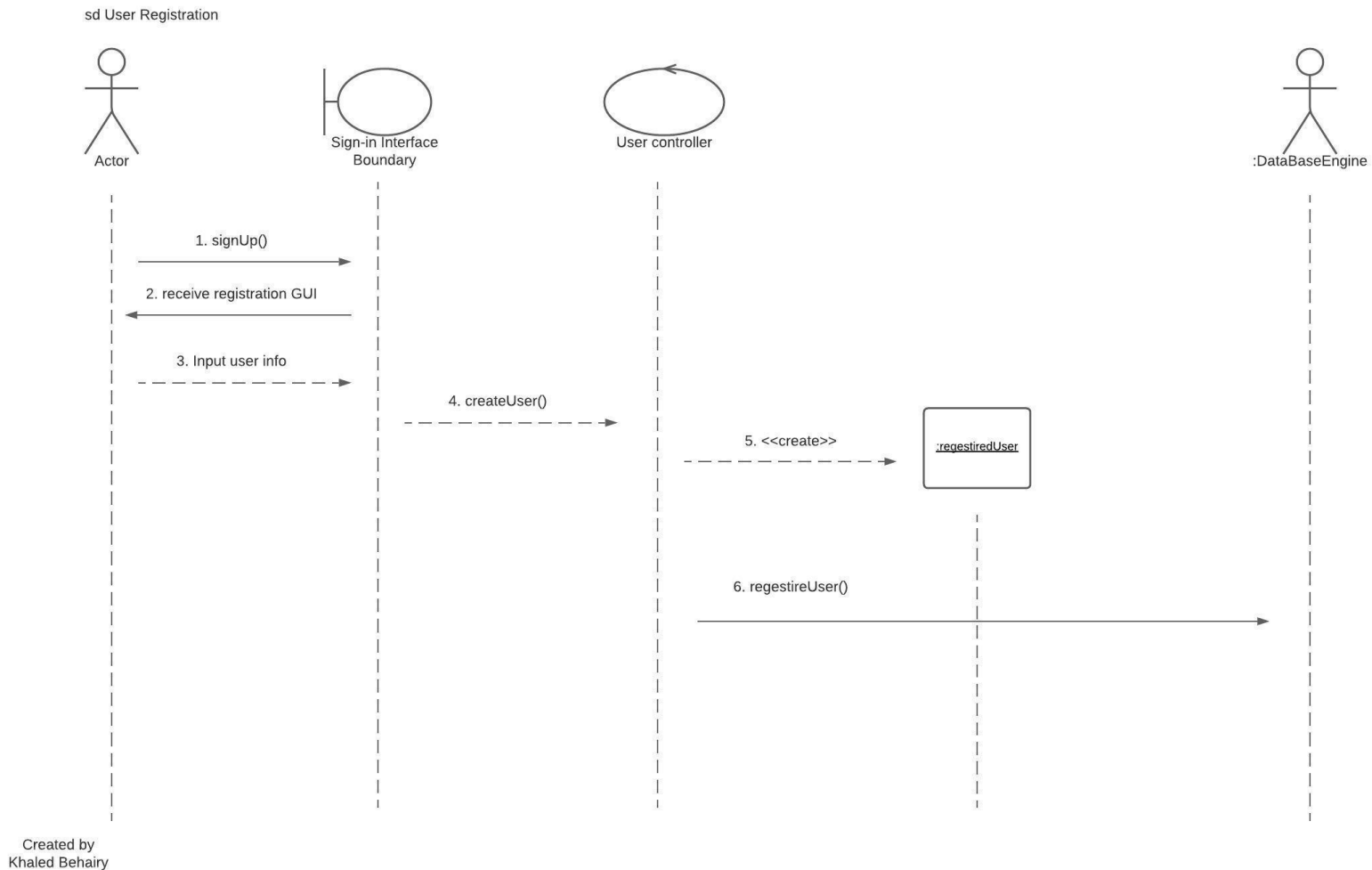


Diagram completed by
Bright Anorchie

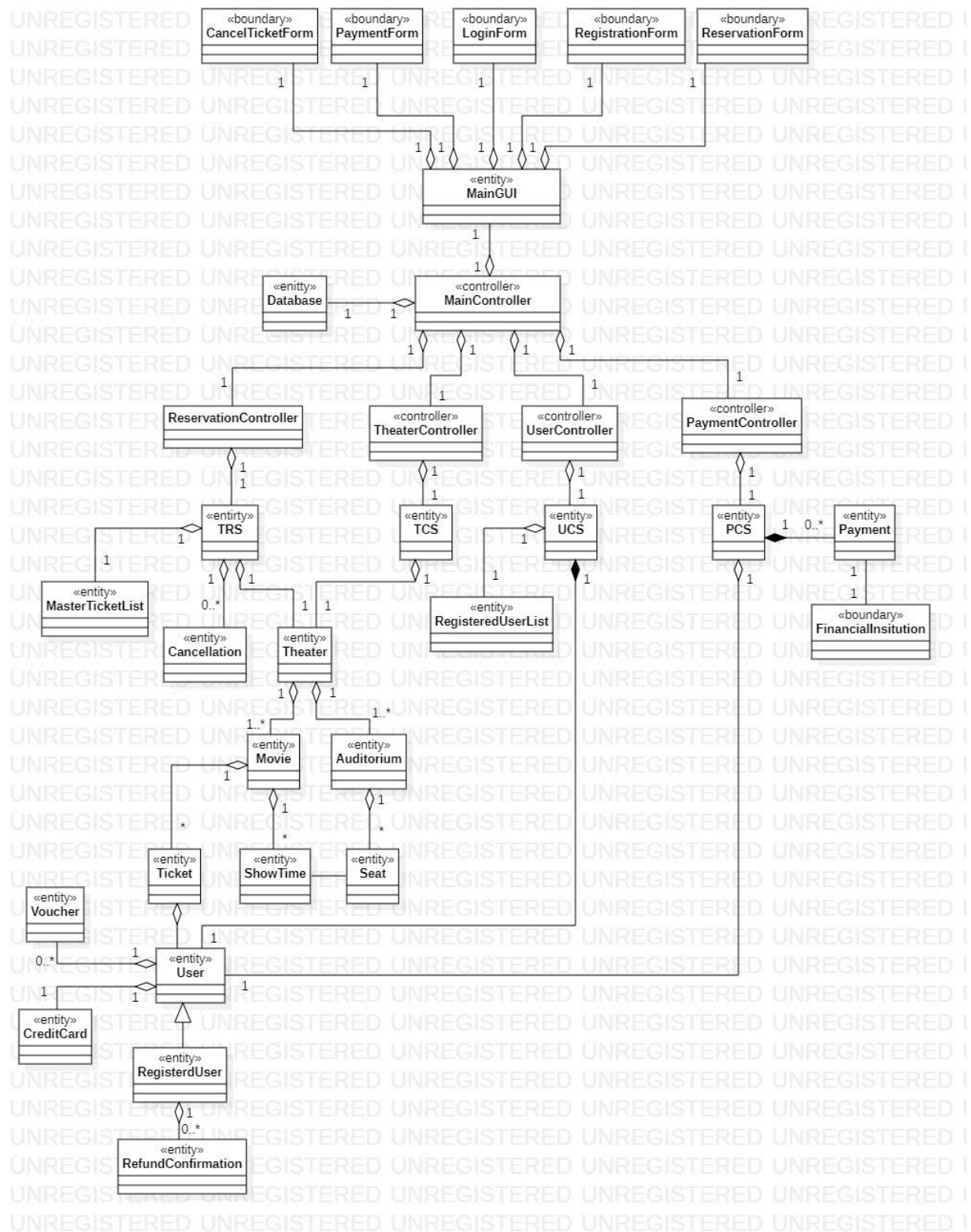
Ticket Cancellation



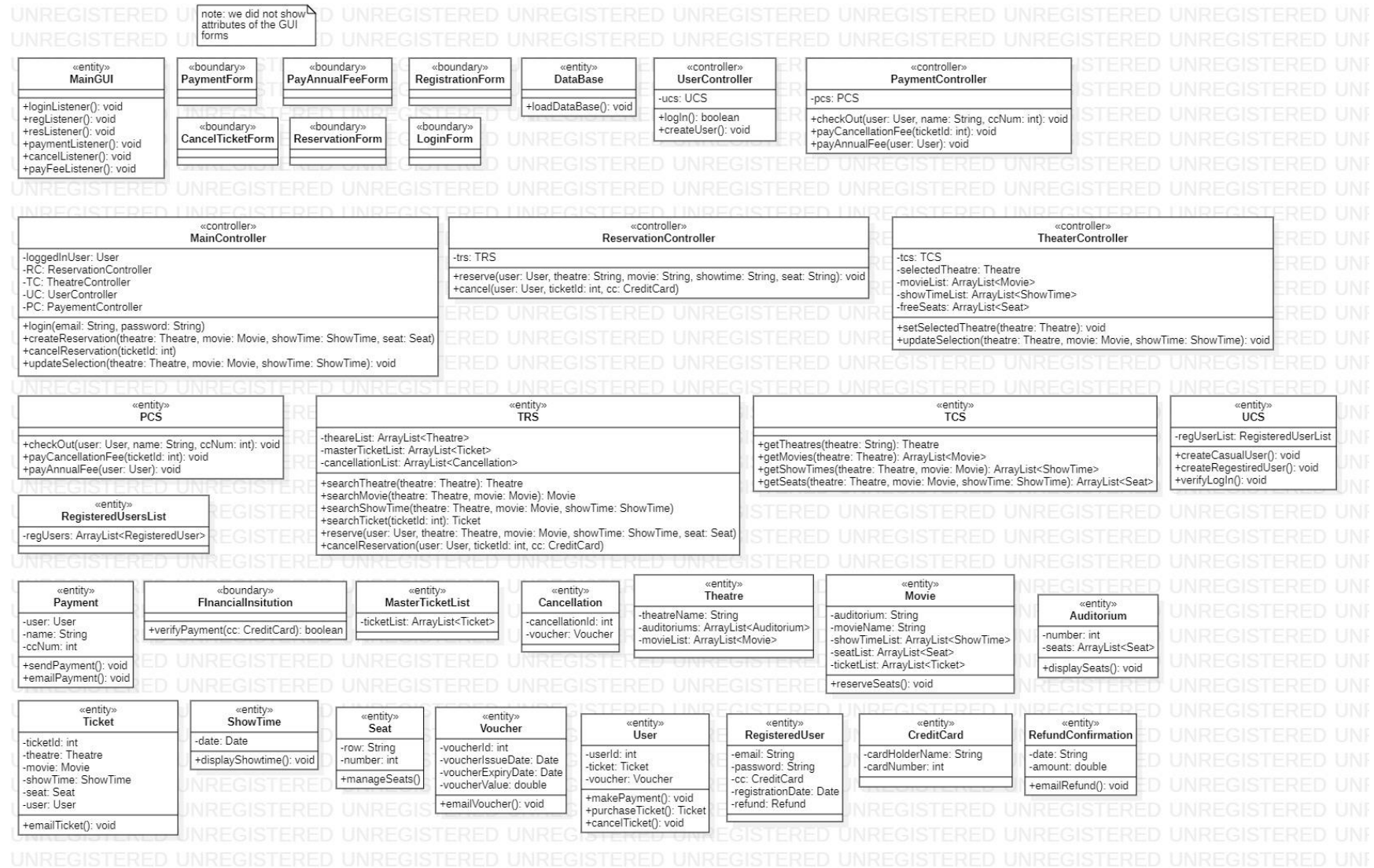
Register User



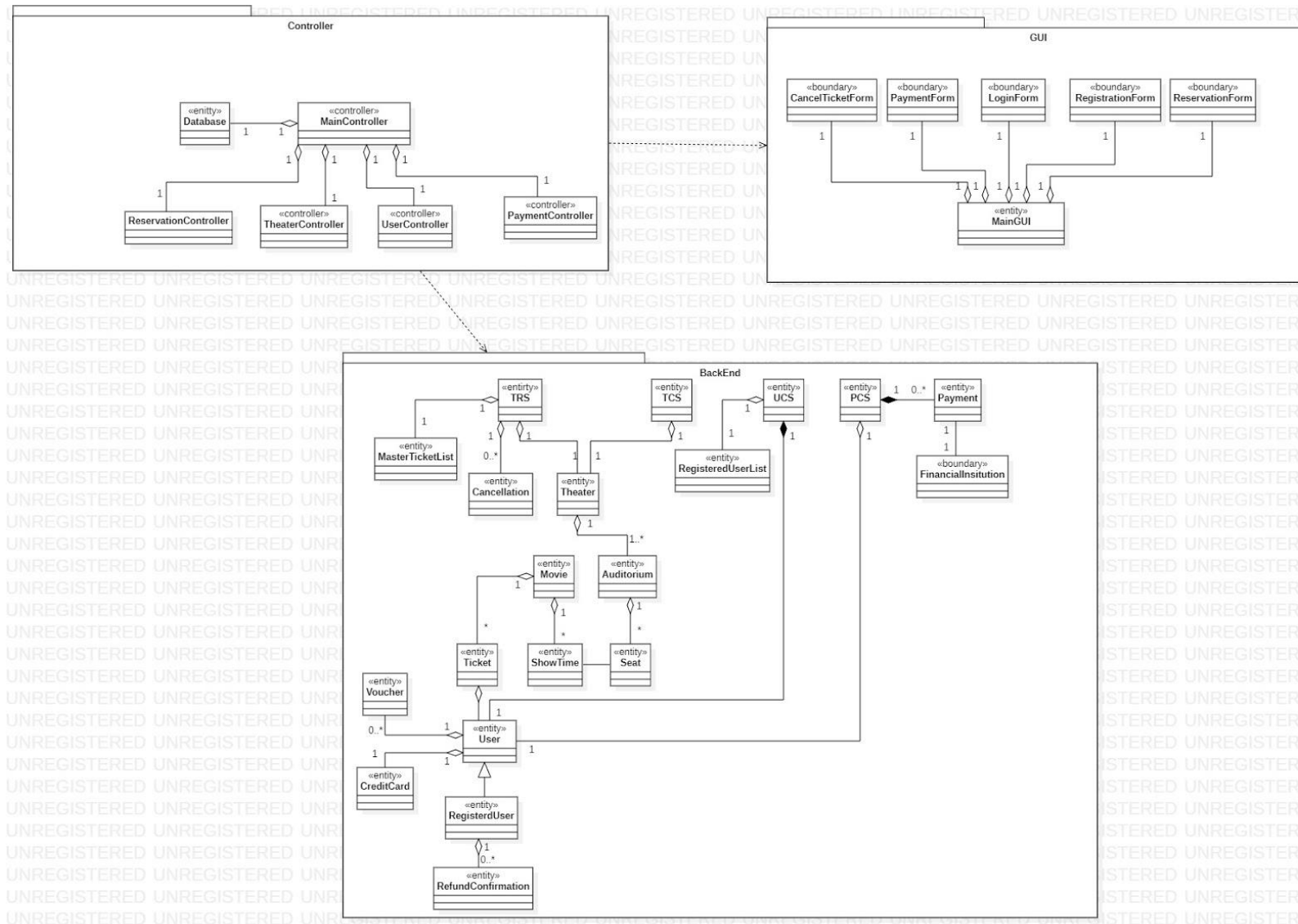
Design Level Class Specification



Class diagram with no relationships



Package Diagram



Deployment Diagram

