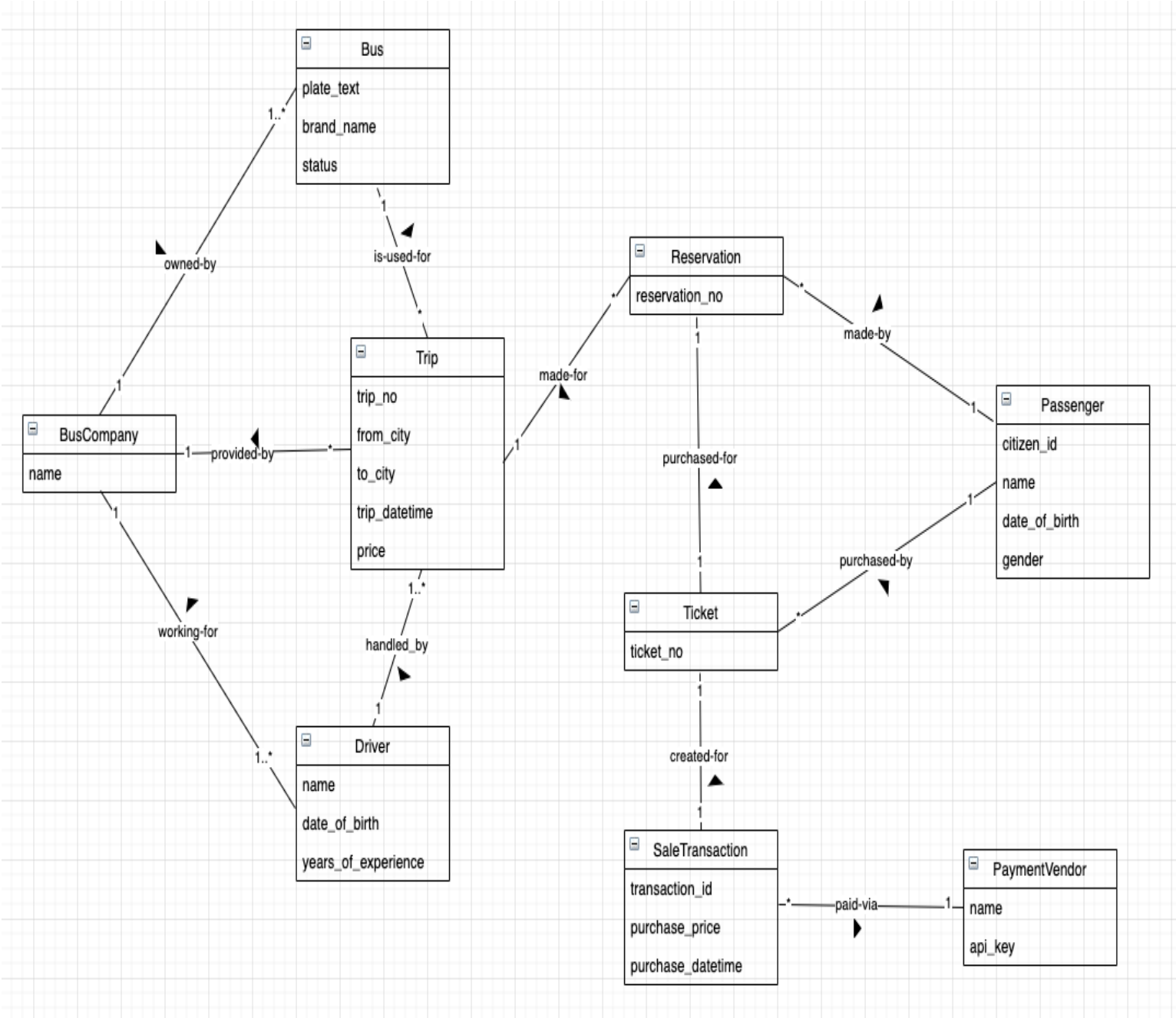
MYES Bus Ticketing System
Design Diagrams

Revision History

Date	Author(s)	Description	Version
30/04/2021	Serdar Mumcu	Initial Version	v1.0
08/05/2021	Serdar Mumcu	Review updates have been made.	v1.1
28/05/2021	Serdar Mumcu	Class diagrams and system sequence and interaction diagrams are extended.	v1.2
05/06/2021	Serdar Mumcu	ManageTrip's system sequence diagram is updated according to the accepted review item.	v1.3
20/06/2021	Serdar Mumcu	Finalized the document after conducting a full review.	v1.4

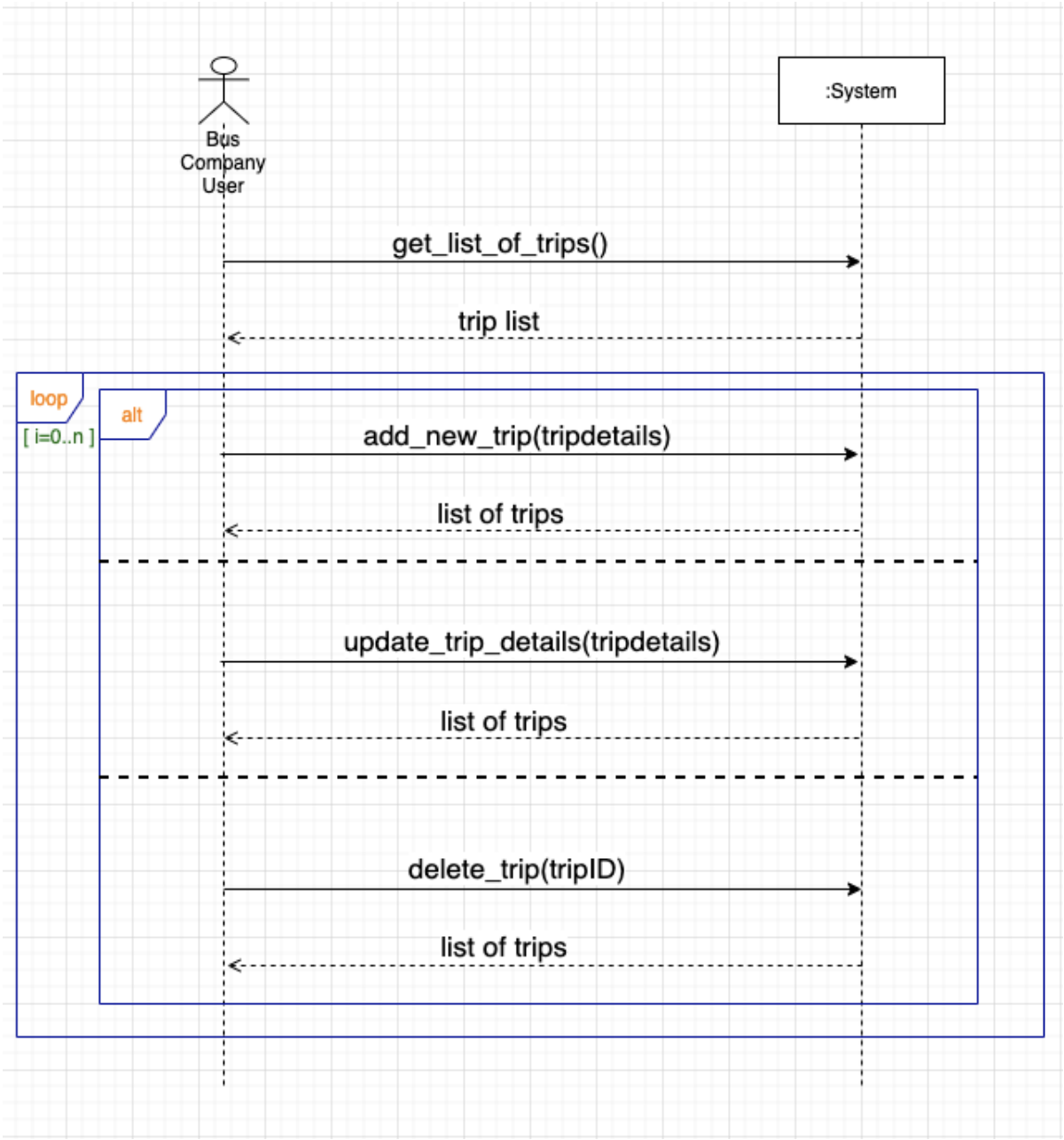
1 Domain Model



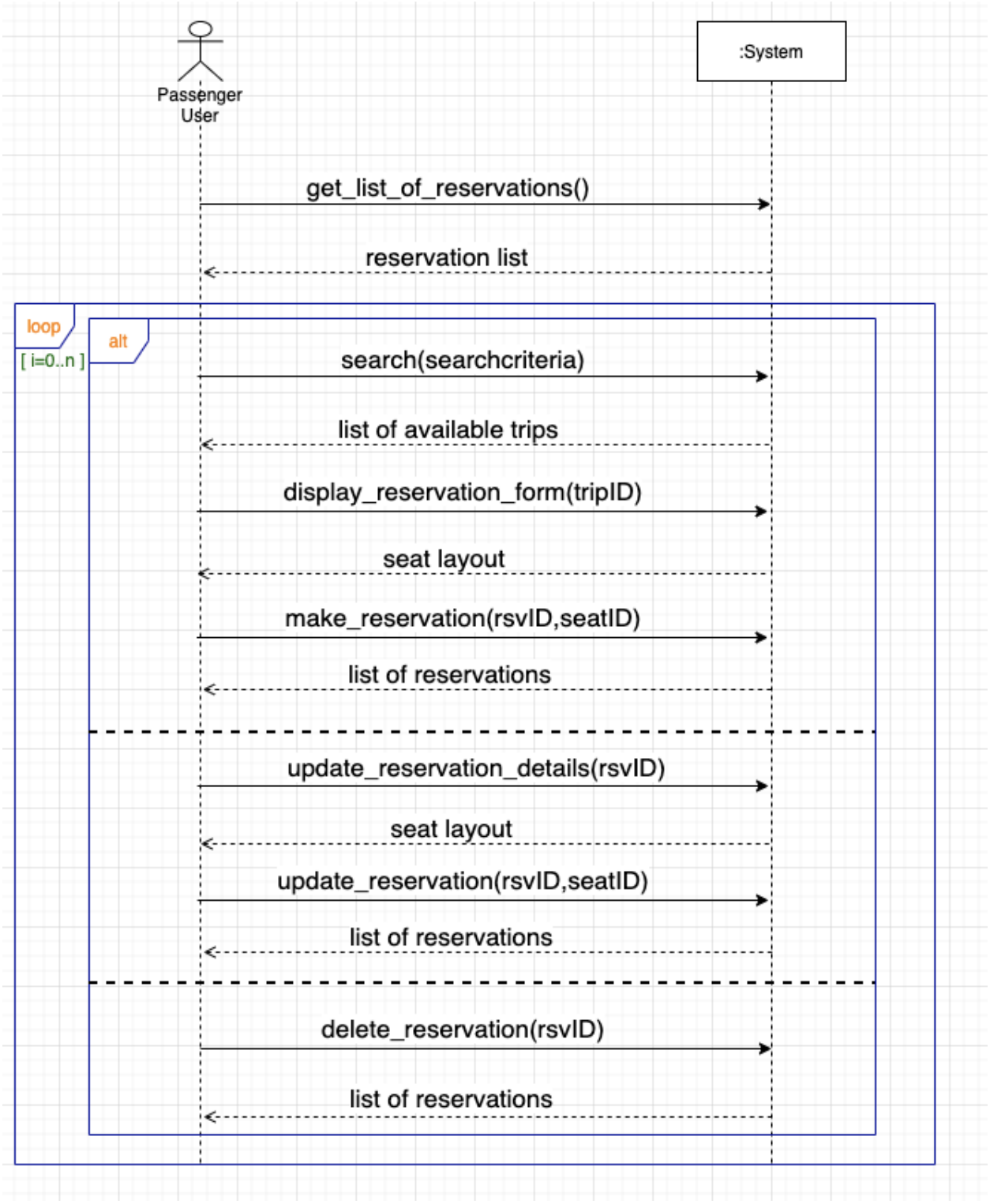
2 System Sequence Diagram

We have selected UC3 (Manage Trip) and UC9 (Manage Reservations) as the most Architecturally important 2 use-cases for the Iteration3, we decided to include their diagrams in this section.

Manage Trip


Bus Company User
:System
get_list_of_trips()
trip list
loop
[i=0..n]
alt
add_new_trip(tripdetails)
list of trips
update_trip_details(tripdetails)
list of trips
delete_trip(tripID)
list of trips

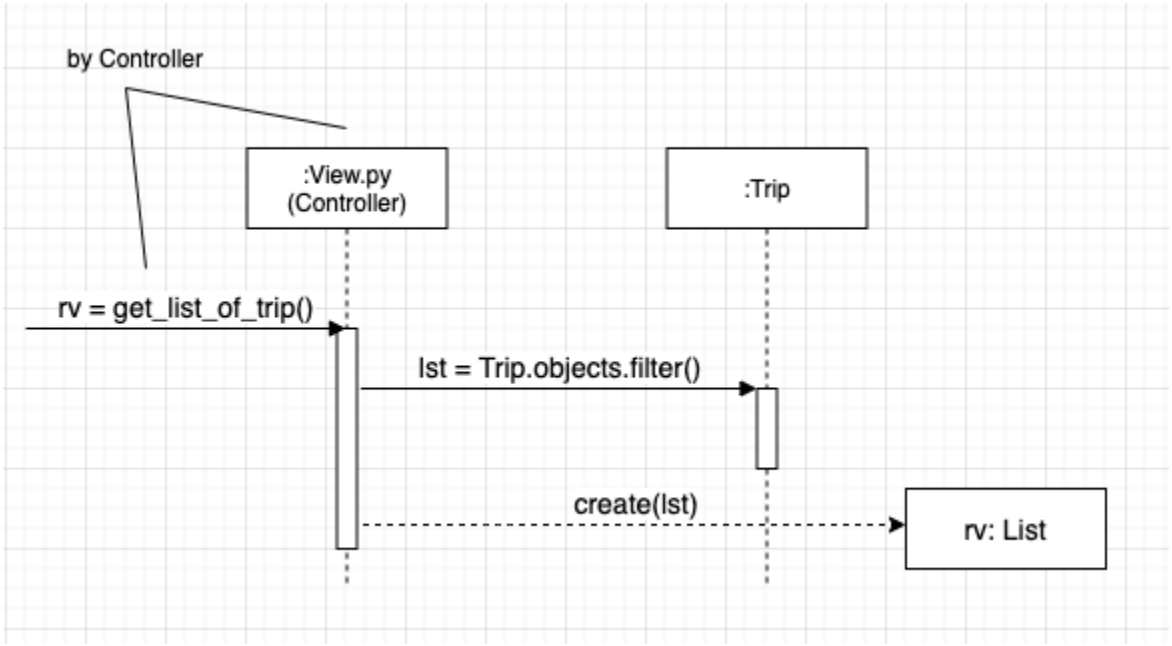
Manage Reservations



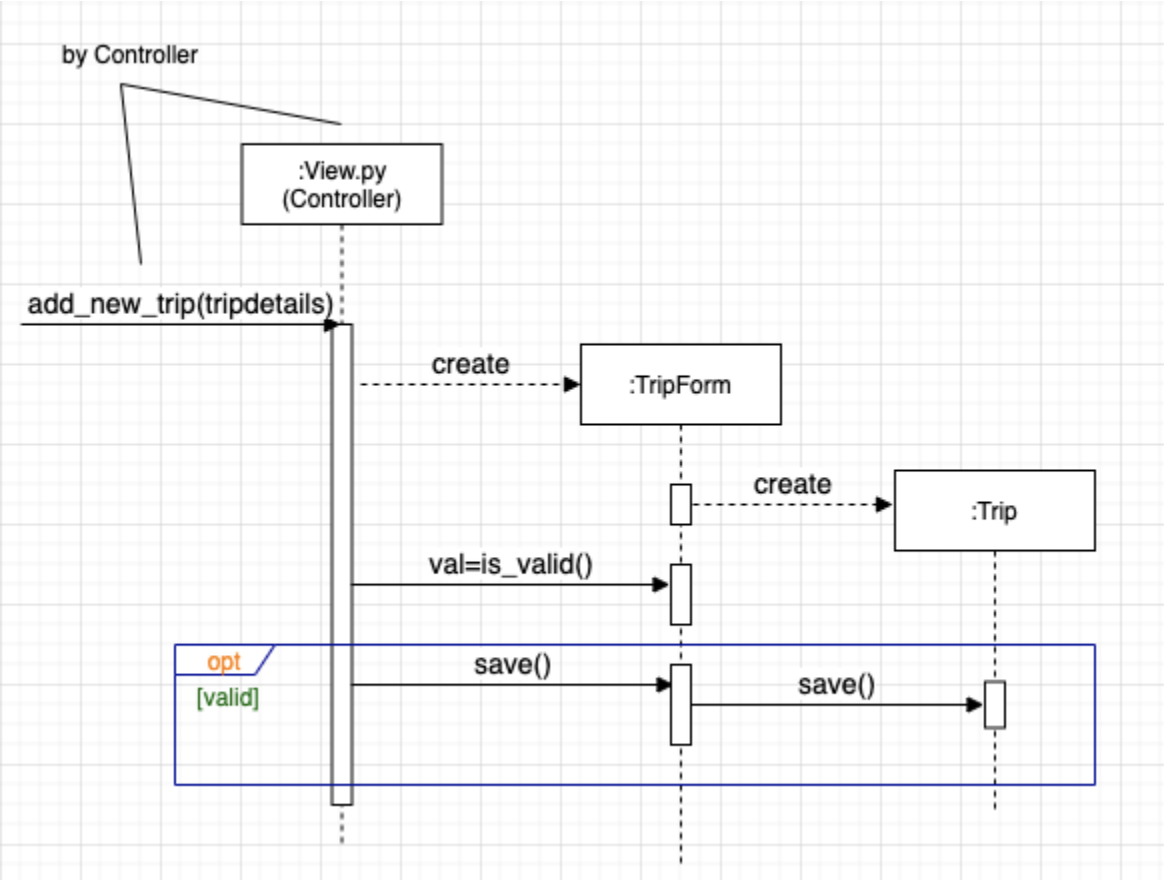
3 Interaction Diagrams

Following interaction diagrams are the detailed interaction diagrams of the system sequence diagram given in the previous section.

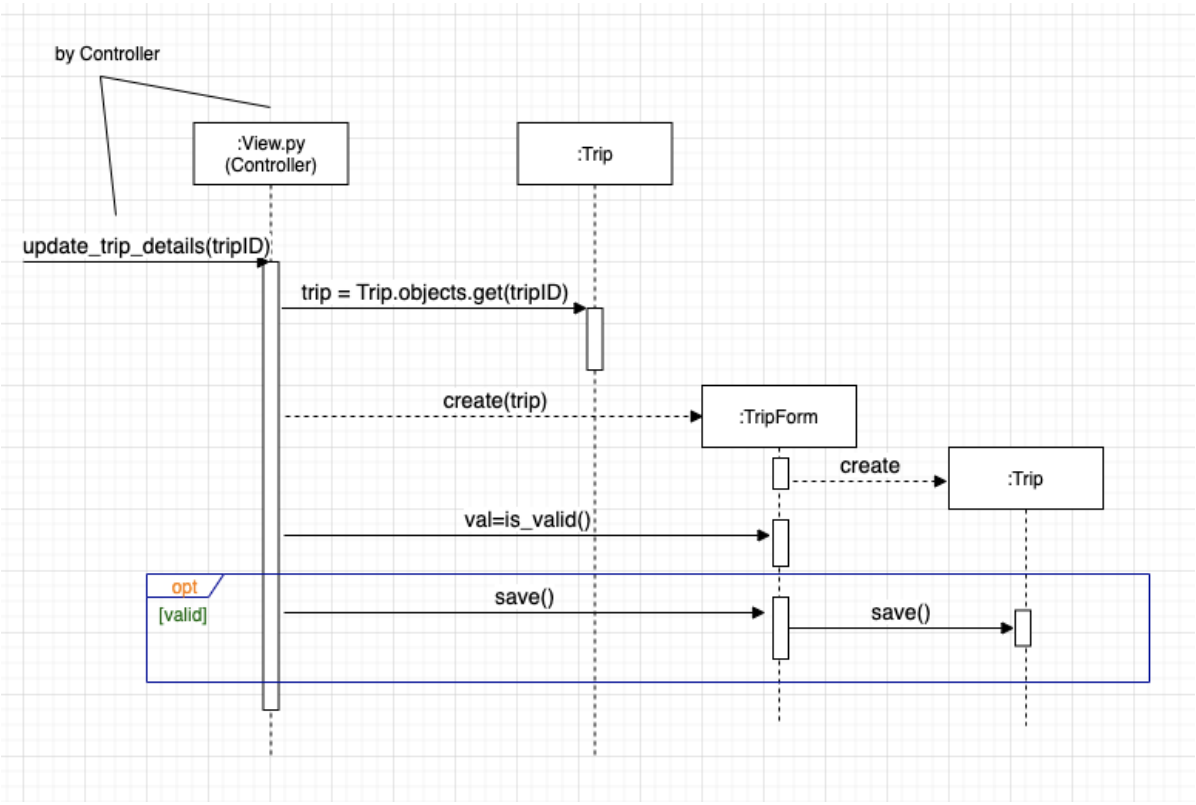
Manage Trip - get_list_of_trips diagram



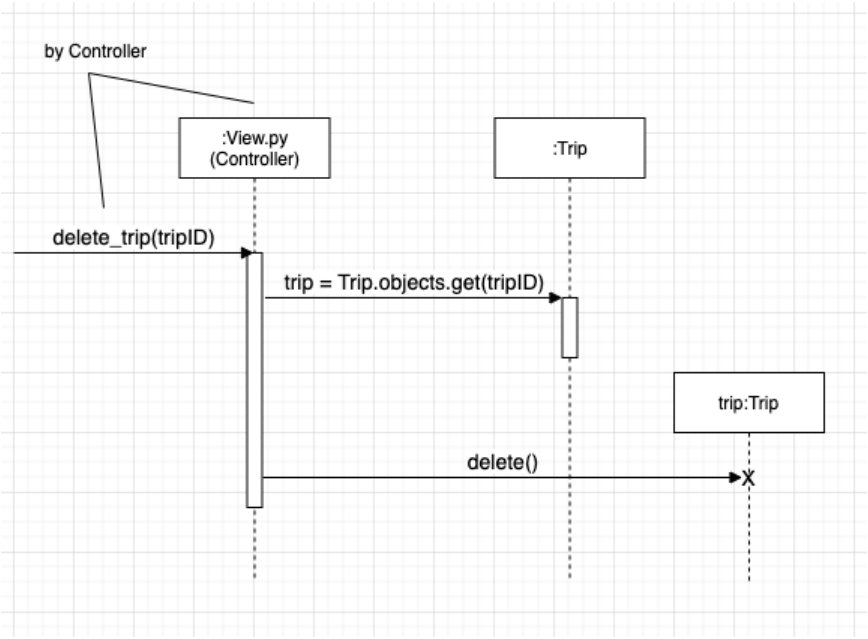
Manage Trip - add_new_trip diagram



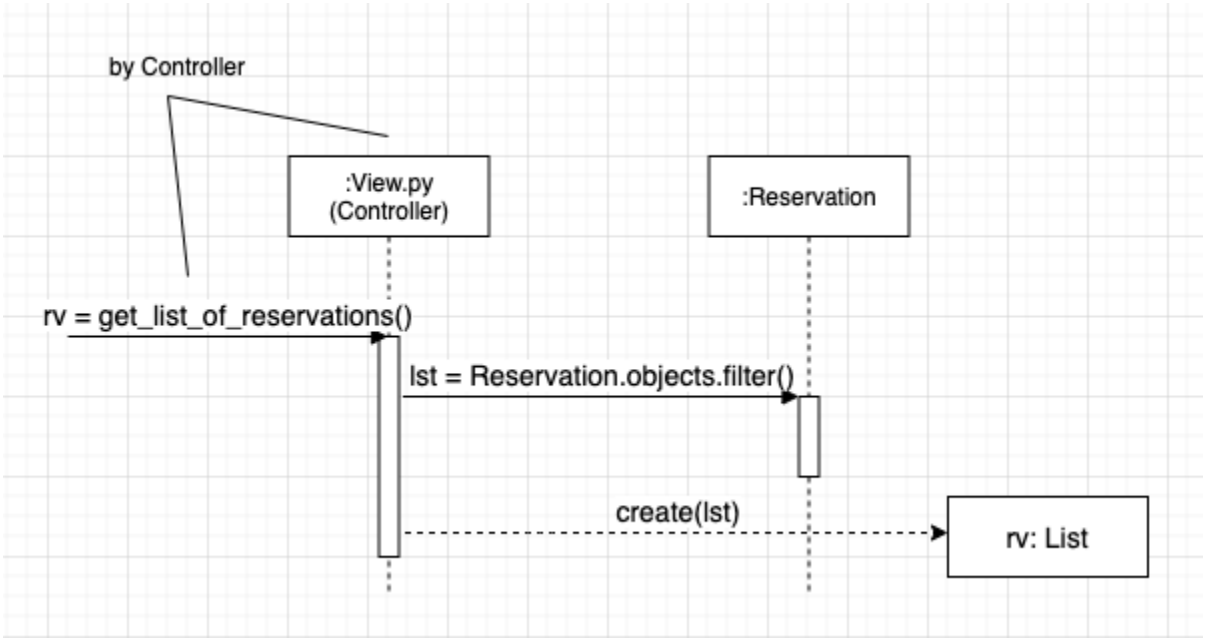
Manage Trip - update_trip_details diagram



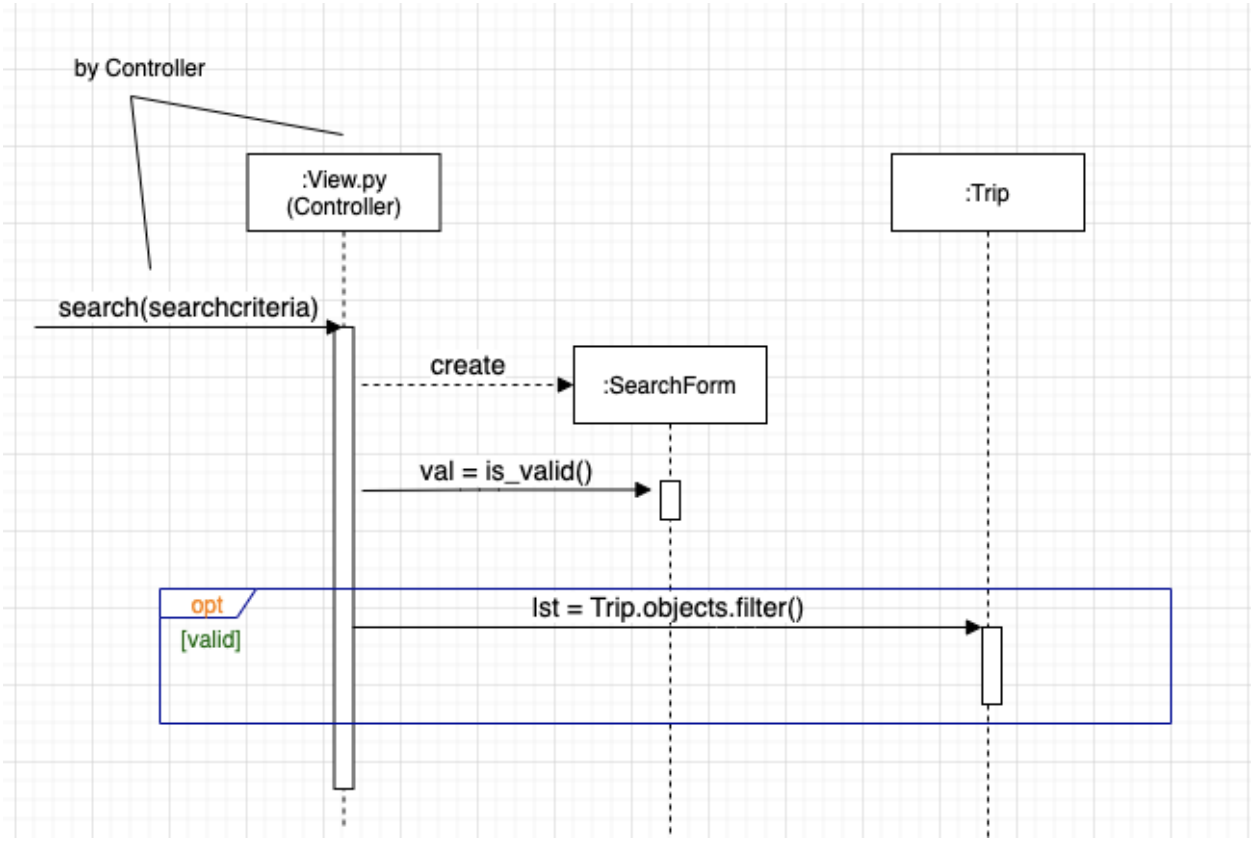
Manage Trip - delete_trip diagram



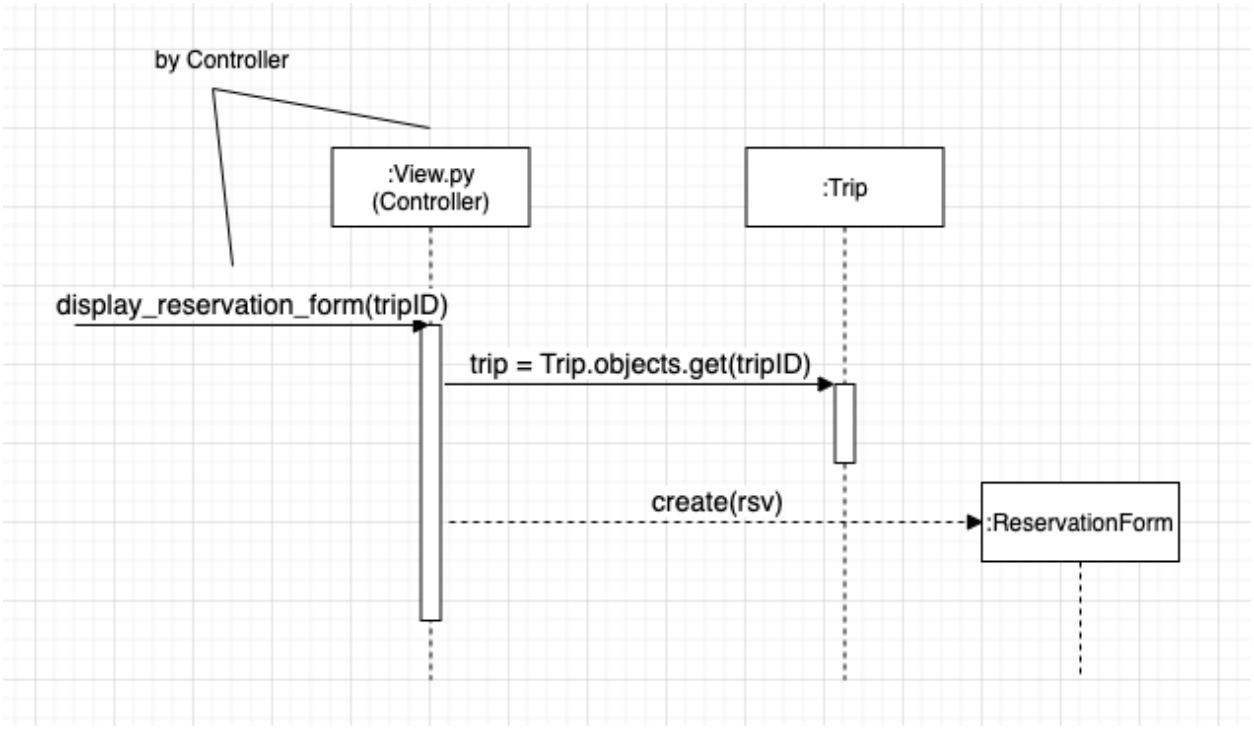
Manage Reservations - get_list_of_reservations diagram



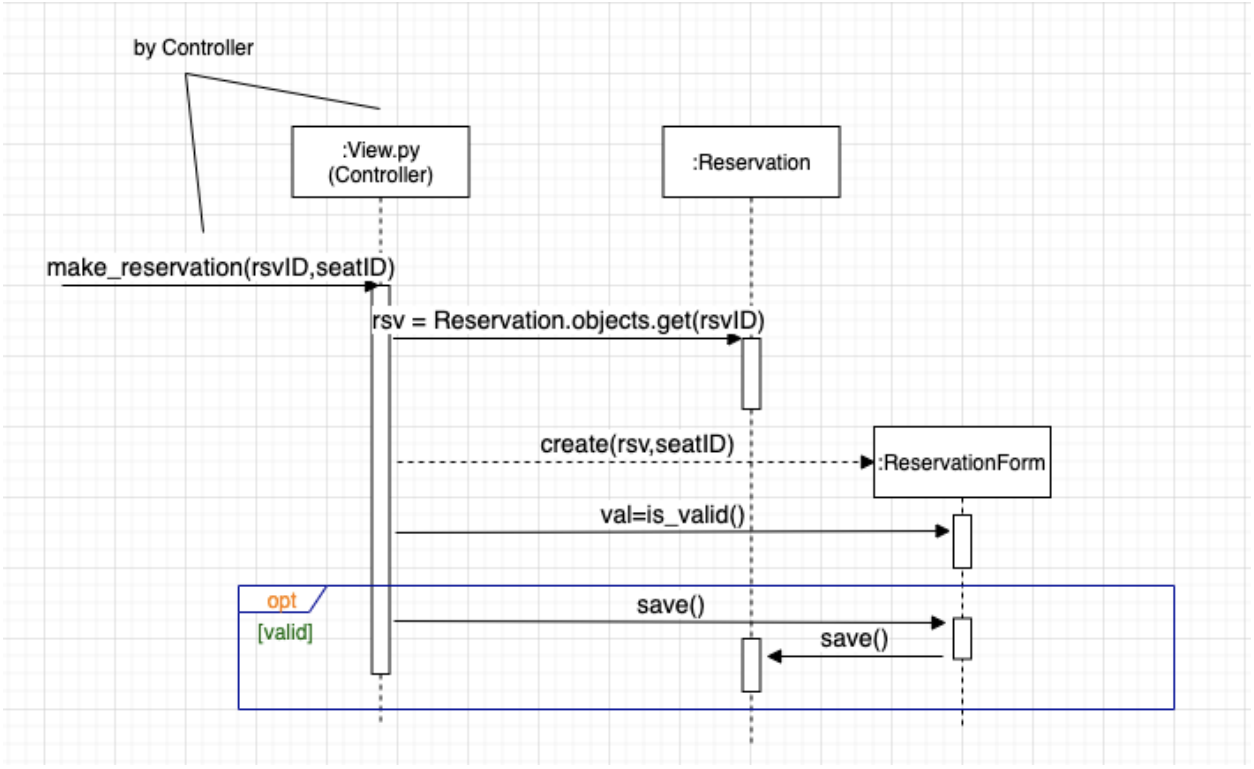
Manage Reservations - search diagram



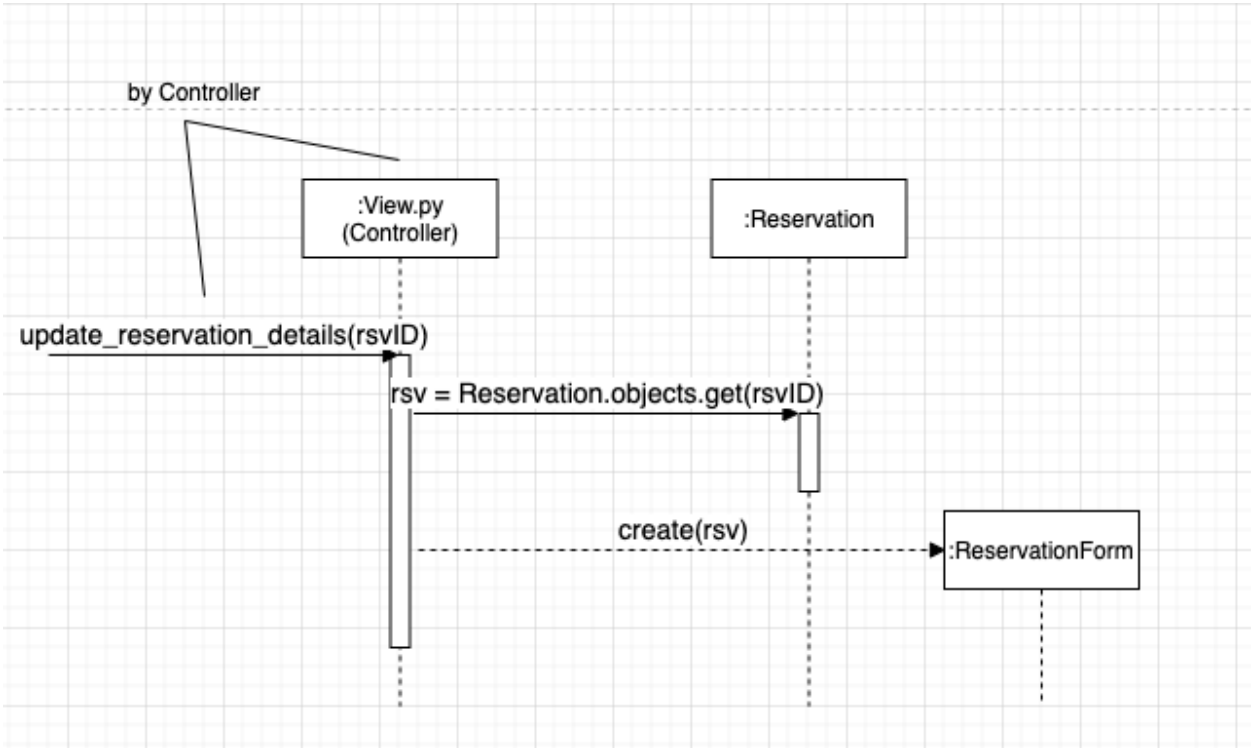
Manage Reservations - display_reservation_form diagram



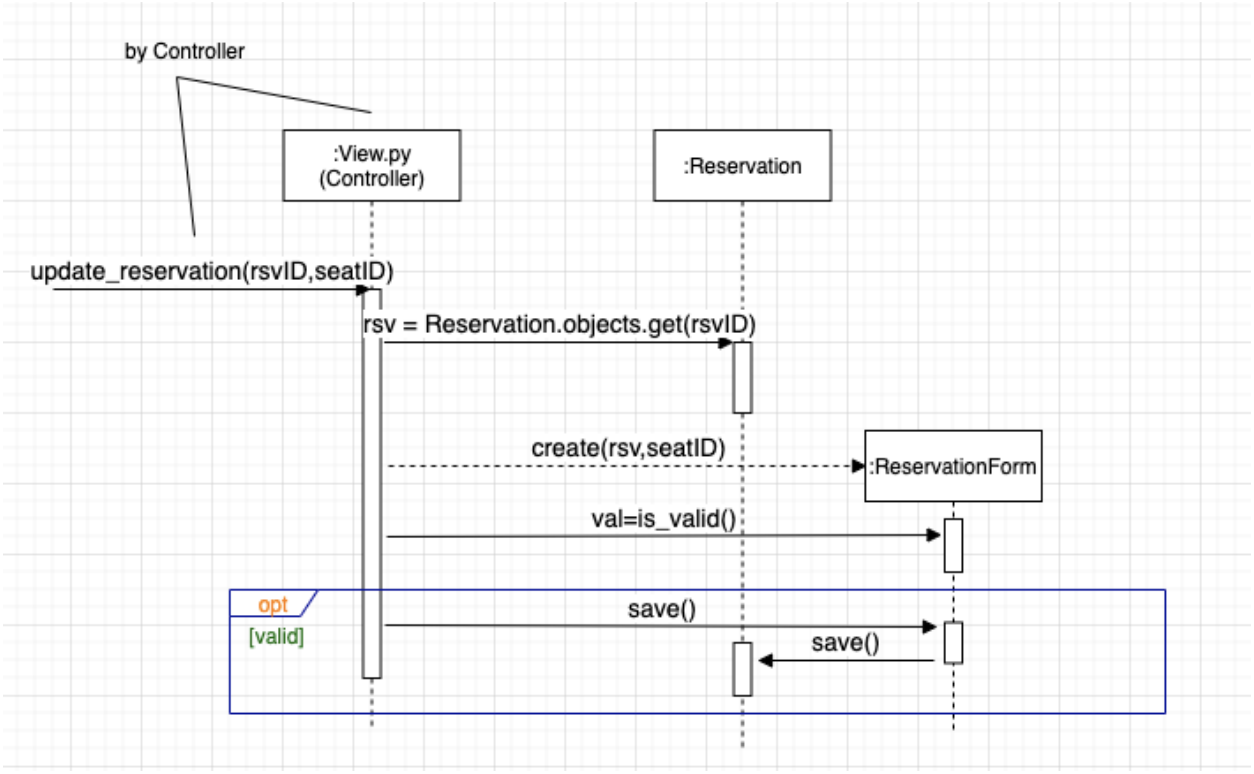
Manage Reservations - make_reservation diagram



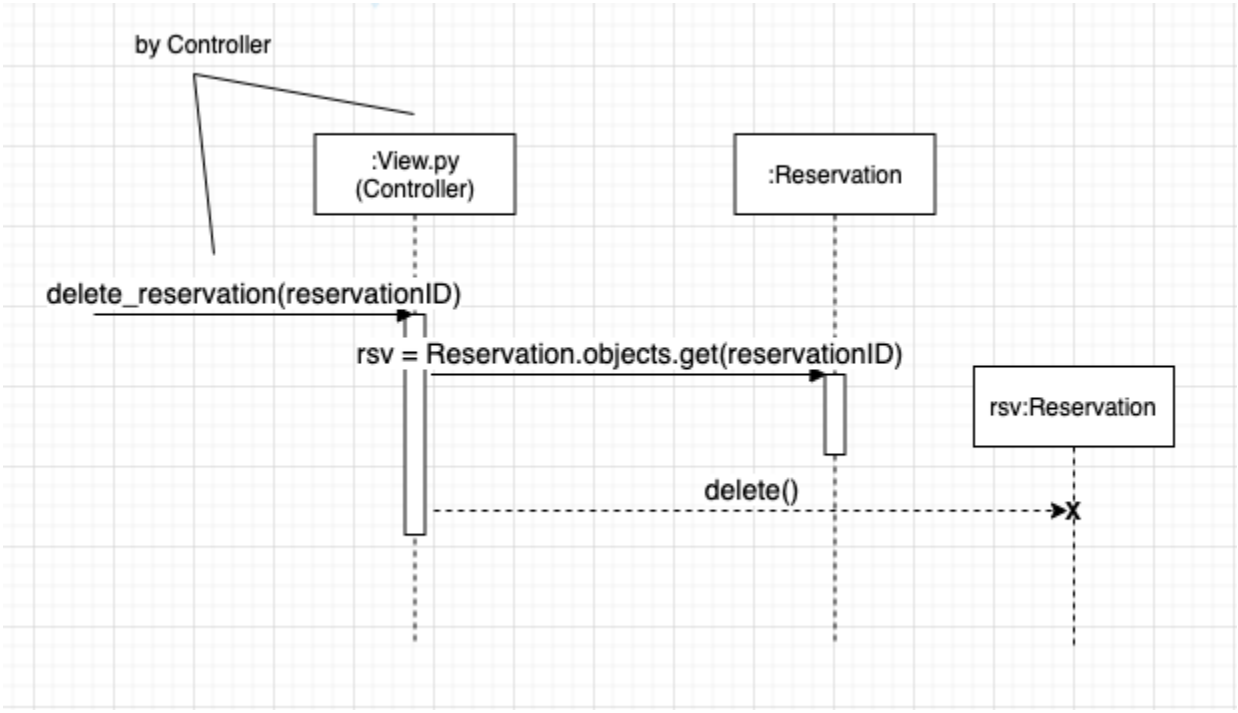
Manage Reservations - update_reservation_details diagram



Manage Reservations - update_reservation diagram



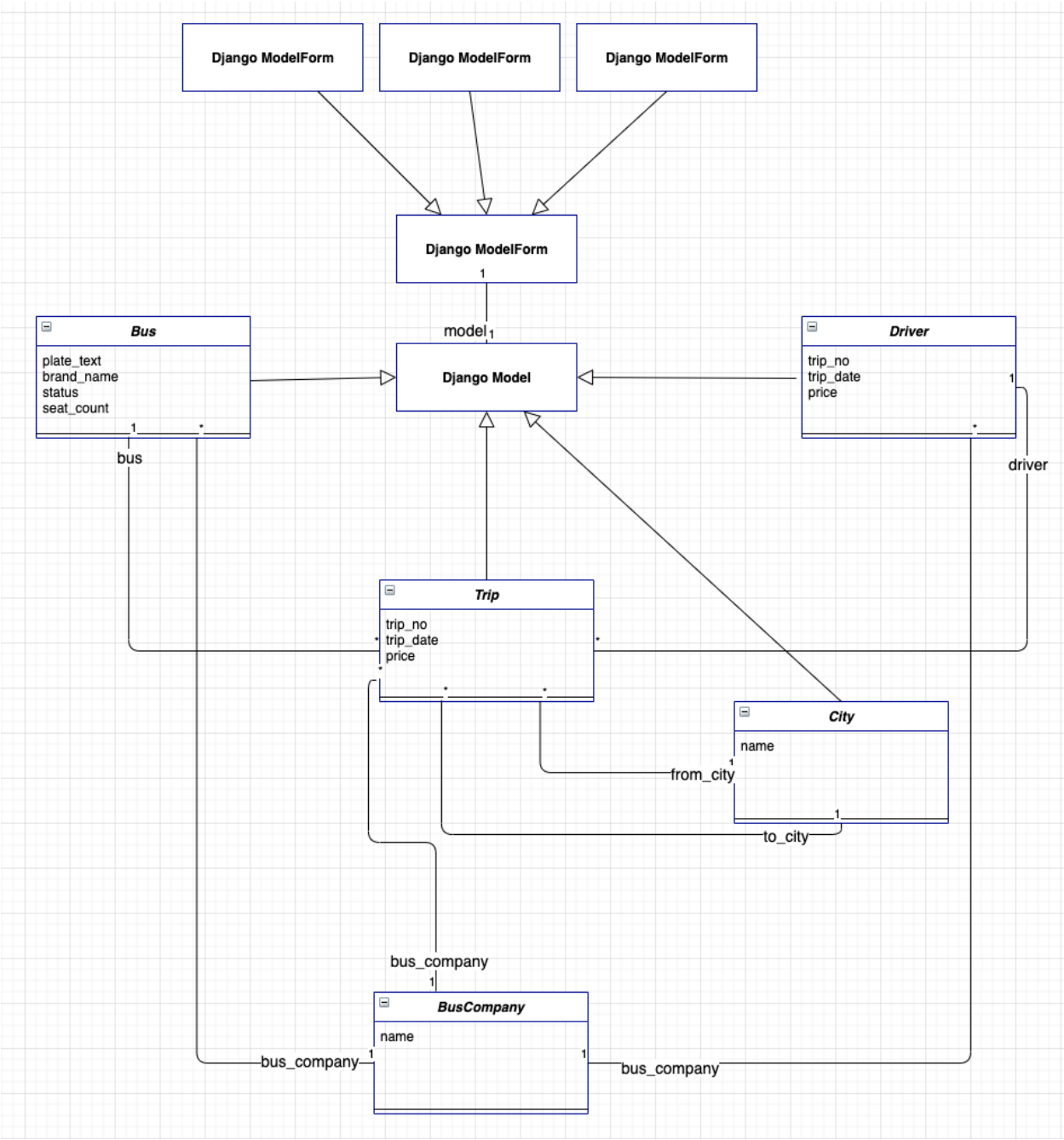
Manage Reservations - delete_reservation diagram



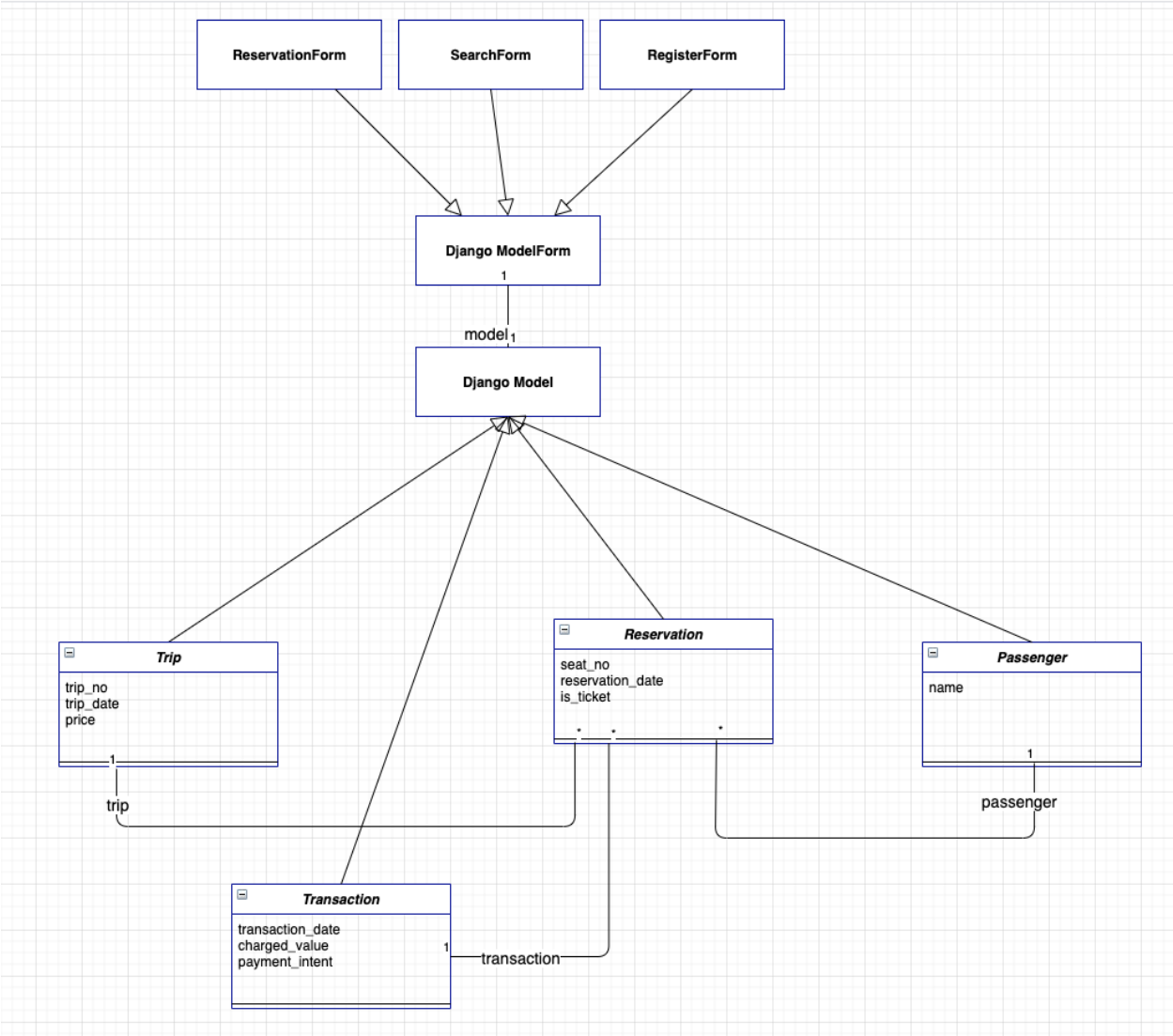
4 Class Diagram

Partial class diagrams for the Iteration#2 and Iteration#3 requirements

Class diagram for BusCompany role



Class diagram for Passenger role


ReservationForm
SearchForm
RegisterForm
Django ModelForm
1
model
1
Django Model
Trip
trip_no
trip_date
price
1
trip
Reservation
seat_no
reservation_date
is_ticket
* * *
Passenger
name
1
passenger
Transaction
transaction_date
charged_value
payment_intent
1
transaction