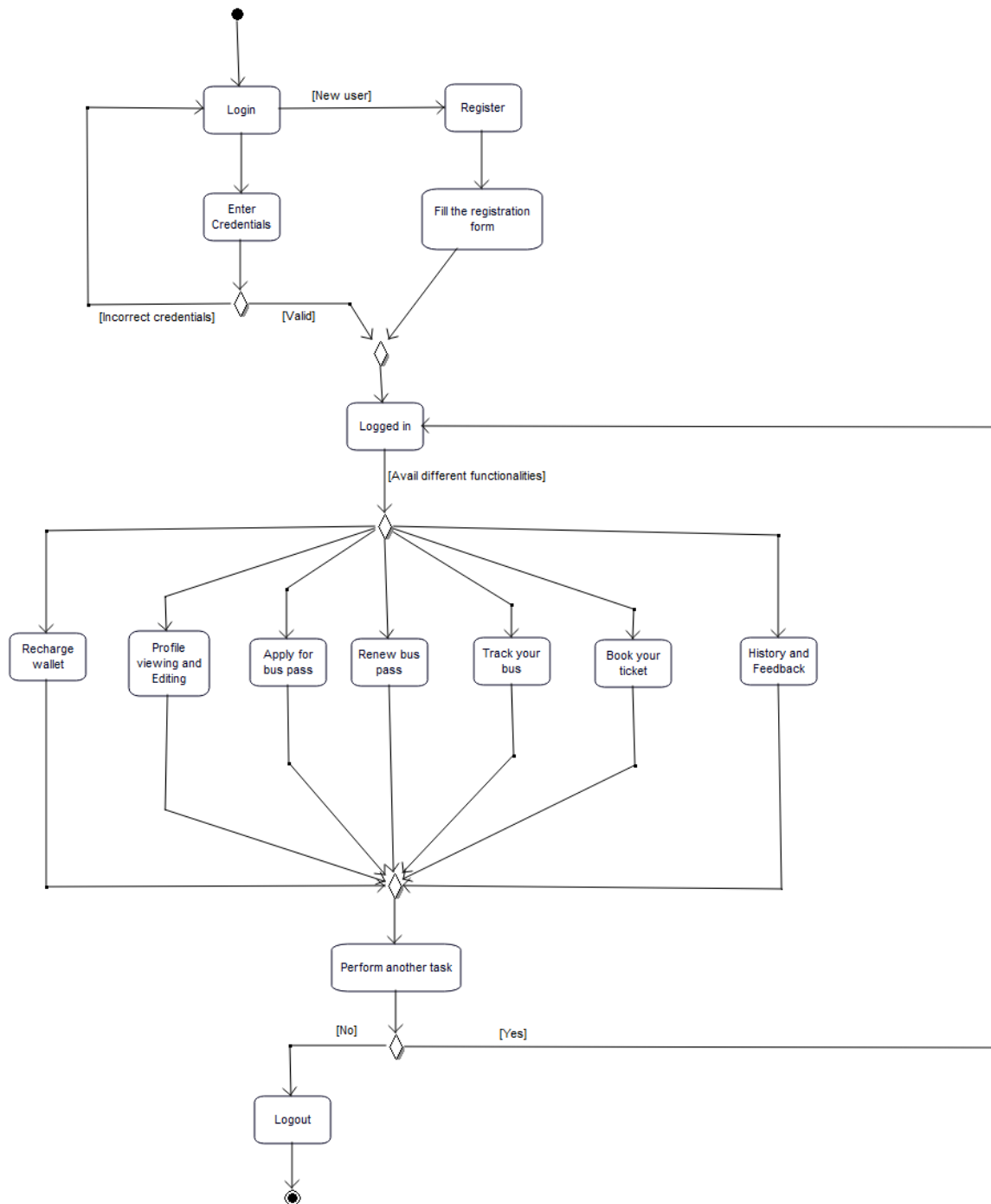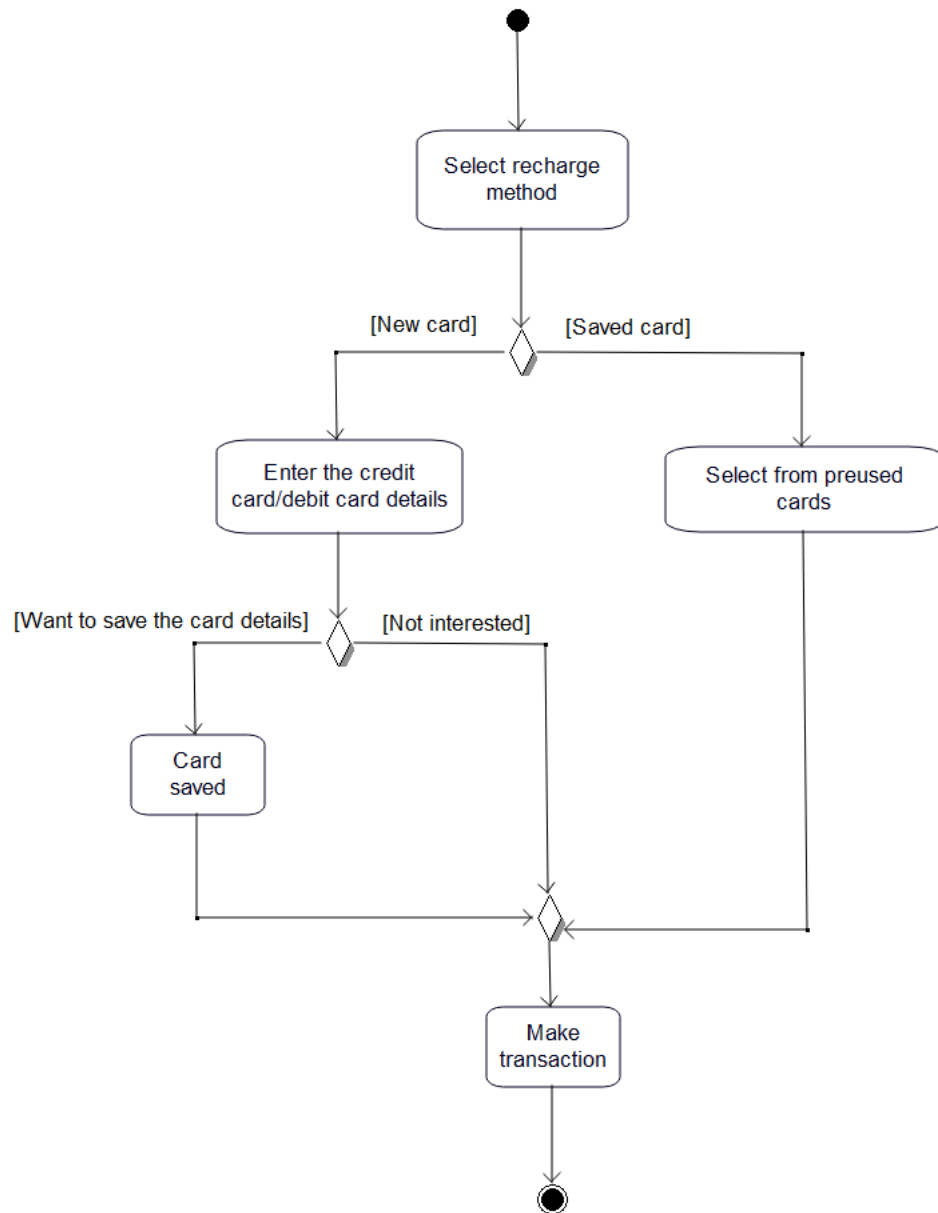# UML – Activity Diagram of Bus Pass System
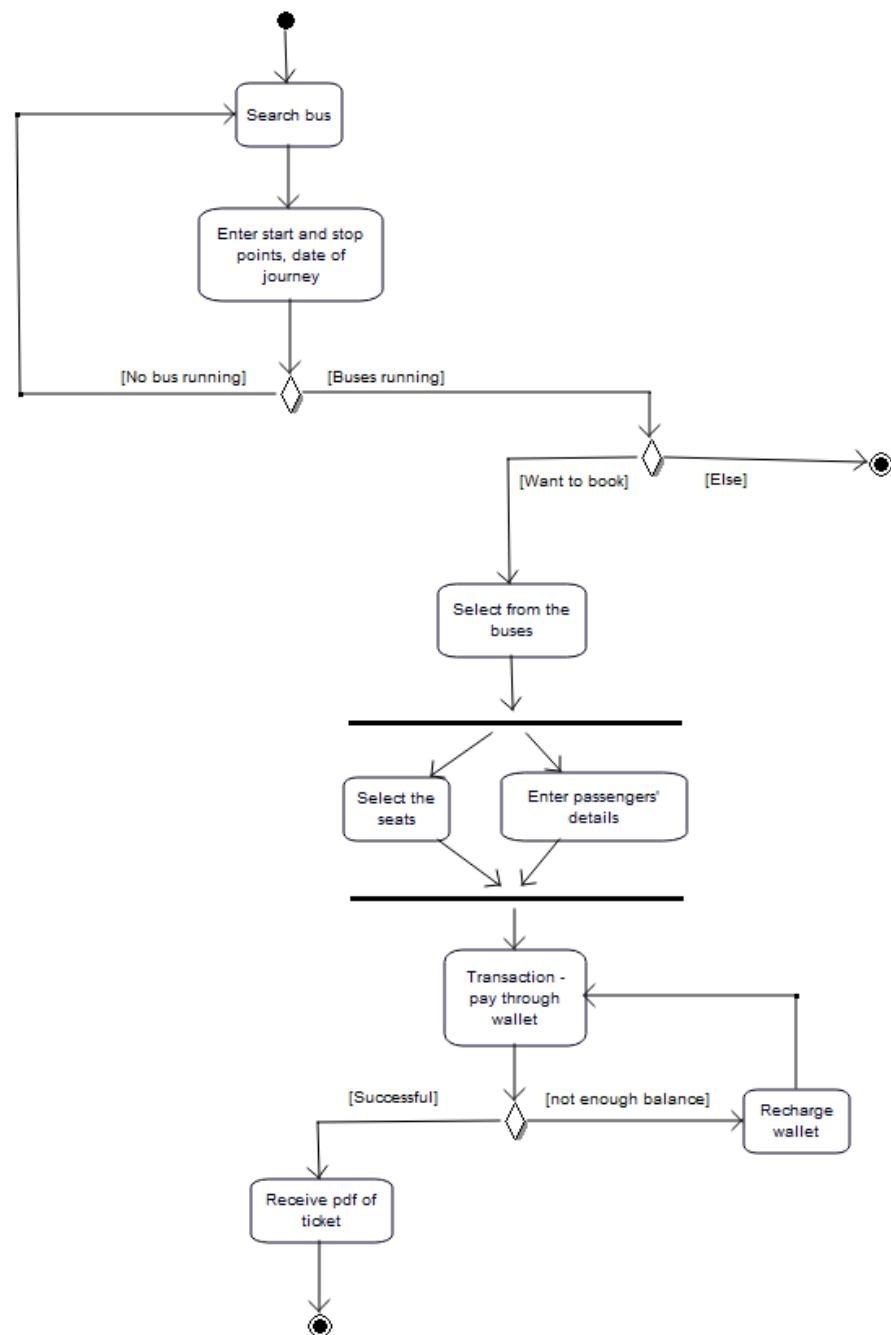
Main Functionalities from User side
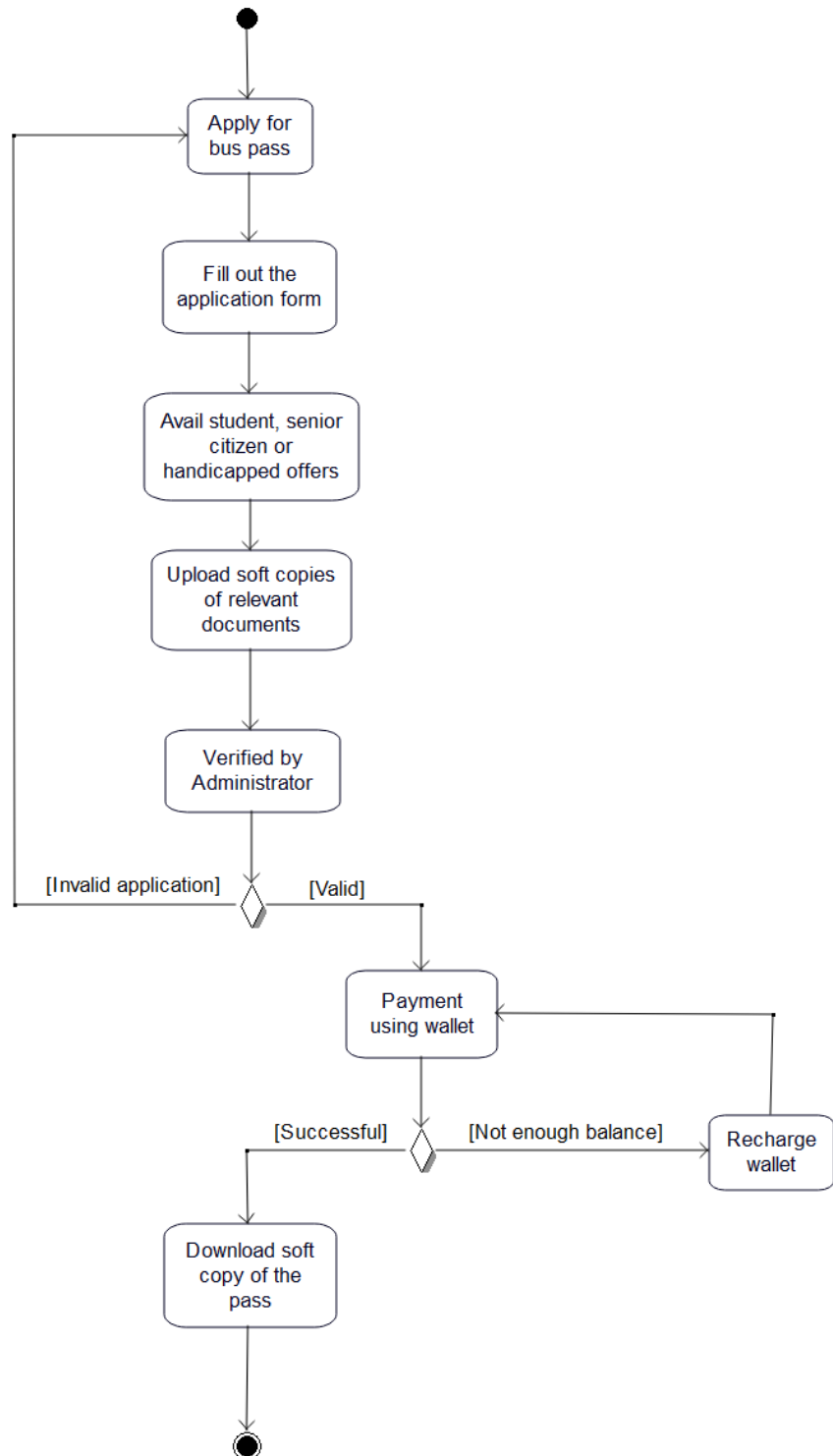
Recharge wallet:

Select recharge method

[New card] [Saved card]

Enter the credit card/debit card details

Select from preused cards

[Want to save the card details] [Not interested]

Card saved

Make transaction

Search buses and book tickets:

```
                              ●
                              │
                              ▼
                    ┌──────────────────┐
                    │    Search bus    │◄────────────────┐
                    └──────────────────┘                 │
                              │                           │
                              ▼                           │
                    ┌──────────────────┐                  │
                    │ Enter start and  │                  │
                    │  stop points,    │                  │
                    │ date of journey  │                  │
                    └──────────────────┘                  │
                              │                           │
      [No bus running]        ◇  [Buses running]          │
    ──────────────────────────                            │
                                        ◇────────────────► ●
                              [Want to book]    [Else]
                                    │
                                    ▼
                          ┌──────────────────┐
                          │  Select from the │
                          │      buses       │
                          └──────────────────┘
                                    │
                          ━━━━━━━━━━━━━━━━━━━━━
                            ╱            ╲
                 ┌──────────────┐  ┌──────────────┐
                 │ Select the   │  │   Enter      │
                 │   seats      │  │ passengers'  │
                 │              │  │   details    │
                 └──────────────┘  └──────────────┘
                            ╲            ╱
                          ━━━━━━━━━━━━━━━━━━━━━
                                    │
                          ┌──────────────────┐
                          │  Transaction -   │◄────────────┐
                          │ pay through      │             │
                          │     wallet       │             │
                          └──────────────────┘             │
                                    │                       │
          [Successful]              ◇  [not enough balance] │
        ────────────                            ┌───────────────┐
              │                                 │  Recharge     │
              ▼                                 │   wallet       │
    ┌──────────────────┐                        └───────────────┘
    │  Receive pdf of  │
    │     ticket       │
    └──────────────────┘
              │
              ▼
              ●
```

Apply for bus pass:

```
                          ●
                          │
                          ▼
              ┌───────────────────┐
    ┌────────▶│  Apply for        │
    │         │  bus pass         │
    │         └───────────────────┘
    │                   │
    │                   ▼
    │         ┌───────────────────┐
    │         │  Fill out the     │
    │         │  application form │
    │         └───────────────────┘
    │                   │
    │                   ▼
    │         ┌───────────────────┐
    │         │  Avail student,   │
    │         │  senior citizen or│
    │         │  handicapped      │
    │         │  offers           │
    │         └───────────────────┘
    │                   │
    │                   ▼
    │         ┌───────────────────┐
    │         │  Upload soft      │
    │         │  copies of        │
    │         │  relevant         │
    │         │  documents        │
    │         └───────────────────┘
    │                   │
    │                   ▼
    │         ┌───────────────────┐
    │         │  Verified by      │
    │         │  Administrator    │
    │         └───────────────────┘
    │                   │
    │  [Invalid         ◇  [Valid]
    └── application]
```

Payment using wallet

[Successful]   ◇   [Not enough balance] → Recharge wallet

Download soft copy of the pass

●

Renew bus pass:

Track bus:
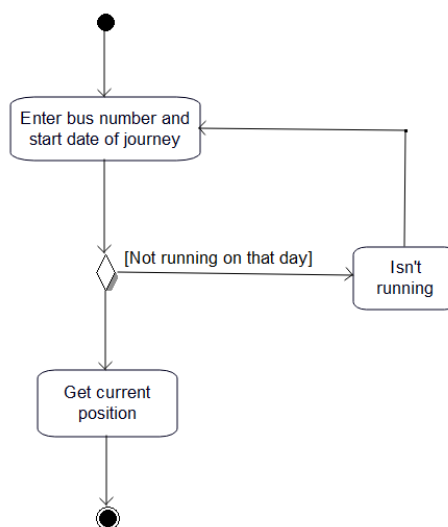
Booking history – cancellation and feedback

View booking history

[Rating] [Cancelling]

Rate a journey   Provide feedback

Cancel a ticket

Get refunded

Rate/cancel another journey

[Yes]

[No]

Profile settings

View Profile

[Else]   [Want to make changes]

Edit Profile
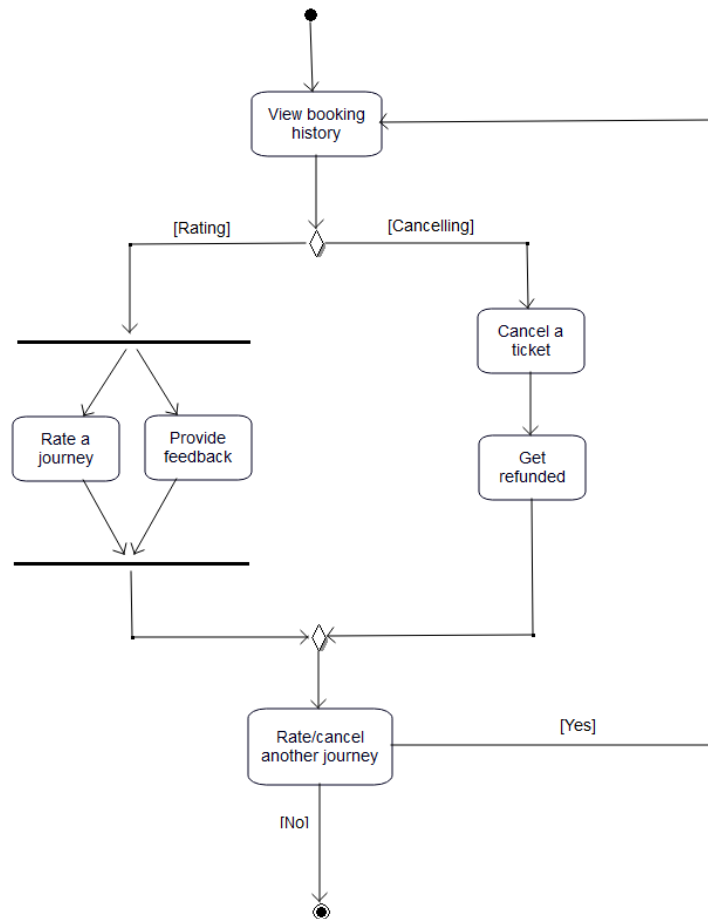
Save changes
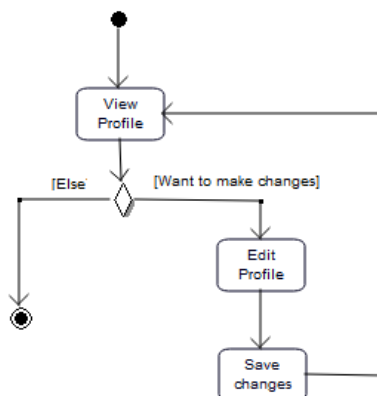
Main Functionalities from Admin side

```
                              ●
                              │
                              ▼
                        ┌──────────┐
                        │  Admin   │◄────────────────────────────┐
                        │  Login   │                             │
                        └──────────┘                             │
                              │                                  │
                              ▼                                  │
        ┌─────────────────────◆─────────────────────┐           │
        │                     │                      │           │
        ▼                     ▼                      ▼           │
   ┌─────────┐        ┌──────────────┐      ┌───────────────┐    │
   │ Release │        │ Append/remove│      │ Verify the    │    │
   │tickets  │        │buses and     │      │ documents     │    │
   │for a    │        │providers     │      │ for pass      │    │
   │day      │        └──────────────┘      └───────────────┘    │
   └─────────┘    [Remove]   │   [Append]        │   [Valid]     │
        │              ┌─────◆─────┐             ◆─────┐         │
        │              ▼           ▼         [Not]│     ▼         │
        │        ┌──────────┐ ┌──────────┐        │ ┌────────┐    │
        │        │Delete    │ │Add       │        │ │Issue   │    │
        │        │from      │ │details of│        │ │bus     │    │
        │        │database  │ │the       │        │ │pass    │    │
        │        └──────────┘ │bus/      │        │ └────────┘    │
        │              │      │providers │        │      │        │
        │              │      └──────────┘        │      │        │
        │              └─────◆─────┘              └──────◆        │
        │                    │                           │       │
        └────────────────────◆───────────────────────────┘       │
                             │                                    │
                             ▼                                    │
                       ┌──────────┐                               │
                       │ Perform  │                               │
                       │ another  │                               │
                       │ job      │                               │
                       └──────────┘                               │
                   [No]     │      [Yes]                          │
              ┌─────────────◆─────────────────────────────────────┘
              ▼
         ┌─────────┐
         │ Logout  │
         └─────────┘
              │
              ▼
              ◉
```