TRAFFIC MANAGEMENT SYSTEM

Report on Process Design

Information System Design Project

(CSE 308)

CSE A2

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TOPICS:

In this week we will discuss on the following topics

- ○ Sequence Diagram
- ○ State-Chart Diagram
- ○ Activity Diagram

Subsystems:

The subsystems of our project are:

- Complain subsystem
- Highway Network Updating Subsystem
- City Network Updating Subsystem
- Query Subsystem

Process Design:

The process design of our project is given below as system wise.
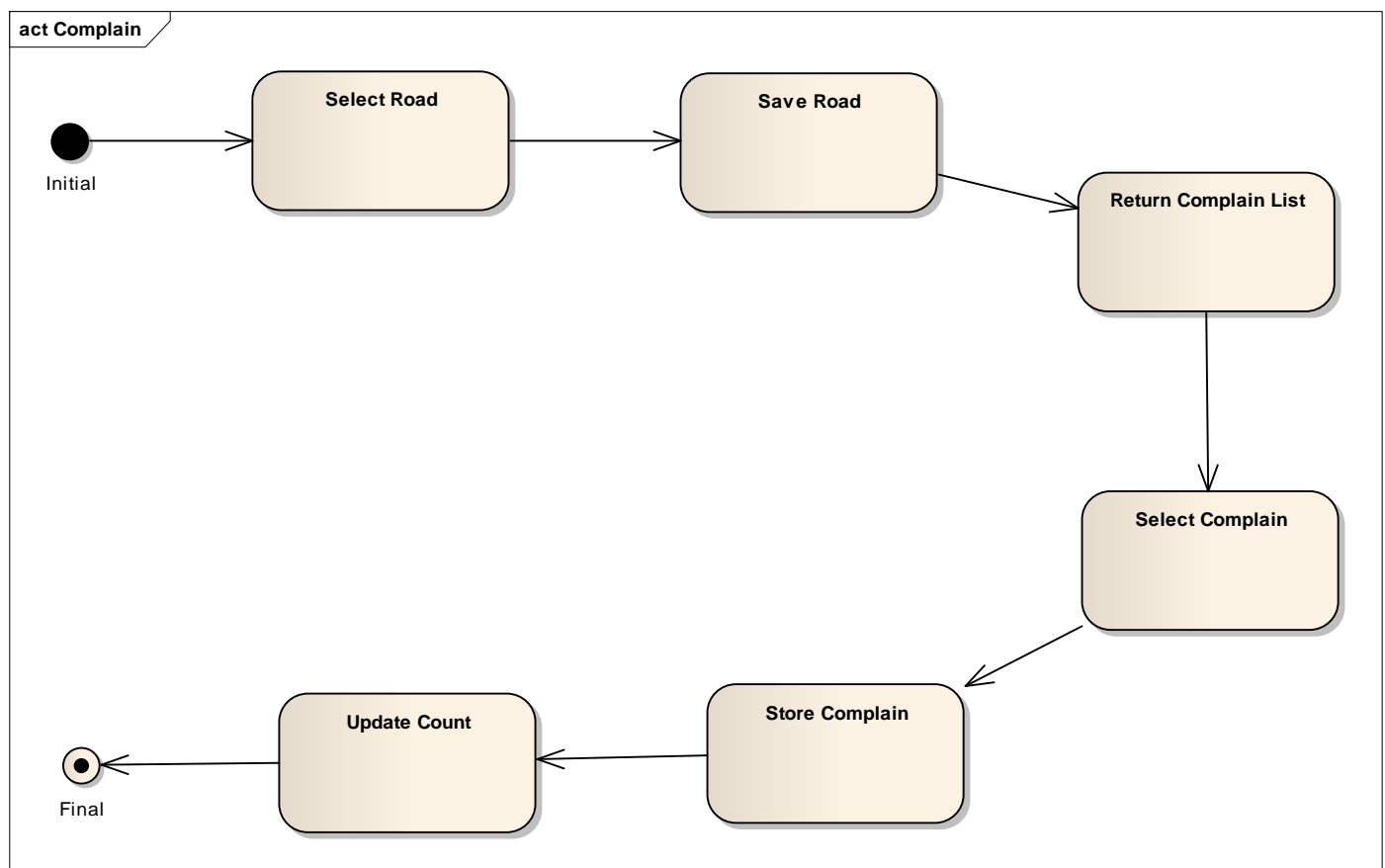
Complain Subsystem:

In this subsystem there are we two use-case. One is complain and another is notification. We will discuss on the sequence diagram, activity diagram and state-chat diagram for each use case. These are given below:
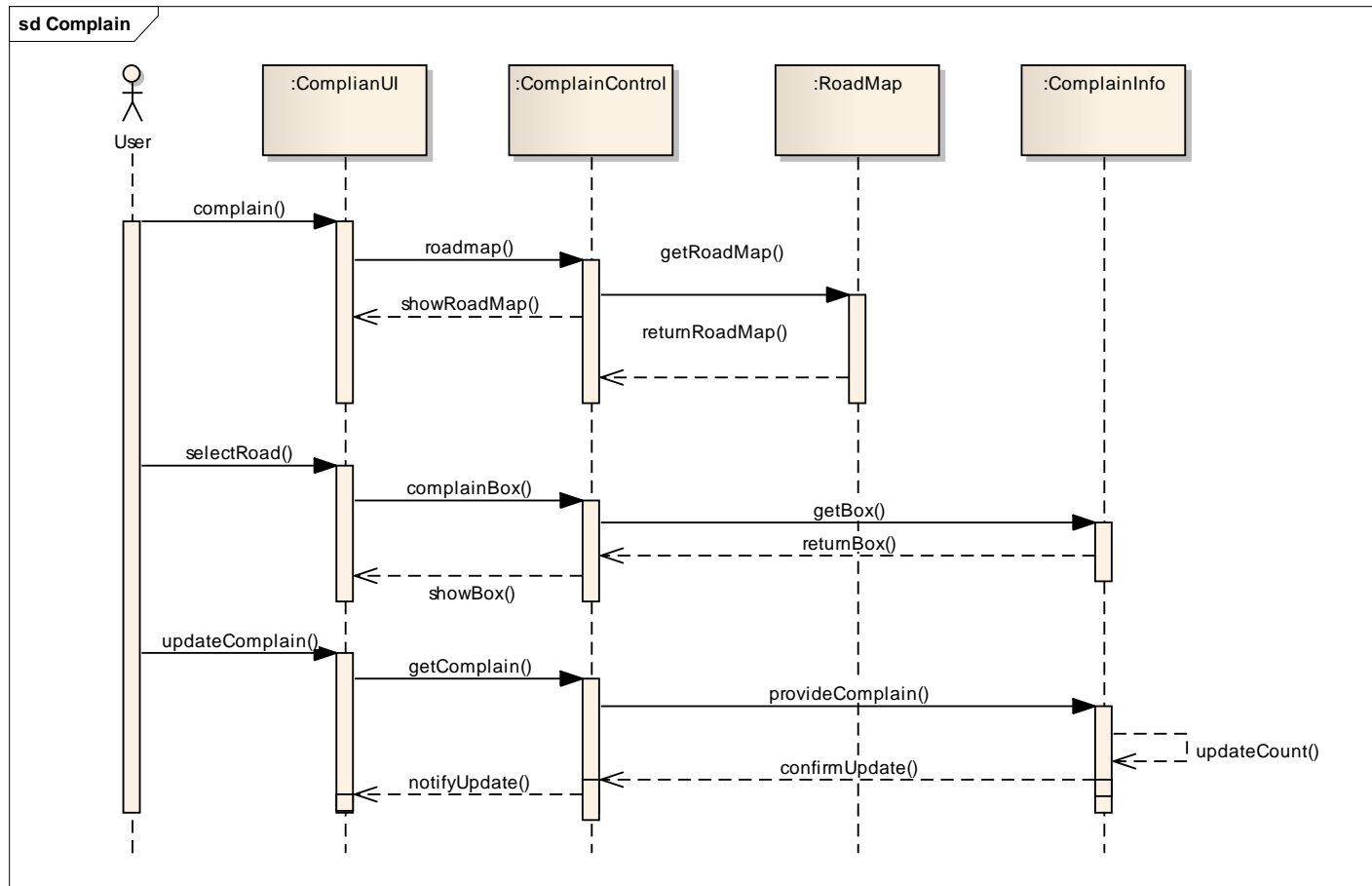
1.Complain Use-Case:

In the complain use-case there will store the complain of traffic management, roads problems, accident prone roads etc. All kinds of user can complain.
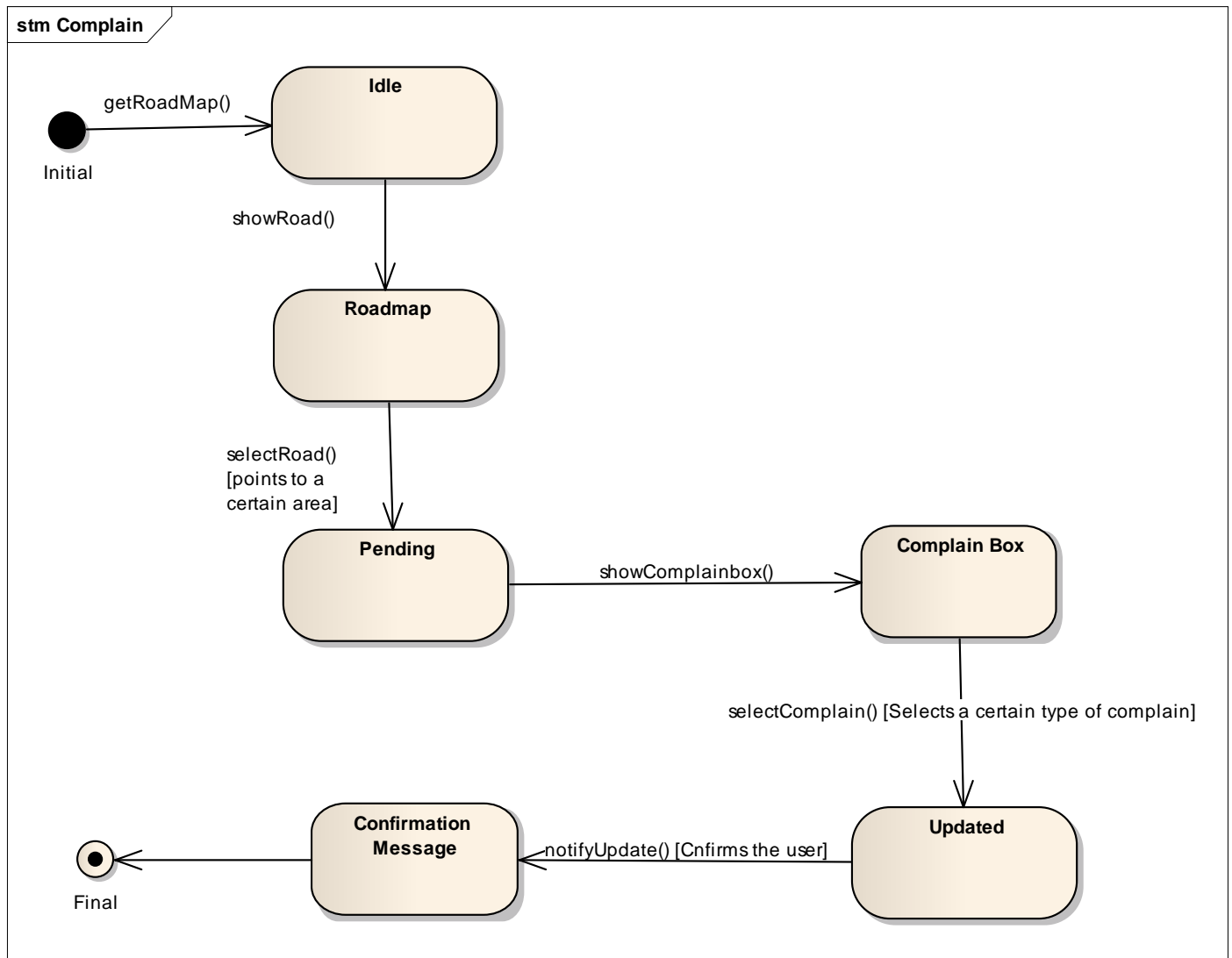
1.1Activity Diagram:

1.1 Fig: Activity diagram for complain use-case

1.1 Sequence Diagram:

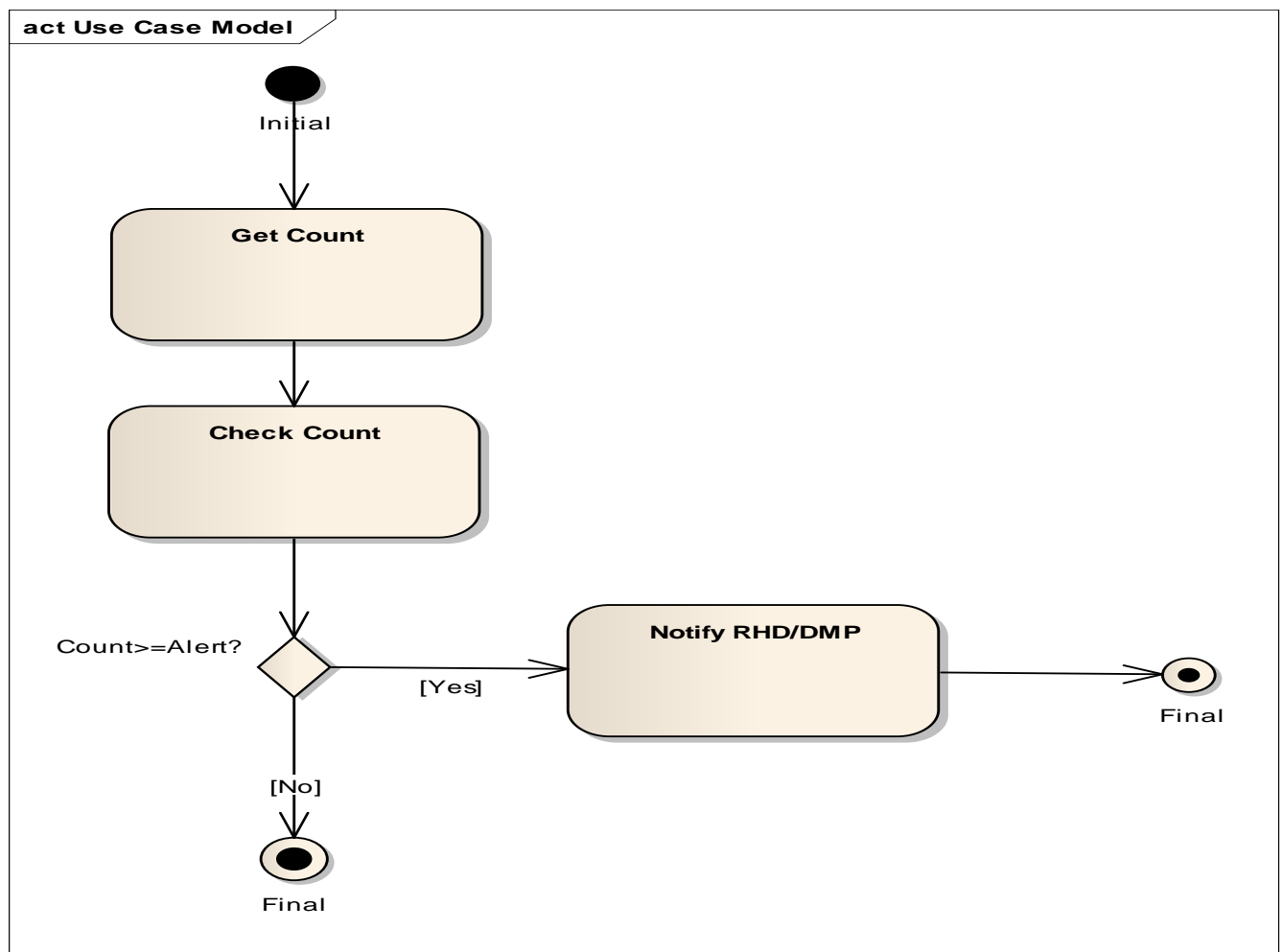1.2Fig: Sequence diagram for complain use-case

1.3State-Chart Diagram:

stm Complain

Initial → getRoadMap() → **Idle**

Idle → showRoad() → **Roadmap**

Roadmap → selectRoad() [points to a certain area] → **Pending**

Pending → showComplainbox() → **Complain Box**

Complain Box → selectComplain() [Selects a certain type of complain] → **Updated**

Updated → notifyUpdate() [Cnfirms the user] → **Confirmation Message**

Confirmation Message → Final

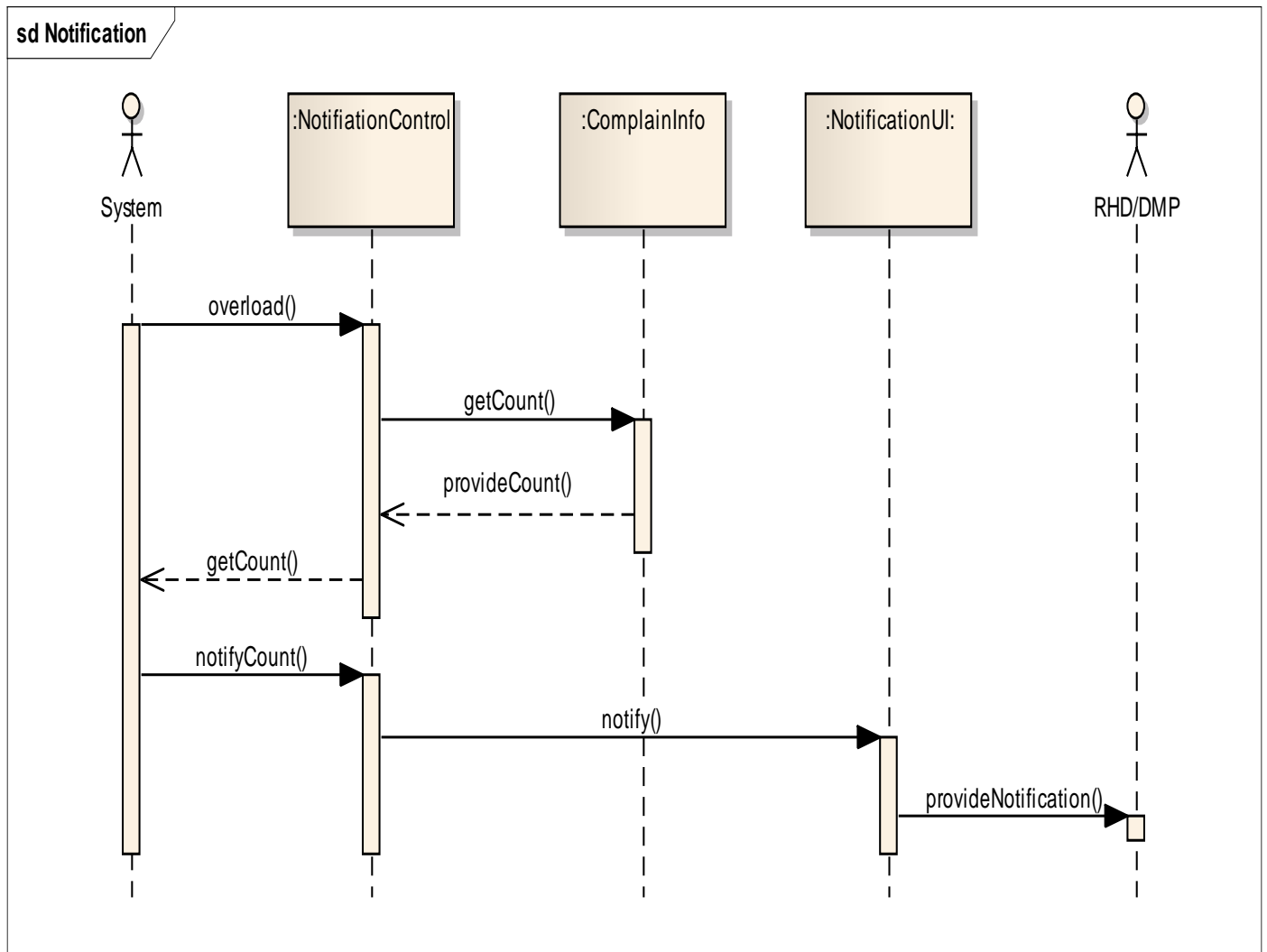1.3Fig: State-Chart diagram for complain use-case

2.Notification Use-Case:

If the complains go over a certain amount, then there will be given a notification to the RDH or DMP to take an essential step for these complains.
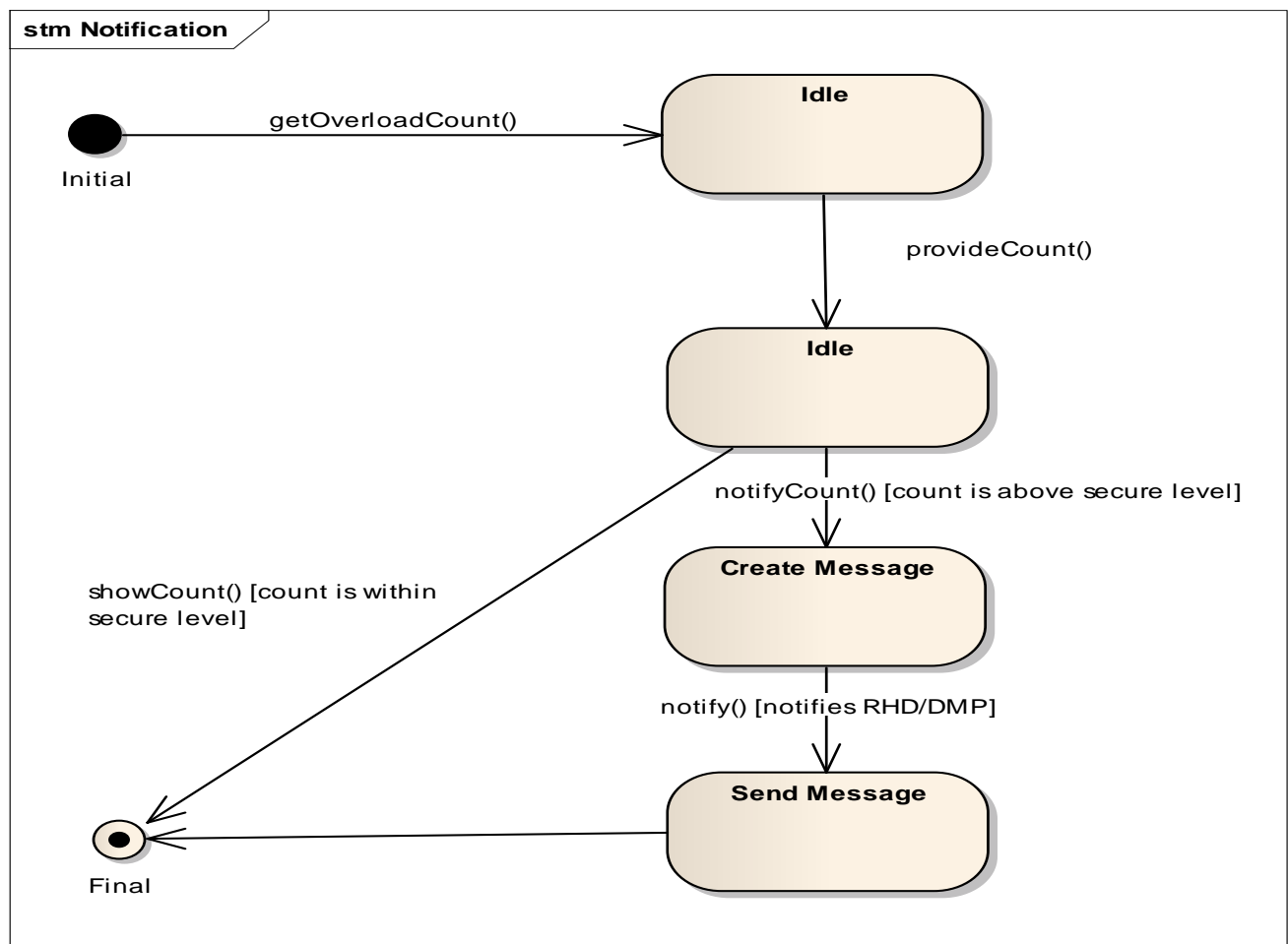
2.1Activity Diagram:

2.1 Fig: Activity Diagram for Notification Use-Case.

2.2Sequence Diagram:

2.2 Fig: Sequence Diagram for Notification Use-Case.
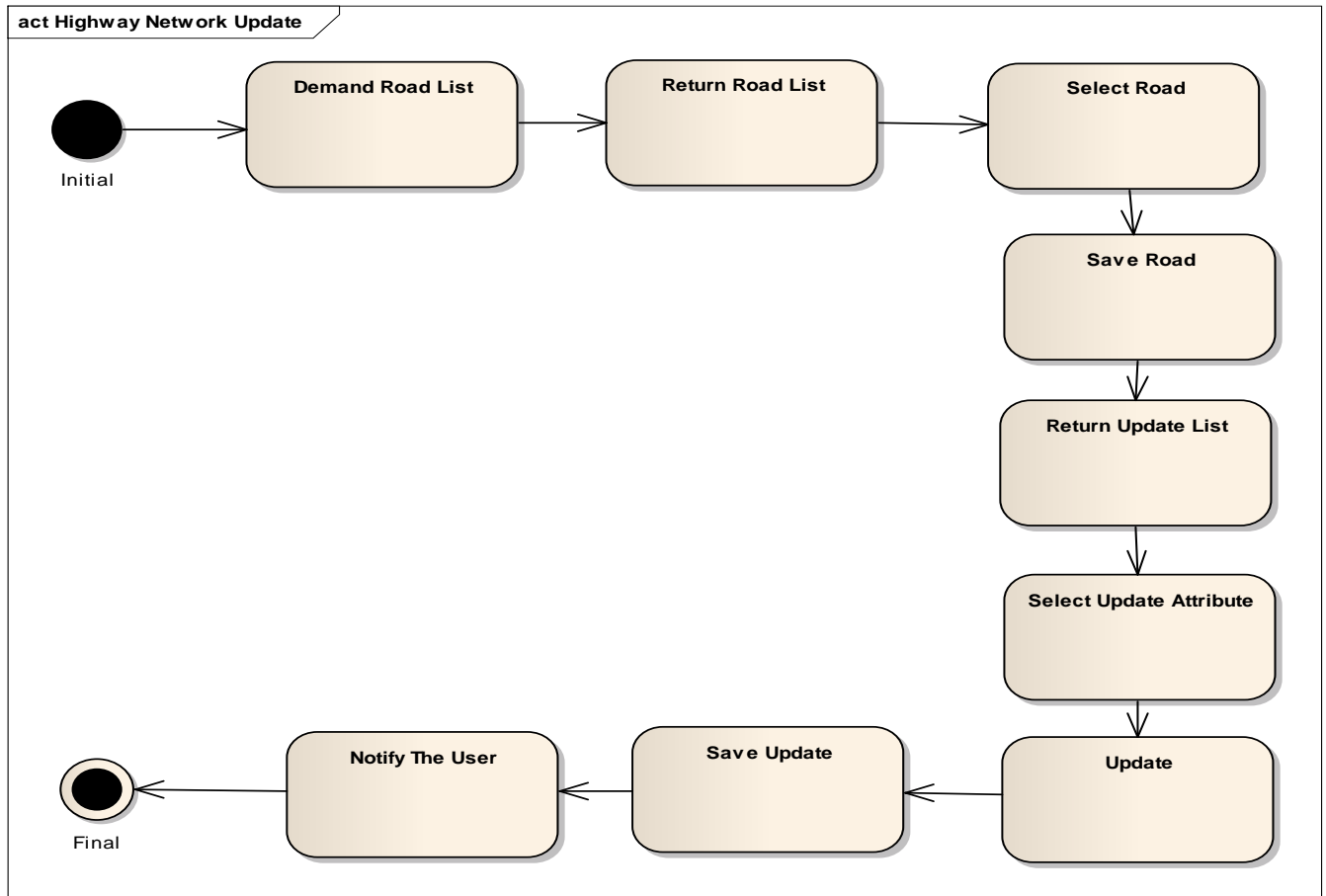
2.3 State-chart Diagram:

2.3Fig : State-Chart Diagram for Notification Use-Case.

Highway Network Updating Subsystem:

In this subsystem the only the authorized user can update road networking. There is one use-case in this subsystem. This is highway updating use-case. The activity diagram, sequence diagram and the state-chart diagram are given below.
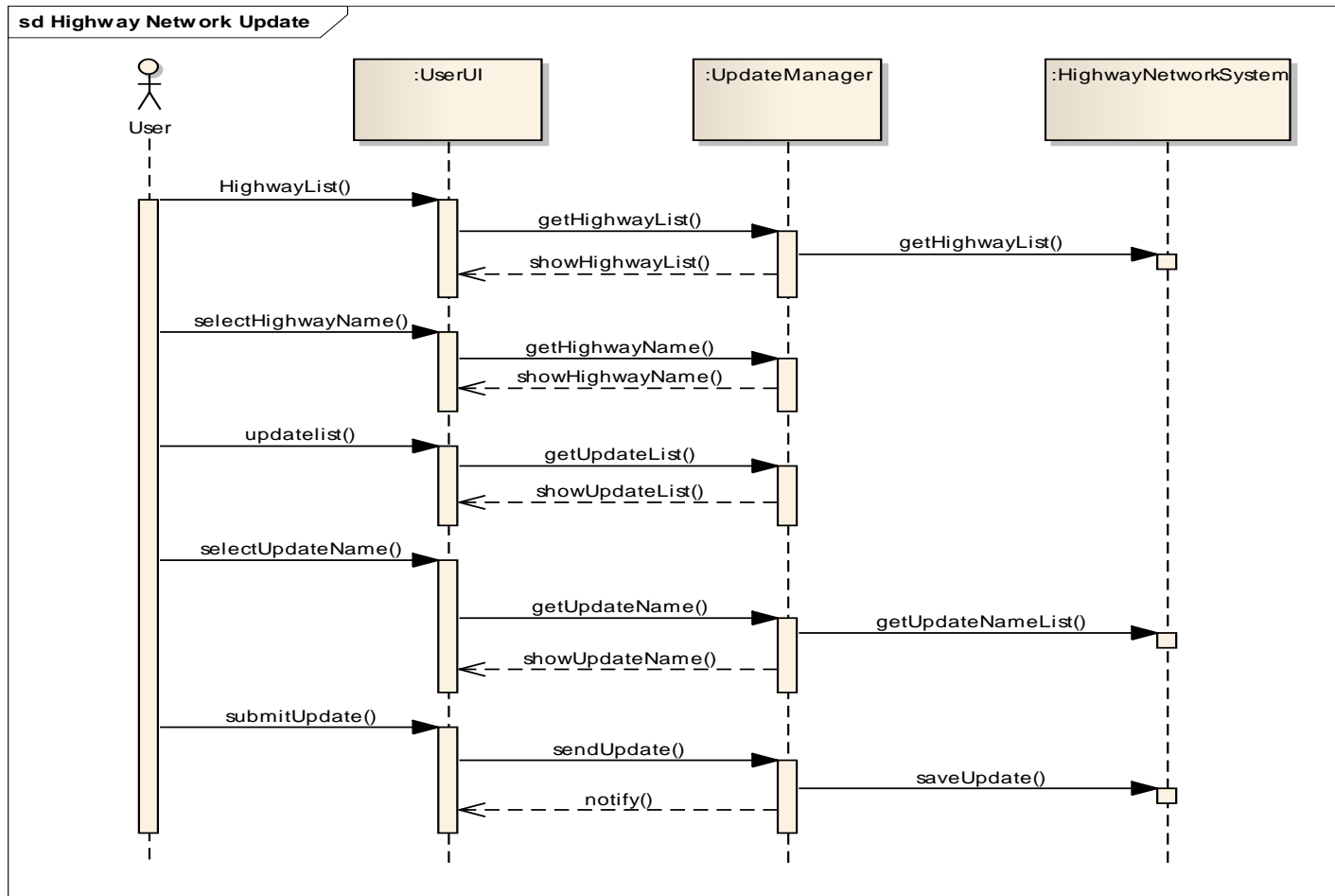
1.Highway Updating Use-Case:
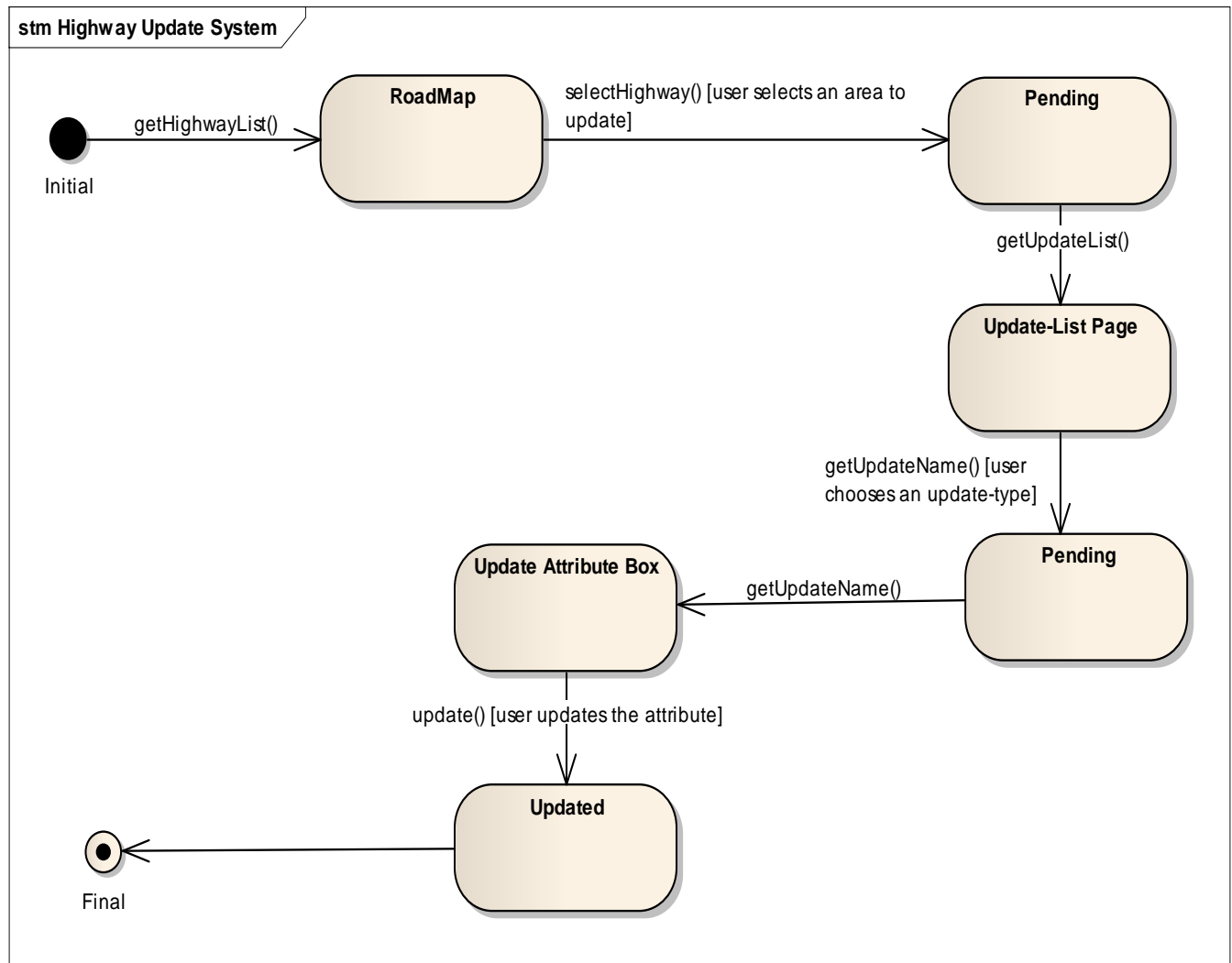
1.1Activity Diagram:

1.1   Fig: Activity diagram for highway updating use-case

1.2Sequence Diagram:

1.2Fig: Sequence diagram for highway updating use-case.
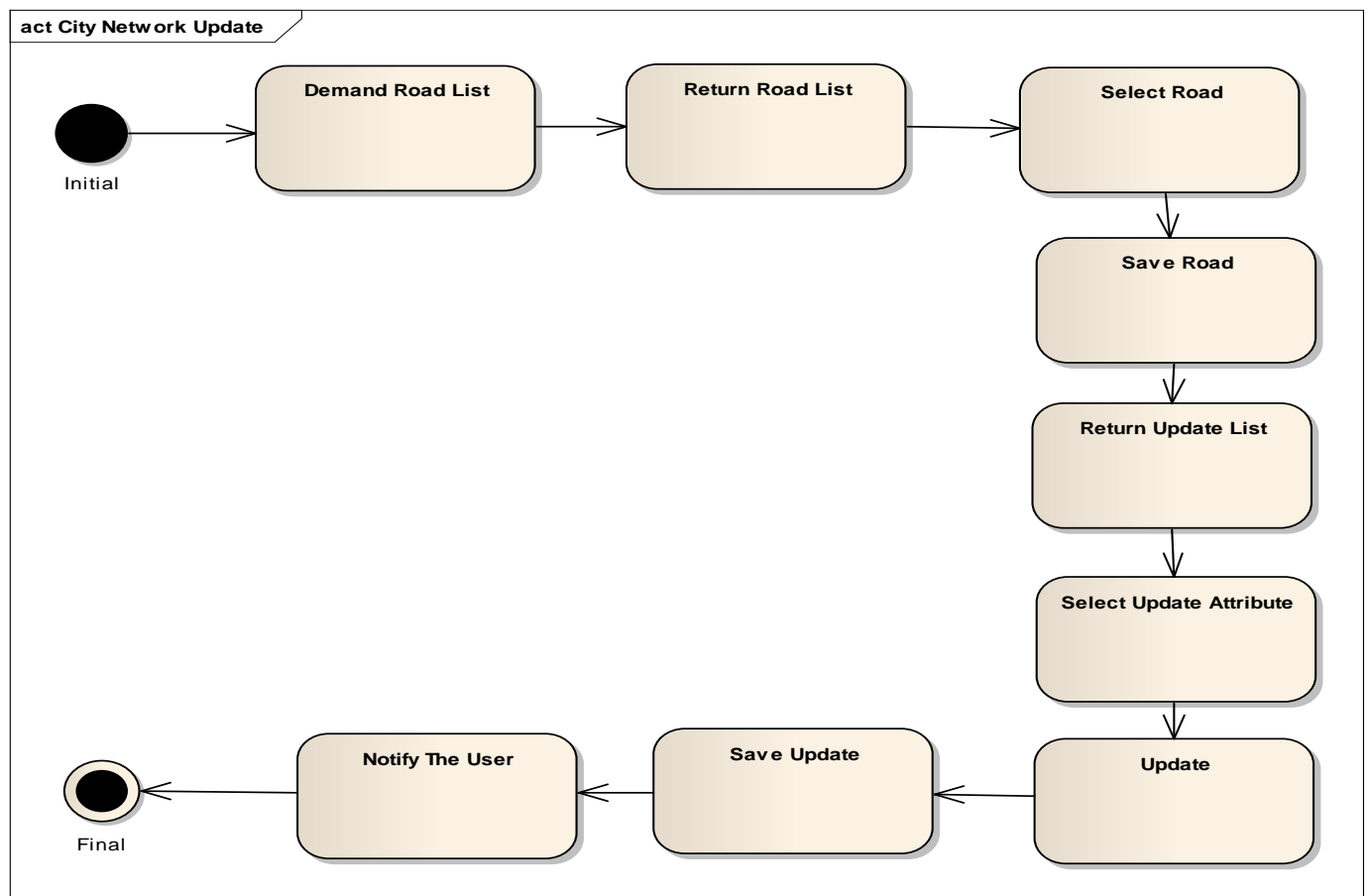
1.2 State-Chart Diagram:

1.2Fig: State-chart diagram for highway updating use-case.

City Network Updating Subsystem:

This subsystem updates the city network. Each city has different routes from one place to another place. So this will take the latest news which route is jam free or which route has a long jam etc. In this subsystem there are two use-case. One is city network update and another is login.
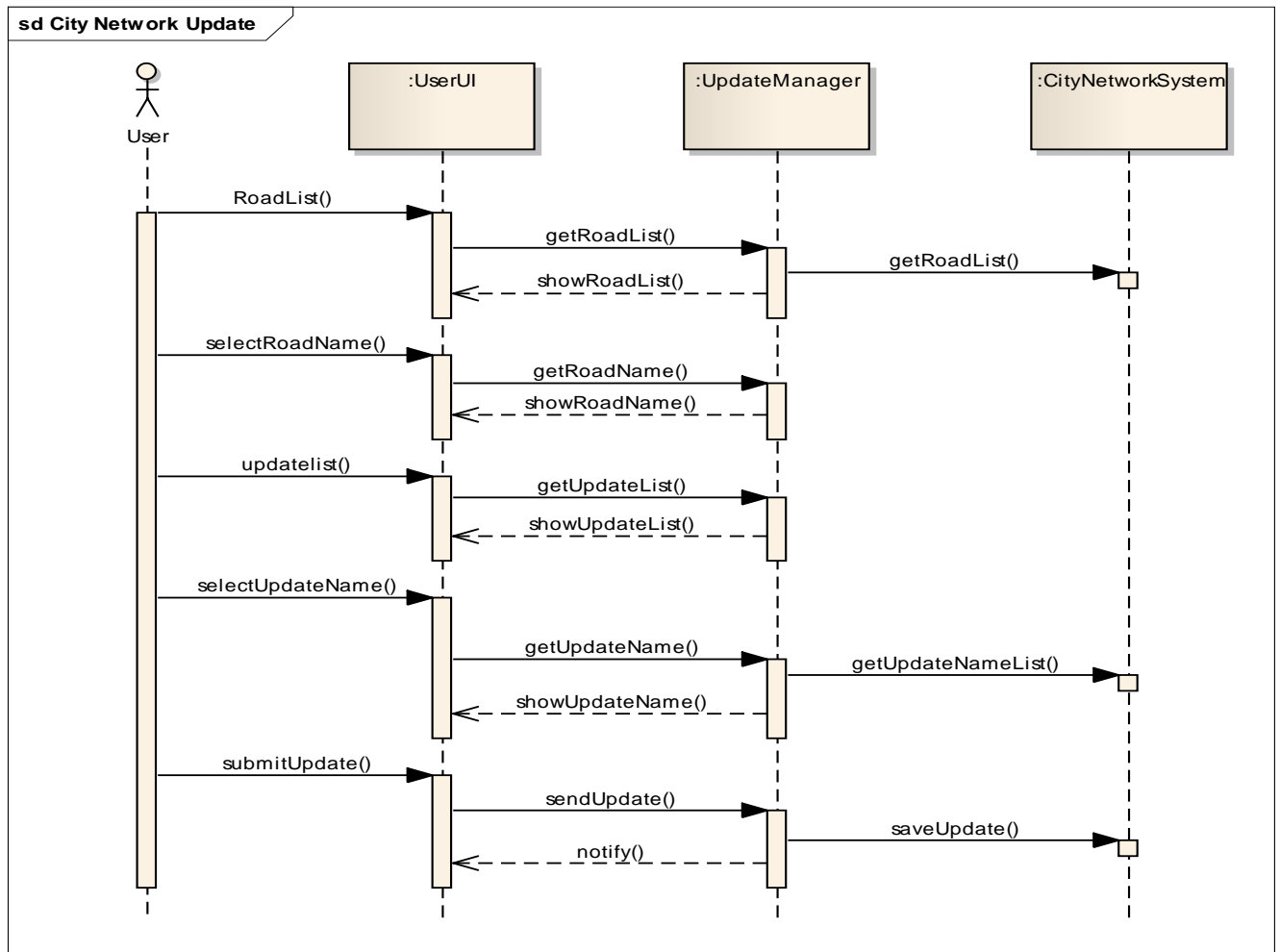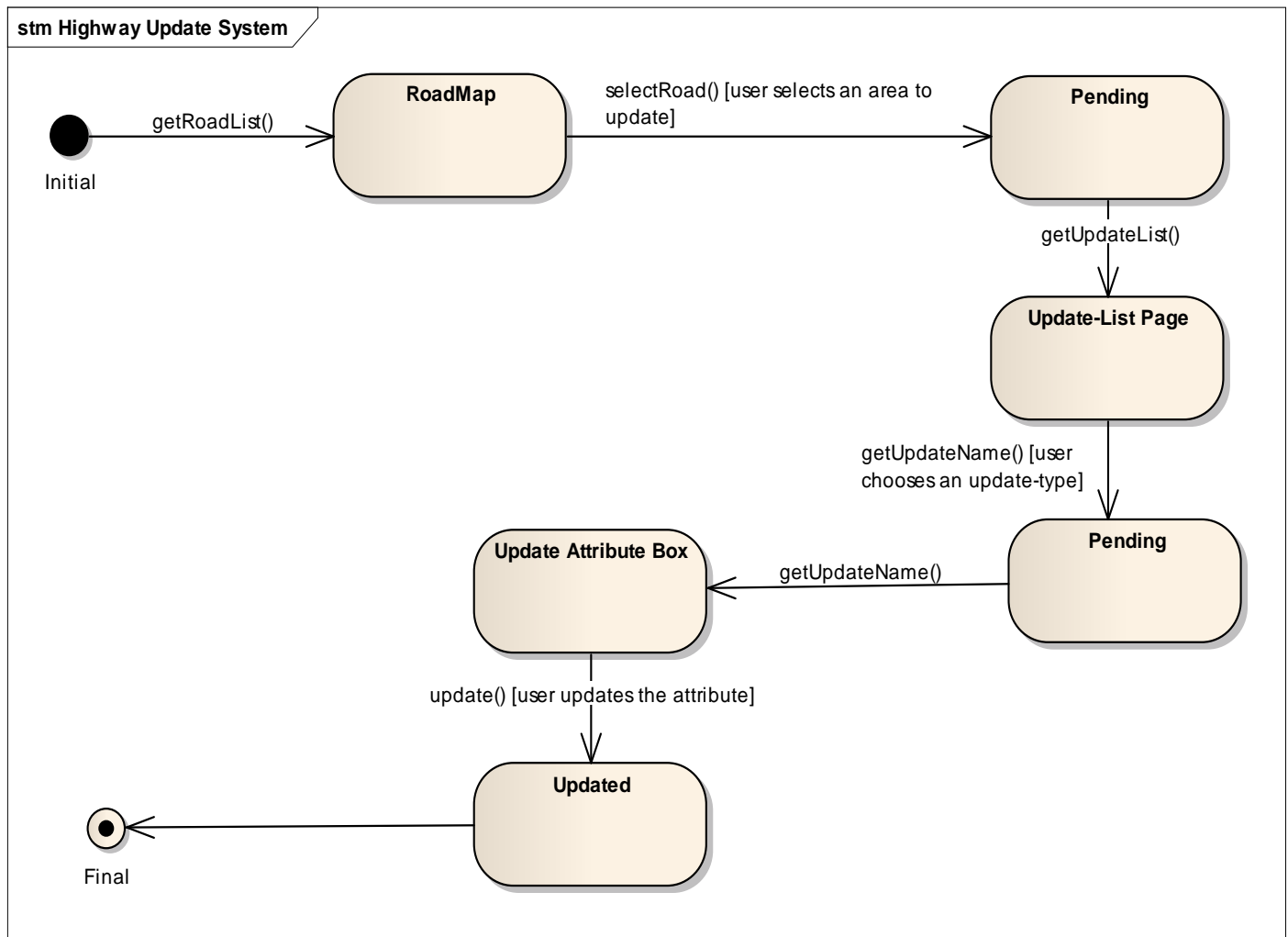
1.City Update Use-Case:

1.1Activity Diagram:

1.1   Fig: Activity Diagram for city updating Use-case

1.2Sequence Diagram:

sd City Network Update
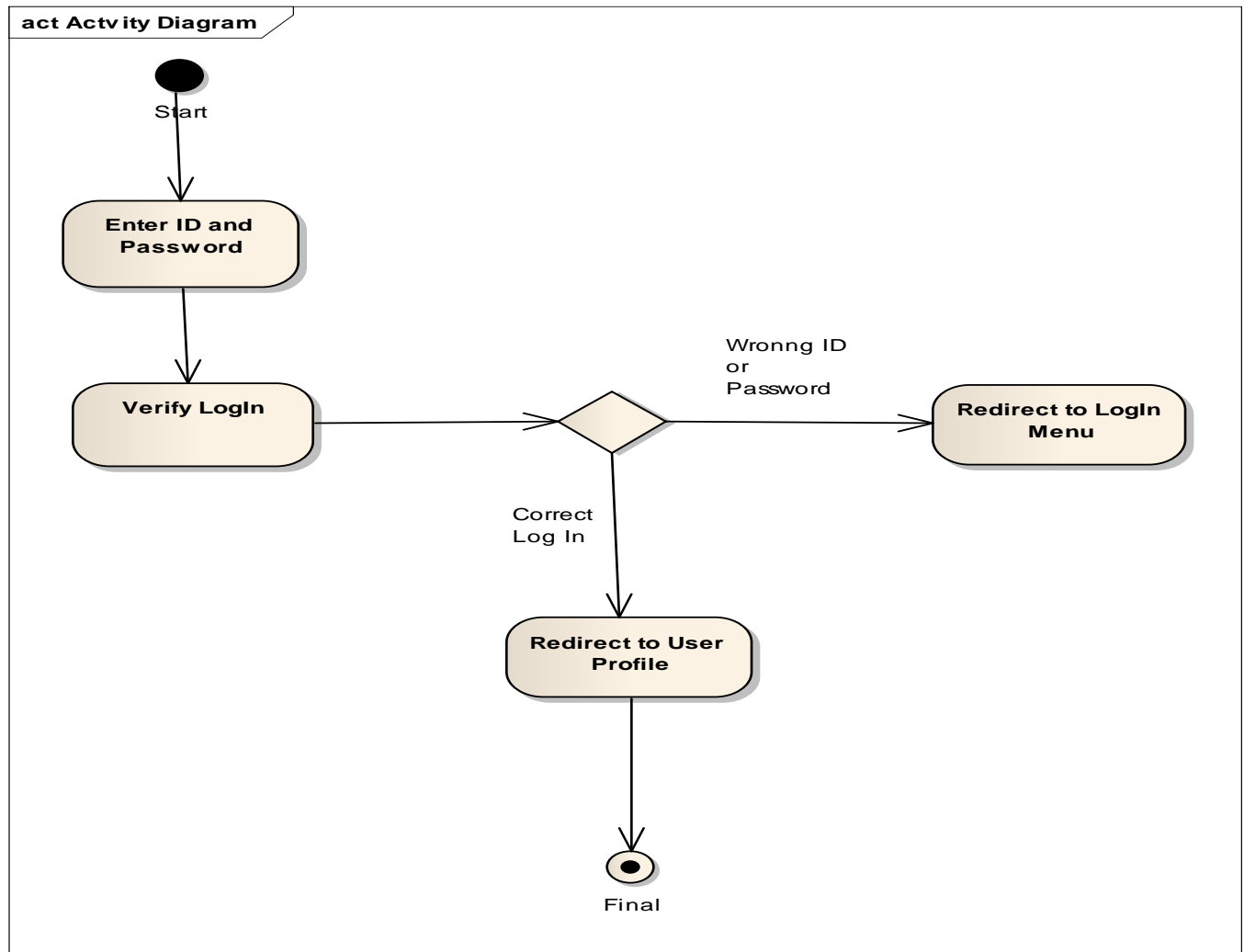

1.2Fig: Sequence Diagram for City Update Use-Case.

1.3State-Chart Diagram:
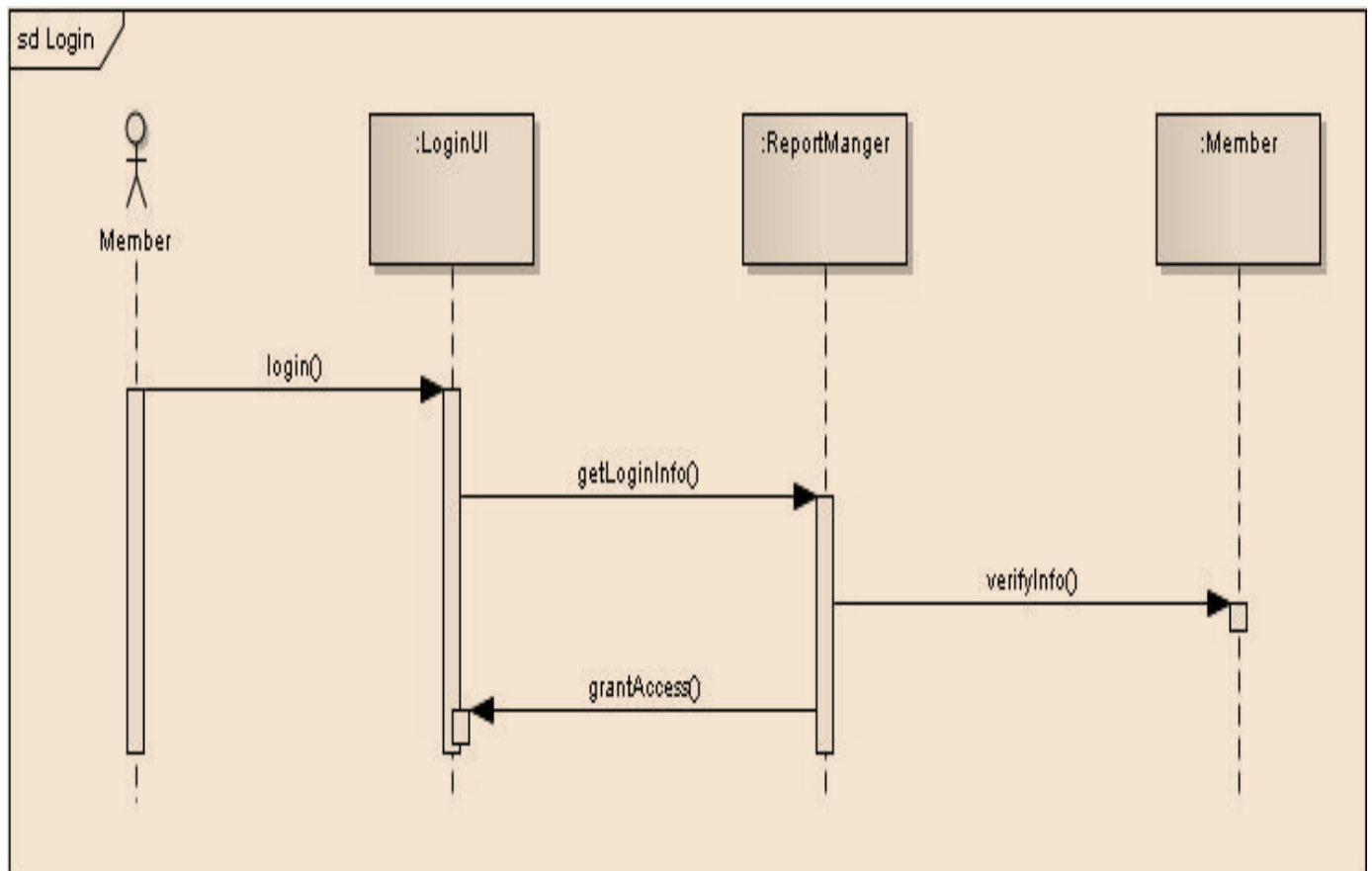

1.3Fig: State-chart diagram for city update use-case

2.Login Use-Case:

2.1 Activity Diagram:

act Actvity Diagram

Start

Enter ID and Password

Verify LogIn

Wronng ID or Password

Redirect to LogIn Menu
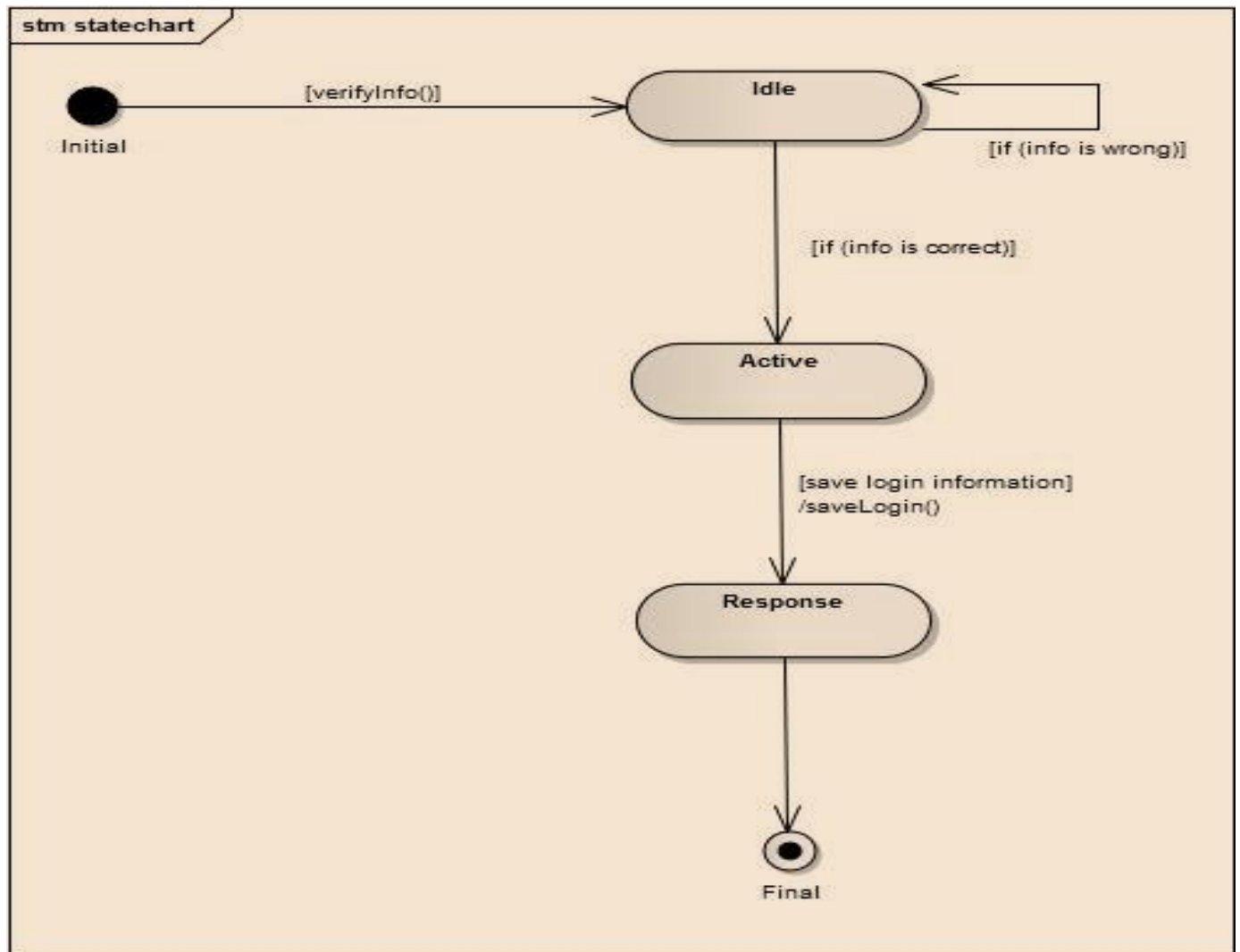
Correct Log In

Redirect to User Profile

Final

2.1 Fig: Activity diagram for login use-case.

2.2Sequence Diagram:

2.2Fig: Sequence diagram for login use-case.
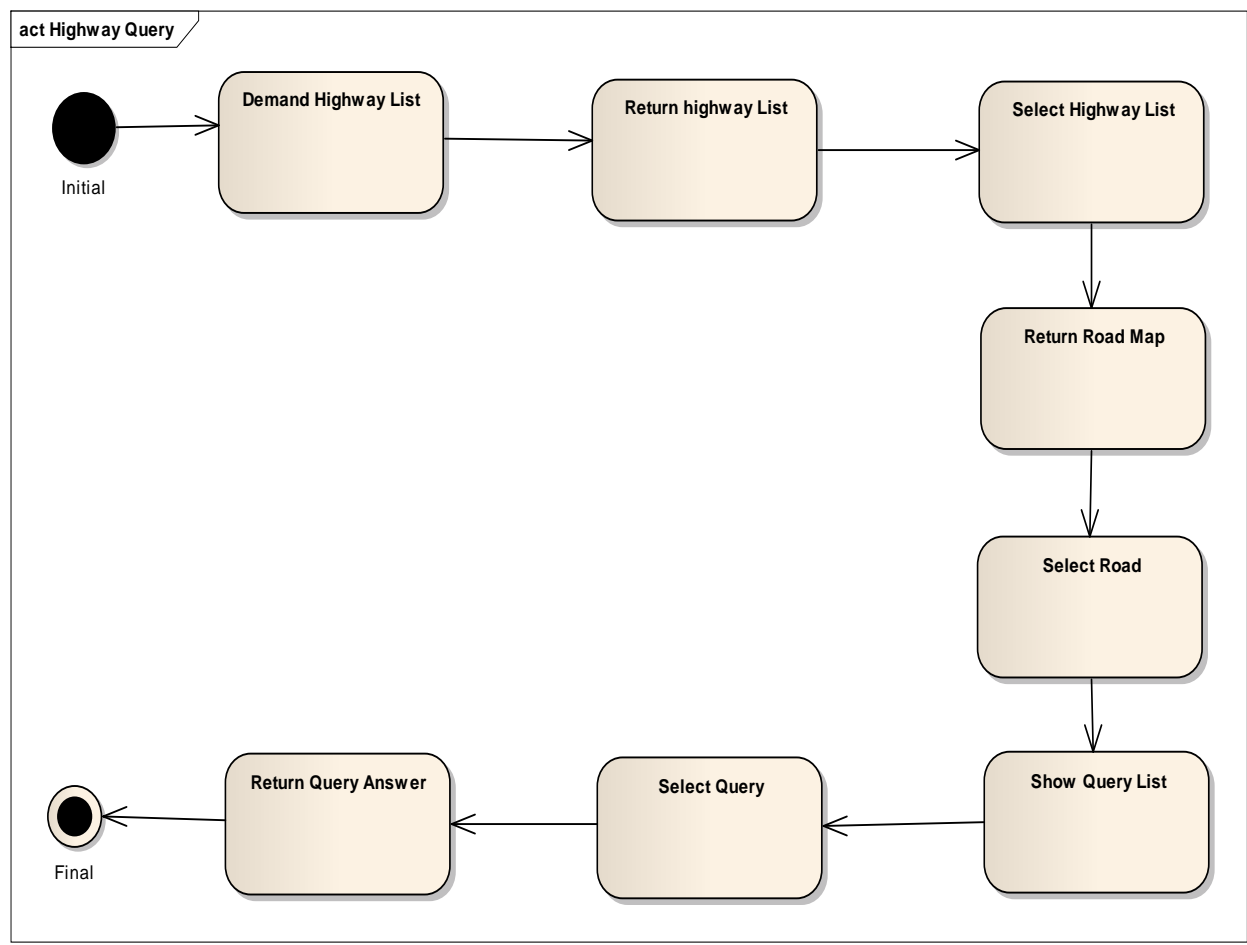
2.3State-Chart Diagram:

2.3 Fig: State-Chart diagram for login use-case.

Query Subsystem:

Query subsystem consists of two use-cases. Highway query and city query. The activity diagram, sequence diagram and the state-chart diagram of these use-cases are given below:
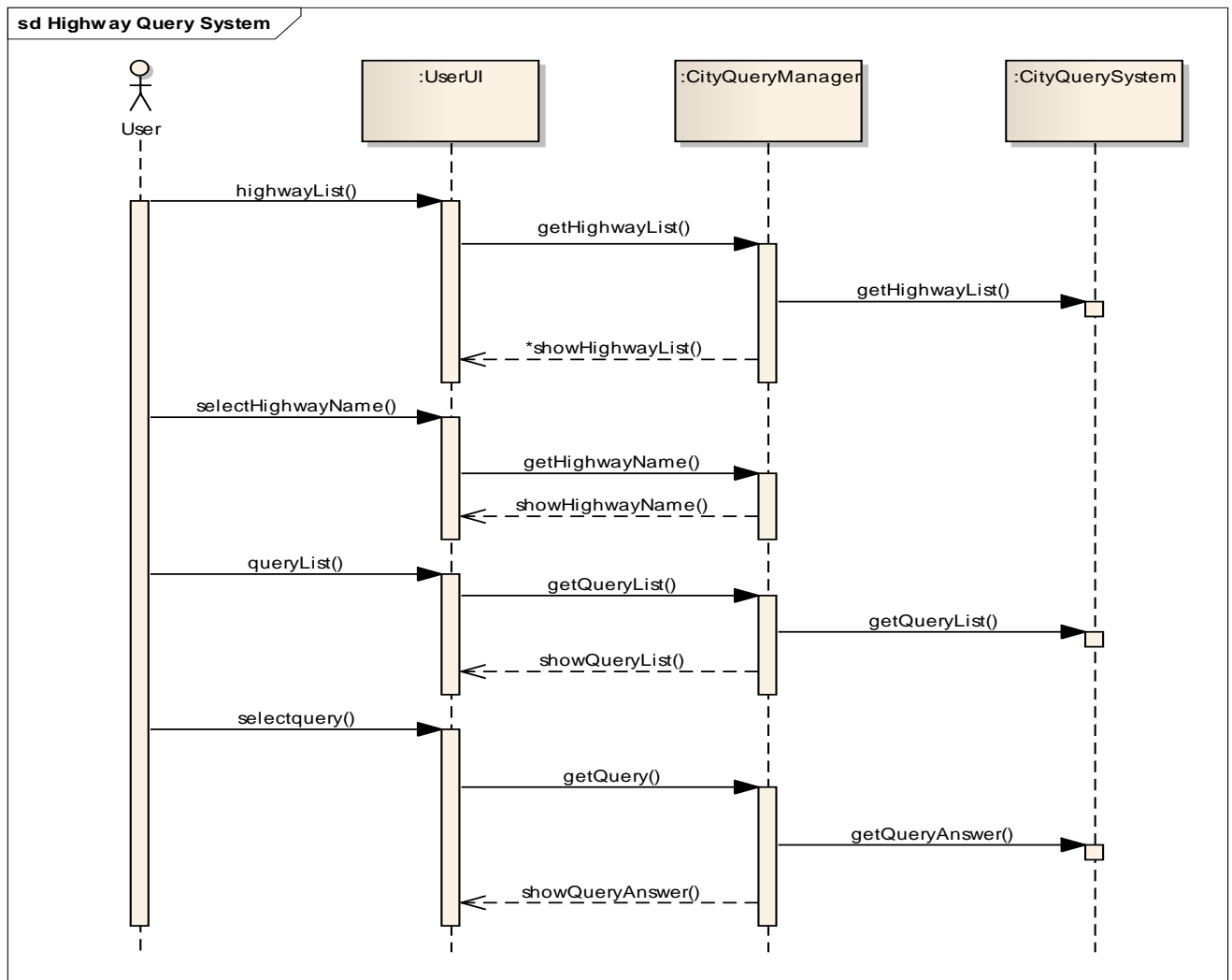
1.Highway Query Use-Case:

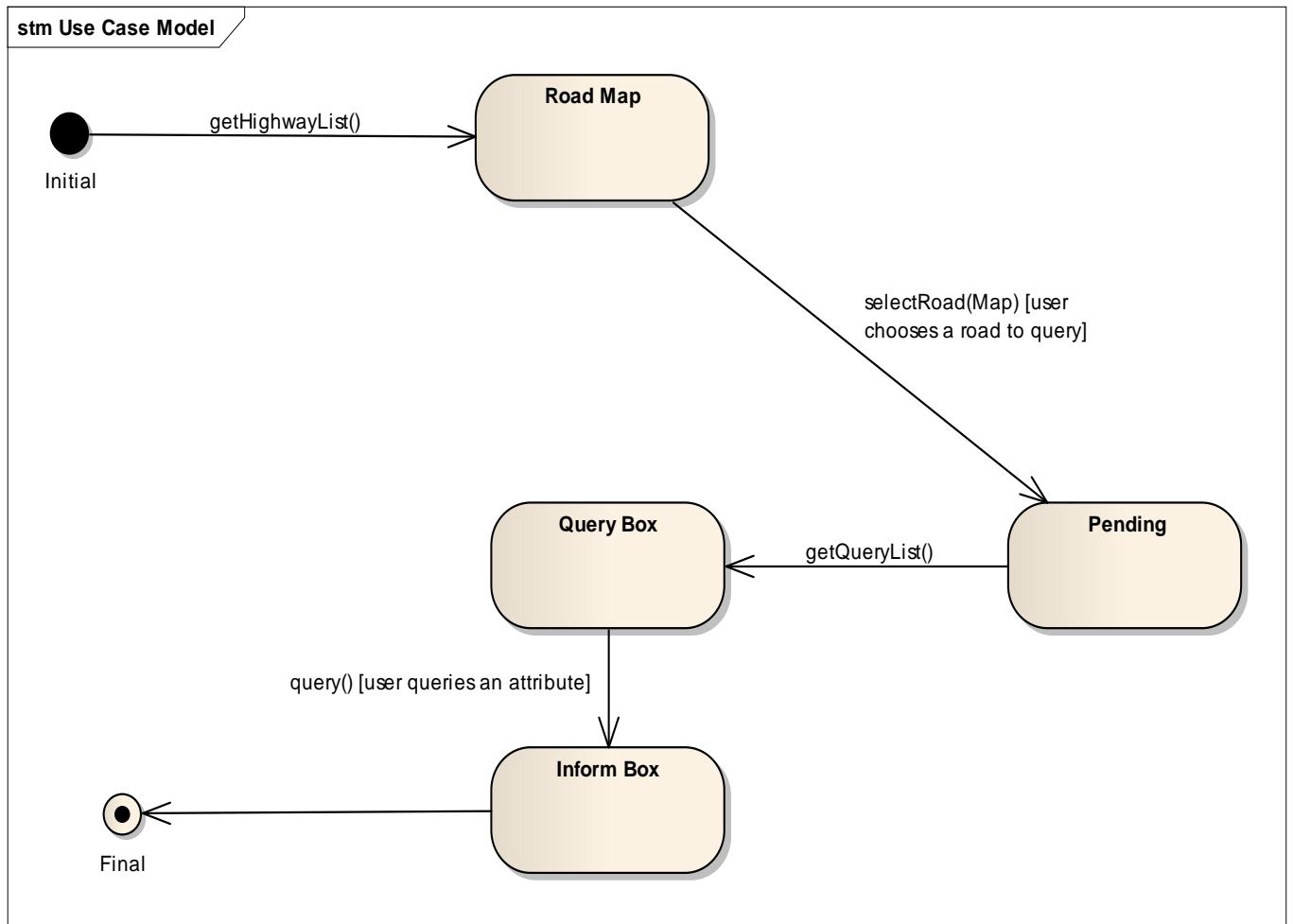### 1.1Activity Diagram:

1.1Fig: Activity diagram for highway query use-case.

1.2Sequence Diagram:

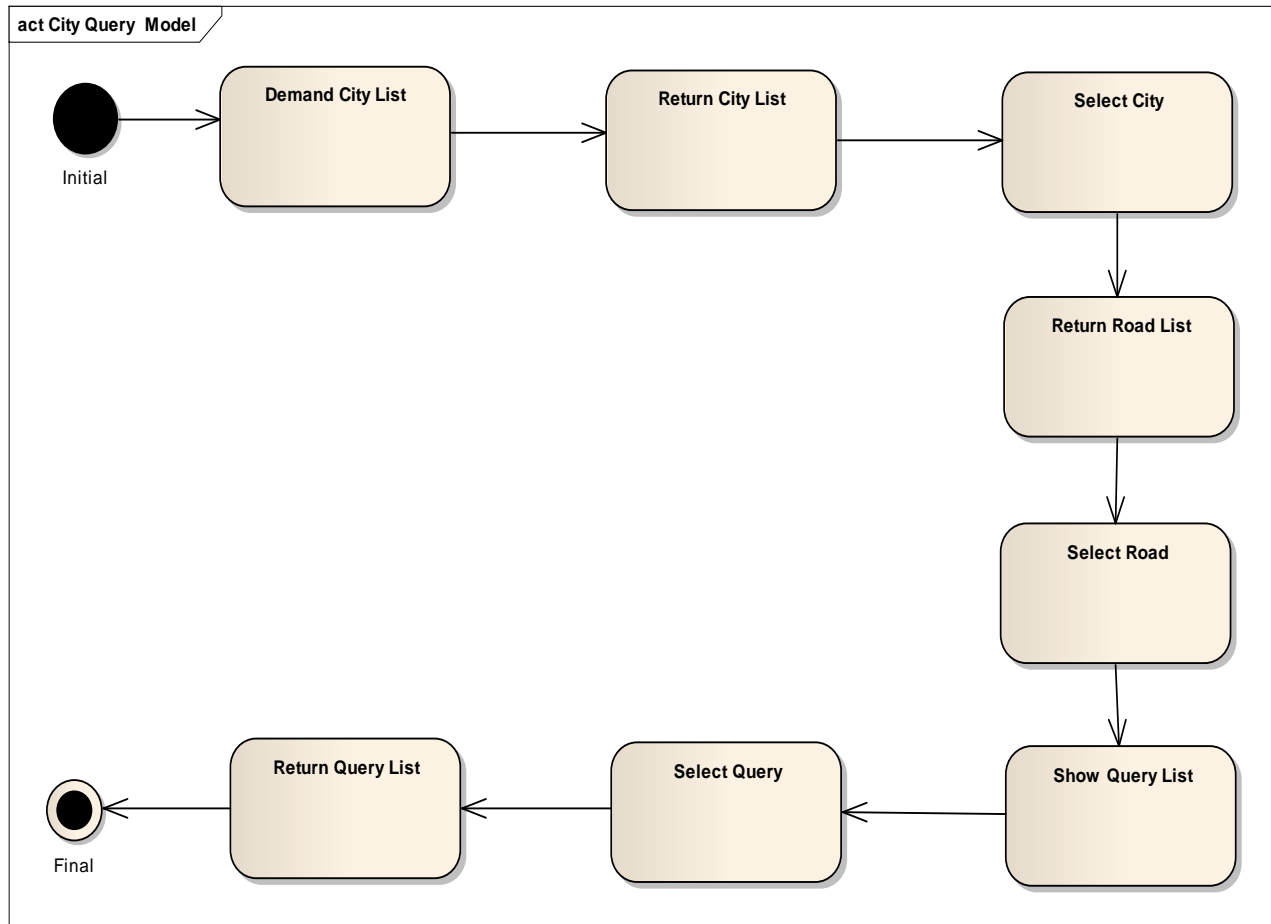1.2Fig: Sequence diagram for highway query.

1.3State-chart Diagram:

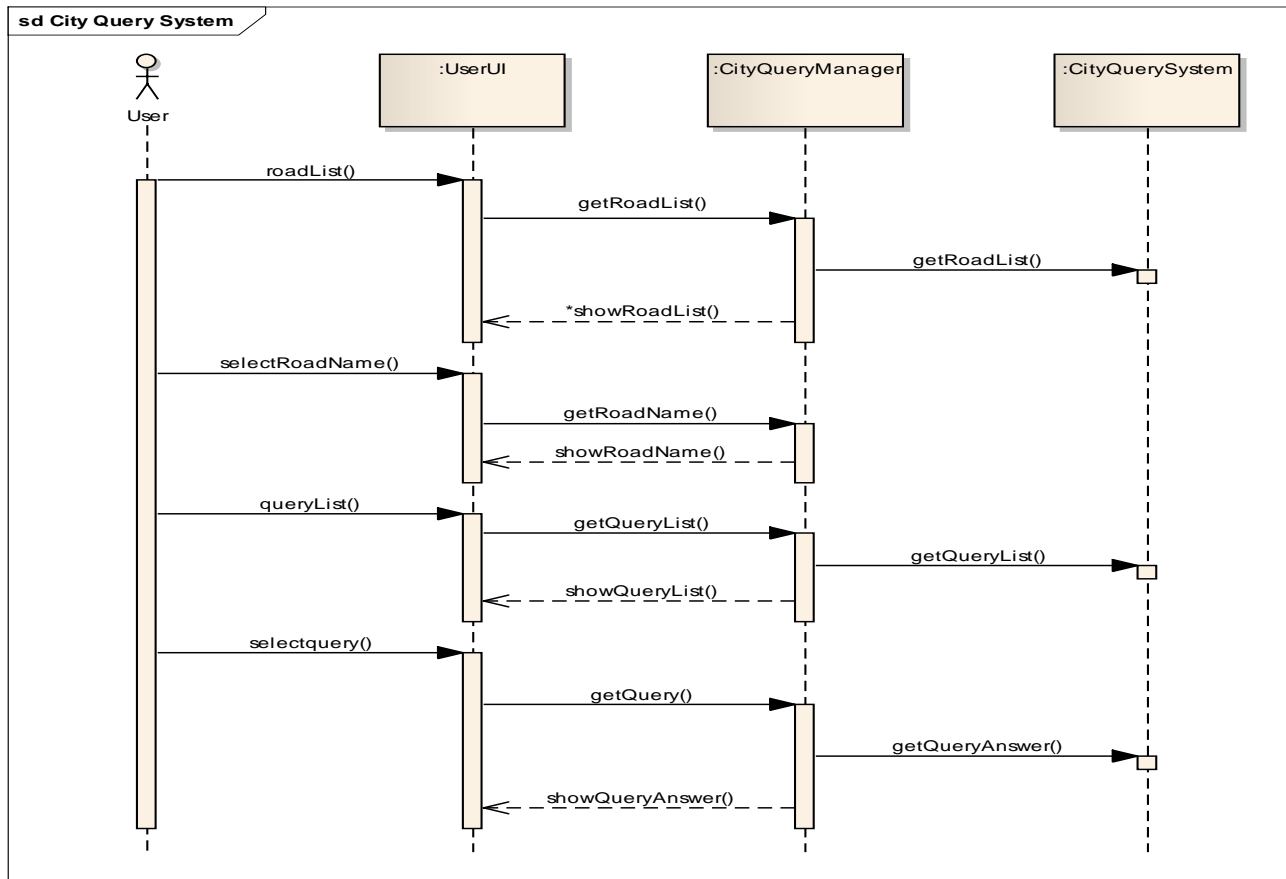1.3Fig: State-chart diagram for highway query.

2.City Query Use-Case:
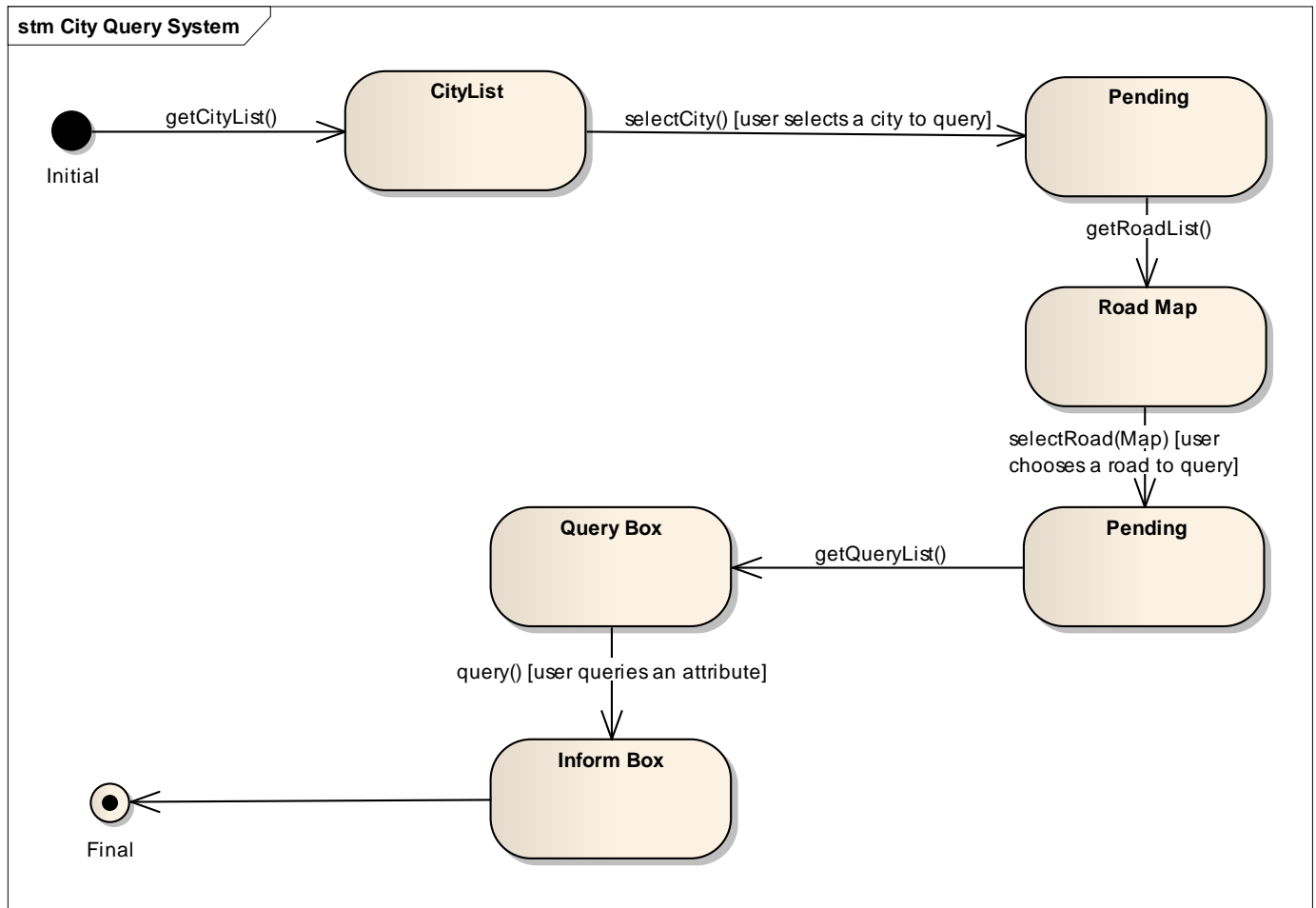
2.1Activity Diagram:

2.1Fig: Activity Diagram for City Query Use-case.

2.2Sequence Diagram:

2.2Fig: Sequence diagram for city query use-case.

2.3 State-Chart Diagram:

2.3Fig: State-Chart Diagram for city query use-case.