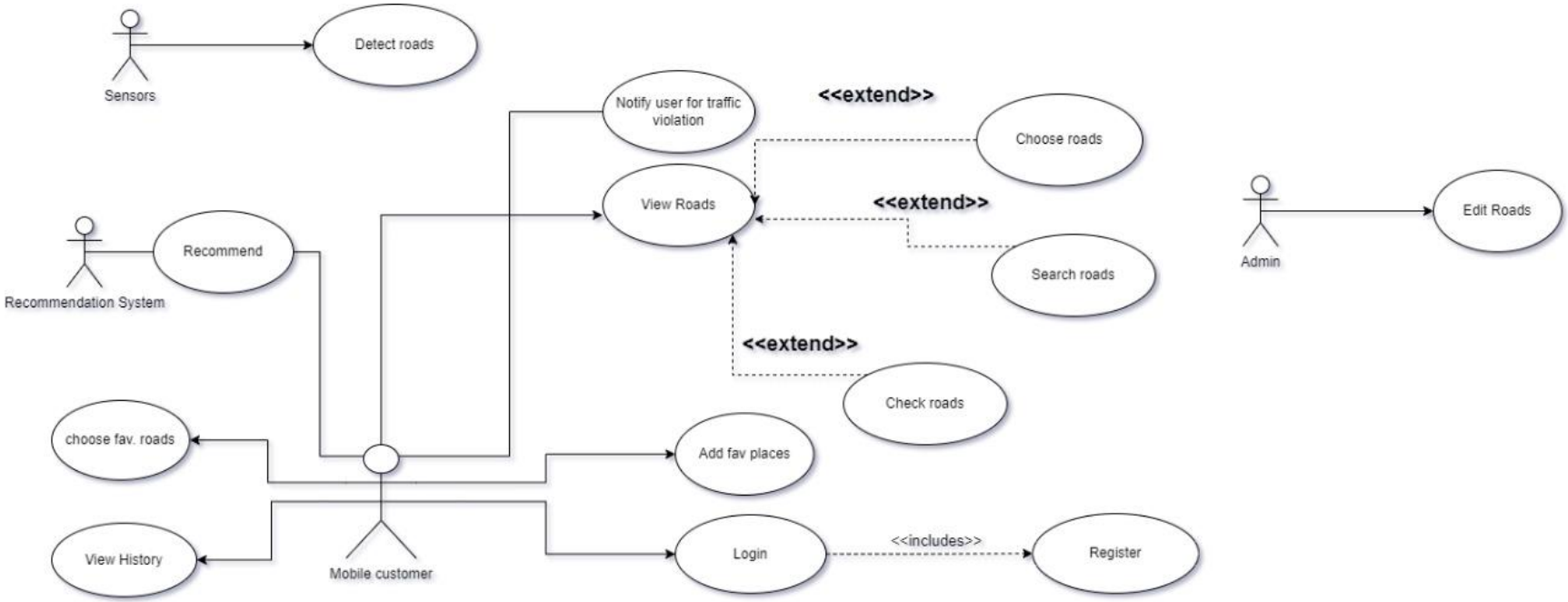
FCIS
AIN SHAMS
UNIVERSITY

System Analysis and Design

Traffic Safety Mobile Application

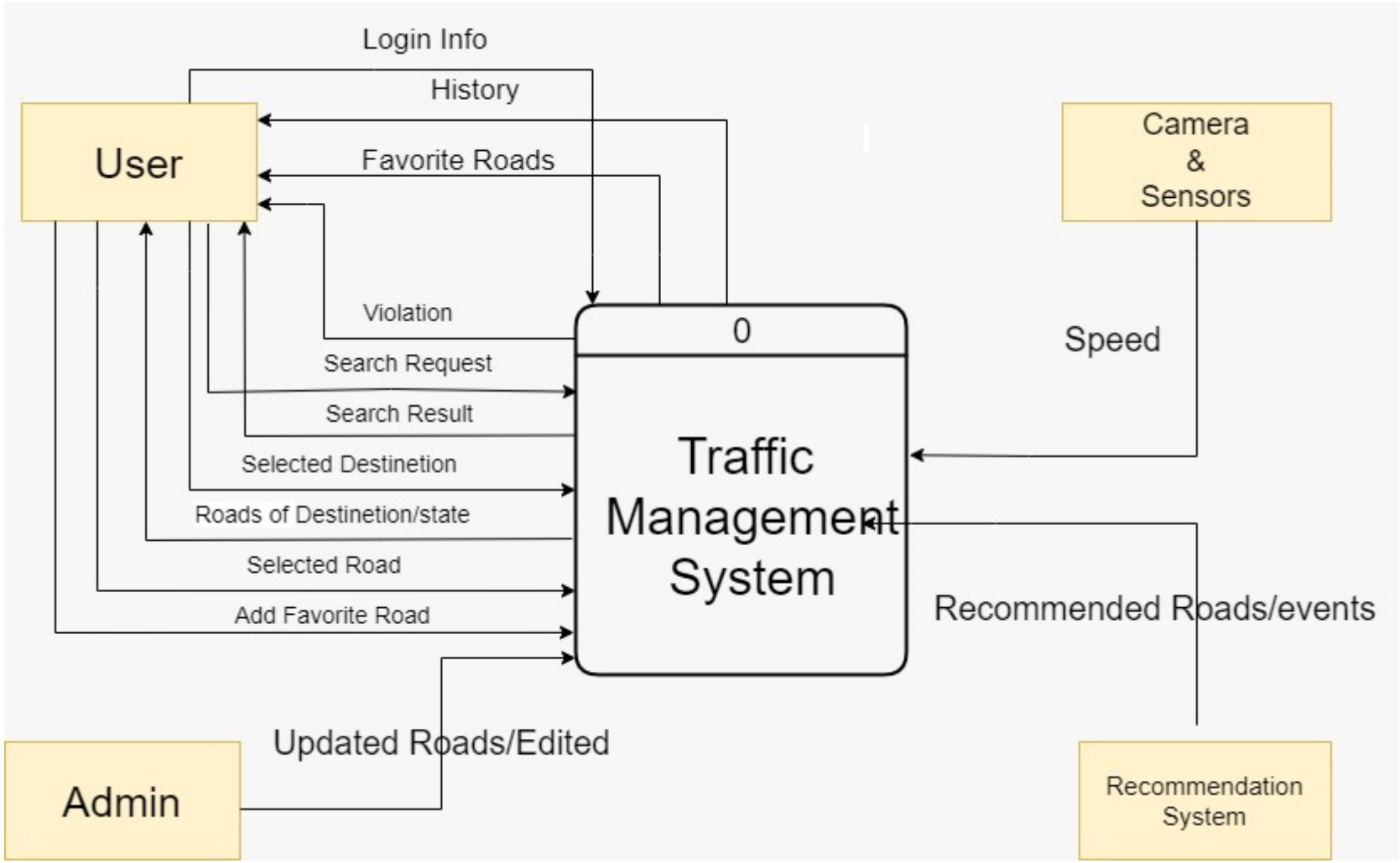
Correct Version of Task 1 Diagrams

1. Use Case Diagram

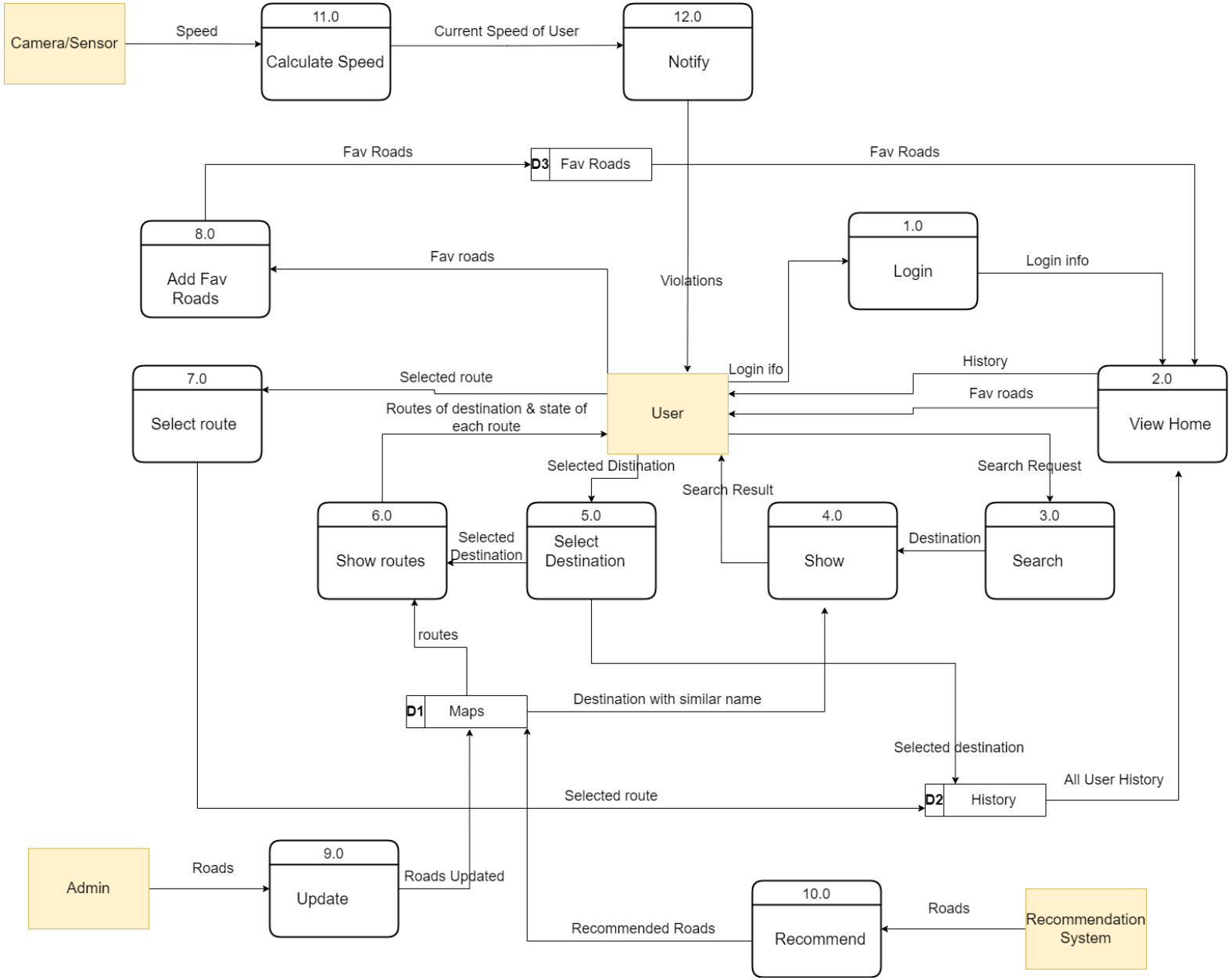


2. DFD Diagrams

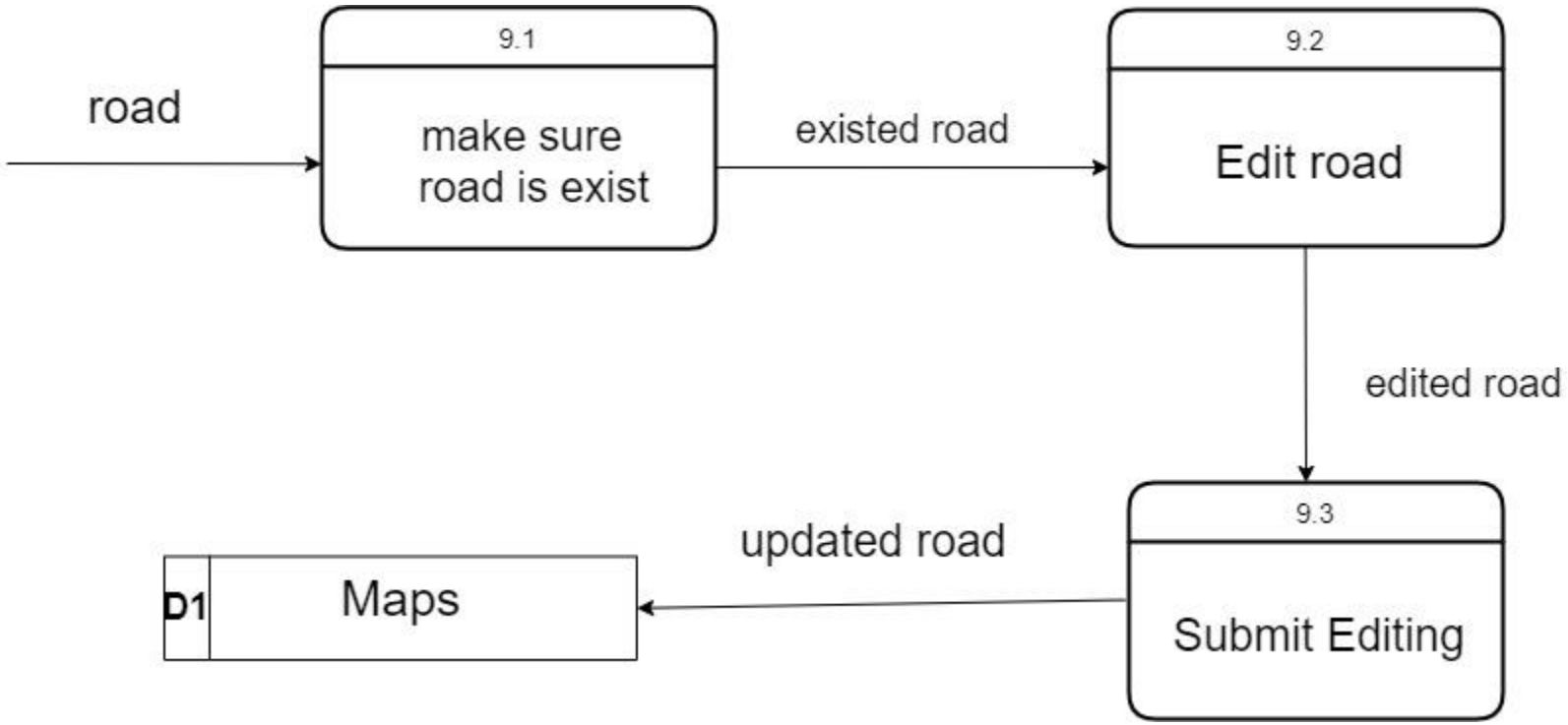
2.1. Context Diagram



2.2. Level 0 Diagram

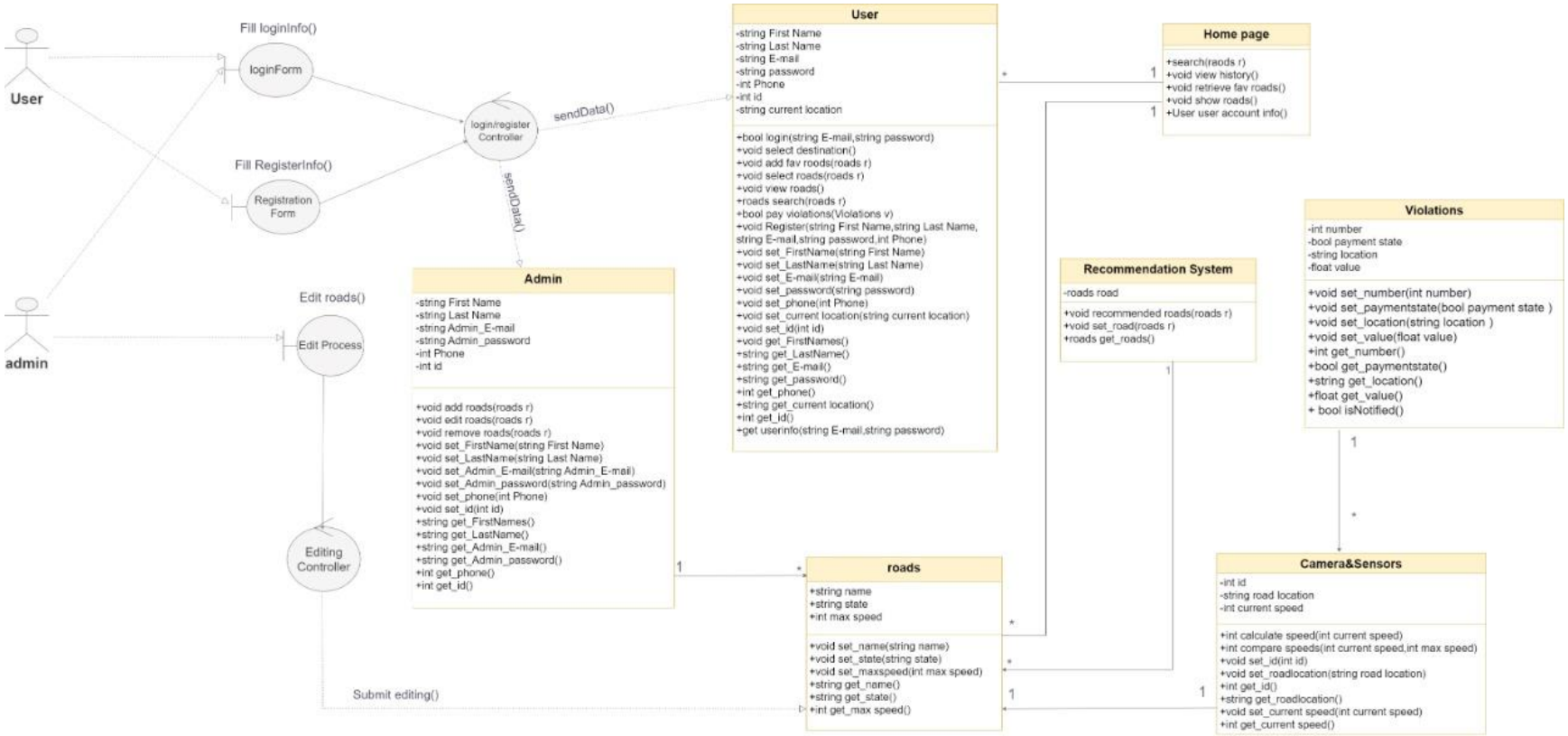

Camera/Sensor
Speed
11.0
Calculate Speed
Current Speed of User
12.0
Notify
Fav Roads
D3 Fav Roads
Fav Roads
8.0
Add Fav Roads
Fav roads
Violations
1.0
Login
Login info
7.0
Select route
Selected route
Routes of destination & state of each route
User
Login ifo
History
Fav roads
2.0
View Home
Selected Distination
Search Request
Search Result
6.0
Show routes
Selected Destination
5.0
Select Destination
4.0
Show
Destination
3.0
Search
routes
D1 Maps
Destination with similar name
Selected destination
All User History
Selected route
D2 History
Admin
Roads
9.0
Update
Roads Updated
Recommended Roads
10.0
Recommend
Roads
Recommendation System

2.3. Level 1 Diagram

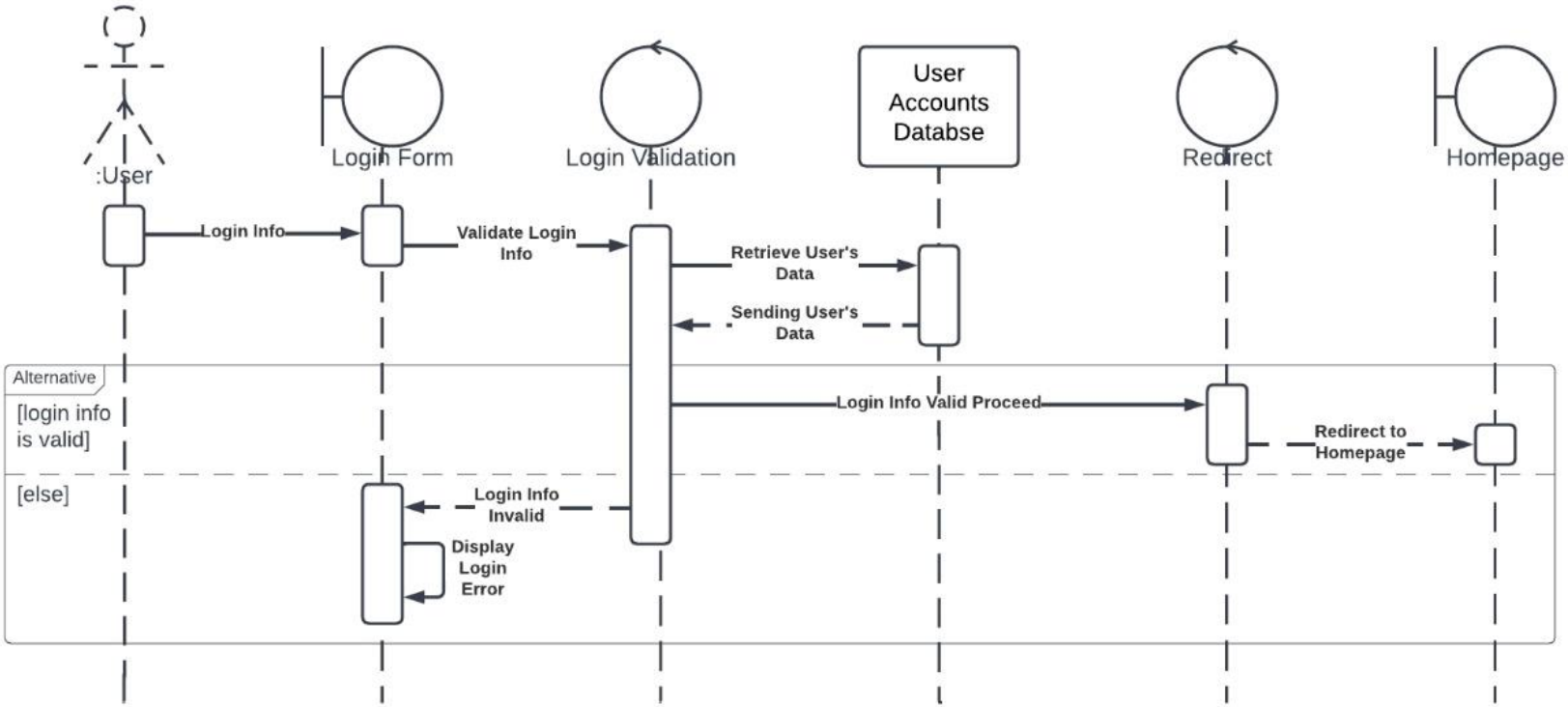


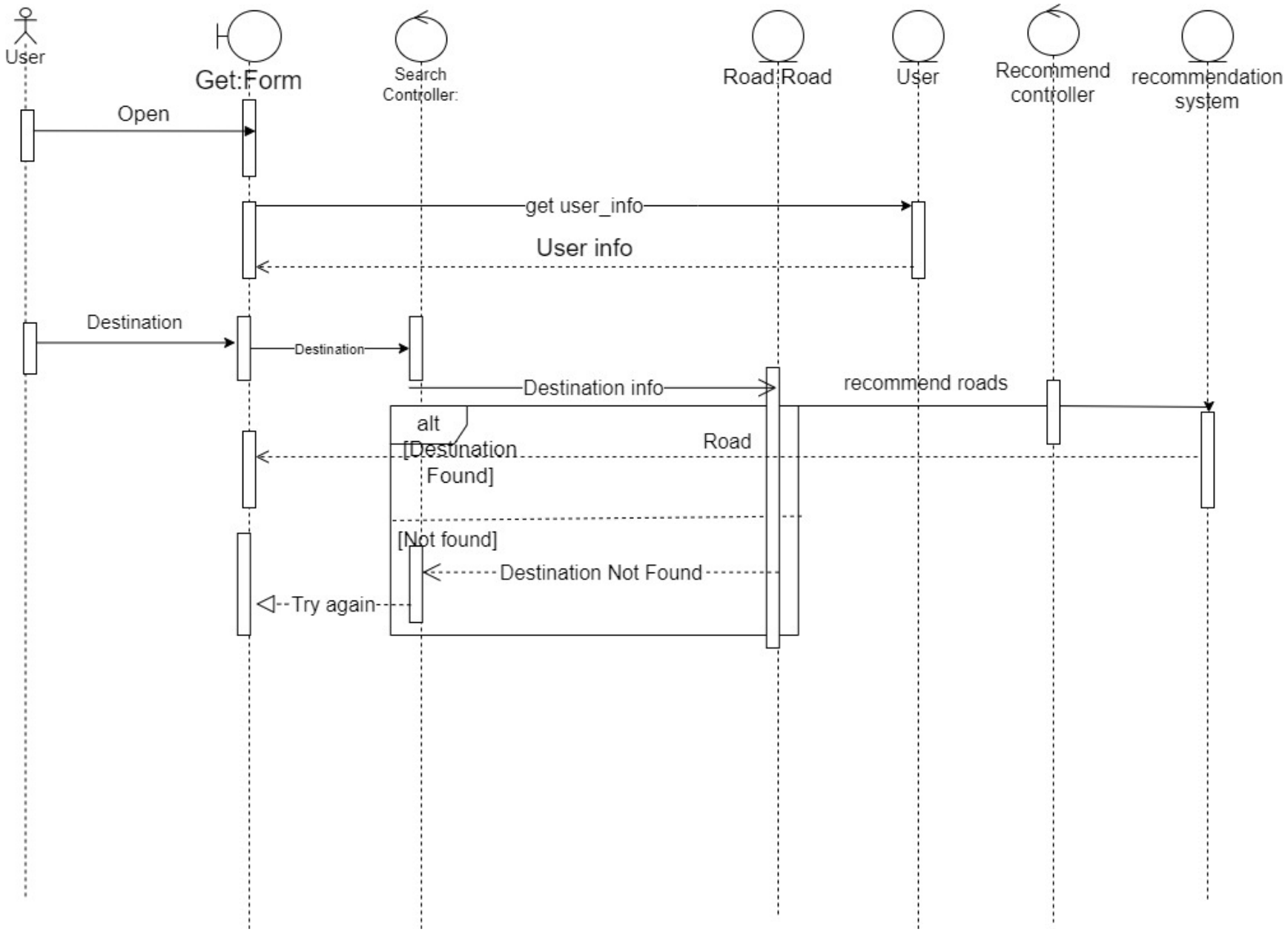
Task 2

1. Class Diagram



2.Sequence Diagrams


:User
Login Form
Login Validation
User Accounts Databse
Redirect
Homepage
Login Info
Validate Login Info
Retrieve User's Data
Sending User's Data
Alternative
[login info is valid]
Login Info Valid Proceed
Redirect to Homepage
[else]
Login Info Invalid
Display Login Error


User
Get:Form
Search Controller:
Road:Road
User
Recommend controller
recommendation system
Open
get user_info
User info
Destination
Destination
Destination info
recommend roads
alt
[Destination Found]
Road
[Not found]
Destination Not Found
Try again