

Task 2: System Modeling

2.1. Draw an activity diagram to capture the business process between systems and the stakeholders in the Task Assignment module.

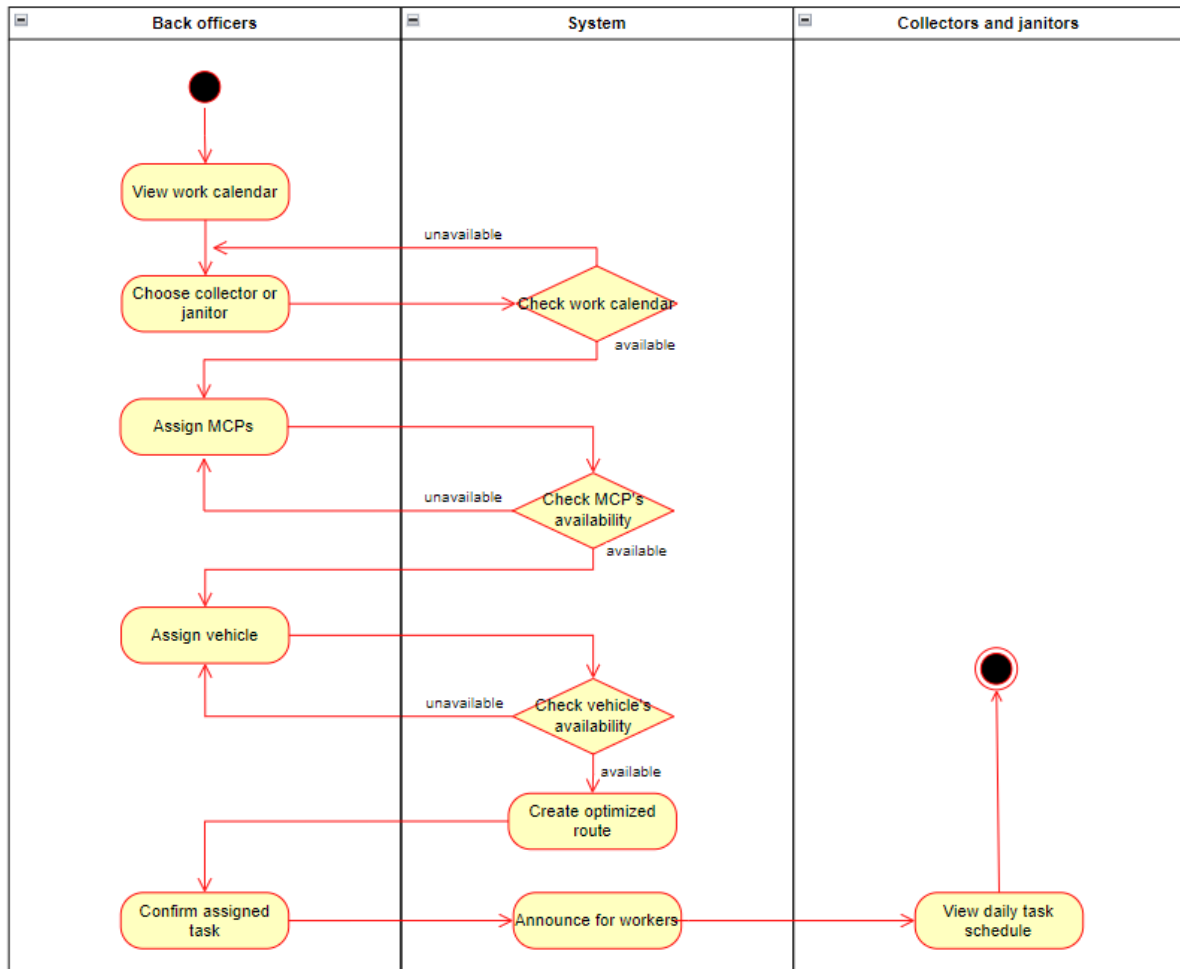


Figure 2.1: Activity diagram business process

2.2. Proposal a conceptual solution for the route planning task and draw a sequence diagram to illustrate it.

Route planning concept:

- The back officer will access the route planning feature by open method.

[loop for each vehicle]

[loop until optimal distance and fuel consumption]

- Route planning task will ask the Map to plan route after that the Map will ask Fuel consumption calculator to compute the fuel consumption.
- The distance and fuel consumption of the route will be return to Route planning task.

[]

- Route planning task will update the route for Vehicle panel, Notification center and System

[]

- After Route planning task process Back officer can close Route planning task.

Sequence diagram:

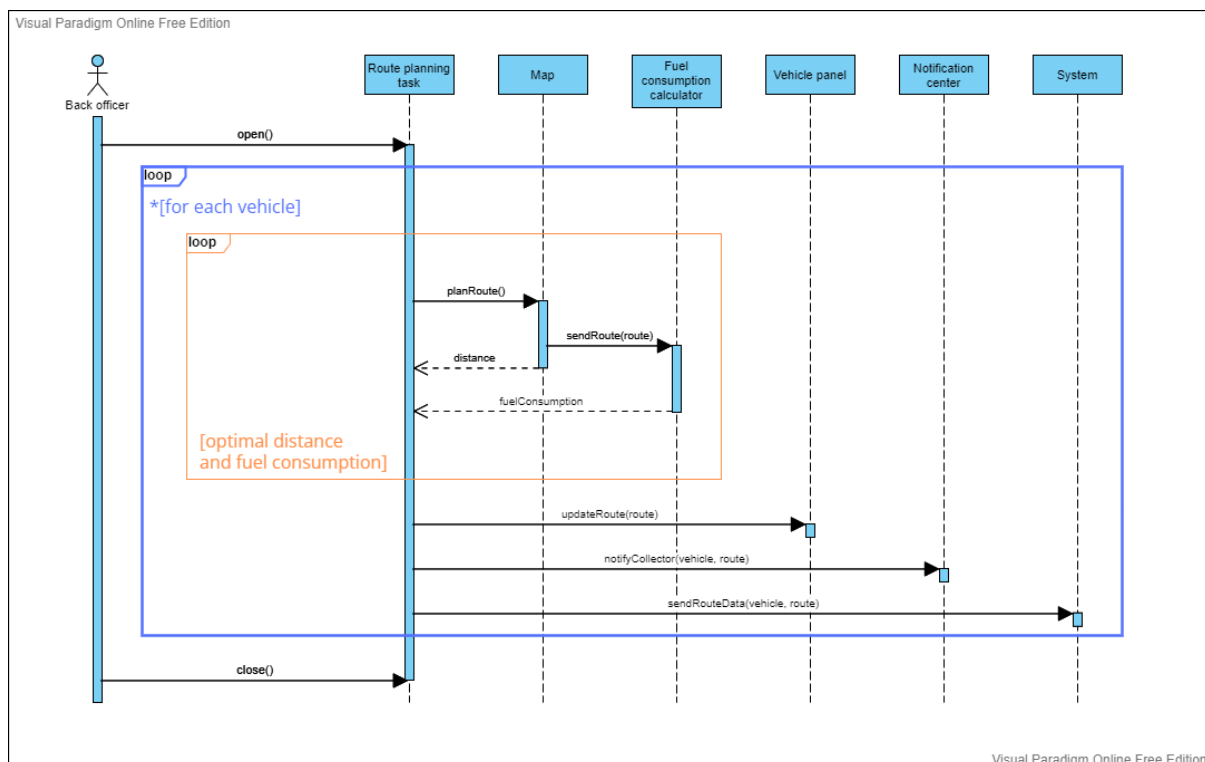


Figure 2.2: Sequence diagram for the route planning task

2.3. Draw a class diagram of the Task Assignment module as comprehensive as possible.

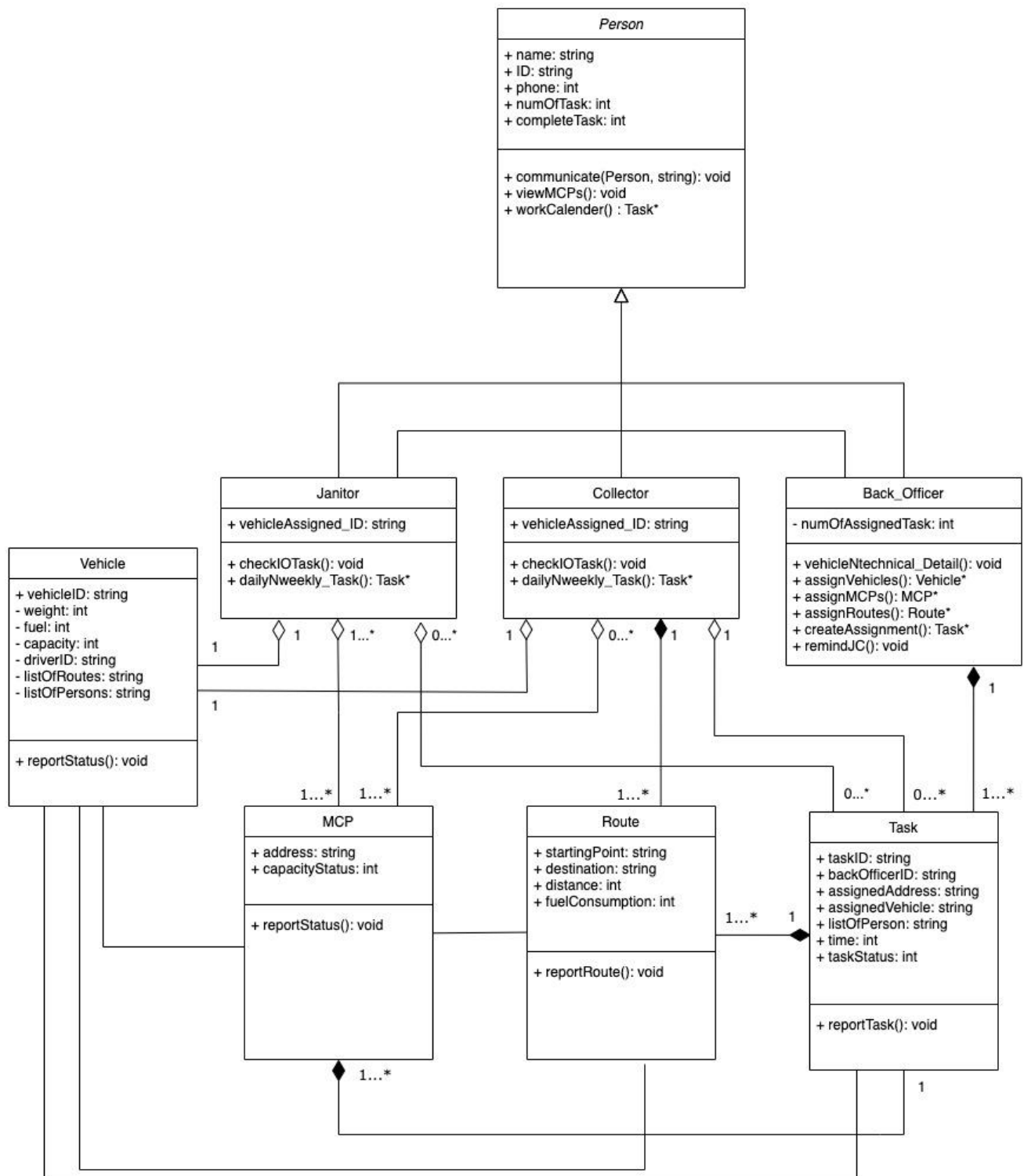


Figure 2.3: Class diagram of the Task Assignment Module