Review task 01

Contents

- Stakeholders
- Non functional requirement
- UC Diagram
- UC Scenario

Stakeholders

- Most groups recognized the principal stakeholders
 - Back officers, Janitors, Collector
- Some groups suggested additional stakeholders
 - Customer, Super Back officer
 - Organizer, Service provider Y
 - Developers
 - 1. Government; 2. Citizen of nearby area; 3. Private Sweeper; 4. Citizen paying for service

Stakeholders

• Benefit of the project for stakeholders: most groups did a good job

Non-functional requirements

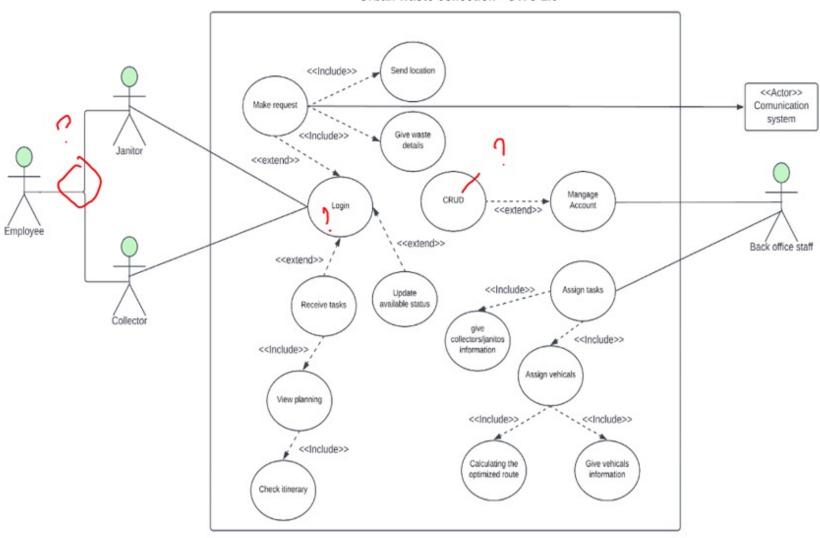
- Do not just simply repeat the project description
 - Do not simply say the system will work 24/7
- Non-functional requirements must be (feasibly) measurable
 - System access error rate is 0.002% (excluding errors caused by the Internet).
 - The probability of data loss is less than 2% → hard to measure

Use-case diagram

- General mistake
 - not follow the notation in UML 2.0
 - UC name should be verb or verb phrase (started by verb)
 - Misunderstanding of include, extend relationships.
 - Using too many relationships of include/extend
- The drawing is too detailed or too simple.
- The UC diagram for the whole system should cover all actors and all primary UC of all modules.
- The UC diagram for Task Assignment module should clarify the functions and features of this module.

Use-case diagram for the whole system:

Urban waste collection - UWC 2.0



3.1 Use-case diagram

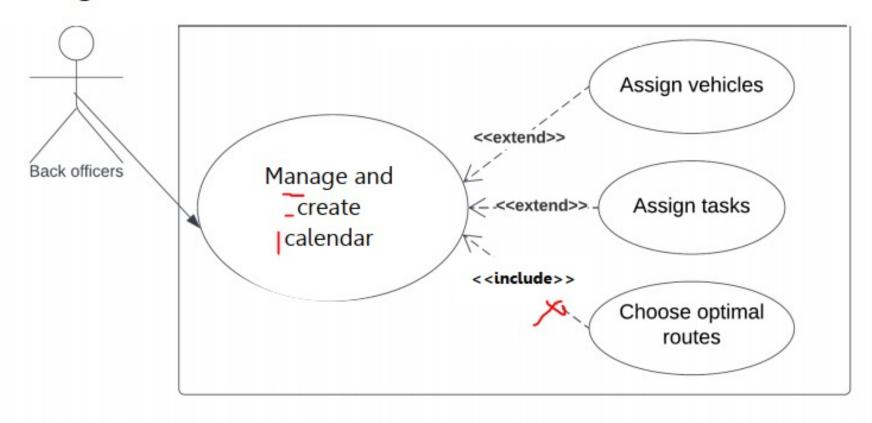
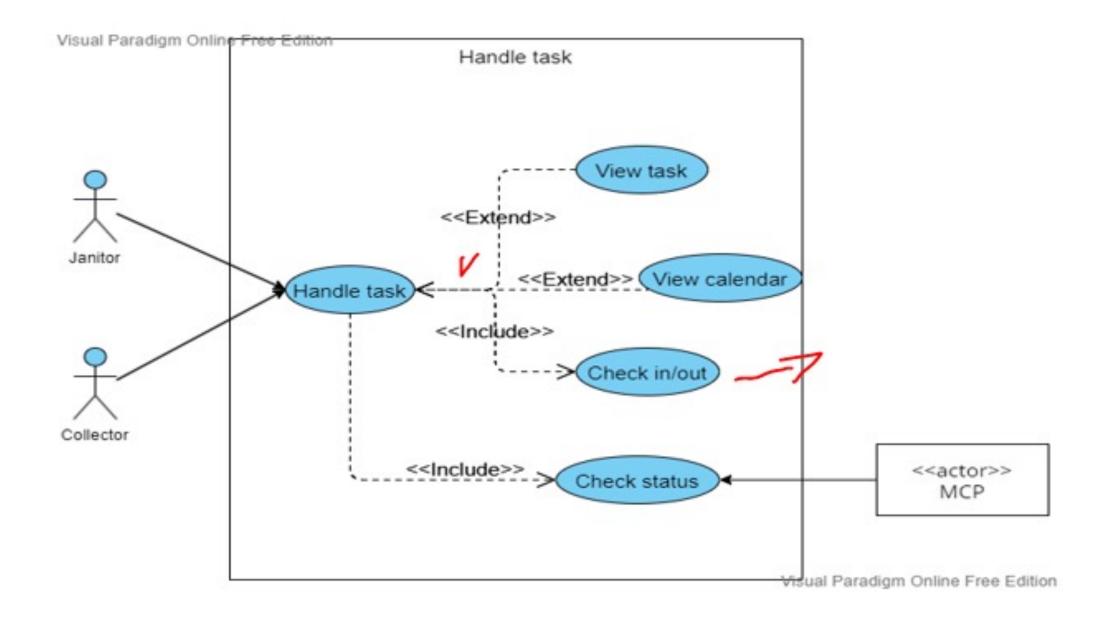
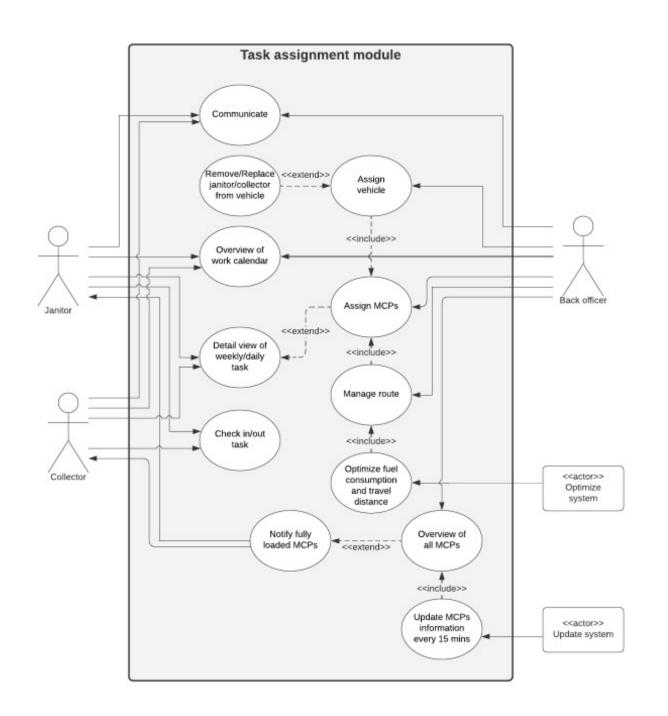
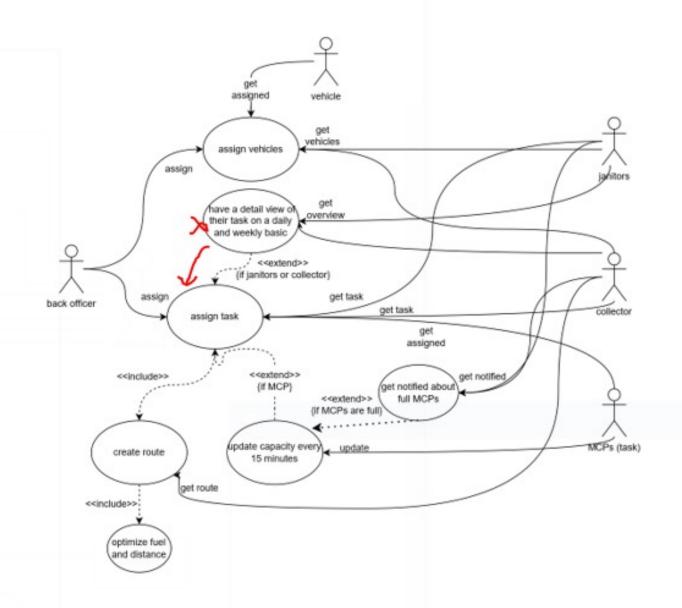


Figure 3.1: Use-case diagram of Task Assignment Module







Use-case scenario

- Misunderstand trigger/pre-post condition
- Misunderstand normal/alternative flow and exception

1 ask 1.5

Assign tasks table:

| Use case name | Assign task | | |
|--------------------|--|--|--|
| Use case over view | When the back officers assign tasks to janitors and collectors | | |
| Actor(s) | Back officers, janitors, collectors, MCPs | | |
| Details | + Create a route for collectors | | |
| | + Give janitors and collectors their daily work overview | | |
| | + Get information about MCPs capacity | | |
| | + Inform janitors and collectors if MCPs are full | | |

| Use-case name | Login | | |
|-------------------|---|--|--|
| Actor | Janitor, Back office, Collector | | |
| Description | Users use this function to log in into system | | |
| Preconditions | | | |
| Normal flow | Display login page Check login validation Navigate to home page | | |
| Exceptions | Users enter invalid authentication information or not enough authentication information. | | |
| Alternative flows | Display toast notification about failed log-in and request for enter login information again. If users have not registered login information, request for registering login information and sign up for a new login account. | | |

- Describe the use-case using a table format:

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| Use case | Description |
|----------------|--|
| Name | Assign vehicle |
| Description | Back officer assigned the vehicles to the collectors. They will track the collectors through the worker list including name and ids. A notification will then be sent by the system to the officer to let him know whether the assignment is successful. |
| Actors | Back officer |
| Trigger | Back officer want to assign a vehicle to the collector . |
| Pre-condition | The user is authenticated. The user must be a back officer. Access to the vehicle's database is mandatory. |
| Post-condition | Update status of vehicle and collector assigned |
| Normal flow | Show the list of collectors. Choose available collectors to assign to vehicles. Update status of vehicle and collector assigned. A collector is assigned to a vehicle. The system then notify that the work is completed. |