**DOMINIC MUHIARWE**

**M23B13/024**

**B20865**

**System Analysis & Design**

Assignment

Github Link:

https://github.com/smappinc/dominicSAD

**SAFEKASASIRO**

Safekasasiro is an app that makes it easy for one to request for rubbish collection.

**1. Use Case Diagram:**

**Actors:**

**User**: Requests rubbish collection.

**Dispatcher**: Receives the request and arranges the collection.

**System**: Processes requests, assigns dispatchers, and tracks collection status.

**Use Cases:**

**Request Collection:** The user sends a request for rubbish collection.

**Assign Dispatcher:** The system assigns a dispatcher to the request.

**Collect Rubbish:** The dispatcher collects the rubbish.

**Confirm Collection:** The dispatcher confirms the completion of the collection, and the system updates the status.

**2. Sequence Diagram:**

Shows the interaction between the User, System, and Dispatcher.

**Steps:**

* The User sends a request to the System.
* The System assigns a Dispatcher.
* The System notifies the User about the status.
* The Dispatcher collects the rubbish.
* The Dispatcher confirms the collection.
* The System updates the status.

**3. Class Diagram:**

**Classes:**

**User**

Attributes: userId, name, address, contactInfo

Methods: requestCollection()

**Request**

Attributes: requestId, status, collectionTime

Methods: assignDispatcher(), updateStatus()

**Dispatcher**

Attributes: dispatcherId, name, vehicleId

Methods: collectRubbish()

**System**

Methods: receiveRequest(), assignDispatcher(), notifyUser(), updateStatus()