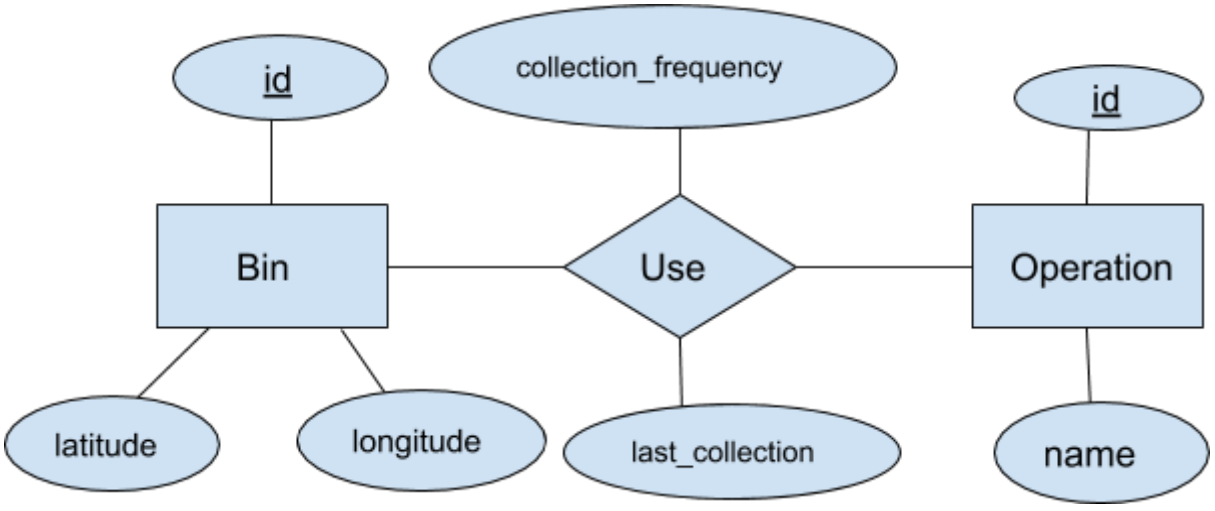
Q1)
Here are my suggestion in order to retrieve this data in a more efficient way:

LastRecord(id_navigation,id_vehicle)

Another database model that keeps the latest navigation record per vehicle may be implemented. This model keeps the id of the latest record for each vehicle and vehicle id together so that there will be one entry per vehicle. When a new entry is saved in the NavigationRecords table, LatestRecord table should be updated.

For the function in the question, after retrieving the latest record for each vehicle from NavigationRecord table with the help of LastRecord table, it can be checked whether it is in the last 48 hours or not. The ones within the last 48 hours will be retrieved.

Q2)
ER-Diagram



To setup:
There are two django apps for questions q1 and q2.

The related functions and models can be found in
/evreka_questions/evreka/q1/views.py
/evreka_questions/evreka/q1/models.py
/evreka_questions/evreka/q2/views.py
/evreka_questions/evreka/q2/models.py
respectively.

q1_fill() and q2_fill() functions in the views.py are to setup database with the dummy input files I wrote, which are input_q1.txt and input_q2.txt. The database has already been constructed with these dummy inputs.

q1_retrieve() and q2_retrieve() are the main functions which are answers to the questions.

The functions can be tested with :

"python3 manage.py shell"
"from q1.views import * "
"from q2.views import * "
"q1_retrieve()"
"q2_retrieve()"