

Requirements Document:

Nouns Verbs

Rules:

- **Volunteers** **work** **shifts**
- **Feedback** is **given** to an **event**
- Every volunteer can give feedback
- Every event **has** multiple shifts
- Volunteers **take on** certain **roles** during shifts
- Volunteers **participate** in many events

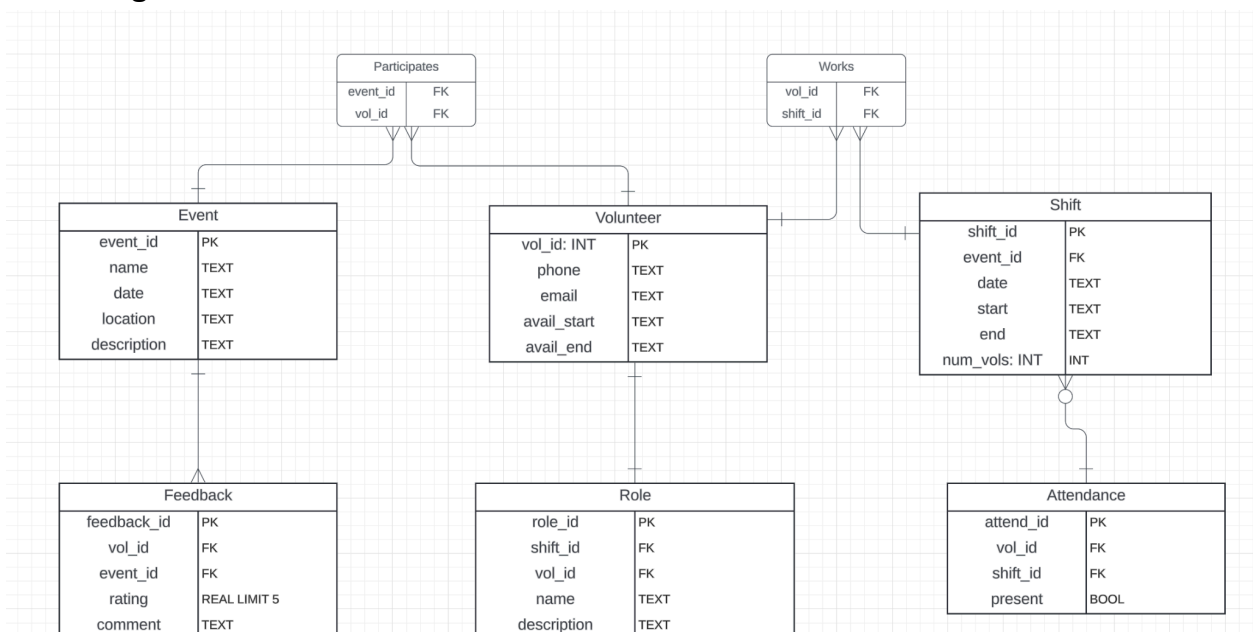
Nouns:

- Volunteers
- Feedback
- Event
- Shifts
- roles

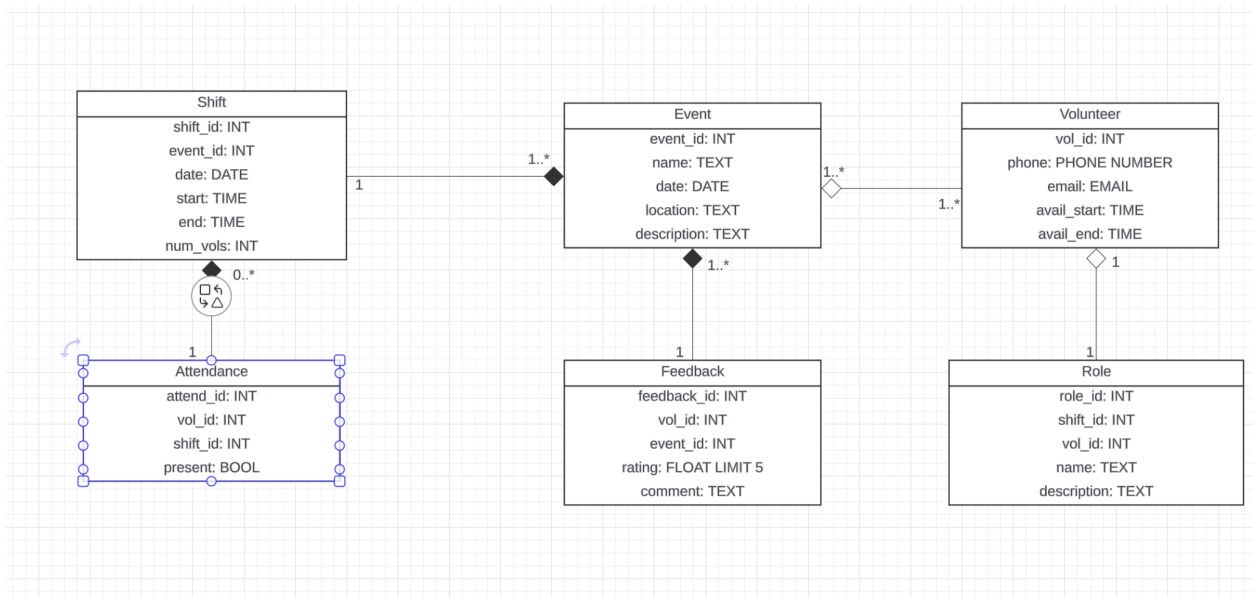
Verbs:

- Works
- Given
- Has
- Take On
- Participate

UML Diagram:



Logical Model:



https://lucid.app/lucidchart/72066dc4-71eb-4c3a-a23f-9a627b40bb4a/edit?viewport_loc=92%2C-93%2C2885%2C1605%2C0_0&invitationId=inv_50bf7adb-fb58-452a-b5f5-3da5ee45918d

Relational Schema:

Event(event_id, name, date, location, description)

Feedback(feedback_id, vol_id, event_id, rating, comment)

Volunteer(vol_id, phone, email, avail_start, avail_end)

Role(role_id, shift_id, vol_id, name, description)

Shift(shift_id, event_id, date, t_start, t_end, num_vols)

Attendance(attend_id, vol_id, shift_id, present)

Participates(event_id, vol_id)

Works(vol_id, shift_id)

BCNF Proof:

Event:

Event_id -> name, date, location, description

All depend on event_id

Feedback:

Feedback_id -> rating, comment

Both rating and comment rely on the feedback_id

Volunteer:

Vol_id -> phone, email, avail_start, avail_end

All attributes rely on the key

Role:

Role_id -> name

Name -> description

The name of the role relies on the id, and the description relies on the name, therefore it is in BCNF

Shift:

Shift_id -> t_start, t_end, num_vols

Event_id -> date

All attributes rely on keys

Attendance:

Attend_id -> present

Attribute relies on keys