Project 2: Apartment Maintenance Database System

Relevant Verbs and Nouns:
As a building manager, the task of assisting rental maintenance needs effectively can be quite demanding. With handling of requests from renters, checking availability with contractors, and keeping track of repair progress, there is a need to have a system made to manage the processes of maintaining apartment units. This system should be made to capture and organize information related to maintenance requests, including the apartment number, description of the issue, priority level, date and time of the request, and status of the maintenance work. It should also include information about the tenant who submitted the request, such as their name and contact information. Furthermore, the system should keep up with maintenance staff, including tracking their availability, cost and completion status.

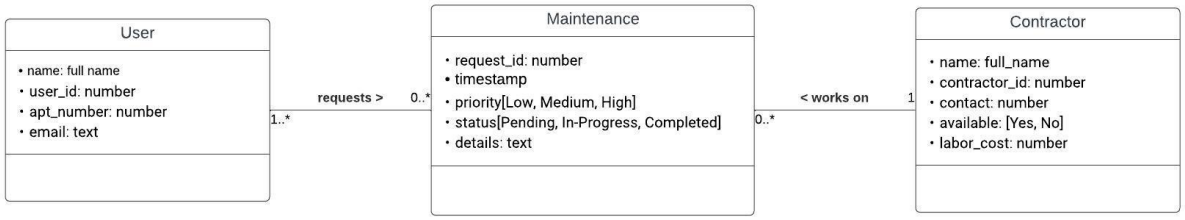
User
- name: full name
- user_id: number
- apt_number: number
- email: number

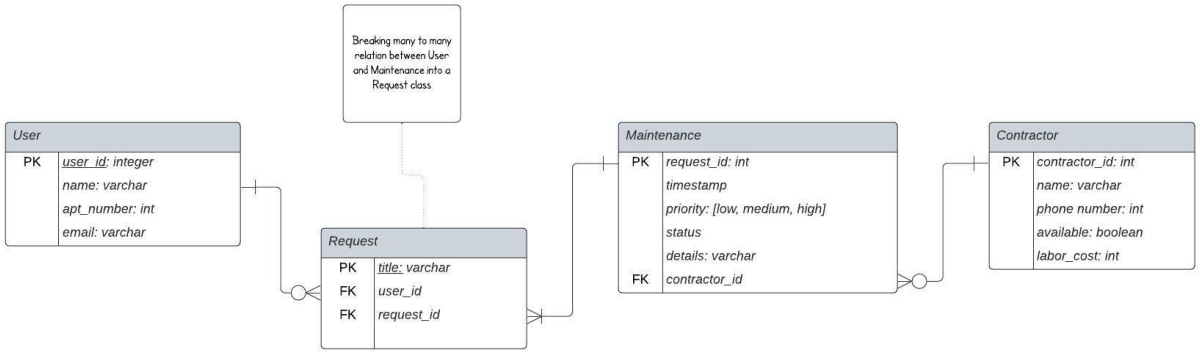
Maintenance
- request_id: number
- timestamp
- priority[Low, Medium, High]
- status[Pending, In-Progress, Completed]
- details: text

Contractor
- name: text
- contractor_id: number
- phone: number
- availability: [Yes, No]
- labor_cost: number

Rules:
- A user can place multiple requests
- Each request must have a user
- A maintenance project have at most 1 contractor
- Maintenance requests can have no contractor
- A contractor can work on multiple maintenance projects

UML & ERD





Relational Schema:

- User(user_id, name, apt_number, contact)
- Maintenance(request_id, timestamp, priority, status, details)
- Request(title, user_id (fk), request_id(fk))
- Contractor(contractor_id, name, phone, availability, labor_cost)