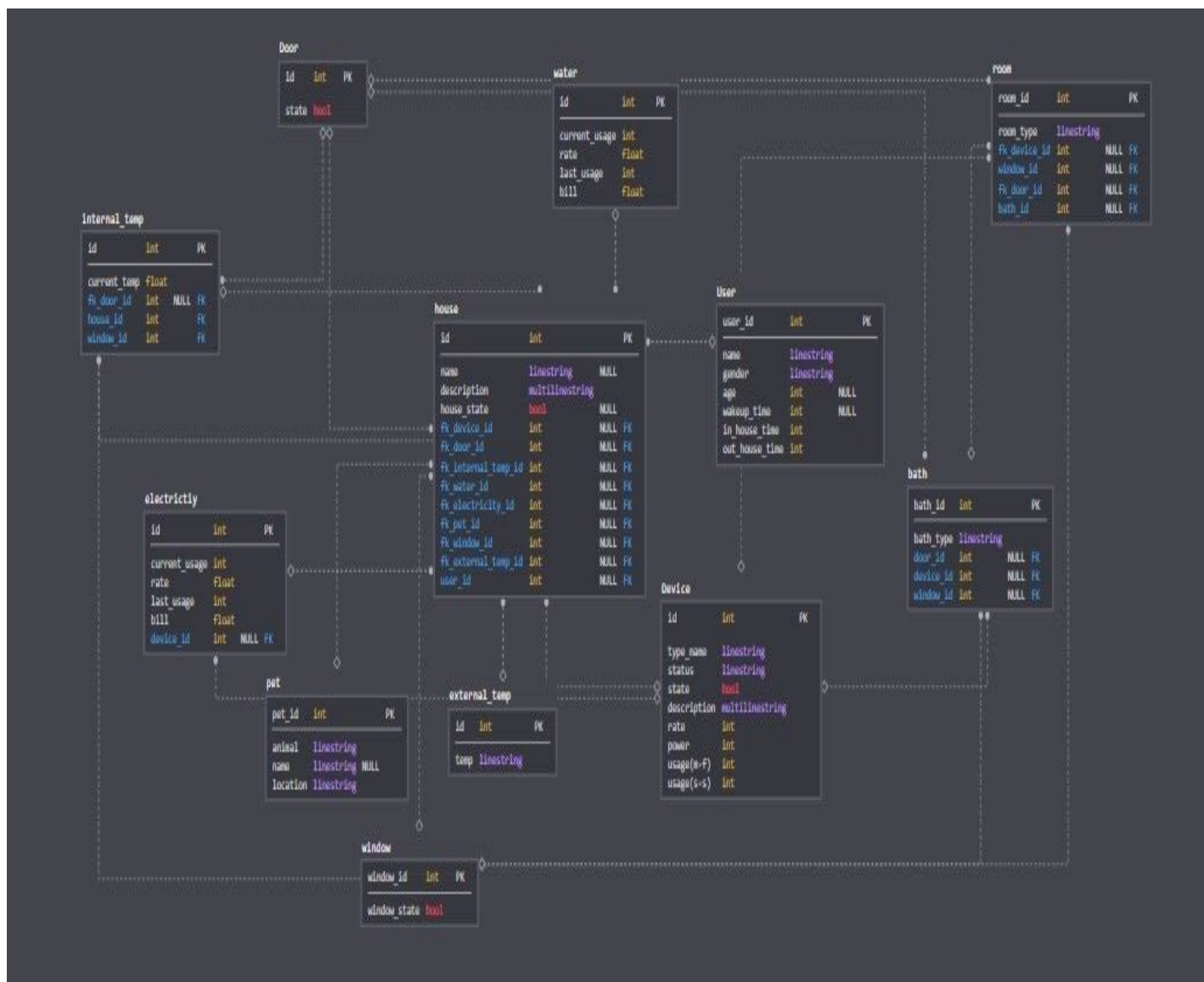


## Team 4 Documentation:

### RESPONSIBILITY MATRIX:

<https://docs.google.com/spreadsheets/d/18jl20Tn6RlZODGQFnFp-bE6QKO9t6hkUjkuyI78kQE0/edit?usp=sharing>

### DATABASE ERD (TENTATIVE)



### **General Requirements:**

- Project should run on a tablet or computer.
- 3 screens:
  - Screen 1: Left  $\frac{3}{4}$  = floor plan, Right  $\frac{1}{4}$  = in / out temperature control.
  - Screen 2: Multi-line graph for electric and water usage (y axis should be a number and not a qualitative measurement, x axis should be the cost ranges from months 1 - 6).
  - Screen 3: (Administrative) Toggle sensors to simulate changing activities for the demo.
- Translation of product into Japanese at the user facing level.
- When taking note of temperatures INSIDE the house there can be an HVAC temperature variance of +/- 2.
- Garage door should open and close, but this does not affect HVAC.
- Instances of doors / windows opening and closing should be tracked.
- Tracking 6 months worth of weather information
- Random generation of instances of doors/windows opening
- Track the on / off status of each smart appliance / light
- Track water and electricity usage based on information coming out of whether things are turned on / off in the floor plan information (screen 1)

### **Main Objectives:**

- Create a GUI that consists of three pages and contains a map of the house and graphs that track appliance usage and housing events such as doors opening
- Creation of data about utility usage and weather patterns that affect graphs on the administrative page of the GUI
- Linking the database containing the generated information to the GUI