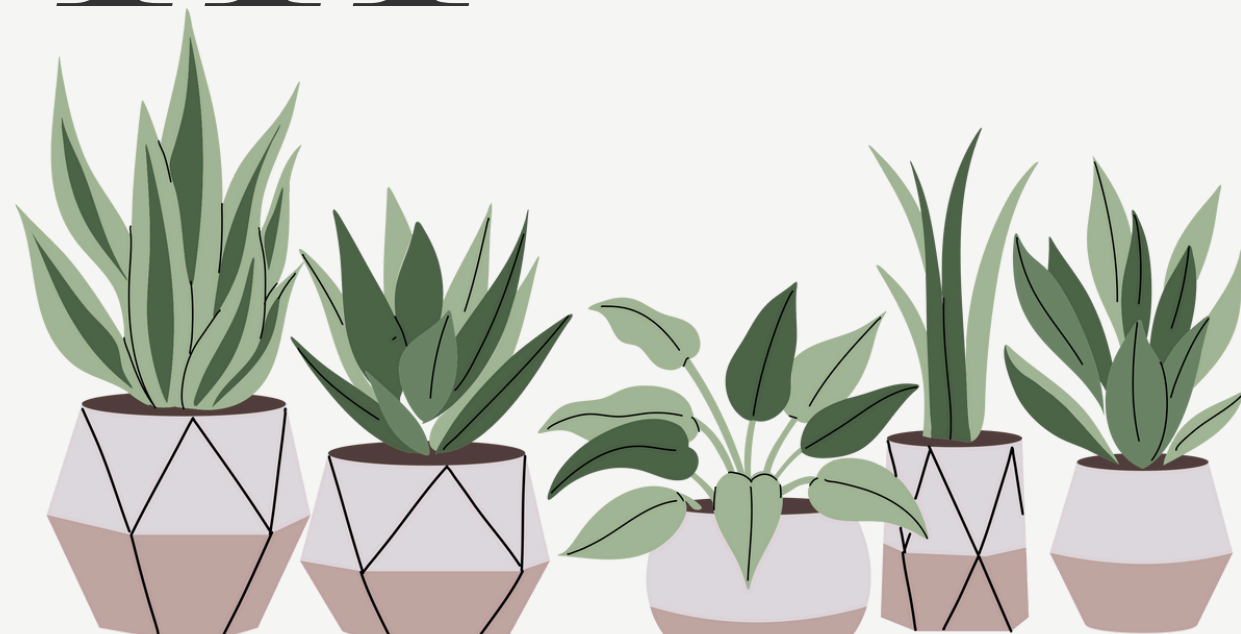# Plant Management System

# CSE 111

Presented by

**George Perez & Christine Doan**

**Phase 3**

# *System Description*

- **We built an interactive command line plant care management system**
- **The system can help users understand and organize plant care information by allowing them to search for plants by name, browse the entire catalog, and filter plants based on care requirements like light, watering, and humidity.**

- **Users can view detailed care instructions for any plant, save favorites for quick access, and attach personal notes**
- **The system also supports adding, editing, and deleting plant entries so the database remains up to date**
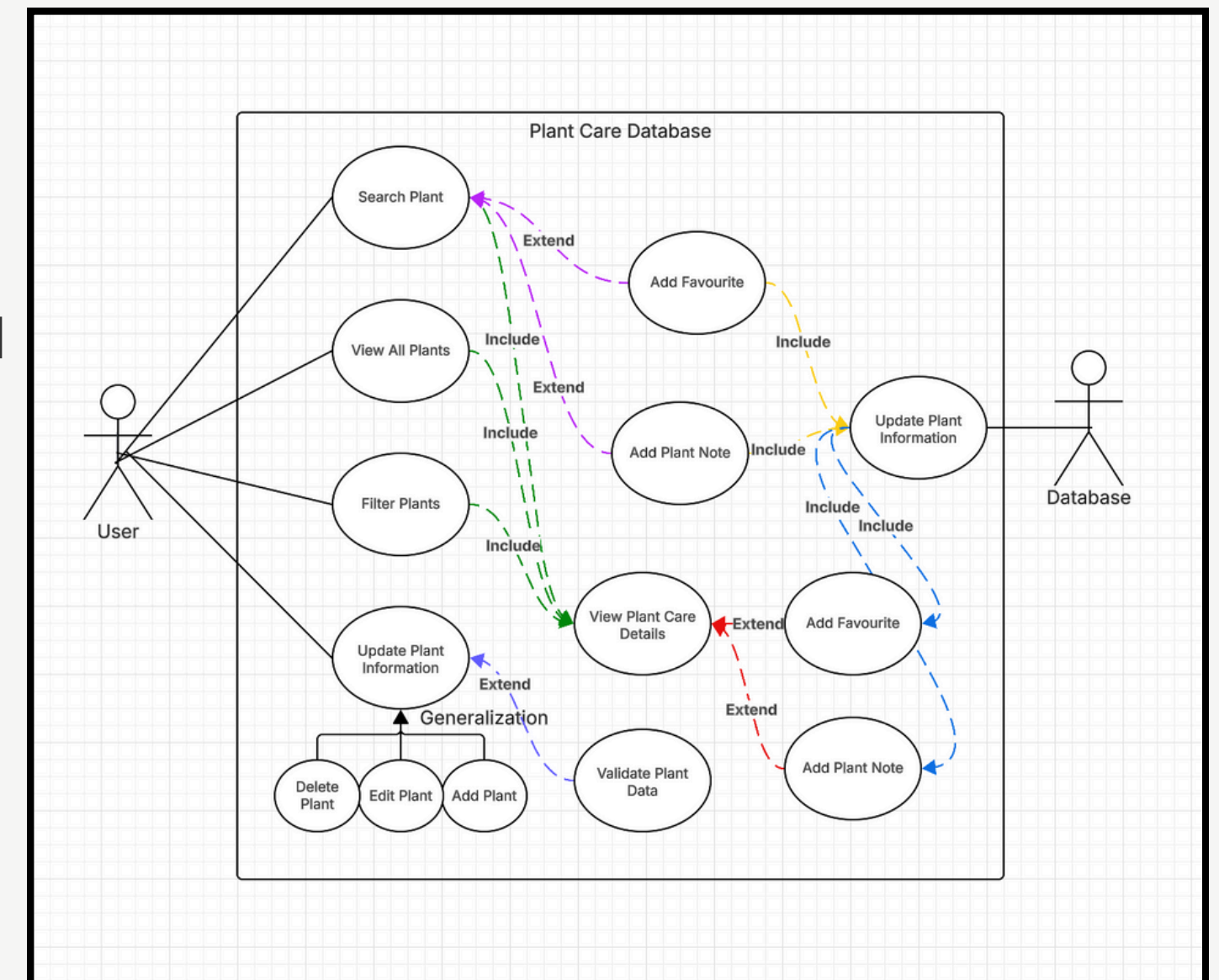
**Christine Doan**
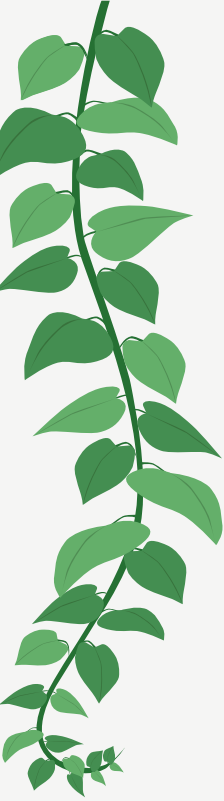
# *Use Case Description*

- <u>Search for 'Plant'</u> → shows search results for specified plant
- <u>View all plants</u> → shows all plants in database
- <u>Filter by care</u> → demonstrates flexibility
- <u>View care details</u> → shows detailed plant care
- <u>Favorite 'Plant'</u> → user can favorite plants they most often need
- <u>Show favorites</u> → quick access to favorite plants
- <u>Add a note</u> → add specific plant information
- <u>Add/Edit plant</u> → shows update functionality

**George Perez**

# E/R Diagram



**Christine Doan**
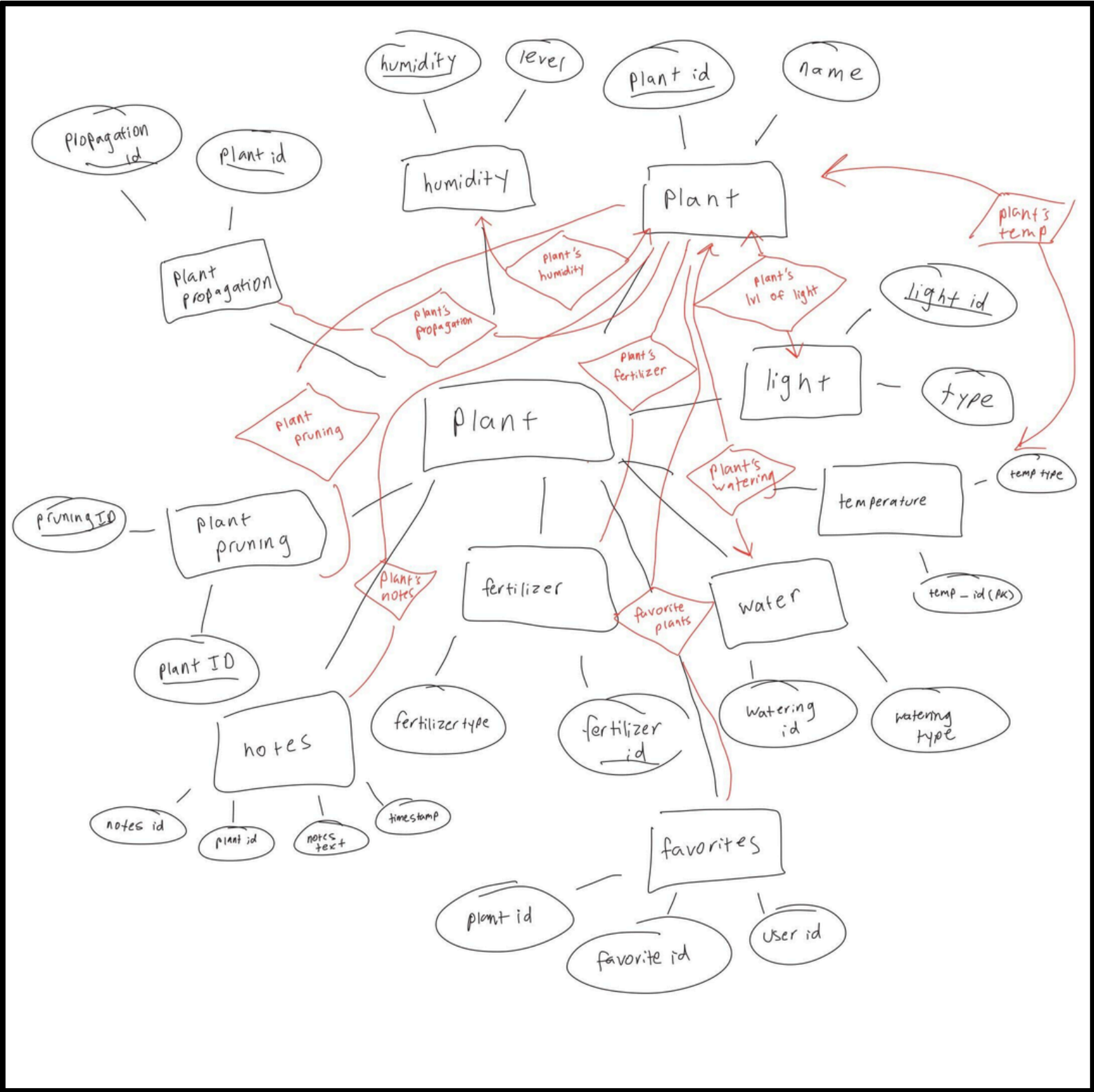
# *Relational Schema*

**George Perez**



**Temperature**

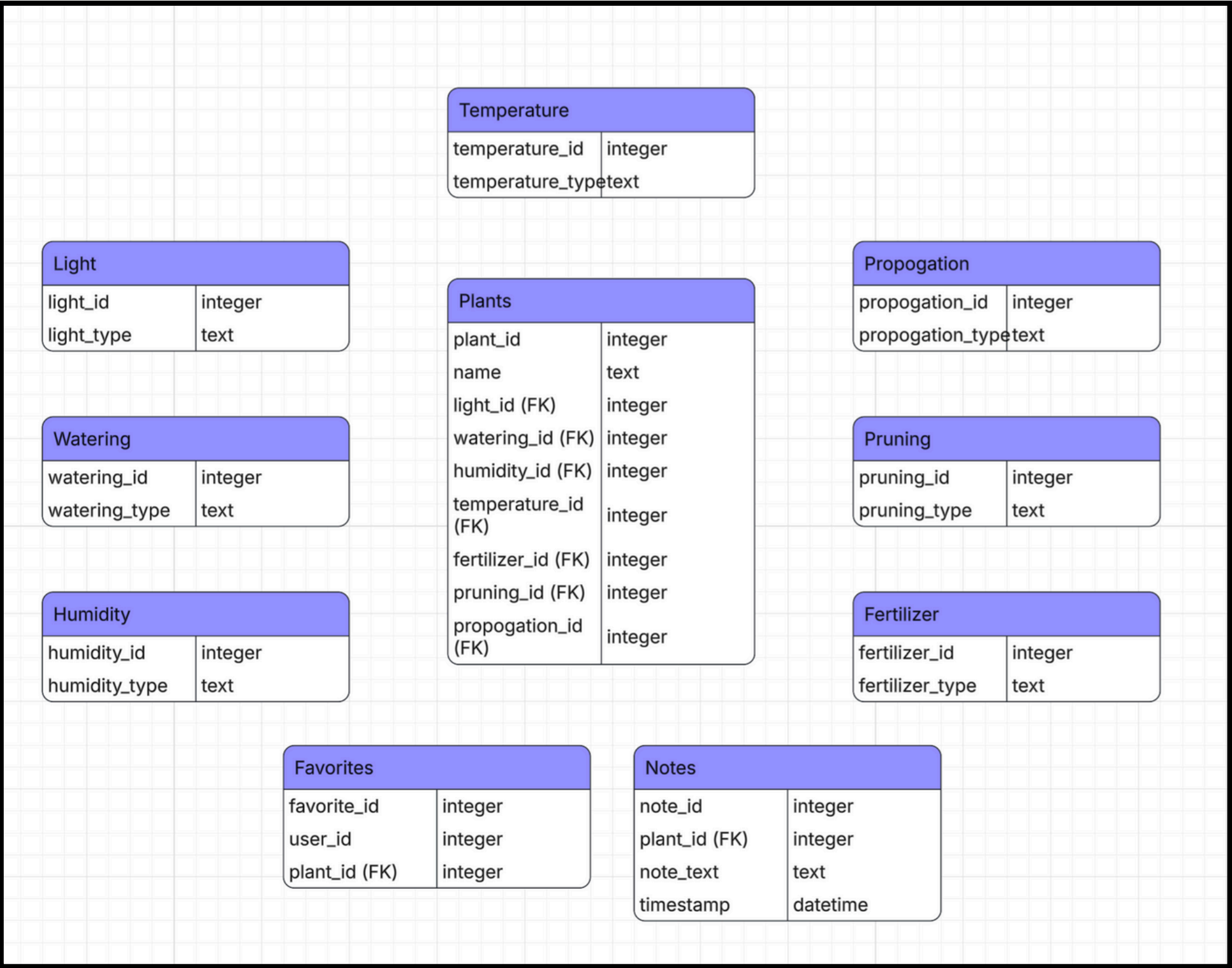| temperature_id | integer |
|---|---|
| temperature_type | text |

**Light**

| light_id | integer |
|---|---|
| light_type | text |

**Plants**

| plant_id | integer |
|---|---|
| name | text |
| light_id (FK) | integer |
| watering_id (FK) | integer |
| humidity_id (FK) | integer |
| temperature_id (FK) | integer |
| fertilizer_id (FK) | integer |
| pruning_id (FK) | integer |
| propogation_id (FK) | integer |

**Propogation**

| propogation_id | integer |
|---|---|
| propogation_type | text |

**Watering**

| watering_id | integer |
|---|---|
| watering_type | text |

**Pruning**

| pruning_id | integer |
|---|---|
| pruning_type | text |

**Humidity**

| humidity_id | integer |
|---|---|
| humidity_type | text |

**Fertilizer**

| fertilizer_id | integer |
|---|---|
| fertilizer_type | text |

**Favorites**

| favorite_id | integer |
|---|---|
| user_id | integer |
| plant_id (FK) | integer |

**Notes**

| note_id | integer |
|---|---|
| plant_id (FK) | integer |
| note_text | text |
| timestamp | datetime |

# *Implementation Details*

- **The database used was 'Plant-Database-2' by Jibrand from Hugging Face.co which we divided into the schema we needed**

- **We used SQLite to structure our database. We made related tables that are linked through foreign keys**

- **The UI was made as a command line application that allows users to run searches, apply filters, add notes, and manage the database interactively**

**Chrisitne Doan**

*Demo*

# Questions?

# *Thank you*