Part C

Plants
species_name
variety (O)
common_name
type
description
germ_days
at_nursery

Potted
species_name
variety (FK)
pot_id (FK)

Logs
pot_id (FK)
location (FK)
feeding
watering
move
time

Requirements
feeding
watering
temperature
air_moisture
light
species_name
variety (FK)

Pots
pot_id
tray_id (FK)
plant_date
germ_date
volume
height
age

Weather_station
location

Measurements
location (FK)
temperature
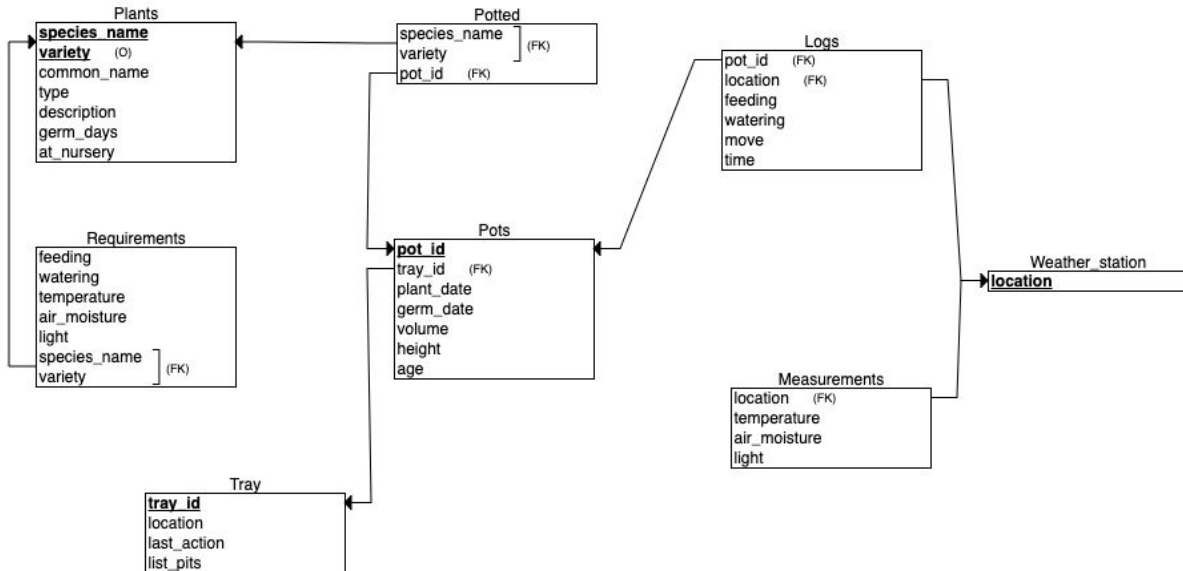air_moisture
light

Tray
tray_id
location
last_action
list_pits

I created a separate table for Requirements because I did not want to have the Plants table to have way too much data stored in it. I used a weak entity relationship for Requirements by requiring all Requirement tuples to have a species_name foreign key to reference the Plants table. I also created a separate Potted relationship between the Plants and Pots tables to make it easy to join these tables later and allow the user to access the attributes of the plant that is inside the pot. I also made the pots to tray relationship a many to one total participation relationship because all pots will be in a tray. Logs will reference the pots and measure tables to easily allow pots to reference the feeding and watering updates from the measurement table.