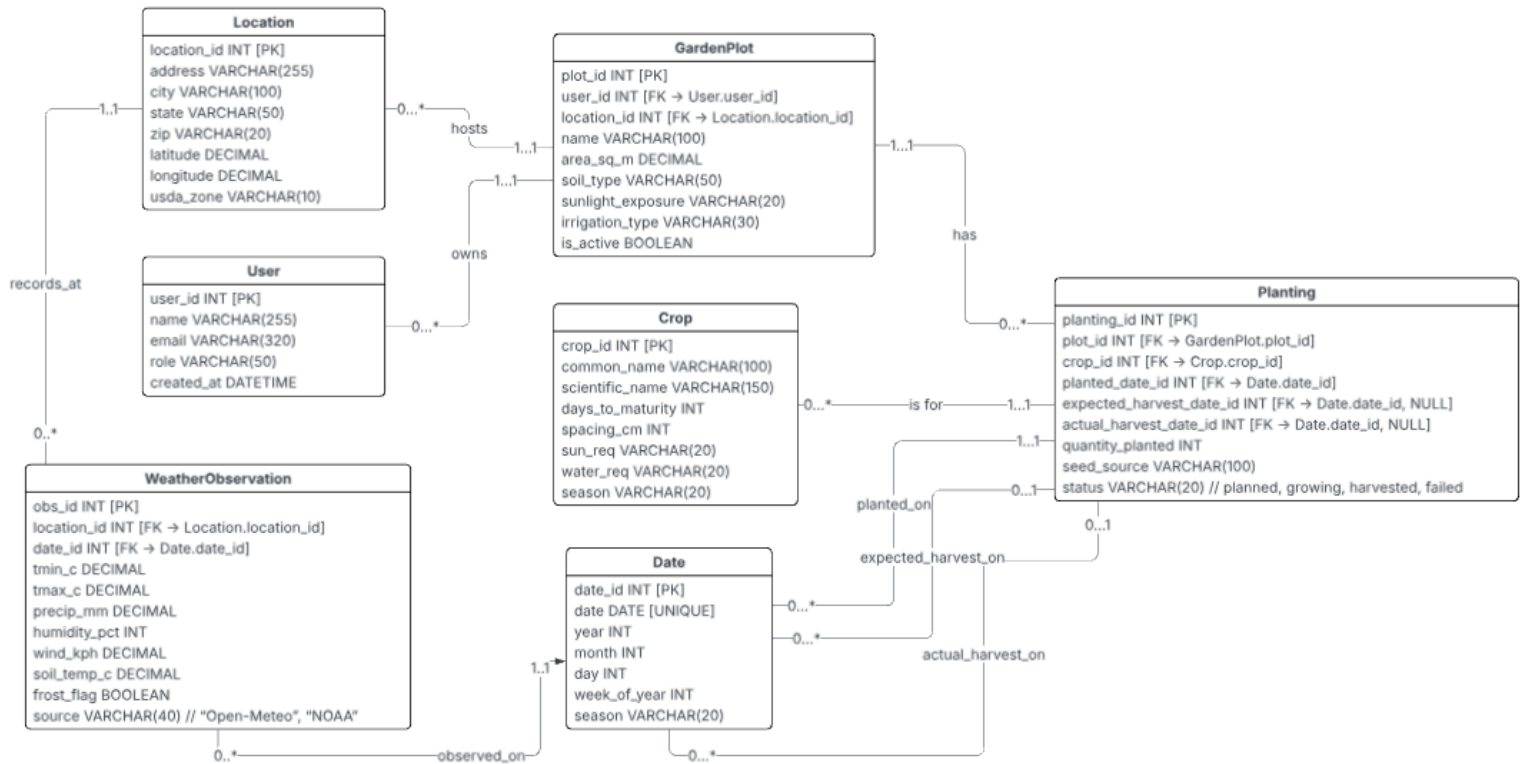


Entities



User

Assumption: One account manages garden data; emails are unique.

Why entity: A user can own many plots and may later have roles/permissions

Location

Assumption: A physical site (address, lat/long, USDA zone) may host multiple plots.

Why entity: Avoids duplicating geo/zone fields and serves as the anchor for shared weather data.

GardenPlot

Assumption: A distinct bed/area with stable traits (area, soil, sun, irrigation); exactly one owner and one location.

Why entity: Core object other entities reference over time; properties are place-specific, not crop-specific.

Crop

Assumption: Catalog of plant types with species-level facts (days to maturity, spacing, sun, water).

Why entity: Reused across many plantings; keeps species data normalized and consistent.

Date

Assumption: Daily calendar dimension (unique date with year/month/week/season) used for grouping and analysis.

Why entity: Shared by plantings and weather; prevents repeating derived calendar attributes.

Planting

Assumption: A planting event tying one plot and one crop at a point in time, with lifecycle fields (planted, expected, actual harvest, quantity, status).

Why entity: Resolves the many-to-many between plots and crops and stores event-specific attributes that do not belong on either side.

WeatherObservation

Assumption: Daily weather per location and date (min/max temp, precip, humidity, wind, optional soil temp, frost flag, source).

Why entity: Needed for recommendations and trend analysis; shared by all plots at a site on a given day.