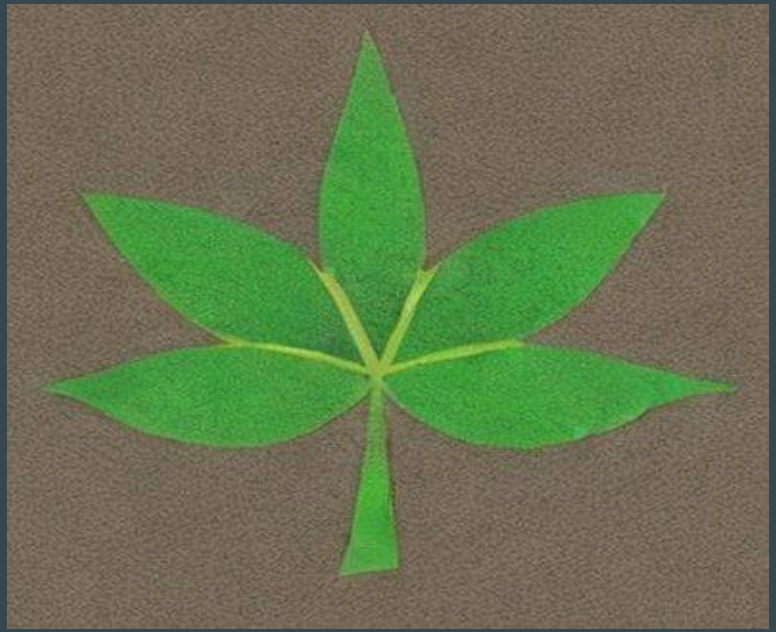
ClassiPlant

Jason Sizemore, Juno Lee, Kevin Than



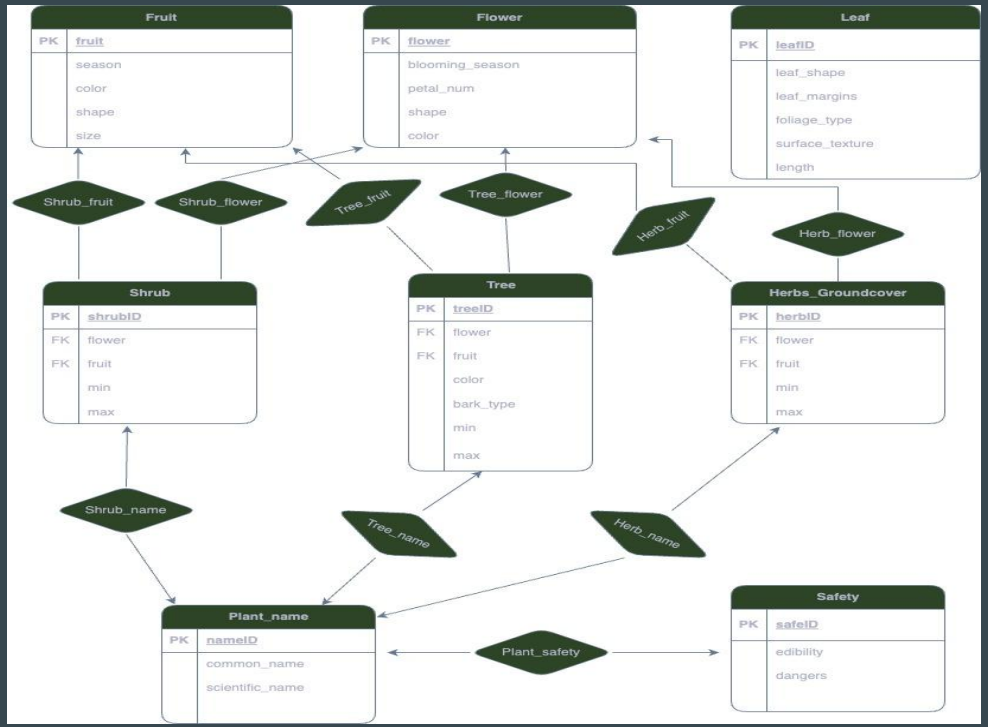
Overview

Objective:
This application is designed to provide information about plants in Pierce County, Washington. Or for a user to identify a plant by inputting observable information

Target audience:
Anyone interested in native plants around the area, wanting to learn more and be more observant about nature

Main features:
A list of all native plants
Search up a plant by name and get information
Try to find a plant's name by inputting information

Entity Relational Diagram



Normalization Proof

Tree Table:

FD1: treeID → flower, fruit, color, bark_type, min, max

Candidate Key for Tree: treeID as it is the candidate key and needed to identify flower, fruit, color, bark_type, min, and max

Proof: Since FD1 has a determinant as a candidate key (treeID), this relation is BCNF.

Plant_name Table:

FD1: nameID → common_name, scientific_name

Candidate Key for Plant_name: nameID as it is the candidate key and is needed to identify common_name and scientific_name

Proof: Since FD1 has a determinant as a candidate key (nameID), this relation is BCNF.

Shrub Table:

FD1: shrubID → flower, fruit, min, max

Candidate Key for Shrub: shrubID as it is the candidate key and needed to identify flower, fruit, min, and max

Proof: Since FD1 has a determinant as a candidate key (shrubID), this relation is BCNF.

Herbs_Groundcover Table:

FD1: herbID → flower, fruit, min, max

Candidate Key for Herbs_Groundcover: herbID as it is the candidate key and needed to identify flower, fruit, min, and max

Proof: Since FD1 has a determinant as a candidate key (herbID), this relation is BCNF.

Flower Table:

FD1:flowerID→blooming_season,petal_num,shape,colorflower→blooming_season,petal_num,shape,color

FlowerID is a candidate Key for Flower as it needed to identity blooming_season, petal_num, shape, color

Proof: Since FD1 has a determinant as a candidate key, this relation is BCNF

Fruit Table:

Candidate Key for Fruit: fruit (as it is the candidate key and needed to identify season, color, shape, size)

Proof: Since FD1 has a determinant as a candidate key (fruit), this relation is BCNF.

Leaf Table:

FD1: leafID → leaf_shape, leaf_margins, foliage_type, surface_texture, length

Candidate Key for Leaf: leafID as it is the candidate key and is needed to identify leaf_shape, leaf_margins, foliage_type, surface_texture, length

Proof: Since FD1 has a determinant as a candidate key (leafID), this relation is BCNF.

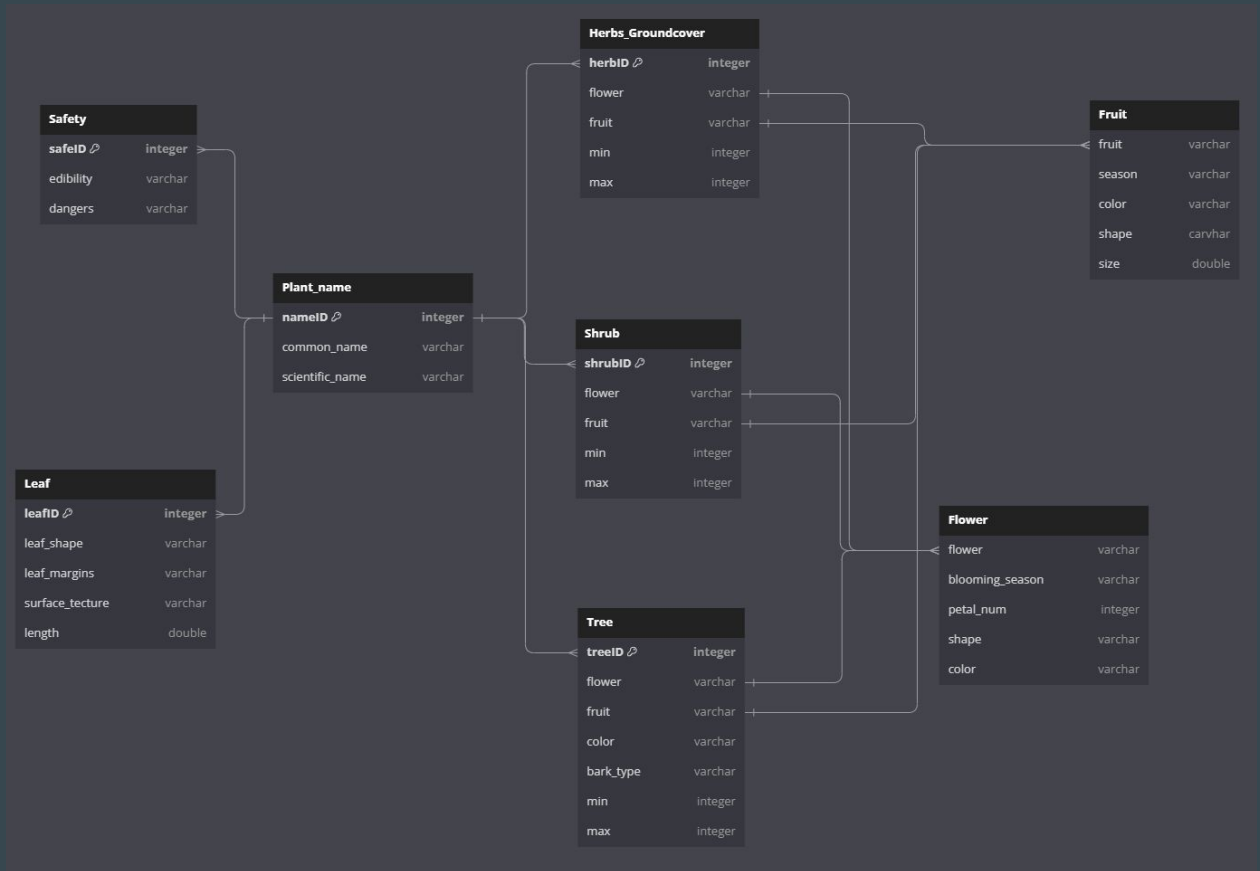
Safety Table:

FD1: safeID → edibility, dangers

Candidate Key for Safety: safeID as it is the candidate key and is needed to identify edibility and dangers

Proof: Since FD1 has a determinant as a candidate key (safeID), this relation is BCNF.

Relational Schema



Demo


DaveWenning

Challenges

Making the schema

Making sure data is correct

Tired

Future Enhancements

Add more information, so users understand terminology

- Give options for input rather than short answer

Web implementation/GUI

- Add pictures
- Drop down menu with options

Allow users to add to database