



PLANT LIFE

the shop inventory

Plant Life: Creating an Inventory App

Planning *who is it for, what will it do and how?*

Prototype *how does the app look and work for the user?*

Programming *how is it built?*

Possible futures *how can the app be improved and developed?*



Meet Anna...



- owner of independent shop in Glasgow called Plant Life
- interested in all things health, wellbeing and environment
- passionate about plants and good customer service
- managing lots of different tasks day to day; plant care, shop display, purchasing, sales
- employs part time staff to help in the shop



User Stories for Anna at Plant Life...

As a shop owner with a daily high turn over of plant sales
I want to keep track of all my stock levels in real time
So that I can react to sales info and re order popular items quickly

As a shop owner dealing with numerous suppliers of different plant types
I want to keep track easily of which plants are sourced from which nursery
So that I can re-order and estimate delivery times and costs more efficiently

As a shop owner with different plant types at different stock quantities
I want to access detailed stock levels quickly
So that I can make more effective visual merchandising decisions

As a shop owner employing part time staff in my absence
I want to have a system which is easy to update and navigate for all
So that I can offer autonomy to staff to make decisions about stock

As a shop owner employing part time staff with limited product knowledge
I want a system that can provide key talking points for staff to share with customers
So that I can improve staff confidence, customer service and maintain consistent messages

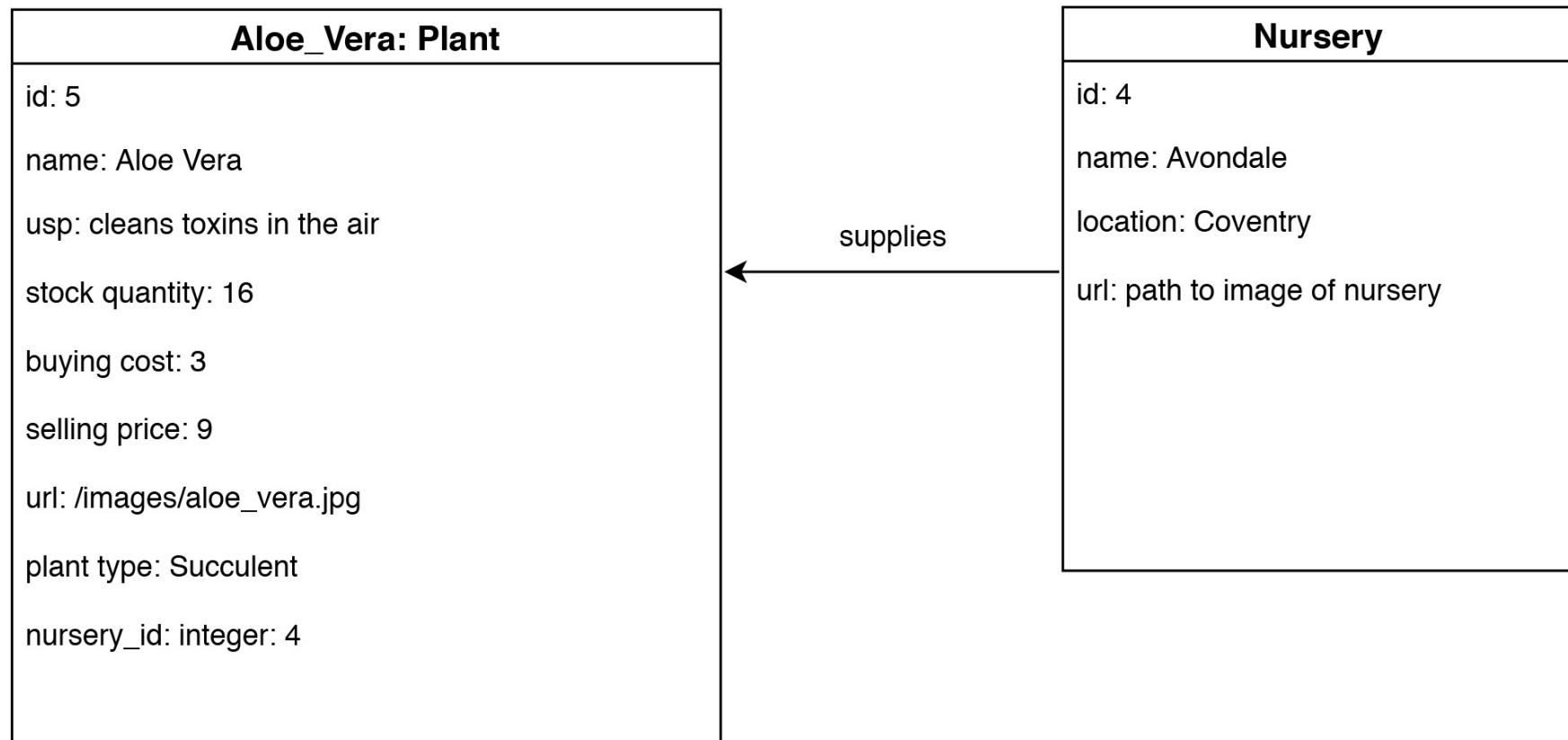


What data needs to be gathered?



Object Diagram for Plant Life...

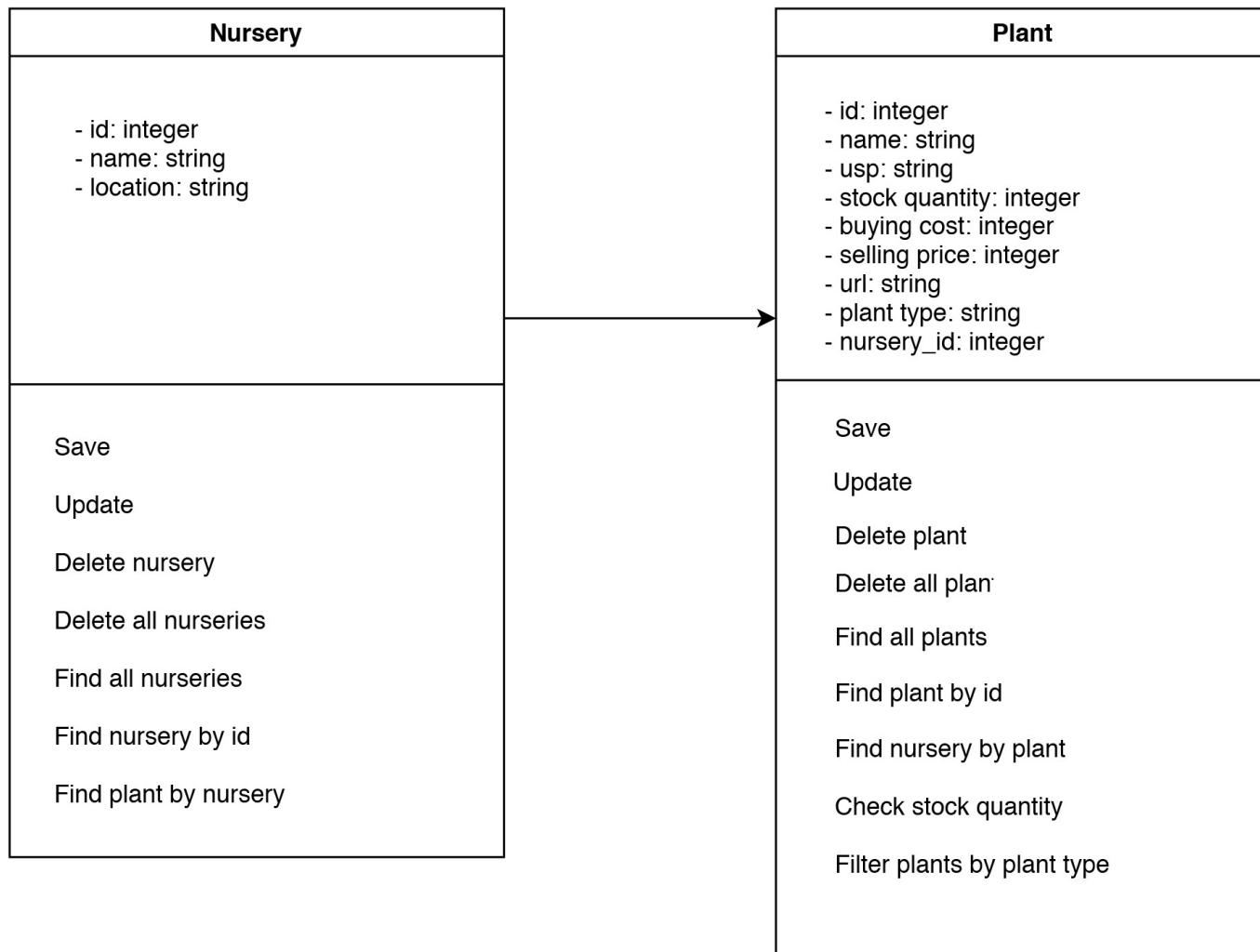
Example of data that will be held in the app



What functions will the app need?



Class Diagram for Plant Life...



Planning the display of the app...



Key Display Features of App

Example of 'View all Plants' page

Image	Name	Stock	Buying	Selling	Level	Mark Up	Plant Type	Nursery
	jhds	jhds	jhds	jhds	jhds	jhds	jhds	jhds
	jhds	jhds	jhds	jhds	jhds	jhds	jhds	jhds
	jhds	jhds	jhds	jhds	jhds	jhds	jhds	jhds

- Each plant listed to have image to help staff be more familiar with stock
- Large buttons - easy to find and use
- Lots of space around the data to help easy referencing
- Be able to access all filter options at any point in the site - all options held in top nav bar



The Prototype...



The Programming...



Filtering plants by @plant_type...

Task: show plants in categories of 'Succulent', 'Variegated Leaf', 'Aromatic' or 'Over 50cm'

```
class Plant

  attr_reader :nursery_id, :id
  attr_accessor :name, :usp, :stock_quantity, :buying_cost, :selling_price, :url, :plant_type

  def initialize(options)
    @id = options['id'].to_i if options['id']
    @name = options['name']
    @usp = options['usp']
    @stock_quantity = options['stock_quantity'].to_i()
    @buying_cost = options['buying_cost'].to_i()
    @selling_price = options['selling_price'].to_i()
    @url = options['url']
    @plant_type = options['plant_type']
    @nursery_id = options['nursery_id'].to_i()

  end
```



Filtering plants by @plant_type...

Select all plants from the database

```
45
46  def self.all()
47    sql = "SELECT * FROM plants"
48    results = SqlRunner.run(sql)
49    plants = results.map{|plant_hash| Plant.new(plant_hash)}
50    return plants
51  end
52
```

Select all ‘plant types’ from all the ‘plants’ into a unique array

```
81
82  def self.all_plant_types()
83    plants = Plant.all
84    all_plant_types = plants.map {|plant| plant.plant_type}
85    return all_plant_types.uniq()
86  end
87
```



Filtering plants by @plant_type...

Create a restful GET route in the controller to display all four plant type categories calling '.all_plant_types' function

```
18
19  get '/plants/plant_type' do
20      @all_plant_types = Plant.all_plant_types
21      erb(:"plants/plant_type")
22  end
23
```

Using a 'for' loop in html to loop through each plant type and display each unique plant type image

```
2
3  <h6>Select plant type to view stock available</h6>
4  <% for plant_type in @all_plant_types %>
5    <a href="/plants/plant_type/<%= plant_type %>"></a>
6  <% end %>
7
8
9
```



Filtering plants by @plant_type...

The display for filtering the plant type categories.

Each plant type image is a link to all plants listed as that plant type

← → ⌂ ⓘ localhost:4567/plants/plant_type

Home View all plants View all nurseries Select Plant Type



Select plant type to view stock available



SUCCULENT



OVER 50CM



VERIGATED



AROMATIC

Filtering plants by @plant_type...

Find all the plants connect to each plant type and store in new array

```
87  
88  def self.find_plant_type(type)  
89    sql = "SELECT * FROM plants WHERE plant_type = $1"  
90    values = [type]  
91    results = SqlRunner.run(sql, values)  
92    plants = results.map{|plant_hash| Plant.new(plant_hash)}  
93    return plants  
94  end  
95
```

Create a GET restful route to display all plant names connected to each plant type

```
49  
50  get '/plants/plant_type/:plant_type' do  
51    @plants = Plant.find_plant_type(params[:plant_type])  
52    erb(:"plants/plant_type/show")  
53  end  
54  
55
```



Filtering plants by @plant_type...

The display for filtering the plant names by each plant type

localhost:4567/plants/plant_type/Aromatic

☆ | +

Plants available:

Aromatic: Arzaleas



Aromatic: Holy Basil



Learning points with the app...



Using html tables to display data is not responsive design!

localhost:4567/plants

Home View all plants View all nurseries Select Plant Type

PLANT LIFE

All Plants

Add plant

Image	Name	Stock	Buying Cost	Selling Price	Stock Level
	Aloe Vera	10 units	£3	£8	Good



How to call multiple functions within one webpage

Aloe Vera

[Edit Plant](#)

[Delete Plant](#)

Stock	Stock Level	Buying Cost	Selling Price	Mark Up	Plant Type	Nursery
10 units	Good	£3	£8	£5	Succulent	Architectural Plants



This plant needs lots of sun, water and warmth to stay healthy. Cut open a leaf and use the gel inside to soothe burns (both from sun or fire), relieve the itching of bug bites or poison ivy.

```
23
24  get '/plants/:id' do
25    @plant = Plant.find(params['id'])
26    @stock = @plant.stock_status
27    @mark_up = @plant.mark_up
28    erb(:"plants/show")
29  end
30
```





Breathe better - go get yourself a spider plant!

