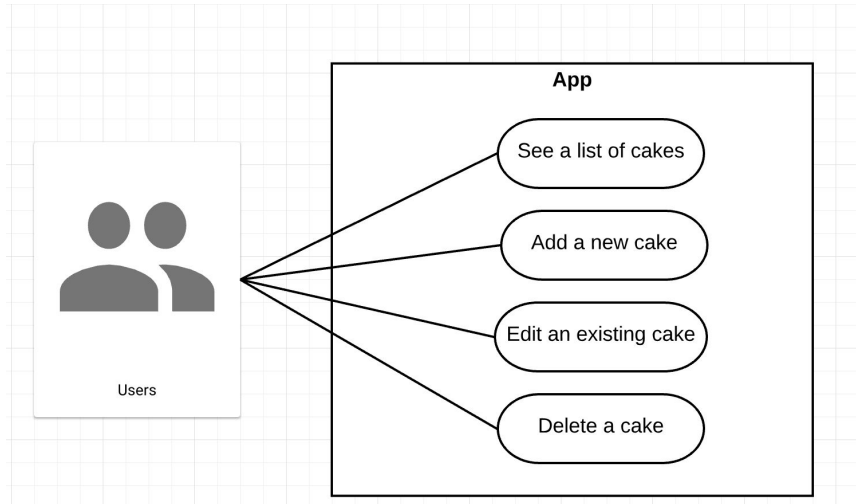**Evidence of Analysis and Design Unit**
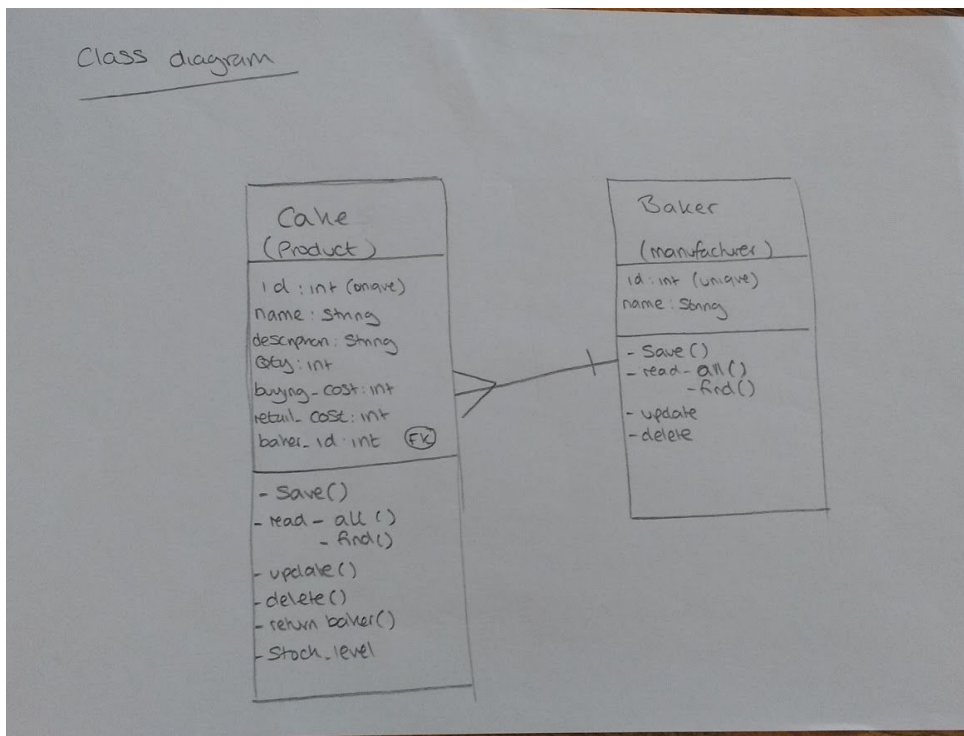
Sarah Murphy
Cohort E21

A.D.1 - Case Diagram
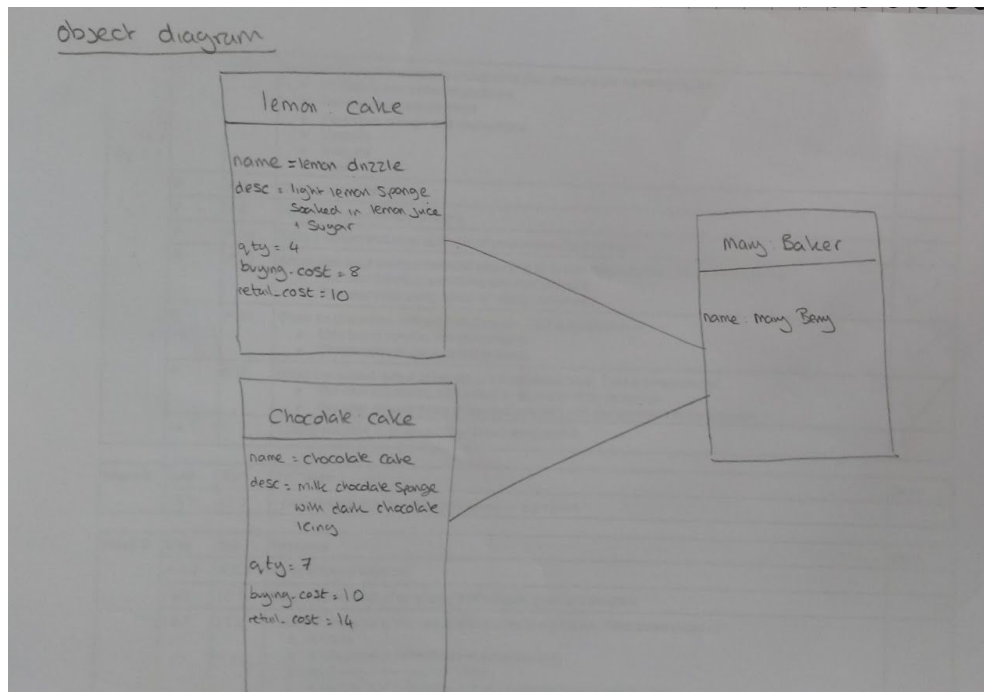Owner can create, read, update and delete cakes and bakers

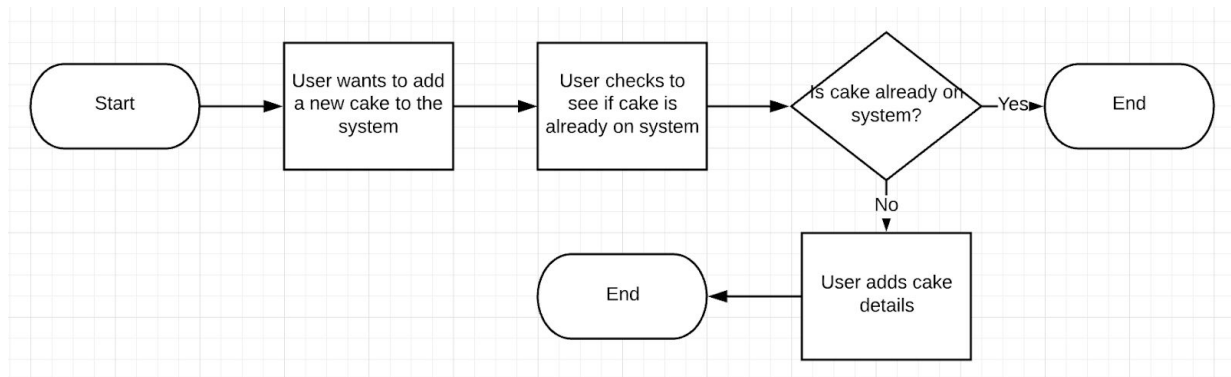## A.D.2 -Class Diagram

A.D.3 - Object Diagram

Object diagram

lemon : cake

name = lemon drizzle
desc = light lemon sponge
      soaked in lemon juice
      + sugar
qty = 4
buying_cost = 8
retail_cost = 10

Mary : Baker

name : Mary Berry

Chocolate : cake

name = chocolate cake
desc = milk chocolate sponge
      with dark chocolate
      icing
qty = 7
buying_cost = 10
retail_cost = 14

A.D.4 - Activity Diagram

Start → User wants to add a new cake to the system → User checks to see if cake is already on system → Is cake already on system? → Yes → End

Is cake already on system? → No → User adds cake details → End

A.D.5 - Inheritance Diagram

Dinosaur (abstract class)

Name - String
Diet Type -Enum
Hunger Level - Int
Weight - double
Length -double

Eat ()

Diplodocus

Name - String
Diet Type -Enum
Hunger Level - Int
Weight - double
Length -double

Eat ()

T- Rex

Name - String
Diet Type -Enum
Hunger Level - Int
Weight - double
Length -double

Eat ()
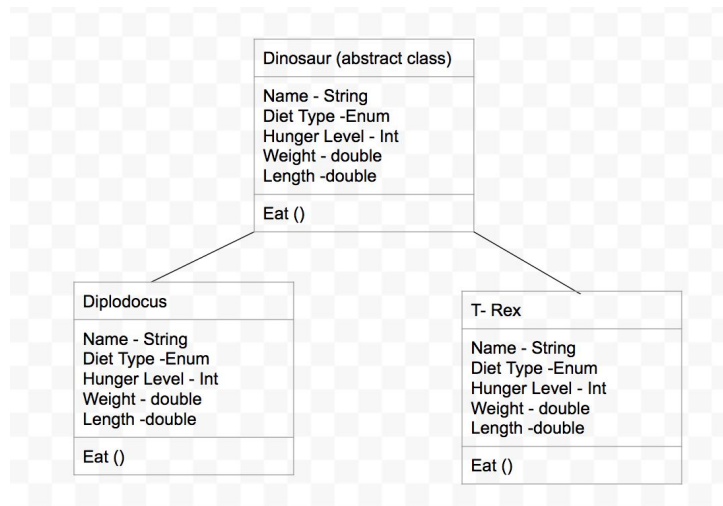
A.D.6 - Implementations Constraints plan

Topic	Possible Effect of Constraint on Product	Solution
Hardware and software platforms	Designing a product that is not suitable for the users needs e.g creating a web app but the user needs a mobile app	Understand what the user needs are and build these into the design of the app
Performance requirements	If it takes to long to add, create or delete a product then the user will become frustrated with the app	Ensure that the response time (e.g. to update a product) is within the users expectations
Persistent storage and transactions	The purpose of the app is to allow a shopkeeper to track their shop's inventory. If the information displaying is not accurate, this will mean that the app is not fit for purpose	Testing the app to ensure you can create, delete and amend a product and ensure that this information is displayed on the inventory page of the app.
Usability	If the user is unable to navigate round the app, they will not be able to execute tasks such as adding a new baker or amending the cake stock	Carry out user testing to ensure that the app is fit for purpose, and make modifications based on user feedback
Budgets	Scope creep could result in insufficient funds to produce a finished the product	Plan and track spend, to ensure that the MVP is achieved within budget
Time Limitations	Poor time management could result in the MVP not being achieved, and an unfinished product is returned to the customer.	Careful planning and prioritisation to ensure MVP is met, and scope creep doesn't impact the timeline for delivery