Cross Platform Development

Ca1 Garden Centre App

**Student Name:** Tegan Mc Daid

**Student Number:** L00152171

**Course:** Contemporary Software Development

**Module:** Cross Platform Development

**Lecturer:** Sean Keys

**Submission Date:** 14/02/2025

**Requirements**:

1. **User Sign-In:**

Users must enter their name and telephone number to log into the app.

1. **Shopping Features:**

Once logged in, users can browse and shop items from any of the three sales categories.

Purchased items are added to an online shopping basket. Users should have the option to remove items from the basket.

1. **Checkout Process:**

When the checkout option is selected, a summary of purchased items and their total price is displayed.

1. **Corporate Clients:**

The centre also serves two corporate clients. Corporate purchases should be added to their accounts, which are settled at the end of each month.

Contents

[User Sign-In. 3](#_Toc190446220)

[Logging In 3](#_Toc190446221)

[Signing up 5](#_Toc190446222)

[Logging Out 6](#_Toc190446223)

[Shopping Features 7](#_Toc190446224)

[Home page 7](#_Toc190446225)

[Shop by Product 8](#_Toc190446226)

[Products Page 9](#_Toc190446227)

[Checkout Process: 11](#_Toc190446228)

[Basket 11](#_Toc190446229)

[Checkout 13](#_Toc190446230)

[Corporate clients 13](#_Toc190446231)

[Checkout 13](#_Toc190446232)

[Corporate page 14](#_Toc190446233)

## User Sign-In.

### Logging In

For this Application the user information is saved in the database. The users are stored uniquely using their phone number as all phone numbers must be unique.

When attempting to sign in if the phone number is not recognised user is prompted to sign up.

A screenshot of a login screen

AI-generated content may be incorrect.

Figure - Account not found shown in UI

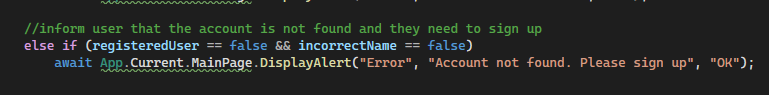


Figure - Code for checking if account exists if all is false display alert shown in figure1.

If number is recognised and name is not correct the user will be notified.

A screenshot of a login screen

AI-generated content may be incorrect.

Figure - Ui showing that the username doesn't match the number

A screen shot of a computer error

AI-generated content may be incorrect.

Figure - Code for checking that Number exists but name does not match it

Lasty if both name and number are correct and match the database the user will be notified of a successful log in.

A screenshot of a login screen

AI-generated content may be incorrect.

Figure - UI Showing successful log in

A screen shot of a computer

AI-generated content may be incorrect.

Figure - Code to check that user matches user information in database

### Signing up

When Signing up for the App the same number cannot be used to sign up twice. It is checked against all saved numbers in the database and if it has a match the user will be notified that that number already has an account.

A screenshot of a phone error

AI-generated content may be incorrect.

Figure - Ui showing account that is trying to sign up with an existing number

A screen shot of a computer program

AI-generated content may be incorrect.

Figure - Code to check that phone number already exists in database

Once all numbers in the database have been checked against the users input if none match the user will be signed up. The user will also be notified upon successful signup!

A screenshot of a sign up box

AI-generated content may be incorrect.

Figure - UI showing user successfully sign up

A computer screen with text on it

AI-generated content may be incorrect.

Figure - Code to add new user that has signed up to the database

### Logging Out

The option for the user to log out is also added in the toolbar of the homepage. It clears any saved user preferences before navigating to the login page.

A screenshot of a computer

AI-generated content may be incorrect.

Figure - UI Showing Logout button available in nav bar

A screen shot of a computer

AI-generated content may be incorrect.

Figure - Code to clear saved user and navigate to login page

## Shopping Features

### Home page

The home page shows pictures of the three sales categories. The images contain Tap gestures so that it is user friendly and easy to navigate. Each image calls a different command when the tap gesture is pressed so that it will filter the products passed through to the products page to match the product selected.

A screenshot of a computer

AI-generated content may be incorrect.

Figure - UI Homepage with images that contain tap gestures

A screen shot of a computer program

AI-generated content may be incorrect.

Figure - Code for the tap gesture behind the images

There is also an activity indicator to let the user know that they have selected the image and the page is loading.

A screen shot of a computer

AI-generated content may be incorrect.

Figure - Code for Activity indicator

Shop by Product

A black screen with green and white text

AI-generated content may be incorrect.

Figure - Code which is called when plants is tapped

Products are filtered based on which category is passed to it. The category is determined by which picture is pressed.

A screen shot of a computer program

AI-generated content may be incorrect.

Figure - Filter products then call products page

### Products Page

Once the products are filtered the navigation takes you to the producst page. This page contains the list of products with an image, name, description and price. There is stepper so you can change the quantity of the item to be added and then an add to basket item.

A screenshot of a computer screen

AI-generated content may be incorrect.

Figure - Ui of Garden Care products page

When added to basket is clicked you are informed that your products have been added to the basket.

A screen shot of a computer screen

AI-generated content may be incorrect.

Figure - Ui of alert when adding to basket

Add to basket adds items both to a local list and to the database.

A screen shot of a computer program

AI-generated content may be incorrect.

Figure - Code behind add to basket

The stepper needs to be dynamically changed to appear in the UI so it is set in the Products model with the OnPropertyChanged method called. A computer screen shot of a program

AI-generated content may be incorrect.

Figure - quantity code in the product model so stepper updates dynamically

A screen shot of a computer program

AI-generated content may be incorrect.

Figure - Stepper implemented

1. **Checkout Process:**

## Checkout Process:

### Basket

There is a basket item added to the toolbar within products so that you can get there with ease.

This is the basket page as a none corporate customer.

A screenshot of a computer

AI-generated content may be incorrect.

Figure - Normal User Basket Page

I have configured the stepper and the price to update dynamically like the stepper and did before this time it is in the BaksetItem model. Unfortunately I ran out of time and didn’t get a change to update the toolbar quantity and total price dynamically.

A computer screen shot of a program

AI-generated content may be incorrect.

Figure - Quantity and price being updated in Basket model for dynamic stepper

### Checkout

When checkout is pressed the Basket is cleared and the user is notified that the purchase was successful. The Total price displayed when the checkout button is clicked is updated to be the correct total price based on the items in the checkout.

**A screenshot of a computer

AI-generated content may be incorrect.**

Figure - Checkout alert in UI

## Corporate clients

### Checkout

The corporate account has a view corporate account button at the bottom of their basket page. When a corporate user checks out they are notified that there purchase was added to their monthly bill.

A screenshot of a computer

AI-generated content may be incorrect.

Figure - Corporate Client Checkout alert

The view corporate account button is only visible to corporate users.

A screen shot of a computer

AI-generated content may be incorrect.

Figure - Corporate account button

### Corporate page

When in corporate page the items are all non editable as these items have already been purchased even though the bill is not yet settled. The bill and total number of items appear in the toolbar. Even though the requirements asked for two corporate clients I felt it was more reusable to set it up for multiple corporate clients incase the “business” was to expand.

A screenshot of a computer

AI-generated content may be incorrect.

Figure - Corporate Bill page