# Portmarnock Garden Centre Mobile App

The Garden Centre App is a mobile application designed using .NET MAUI to help make shopping experience more convenient for both individual and corporate customers. The MAUI application offers access to a range of gardening products across three main categories: Plants, Tools, and Garden Care. Users can browse, select, and manage their purchases through the application. The app features user authentication, a shopping cart system, and corporate billing management. Corporate clients benefit from a monthly billing system, while regular customers can complete instant purchases. The app ensures a consistent experience across multiple platforms while maintaining robust data management through SQLite integration. This will report will demonstrate the following areas of the Garden Centre App:

* Create an Account
* User Sign-in
* Browse shopping categories
* Add items to shopping basket linked to the user ID
* Basket management, remove items or checkout
* Checkout process for Corporate clients
* UI overall design

Create an Account:

A screenshot of a phone screen

AI-generated content may be incorrect.The main page has the SignUp option, if the user does not currently have an account with Portmarnock Garden Centre. They can select Sign-up and the sign-up screen will appear. This will request the users name, email and phone number (used as the password). If a user does not select a corporate account, their customer type will be set to General. If the user selects the corporate option they will be set to corporate.

A screenshot of a login form

AI-generated content may be incorrect.

A screen shot of a computer code

AI-generated content may be incorrect.

User sign-in:

A screenshot of a computer screen

AI-generated content may be incorrect.If a user enters details that are not currently in the database an error window will appear, and it will give the user the opportunity to re-enter the details to login to the app. The user will have to create a new account if they cannot remember there password as there are no reset password functionality. If a user successfully enters login details it will let them into the website where they can choose what category of shopping they would like to look at.

Browse shopping categories:

The browse shopping category has a welcome message for the user. It includes the users name in this case it is “Test”. There are a few clickable items available to the page. Plants, Tools and Garden Care are available to click and once they’re clicked they will take you to the shopping category of choice where the user can see what items are available for sale. Basket on the top right of the page will take the user to the basket where they can see what items they have added and how to purchase or remove items. The last clickable item on the Garden shopping categories page is the Logout button, this will log the user out and return them to the main page.

A screenshot of a phone

AI-generated content may be incorrect.

Add items to shopping basket linked to the user ID:

A screen shot of a computer program

AI-generated content may be incorrect.Once one of the shopping categories are selected, the user can then decide to add the items to the shopping cart. Once the quantity is incremented the Add to Cart button is available to use, otherwise the button is not active. A description and price is available with each product listing, If the quantity gets increased to two the price will update to quantity \* price, this is done by setting the item price to basePrice but if the quantity is greater than 1 it will multiply basePrice by Quantity.

Screens screenshot of a phone

AI-generated content may be incorrect.Screens screenshot of a phone

AI-generated content may be incorrect.The user also has the ability to return to the Garden Shop Categories page to browse a different category, If they added an item to their shopping basket the item will still be there. The page has scrolling enabled, I could not demonstrate with screenshots, can be seen once app is launched on mac.

The below code screenshot demonstrates what items of the product is added to the shopping cart and how it associates with the current user ID as before it was adding all ideas to the basket for all users. So if I logged in as a corporate user I could still see all the items added to the basket by the Test user.

A computer screen shot of a program code

AI-generated content may be incorrect.

Basket management, remove items or checkout:

A screenshot of a phone

AI-generated content may be incorrect.A screenshot of a phone

AI-generated content may be incorrect.By clicking the basket icon, it will direct the user to the basket and if they have items in their basket it will be displayed like the below. For a general customer basket they have the option to logout, go back to the last shopping category they were in, this case it was Tools. The user also has the functionality to remove items from the basket, this is down by clicking the red remove button – in hindsight I should have added a popup so the user could confirm that they wanted the item removed.

The bottom right of the page will show the total of the items in the basket, the user can then select the checkout button which will provide a summary of the purchase like item, quantity, price and the total amount. Once checkout is complete the basket is cleared. Although if the user decides not to checkout, the items will remain in the basket until they’re removed.

Checkout process for Corporate clients:

The corporate customer have a slightly different process, they still have the ability to check out the items that they want to purchase. All the items get stored in a separate database, which links the order to the corporate user id and has the purchase date, amount and a Boolean to determine if amount has been paid.

A screenshot of a shopping cart

AI-generated content may be incorrect.

A screenshot of a shopping cart

AI-generated content may be incorrect.Corporate Details of the “Corpy” account before the user has selected checkout. The monthly total there currently is from items already added in testing.

A screenshot of a computer

AI-generated content may be incorrect.Once checkout was selected and the Corporate Details button re-clicked the updated total is now available for the “Corpy” corporate user and the due date is set to the end of the month. The Corporate Details button uses the customer type filter to determine if the button will appear.

A computer screen shot of text

AI-generated content may be incorrect.

UI overall design:

I tried to make the app as clean, intuitive interface with a consistent light colour background of green so everything else could pop with a darker green and black. The Shopping cart page includes a subtle dotnet\_bot.png watermark cantered behind content, I would have liked to include this on all pages but just couldn’t get it working on anything other than the shopping cart. The layout progresses from login, to category selection (Plants, Tools, Garden Care), to product pages with quantity controls and "Add to Cart" functionality. The shopping cart displays items in white cards so the information can pop. Corporate users have additional account details access as they pay a different way to normal Customer.

Things I would change, on the shopping cart you can only go back to the previous shopping category, it might be best to go all the way back to the option to select all shopping categories. Adding the background image to the rest of the pages, even though it would be overshadowed by the category and project cards it would be a nice addition. Provide delivery information and costs, along with the option to collect from the store. Also the option to display the store on the map would.