COURSE NAME: MAST5112
ASSINGMENT TITLE: PART 1- USER INTERFACE
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Assignment 1 Part 1-User Interface Design and Implementation Plan

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1.Introduction

In this document I am presenting my design and technical implementation plan for the My Chef application.it will include a few visual documents for all the required screens, and also a detailed user navigation flow, I will also add a component by component breakdown of how I will implement the design in react Native. The design prioritizes a clean, user friendly, organized, and consistent user experience.

2.GUI screen Design and Mockups

2.1. Home Screen

Design Mockup
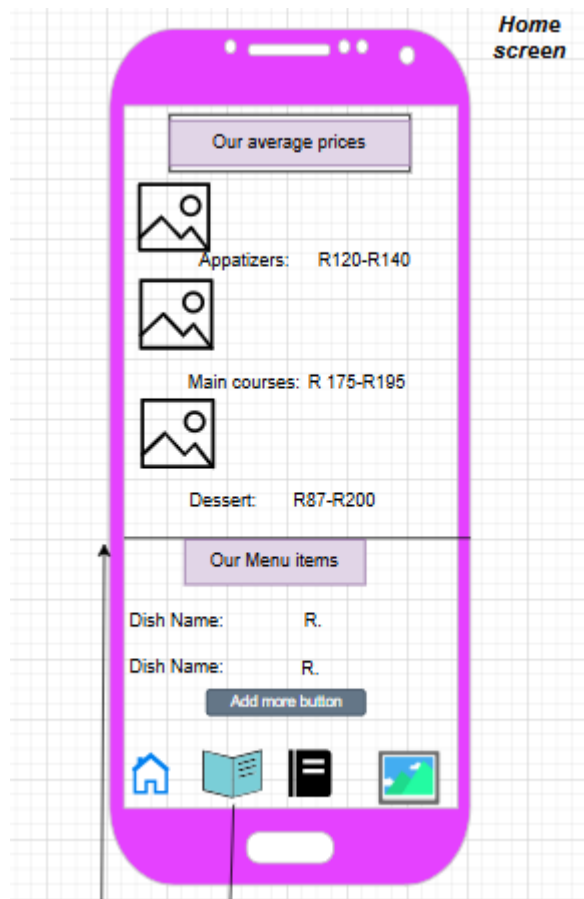
My description and functionality for my home screen:

- **Purpose**: The purpose of the home screen is to be the main landing page of my app. It provides an instant overview of the available menu items and serves as the essential navigation hub.
- **User actions**: From the home screen the user can:
  View a list of all the items there is to offer on the menu.

They can also view a few images of the courses.

They can also view the price of the courses.

They can press a button that will navigate them to the Menu screen.

They can press a button that navigates them to the courses screen.

They can also press a button that navigates them to the course's gallery.

They can also press on an individual item to view the item and the details of the item.

2.2. Menu Screen

Design mockup:
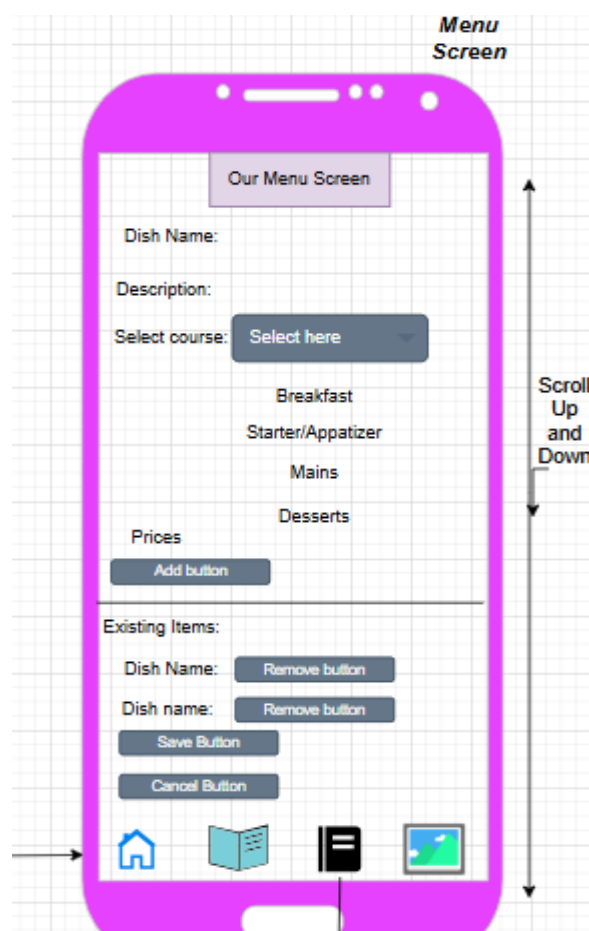
Description and Functionality of the Menu screen.

- **Purpose: In** this screen the user will be able to add an item, and the chef will be able to remove items Aswell.
- **UI Elements**: This screen contains an input field for the dish name as well as the description, there is also a choice to select a course with a drop-down option and there is also an input field for the prices, lastly there is an add Button.
- **User Actions:** The user can fill out the form fields that are on the page.
  The user can press a Save button and there is also an add button if you want to submit latest items.

There is also a Cancel button that allows the user to return to the home screen without saving.

2.3. The Courses Screen

Design mockup
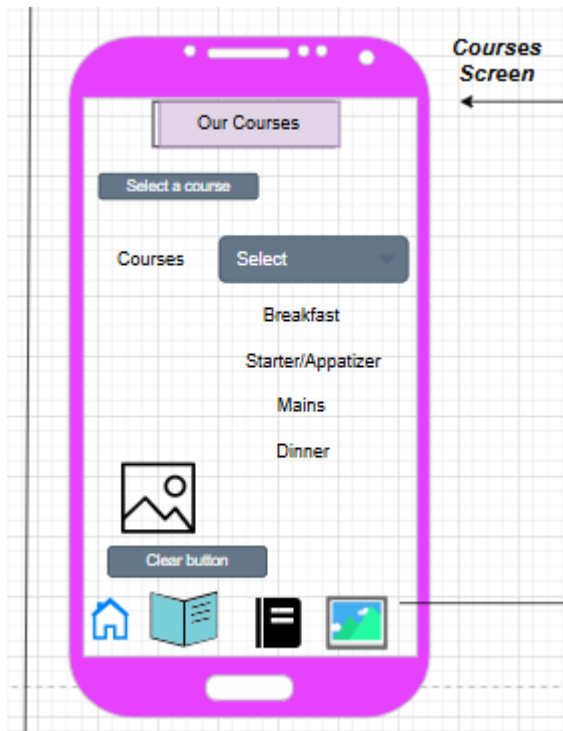
Description and Functionality:

Purpose: This screen will allow users to view items that are specific to the course, for example dinner, breakfast etc.

UI Elements: This screen uses interactive elements to select a course and there is a display area for the results.

User Action: The user can select a course of their choice though the drop-down menu.

The app will automatically update to only show the chosen course.

The user can press a button to clear and view all the items in the list again.

2.4. The Courses Gallery

Design Mockup
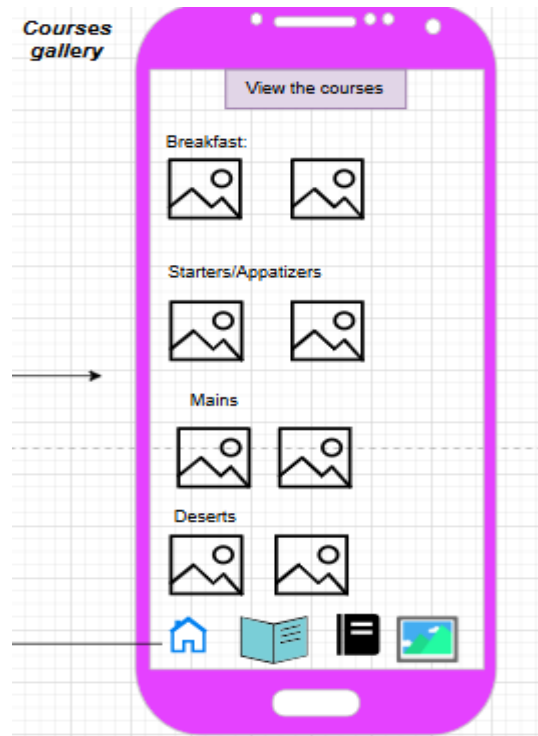
Description and functionality of this screen:

Purpose: The purpose of this screen is to be able to view the different Courses And see what they look like through providing images of the courses.

User Action: The user is able to see what the item looks like and decide if they would want that item.

3.Application Navigation Flow

Navigation Diagram:

Diagram Description:
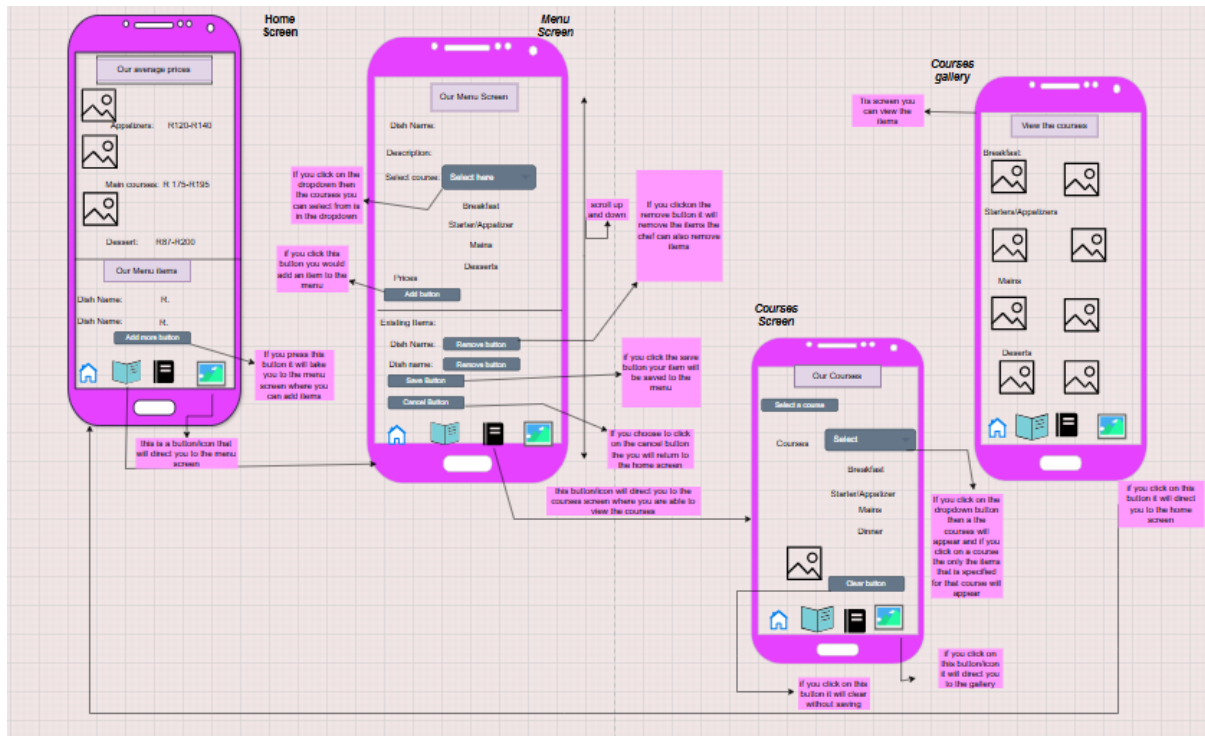
1.If the user lands on the **Home Screen.**

2.Then from the Home Screen, by clicking on the Add Button it will navigate the user to the **Menu Screen.** After pressing the save or cancel button, the user will return to the **Home Screen.**

3.From the **Home Screen,** pressing the **Add button** then it will navigate the user to the **Courses Screen.** From there on they can view the gallery by pressing on the **Gallery Button/Icon.** After that they will navigate back to the **Home Screen.**

4.React native implementation plan

In this section the implementation plan will outline the structure and components for my React Native application that I will create.

I will use the following for the home screen:

4.1. Home screen

Header -This will display the title of this page "Average prices."

Images-This is used for visual representation for the courses.

Price List-This will show the different numbers of the courses.

Buttons – different buttons, Home button, Menu button, Courses button and a gallery button and also an add button that will navigate you to the Menu Screen.

4.2. Menu Screen

Header-This will display "Our menu ".

Buttons-To navigate to different pages, in this screen there will be an Add Button, Remove Button, Save Button and also a Cancel Button.

Selector/Dropdown- to have a dropdown to select the course you would want to select.

Data names: To show the selected course.

4.3. Courses Screen

Header-This component will display "Our Courses."

Dropdown /selector-this will show the course to select from.

Image- this will display a food item.

Button-In this section there will only be a Clear Button so that you will be able to clear after you are done deciding. And the navigation buttons.

4.5. Courses Gallery

Header -will display "View our Courses."

Text- to display the different options there are.

Images- to display how the items will look like.

Buttons-Navigation buttons so you can navigate back to any other screen.

Components that will be used:

Headers, Images, Flat list, Text, picker etc. will be used in React Native to create my application. And styling will be added in the react native.

4.1. General Setup and Libraries

- **Navigation:** React navigation (react-navigation/native, react-navigation/stack) I will use this to manage the flow between my pages.
- **Styling**: I will manage all the styles using the Stylesheet. Create API for performance and organization.

4.2 Home Screen Implementation

UI Elements	React Native Components	Required imports	Key Considerations
Main Container	<SafeAreaView> <View>	SafeAreaView View	SafeAreaView will be used to not get a notch, and view will be used to fill the Screen in.
Screen Titles	<Text>	Text	The Styling will be done with Stylesheet from react native, with a large font size and the weight for this will be bold.
Menu List	<Flat List>	Flat List	This will create a custom component for each item that there is in the item list.
List Items	<View>, <Text>	View, Text	A custom component will be created like (MenuItems.js).
Add item. Button	<Touchable Opacity>, <Text>	Touchable Opacity, Text	This Touchable Opacity provides users with feedback after they have pressed the button.

4.3 Menu Screen Implementation

UI Elements	React Native Components	Required imports	Key Considerations
From Container	<View>	View	This will used to create space around all the elements.
Input Labels	<Text>	Text	Created to be clear and be placed above all input fields.
Text Inputs	<Text Input>	Text Input	Use State will be used to hook each input field.
Button	<Touchable Opacity> <Text>	Touchable Opacity Text	A handler will process the Data and navigate the user back.

5.Design System and Consistency

Color Palette:

- Primary: Blue-Will be used for my buttons, headers.
- Background: A light grey-Will be used for the screens background.
- Text: Black or dark grey-Will be used for all my primary text on all my screens.
- Accent: Green-Will be used for highlights.

Typography:

- Font: System Default font.
- Headings: fontSize:20 font Weight: Will be bold.
- Body Text: FontSize:14 font Weight: Will be Normal.
- Button Text: FontSize:17 fontWeight:600, color will be Black.

Reusable Components:

- For me to ensure consistency throughout my application I will create reuseable components like customButtons.js and I might create Card.js etc. This will prevent code duplications and ensure that all my buttons and cards are 100% accurate and identical.

6.Conclusion to this application

The conclusion I have is that this document will provide you with a comprehensive idea of my plan and design and my implementation of the application user interface I have created. The design I made is user centric and my navigations are very logical. My screens were design to enhance the users' experience; my design makes it easy to navigate and will also allow our users to interact very easily with my app. The outline technical plan will serve as a clear roadmap for my development in React Native. My design and framework will guarantee a clear and consistent final product that will meet the user's needs and their expectations.

7.Refrences

https://menupricesza.com/breakfast-menu-prices-list-south-africa/

https://www.procompare.co.za/prices/catering/catering-prices

https://www.menubly.com/blog/how-to-charge-for-catering/

8.Ai Usage Declaration

In the interest of academic integrity and transparency, this declaration outlines the extent to which I have used Artificial Intelligence (AI) was utilized in the preparation of this assignment. The AI assistant, Google Gemini, was used as a tool for the following specific purposes:

• To generate a structural template for me so I can have an idea of how I am supposed to create the structure for the assignment and to also have the correct format according to the rubric.

• To assist me with formatting for my document, to make sure my document is professional and correctly structured.

• I also asked artefactual intelligence to show me a concept of an react native plan/diagram, similar to the assignment.

The Important Notice on Academic Integrity and AI Misuse

It is imperative to state that the use of AI was strictly limited to assistance, ideation, and formatting as detailed above and not be used to do your project. The core analysis, designs, technical plans, and all written content are my original work. This institution maintains a zero-tolerance policy regarding academic dishonesty. The use of AI to write and copy answers, plagiarize content, or submit work that is not genuinely your own is a severe breach of academic integrity. Any student found to have engaged in such misconduct will automatically receive a mark of zero (0%) for the assignment and will be immediately referred for a formal disciplinary hearing as you were dishonest and did not oblige to the regulations. This hearing may result in further academic penalties, including but not limited to suspension or expulsion due to you being dishonest.

I, the undersigned, declare that this assignment is my own original work and that I have fully disclosed the extent of my use of AI in its preparation, adhering to the principles of academic integrity.

Signed: Z.Nel

 Full Name: Zene Nel

Student Number: St 10493345

Date: 2025/09/09