Criterion B – Design

Software Design:

Home page:

Ingredient	New Ingredient	Upgrade Ingredient
Orders	New Orders	
Recipes	New Recipes	

This is the home page with buttons to redirect to inner

Ingredients page:

home

Home redirect button

Ingredient

Search…

Search bar for sorting

Table to keep check of all ingredients and its data

Ingredient Name	Amount Present	Amount Optimum	Amount Used	Minimum Threshold	Amount Ordered	Last Ordered
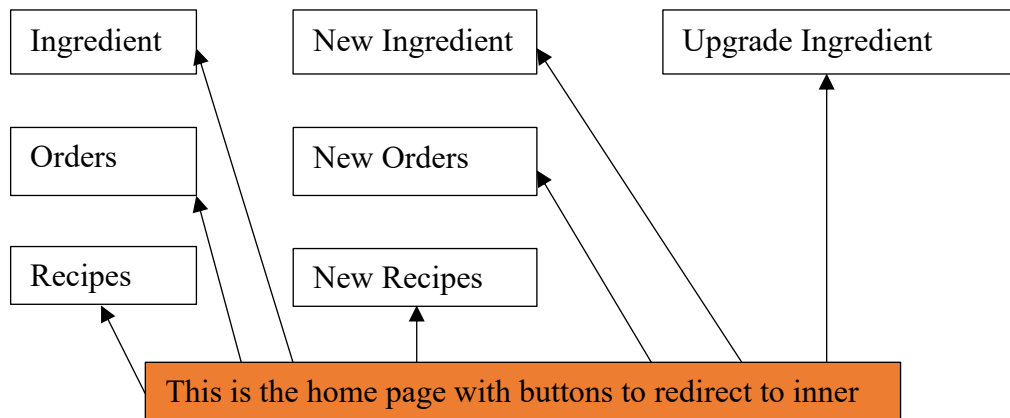
New Ingredients page:

home

Ingredient Name

Unit

Optimum Amount

Minimum Threshold Amount

Form to add a new ingredient and its basic essential details

Add Ingredient ← Button to add form in database

Update Ingredients page:

home

Click to Choose Ingredient ← Dropdown for choosing an ingredient data to update

Property	current value	update value
Ingredient Name		
Amount Present		
Unit		
Optimum amount		
Amount used		

Form fields to update an ingredient data

Minimum Threshold   [   ]

Amount Ordered   [   ]

Last Ordered   [   ]

[Update Ingredient]   ←   Button to patch
                              ingredient data
                              in the database

Order page:

[home]

Order

[Search…]

Table with all order data for
analysis, comparison and
internal company uses

Time	Customer name	Dish	Quantity	Note

New Order page:

[home]

Customer Name   [   ]

[Click to Choose Dish]

Form for dish specifications

Quantity [_____]   Note [_____] | + |

Button to add dish to order with specifications

Dish	Quantity	Note

Selected dishes with specifications

Submit Order

Button to add order in database
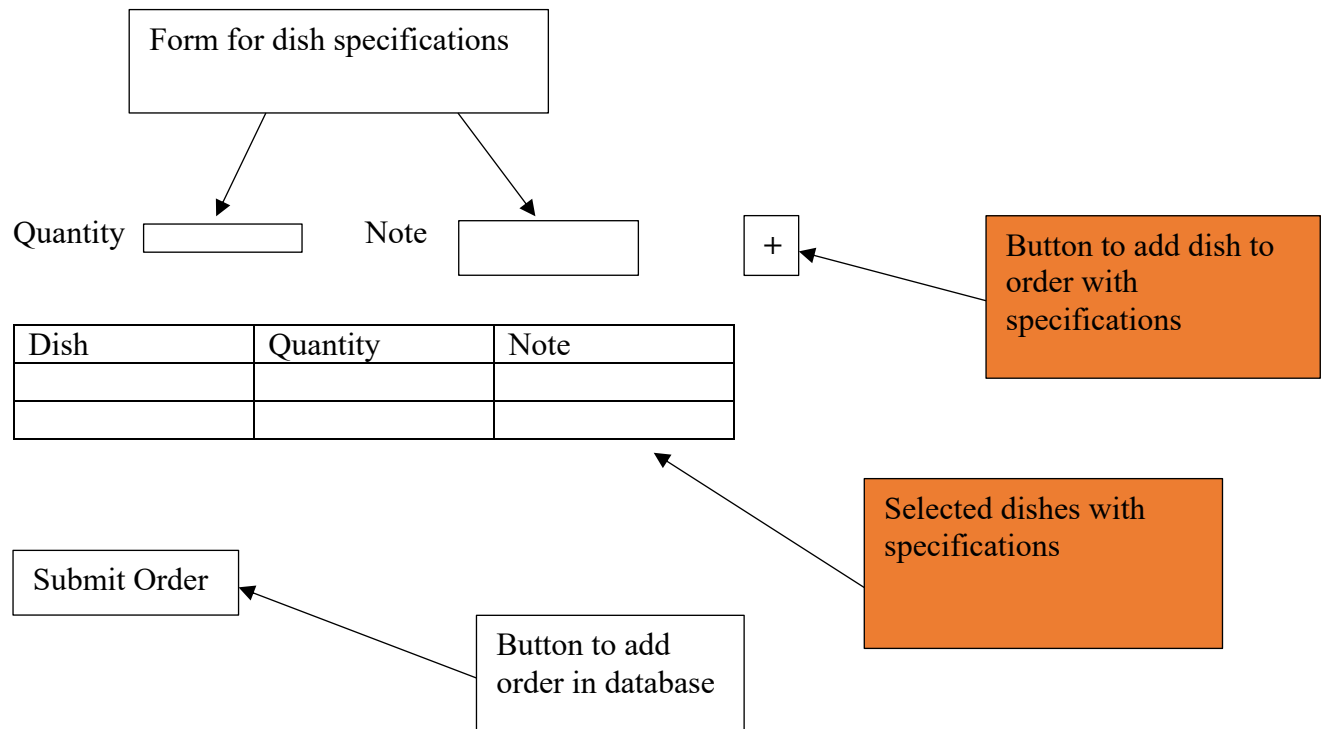
Recipe page:

home

Recipe

Search…

Output table to display dish all

Dish name	steps

New Recipe page:

home

Dish name

Steps

Ingredient   Amount

Click to choose ingredient

Click to choose ingredient

Click to choose ingredient

Click to choose ingredient

Click to choose ingredient

Add Recipe

Form to add new recipe

Amount of ingredient to used in recipe

Drop down to select ingredient

Button to add recipe in database
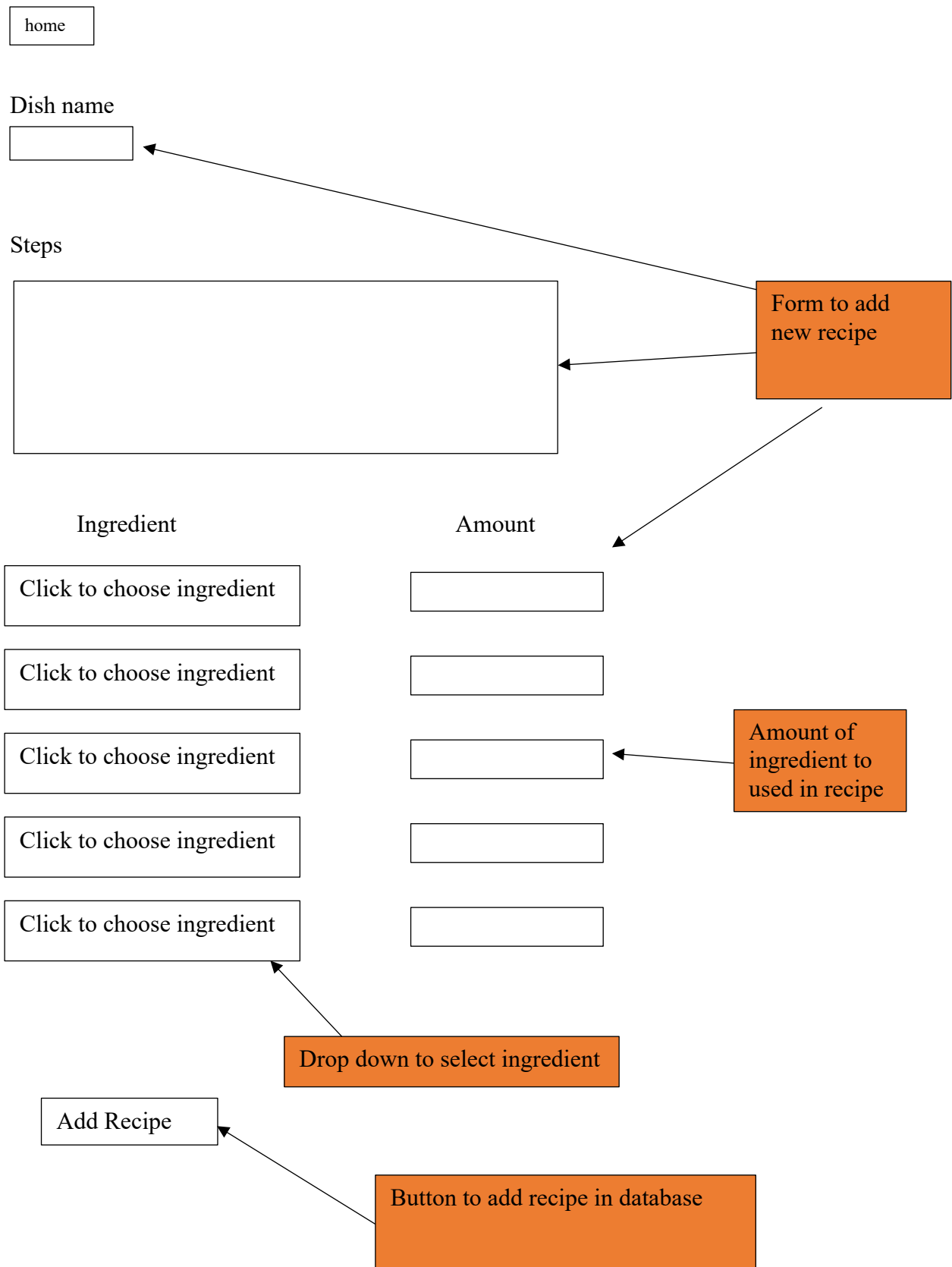
Database tables

Ingredient

Ingredient name is the key primary

Ingredient Name	Unit	Amount Present	Amount Optimum	Amount Used	Minimum Threshold	Amount Ordered	Last Ordered

Text field

Number field
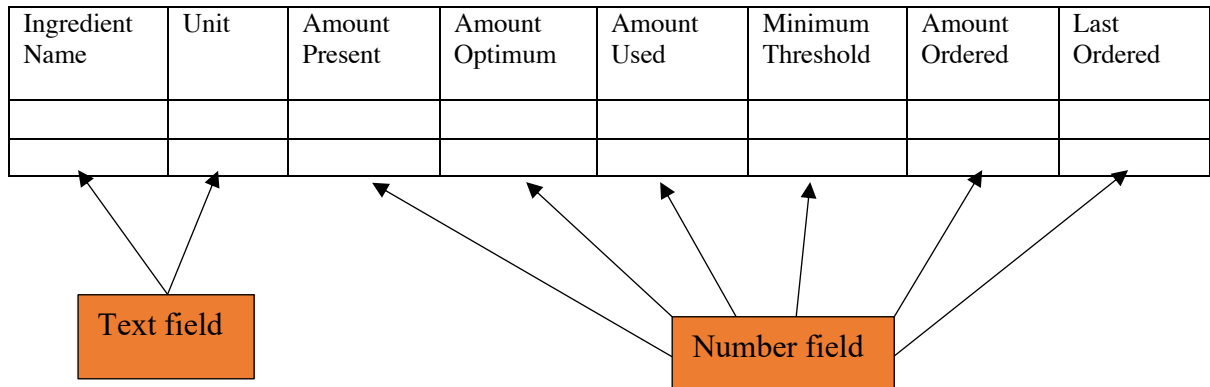
Recipes
Dish name is the primary key.
Ingredient name is the foreign key from Ingredients

| Dish name	steps

Text field
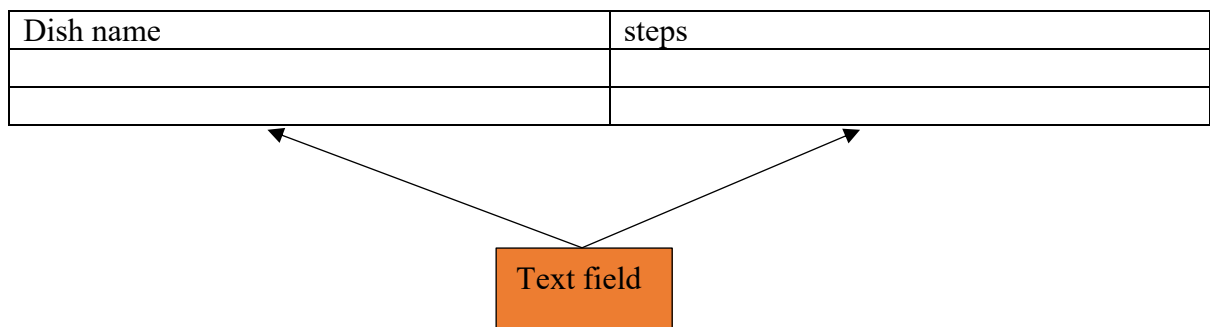
Orders
Customer name is the primary key
Dish name is the foreign key from recipes

Time	Customer name	Dish	Quantity	Note

Time field

Text field

Number field

```
                        ┌──────────────┐
                        │   Website    │
                        └──────────────┘
                 1            │ 1            1
        ┌──────────────┐ ┌──────────────┐ ┌──────────────┐
        │  Ingredient  │ │    Recipe    │ │    Orders    │
        └──────────────┘ └──────────────┘ └──────────────┘
                                   2
                              3
```
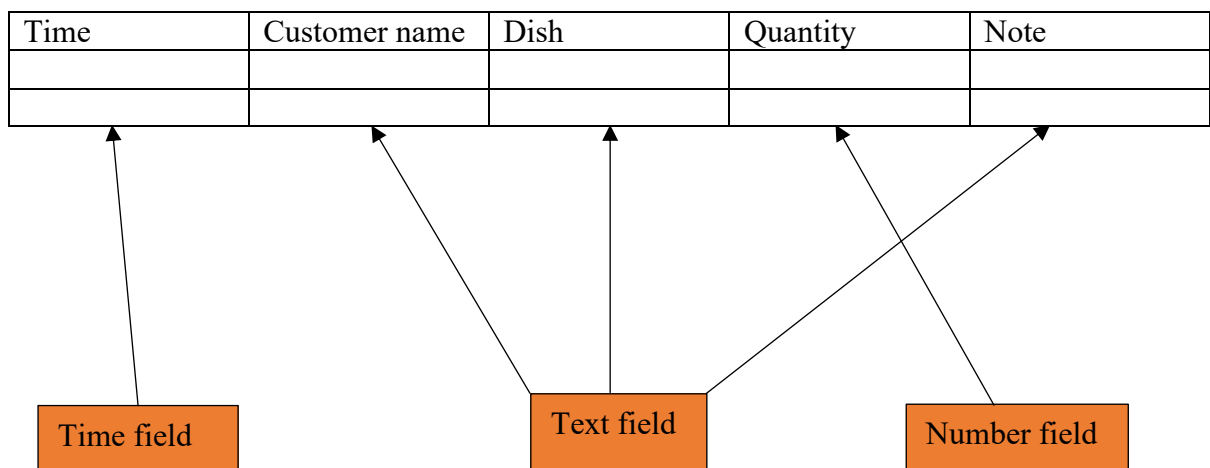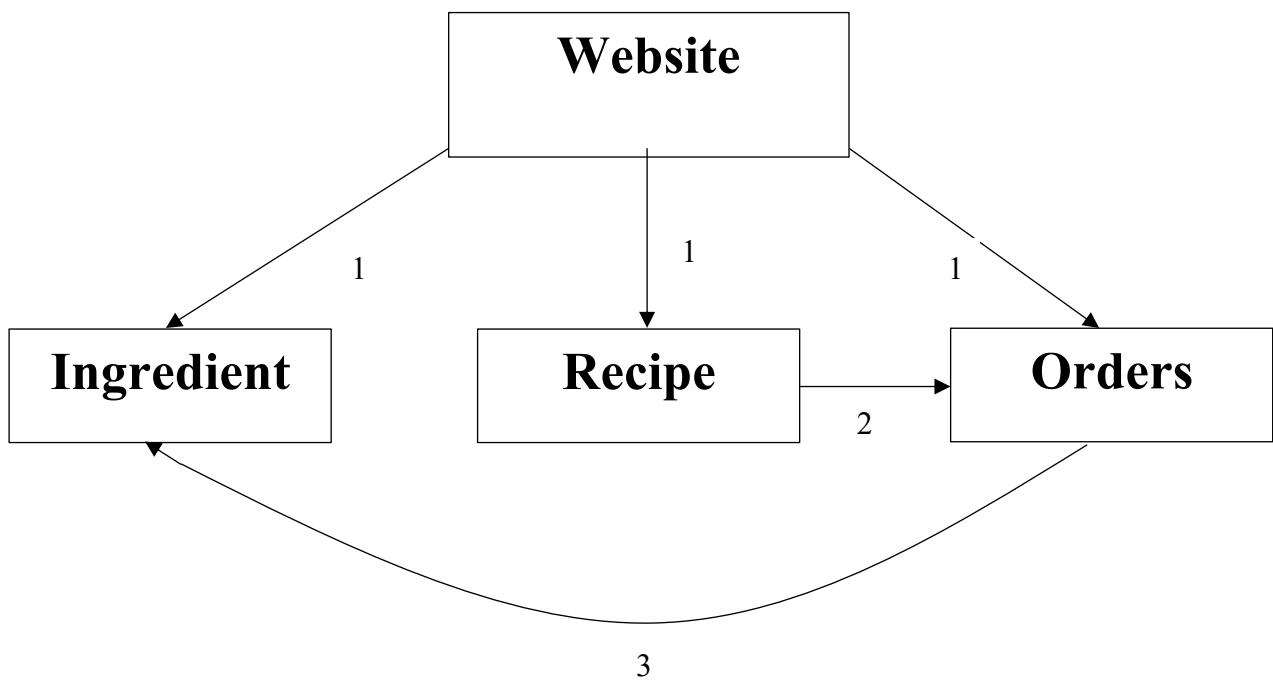
1   Website communicates with database to fetch and patch it
2   Recipe provided dish name to order along with all the ingredient amounts
3   Order makes changes to the ingredient amount

```
                    ┌────────────────┐
                    │ New Ingredient │
                    └────────────────┘
   ┌────────────┐
   │ Ingredient │
   └────────────┘         ┌──────────────────────┐
                          │  Upgrade Ingredient  │
                          └──────────────────────┘

               ┌──────────────┐
               │ New Recipes  │
               └──────────────┘       ┌───────────┐
                                      │  Recipes  │
   ┌──────────┐                       └───────────┘
   │  Orders  │
   └──────────┘
                   ┌──────────────┐
                   │  New Orders  │
                   └──────────────┘
```
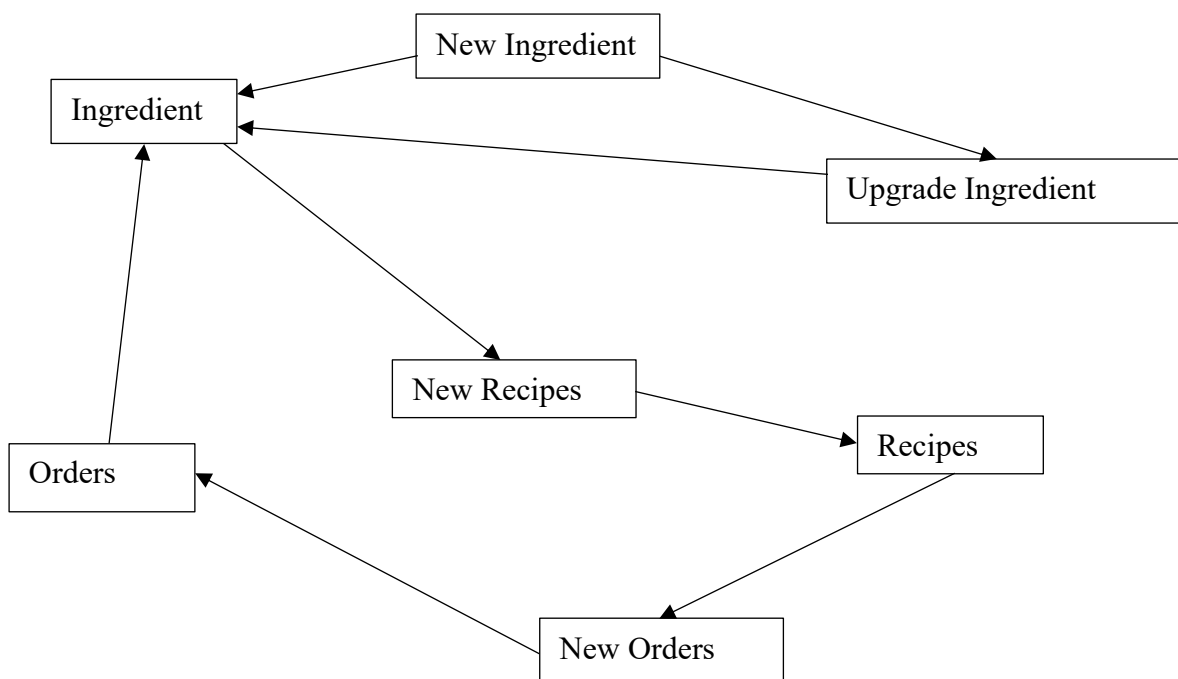
Flow charts

Add ingredient

```
        ┌─────────────┐
        │    Start     │
        └─────────────┘
               │
               ▼
        ╱──────────────╱
       ╱ Input data  in ╱
      ╱      form      ╱
     ╱────────────────╱
               │
               ▼
        ┌─────────────┐
        │     End      │
        └─────────────┘
```

Update ingredient

```
                    ┌─────────┐
                    │  Start   │
                    └─────────┘
                         │
                         ▼
                  ┌──────────────┐
                  │ Get preoperties│
                  │ from ingredients│
                  └──────────────┘
                         │
                         ▼
                      ◇ Change property ◇
          Yes ────────┘           │
           │                      │ No
           ▼                      │
   ┌──────────────┐               │
   │ Make change to │             │
   │  ingredient    │             ▼
   └──────────────┘         ┌─────────┐
           │────────────────▶│   End    │
                             └─────────┘
```

New recipe

```
┌─────────────┐
│    Start    │
└──────┬──────┘
       │
       ▼
 ┌──────────────────┐
 │ Input recipe name │
 │    and steps      │
 └────────┬──────────┘
          │
          ▼
 ┌──────────────────────┐
 │ Input ingredient name │
 │ from ingredient and   │
 │ ingredient amount     │
 └──────────┬───────────┘
            │
            ▼
     ┌──────────┐
     │   End    │
     └──────────┘
```

New order

```
                          ┌─────────┐
              ┌───────────│  Start  │───────────┐
              │           └────┬────┘           │
              ▼                ▼                ▼
      ┌──────────────┐  ┌──────────────┐  ┌──────────────────┐
      │Input quantity│  │ Input recipe │  │  Input note and  │
      └──────┬───────┘  │  name from   │  │  customer name   │
             │          │   recipe     │  └────────┬─────────┘
             │          └──────┬───────┘           │
             ▼                 │                   ▼
      ┌──────────────┐         │           ┌──────────────┐
      │   Reduce     │◄────────┘           │ Add in order │
      │  ingredient  │                     └──────┬───────┘
      │  amount in   │                            │
      │  ingredient  │                            │
      └──────┬───────┘                            │
             │              ┌─────────┐           │
             └─────────────►│   End   │◄──────────┘
                            └─────────┘
```
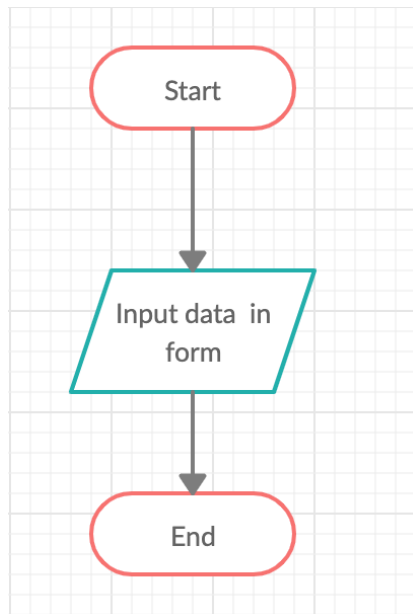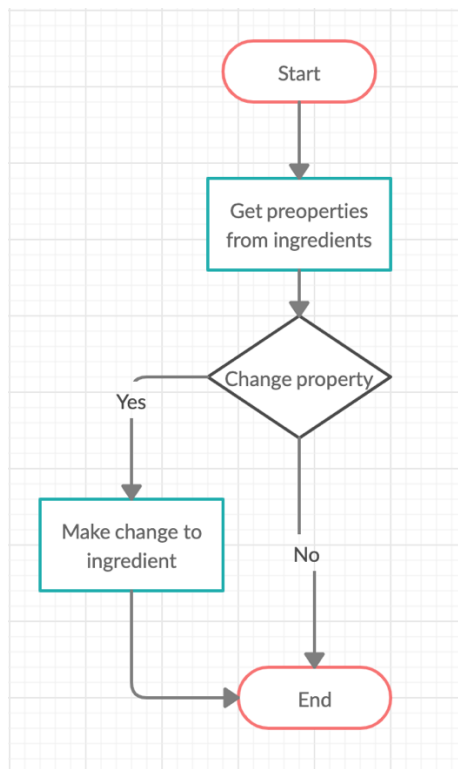
Test Plan

Action to be tested	Test method
All webpages can be accessed and home button works	Open each webpage from home page. Go back to home page using the button. Refresh the website and open another webpage
See if checks are working	Try inputting wrong data type. Invalid data type should not enter. Integer data input should have a selector.
Functional dropdown button	Click on dropdown button select random options. Check if it gets selected and shown below.
Functional search bar	Input words present in table. Only rows with word present should be sorted and shown. Input random alphabets. No result should be shown.
Working of Add Ingredient	Input correct data in the New Ingredient form. Press add ingredient button. Open ingredients webpage and check for the added ingredient.
Working of Update Ingredient works	Select ingredient name make changes to some fields. Press Update ingredient button. Open ingredients and check for change. Try again for all fields. Check ingredients for successful change.
Working of New Recipe works	Input correct data in the New Recipe form. Input all ingredients and ingredient amounts. Press add recipe button. Open Recipe webpage and check for the added recipe. Repeat the same process with but random number of ingredients, not all.
Working of New Order works	Check ingredient amount. Input all data to order one dish. Press '+' button. Check if order with all details comes in table below. Press submit order button check Order page with details of the order along with correct order time. Check if correct ingredient amount has been deducted in Ingredients. Repeat this process with multiple quantities of one dish, multiple dishes, and multiple dishes with multiple quantities.