

Criterion B - Design

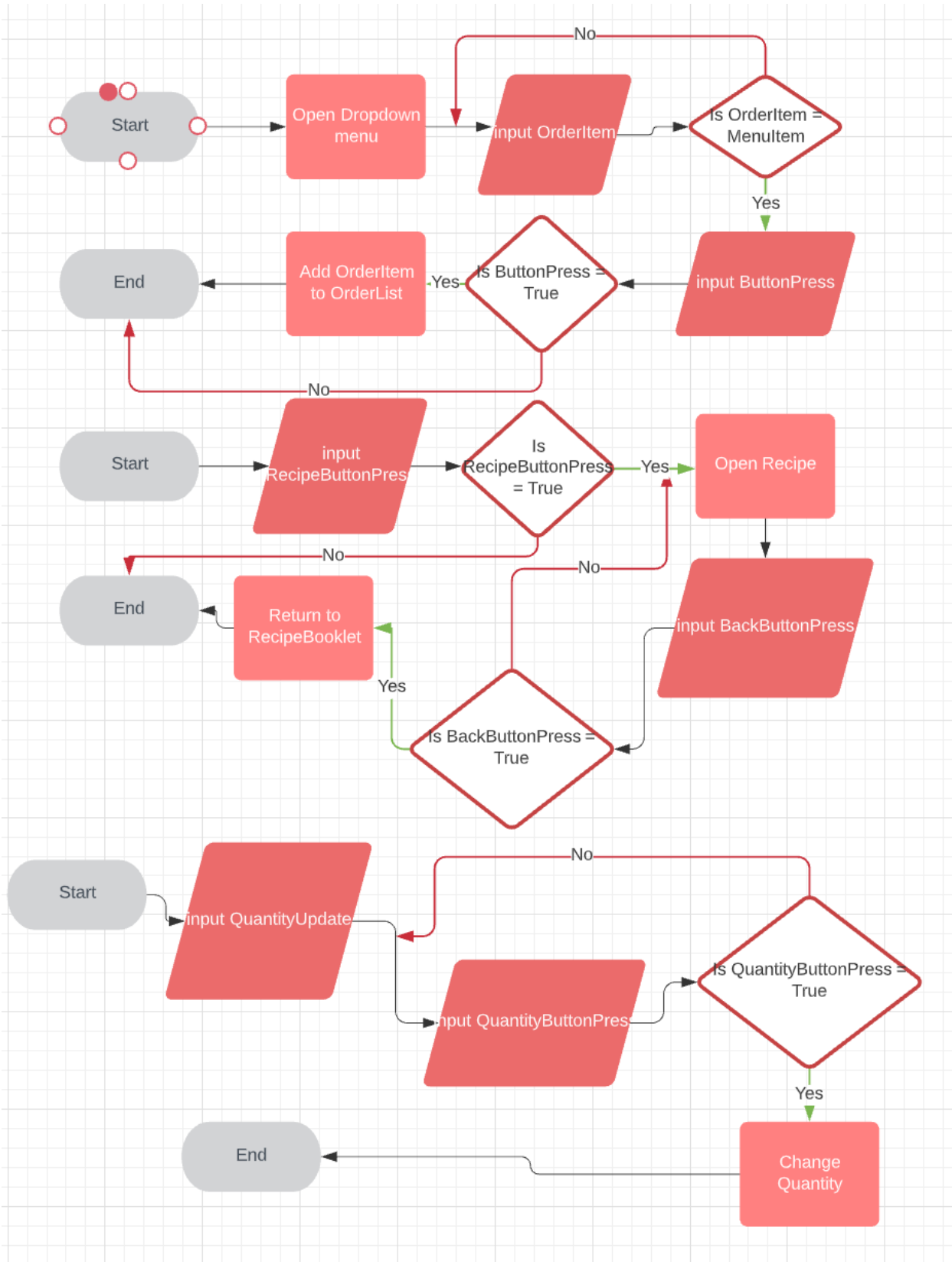
Word count: 109

Input/Output Table

Input	Data type	Normal Example	Range	Extreme	Wrong type
Ingredients	String	"Sugar"	Not left blank - Having an ingredient written	Too many characters	643
Quantity Editor	int	4	Any integer number greater than 0. Can be left blank.	2147483648	"four"
MenuItem	String	"Fudgy Brownies"	Not left blank - Having a menu item written	Too many characters	49
itemsThere	Boolean	True	True or False	n/a	"Valid"

Output	Data type	Normal Example	Range	Extreme	Wrong type
MenuItemFound	String	Shows menu item that matches search: "Fudgy Brownies"	"Search not found" - any menu item that matches the search.	Too many characters	38
Quantity	int	6	Any integer number greater than 0. Can be left blank.	2147483648	"six"

UML Class Diagrams



Pseudocode:

Adding item to the order list:

//Assume drop-down menu is open

```
public addItem(){
    while boolean orderLoop = true{
        if orderLoop = true{
            String tempOrder = USERINPUT;
            orderList.resetNext();
            orderList.addItem(tempOrder); //Assume drop-down menu is closed
            END if
        }
        else{ //The drop-down menu closes when orderLoop is false
        }
    }
}
```

Updating quantity and alerting the user if the quantity gets too low:

```
public setQuantity(){
```

```
    int itemQuantity = USERINPUT;
```

```
}
```

```
public quantityAlert(){
```

```
    if itemQuantity < 10{
```

```
        JOptionPane.showMessageDialog("Low on ingredient!");
```

```
    END if
```

```
}
```

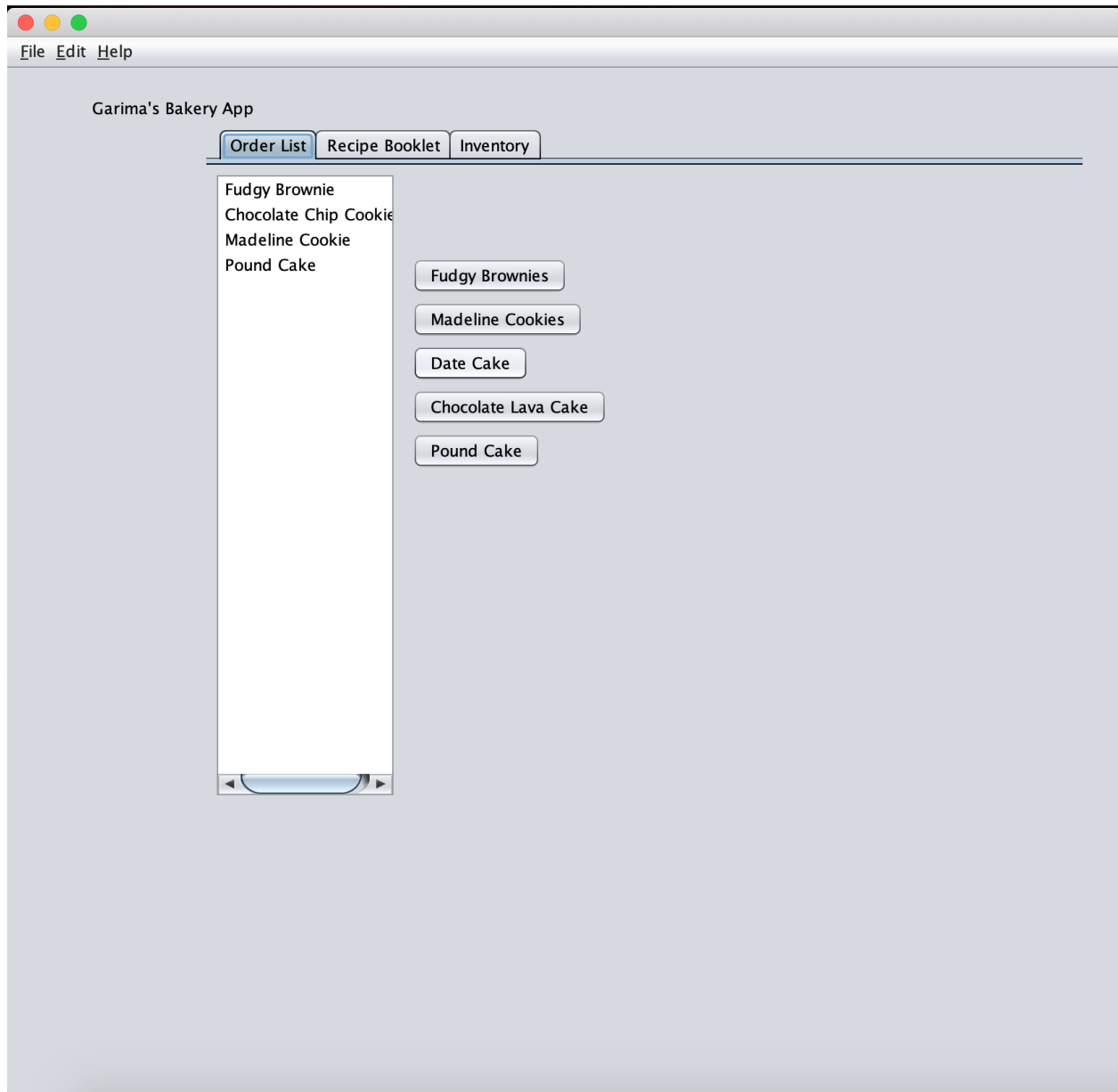
```
}
```

Searching the recipe booklet:

```
public recipeBookletSearch(){
    String searchTerm = USERINPUT;
    recipeBooklet.resetNext;
    while searchNotFound = true{
        if !recipeBooklet.isEmpty{
            if searchTerm = recipeBooklet.getNext{
                searchNotFound = false;
                OUTPUT "Search found";
            END if
        }
    else{
        OUTPUT "Search not found";
    END if
    }
}
}
```

Product Prototype on following page

Product Prototype:





File Edit Help

Garima's Bakery App

Order List

Recipe Booklet

Inventory



Fudgy Brownies



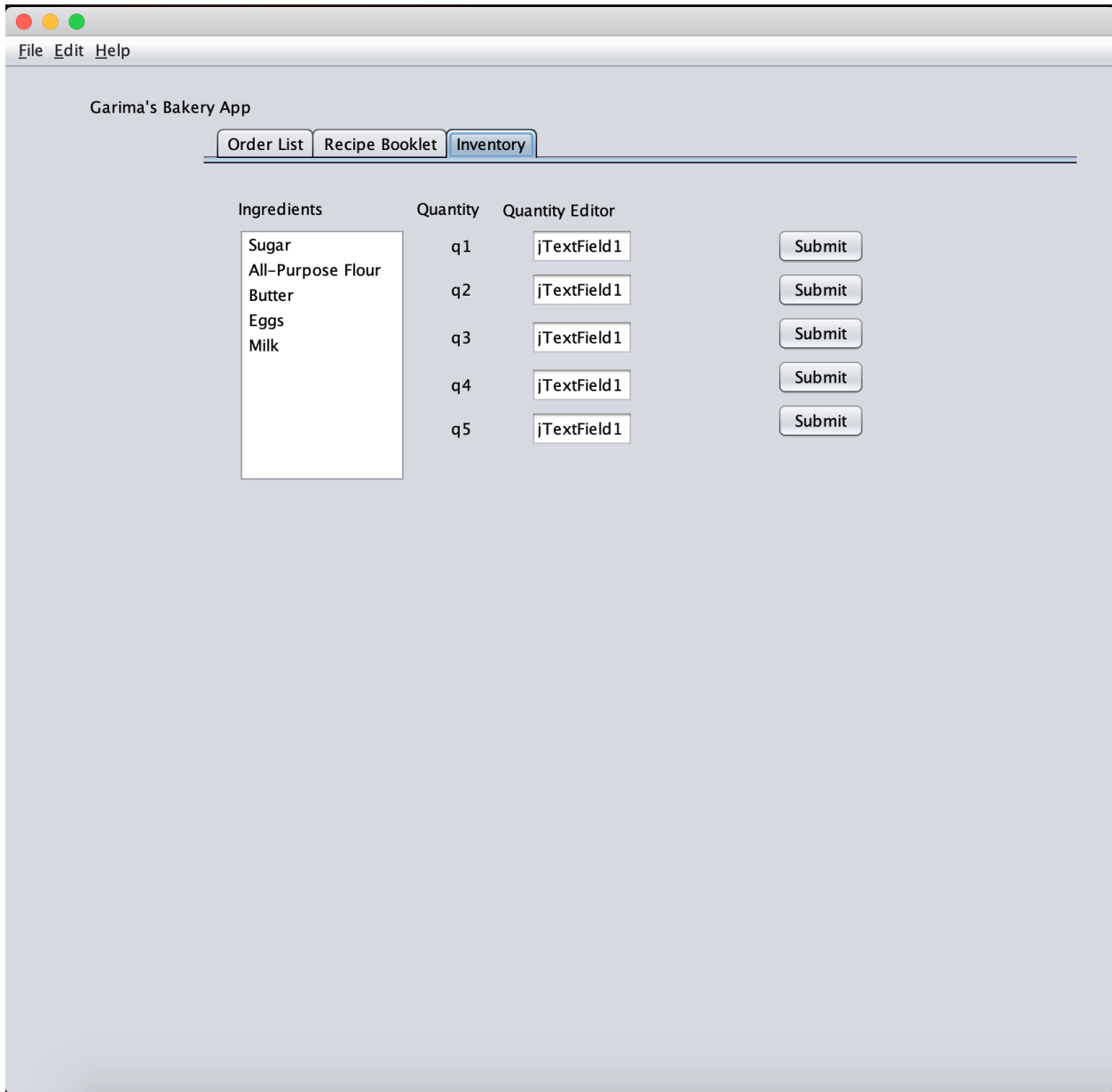
Madeline Cookies



Date Cake



Chocolate Lava Cake



Testing plan on following page

Testing Plan:

Action to Test	Method of Testing/Expected Result
Order list button press	Click the button Should result in the corresponding item being appended to the list
Quantity Editor	Adding integers and clicking the submit button Should result in the quantity being updated next to the corresponding ingredient
Recipe booklet button press	Click on a recipe Should open a dialog box with the ingredients for the good