# PROJECT RED MOON REMASTERED

Enhancing Red Moon Foods Self-Ordering System with OOP and GUI

## THE GOAL

1. Integrate OOP into the project
2. Design and build the GUI for the project

## INITIAL UML PLAN

|  |
| --- |
| Main |
|  |
| +printWelcomeMessage(): void  +printMainMenu(): void |

|  |
| --- |
| Menu |
| * categoryList: ArrayList<ProductCategory> |
| +populateCategoryList(): void  +getCategoryList(): String |

|  |
| --- |
| ProductCategory |
| * categoryIndex: int * categoryName: String * productList: ArrayList<Product> |
| +populateProductList(): void  +readProductFile(i): void  +getProductListString(): String |

|  |
| --- |
| Product |
| * productIndex: int * productName: String * productPrice: double * volume: int |
| Setters  Getters |

|  |
| --- |
| Costumer |
| * orderList: ArrayList<Product> * totalPrice: double |
| +Costumer()  +addOrder(Product): void  +viewOrders(): void  +resetOrders(): void  +checkout(): void  +printReceipt(): void  +generateTotalPrice(): void  +takeUserChoice(): int  +takeUserChoice(): char  +takeUserChoice(): String |

## PSEUDOCODE

instantiate Menu menu

prepareMenu()

menu.populateCategoryList

looping

menu.categoryList[i].populateProductList()

instantiate new Costumer suki

printWelcomeMessage()

printMainMenu()

menu.getCategoryListString()

looping

get categoryList[i].getCategoryName && .getCategoryName

printing/return

suki.printUserOptions()

viewOrders(): orderlist, total price

resetOrders()

checkout()

printReceipt()

printMainMenu()

take input from choices suki.takeUserChoice()

looping

printCategoryProductList()

print menu.categoryList[i].getProductListString()

suki.takeUserChoice()

suki.saveOrderPrompt()

int volume = takeUserChoice()

takeUserChoice() if suki wants to save order

if yes

save to suki.addOrders(productIndex, productName, productPrice, volume)

menu.categoryList[i].getProductList().getProductIndex()

menu.categoryList[i].getProductList().getProductName()

menu.categoryList[i].getProductList().getProductPrice()

volume

suki.takeUserChoice() if suki wants to order again

if yes printMainMenu()

## ADMIN PSEUDOCODE

Print options either ORDER PRODUCTS or ADMINISTRATOR ACCESS

If ORDER PRODUCTS, startCostumerThread()

If ADMINISTRATOR ACCESS, startAdministratorThread()

Commands:

show = show list of <specifier>

mod = modify <specifier>

add

remove

exit

Specifiers:

category = categories <index>

product = products <index>

|  |  |
| --- | --- |
| Show category | Show list of categories |
| Show category <i> | Show category <i> information |
| Show category <i> product  Show product | Show category <i> list of products |
| Show category <i> product <j>  Show product <j> | Show information of product <j> under category <i> |
| Mod category | Show list of categories. Identify <index> |
| Mod category <i> | Show information of category.  Change category name? [y/n]  If y  New Category Name:  Saved. |
| Mod category <i> product | Show list of products. Identify <index> |
| Mod category <i> product <j>  Mod product <j> | Show information of product.  Change product information? [y/n]  >> y  New Product Name:  New Product Price:  Save? [y/n]  >> y  Saved. |
| add |  |
| Add category | Add new category? [y/n]  Enter New Category Name:  Save? [y/n]  >> y  New Category saved. |
| Add category <name> | Save <name> as new category |
| Add product | Add new product? [y/n]  Enter New Product Name:  Enter New Product Price:  Save? [y/n]  >> y  New Product saved. |
| Add product <name> <price> |  |
| Remove |  |
| Remove category | Show list of categories. Identify <index> |
| Remove category <i> | Are you sure you want to remove category <i> and all products in it?  [y/n]  Removing products under category <i>…  Removing category <i>…  Category <i> was removed successfully. |
| Remove product <i> | Are you sure you want to remove product <i>?  [y/n]  Removing products <i>…  product <i> was removed successfully. |