# FlooringSG.UI

| DisplayOrders |
| --- |
| Properties:<br>+ Orders order = New Orders();<br>+ DateTime userDate |
| + void DisplayMenu(); Ask user for date and then send to ValidateDate(userDate) Check to see if user input was valid. If input was valid send to |
| + void Execute(); Execute other methods. Checks response.success |
| +void PrintOrderDetails(<List>Response.Data); Write out order details. |
| +void ChangeDateToString;(Date) Parse Datetime |

| AddOrders |
| --- |
| Properties:<br>+ Orders order = New Orders();<br>+ DateTime currentDate<br>+ orderOps |
| + DisplayMenu();Ask for user details when adding a order. Name, state, product type, area. |
| +Orders AddNewOrder(); Creates Order from user details and sends it to BLL. |
| +void display order to user (order); Display order and validates user wants to submit it. If yes then sends to BLL. If no then we loop back. |

| Test Data |
| --- |
| Properties:<br>+ RandomNumber RNG |
| + void createRandomProduct |
| + void CreatesRandomTax |

| EditOrders |
| --- |
| Properties:<br>+ Orders order = New Orders();<br>+ DateTime currentDate |
| + GetOrderNumber(); get order number from user.<br>+ GetOrderDate(); get order date from user. |
| +PrintOrderDetails(Response<Orders>); Print out order you are going to edit details. |
| +string ValidateEdit (updated value, original value); Validates and analyzes the updated values. |
| +Orders EditScreen (Order Request); Display order line by line and asks if you want to edit. |

# FlooringSG.BLL

| OrderOperations |
| --- |
| Properties:<br>+ List Orders<br>+ DateTime userDate |
| + void GetOrders(userDate);<br>pass in date to data class to get orders for that date. If orders equals null set response.success to false and update message. If orders are returned set response.success to true and update data in response.success. return response |
| + Orders AnalyzeAddOrder(Orders addOrders) get state from order and send to data layer and validate.Calculates out LaborCost = productType.LaborPerSquareFoot * Area<br>MaterialCost = productType.CostPerSquareFoot * Area<br>TotalBeforeTax = LaborCost + MaterialCost<br>Tax = state.taxrate * TotalBeforeTax<br>Total = totalbeforetax + tax |
| + AddNewOrder(Request) get datetime.now and convert to string. Then send to data layer and validate response. |
| + EditOrder(Request) submits and validates edited order to data layer |
| + Remove(Request) submits and validates order to remove to data layer |

| Product Repository |
| --- |
| Properties:<br>+ TaxFilePAth |
| +GetAllProducts(); Grabs all products. |

# FlooringSG.DATA

| OrderRepository |
| --- |
| Properties:<br>+ FilePath<br>+ DateTime userDate |
| +List<orders> GetOrders(userDate) - for each order in orders_userDate.txt get all orders. |
| + void AddOrder(currentDate, Order) -checks to see if orderfile exist. If it does then lookup max order number and create file, write order to new line in file, if it doesnt then create new ordernumber and new file. Write columns and order to file. |
| +Orders GetEditOrders(userDate, ordernumber) - for each order in orders_userDate.txt get order we want to edit |
| OverwriteFile (order, date); deletes and adds new file with orders. |
| EditOrder (order, date); removes original order and then adds the new one. |
| Remove (order, date); removes order by id. |

| Tax Repository |
| --- |
| Properties:<br>+ TaxFilePath |
| +GetAllTaxes(); Grabs all taxes. |

# FlooringSG.Models

| Orders |
| --- |
| Properties:<br>+ string order number<br>+ string customer name<br>+ string state<br>+ decimal tax rate<br>+ string product type<br>+ int area<br>+ decimal cost per square foot<br>+ decimal labor cost per square foot<br>+ decimal material cost<br>+ decimal labor cost<br>+decimal tax<br>+ decimal total |

| Tax |
| --- |
| Properties:<br>+string state<br>+decimal taxRate |

| Response<T> |
| --- |
| Properties:<br>+bool Success<br>+string Message<br>+T Data |

| Products |
| --- |
| Properties:<br>+string productType<br>+decimal costPerSquareFoot<br>+decimal laborCostPerSquareFoot |

| CreateNewOrderRequest |
| --- |
| Properties:<br>+Order NewOrder |