**IOException**

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<<interface>>
**PrintOutput**

---

+ printOrderForm()

<<throws>>

**FoodItemDatabase**

-foodItemArray: ArrayList<FoodItem>

---

+FoodItemDatabase()
+fetchFromFoodDatabase()
+deleteItem()
+getFoodItemArray(): ArrayList<FoodItem>
+updateDatabase()

**Hamper**

-numAdultsM: int
-numAdultsF: int
-numChildUnder8: int
-numChildOver8: int
-totalWholeGrains: int
-totalFruitVeggies: int
-totalProtein: int
-totalOther: int
-totalCalories: int
-requiredWholeGrains: int
-requiredFruitVeggies: int
-requiredProtein: int
-requiredOther: int
-requiredCalories: int
-foodItems:FoodItem[]
-quantity: int

---

+Hamper(int numAdultM, int
numAdultF, int numChildOver8, int
numChildUnder8, int numHampers)
+getNumberOfHampers(): int
+getNumAdultsM(): int
+getNumAdultsF(): int
+getNumChildUnder8(): int
+getNumChildOver8(): int
+getTotalWholeGrains(): int
+getTotalFruitVeggies(): int
+getTotalProtein(): int
+getTotalOther(): int
+getTotalCalories(): int
+createHamper()
+getFoodItems():FoodItem[]
+validateHamper(): boolean

**FoodItem**

-ITEMID: int
-ITEMNAME: String
-GRAINCONTENT: int
-FIBERCONTENT: int
-PROTEINCONTENT: int
-OTHERNUTRITION: int
-CALORIES: int

---

+FoodItem(int itemID, String itemName, int grainContent, int
fiberContent, intProteinContent, int otherNutrition, int calories)
+getItemID(): int
+getItemName(): String
+getGrainContent(): int
+getFiberContent(): int
+getProteinContent(): int
+getOtherNutrition(): int
+getCalories(): int

<<uses>>

<<uses>>

<< use >>

**Order**

-hampers: ArrayList<Hamper>

---

+Order(ArrayList<Hamper> hamperArray)
+getHampers(): ArrayList<Hamper>
+addHamper(Hamper hamper)
+validateOrder()

**GUI**

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**Client**

-CLIENTID: int
-CLIENTTYPE: String
-WHOLEGRAINS: int
-FRUITVEGGIES: int
-PROTEIN: int
-OTHER: int
-CALORIES: int

---

+Client(String ClientID, String clientType,
String[] nutritionInfo)

+getWholeGrains(): int
+getFruitsVeggies(): int
+getProtein(): int
+getOther(): int
+getCalories():int

<<uses>>

**ClientSingleton**

-hasFetchedData: boolean
-ClientTypeList: ArrayList<Client>

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+ClientSingleton()
+FetchClientTypes(): ArrayList<Client>
+newClient(String clientType): Client

<<throws>>

**IllegalArgumentException**

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