

SWE 3313

# Technical Design

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## JSON Example for Customer Data

TITLE	PATH	DATA TYPE	DESC.
<b>CUSTOMERS</b>	Customers[]	List<Customer>	List of all Customers
<b>FIRSTNAME</b>	Customers[].FirstName	String	First Name of a Customer
<b>LASTNAME</b>	Customers[].LastName	String	Last Name of a Customer
<b>PHONE</b>	Customers[].Phone	String	Phone Number of Customer
<b>REWARDPOINTS</b>	Customers[].RewardPoints	Decimal	Total Reward points a customer has
<b>ORDERS</b>	Customers[].Orders[]	List<Order>	List of Orders made by a given customer
<b>DATE</b>	Customers[].Orders[].Date	DateTime	The date of a given order
<b>SUBTOTAL</b>	Customers[].Orders[].Subtotal	Decimal	The subtotal of the order
<b>TAX</b>	Customers[].Orders[].Tax	Decimal	Added cost due to tax
<b>TOTAL</b>	Customers[].Orders[].Total	Decimal	Subtotal + Tax
<b>POINTSEARNED</b>	Customers[].Orders[].PointsEarned	Decimal	Points earned for the order, Total*10
<b>CARD</b>	Customers[].Orders[].Card	String	Credit/Debit card number used in order
<b>DRINKS</b>	Customers[].Orders[].Drinks[]	List<Drink>	List of drinks in the order
<b>NAME</b>	Customers[].Orders[].Drinks[].Name	String	Name of drink
<b>BASEPRICE</b>	Customers[].Orders[].Drinks[].BasePrice	Decimal	Price of drink
<b>TOTALPRICE</b>	Customers[].Orders[].Drinks[].TotalPrice	Decimal	Price of drink + Customization cost
<b>CUSTOMIZATIONS</b>	Customers[].Orders[].Drinks[].Customizations	String	Concatenated string of all customizations on a given drink

## JSON Code Example

```
{
  "Customers": {
    "anonymous": {
      "Phone": "anonymous",
      "RewardPoints": 0,
      "Orders": [
        {
          "Date": "2022-08-03",
          "Subtotal": 5,
          "Tax": 0.30,
          "Total": 5.30,
          "Points Earned": 53,
          "Card": "5329",
          "Drinks": {
            "Name": "Latte",
            "BasePrice": 4,
            "TotalPrice": 5,
            "Customizations": "Lots of Foam:$0.00, Large:$1.00, Whole Milk:$0.00"
          }
        }
      ]
    }
  }
}
```

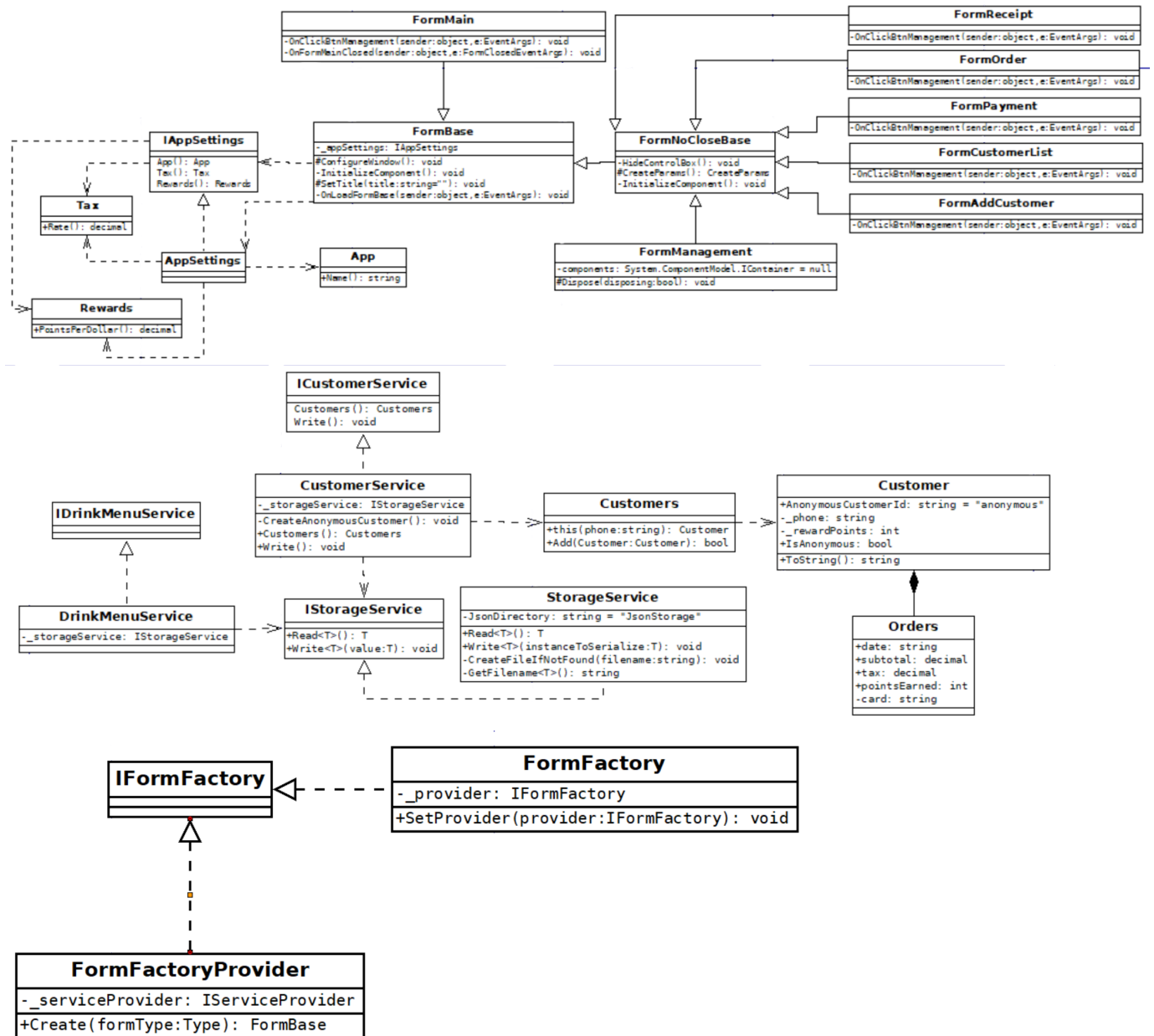
```

    }
  ]
},
"customer 1": {
  "Phone": "123-456-7890",
  "RewardPoints": 95,
  "Orders": []
},
"customer 2": {
  "Phone": "098-765-4321",
  "RewardPoints": 10000,
  "Orders": [
    {
      "Date": "2022-08-09",
      "Subtotal": 11,
      "Tax": 0.66,
      "Total": 11.66,
      "Points Earned": 116,
      "Card": "1057",
      "Drinks": [
        {
          "Name": "Latte",
          "BasePrice": 4,
          "TotalPrice": 5,
          "Customizations": "Lots of Foam:$0.00, Large:$1.00, Whole Milk:$0.00"
        },
        {
          "Name": "Latte",
          "BasePrice": 4,
          "TotalPrice": 6,
          "Customizations": "Lots of Foam:$0.00, Mega:$2.00, Decaffeinated:$0.00"
        }
      ]
    }
  ]
},
"customer 3": {
  "Phone": "098-765-4321",
  "RewardPoints": 10000,
  "Orders": [
    {
      "Date": "2022-04-01",
      "Subtotal": 13.25,
      "Tax": 0.78,
      "Total": 14.03,
      "Points Earned": 140,
      "Card": "1955",
      "Drinks": [

```

```
{
  {
    "Name": "Iced Latte",
    "BasePrice": 5.25,
    "TotalPrice": 7.75,
    "Customizations": "Large:$1.00, Almond Milk:$1.50, Decaffeinated:$0.00"
  },
  {
    "Name": "Iced Matcha Green Tea Latte",
    "BasePrice": 4,
    "TotalPrice": 5.5,
    "Customizations": "OatMilk:$1.50, Extra Ice:$0.00"
  }
]
},
{
  "Date": "2022-08-24",
  "Subtotal": 6.75,
  "Tax": 0.40,
  "Total": 7.15,
  "Points Earned": 71,
  "Card": "6033",
  "Drinks": [
    {
      "Name": "Espresso",
      "BasePrice": 2.5,
      "TotalPrice": 3.75,
      "Customizations": "1 Extra Shot:$1.25"
    },
    {
      "Name": "Latte",
      "BasePrice": 4,
      "TotalPrice": 3,
      "Customizations": "Small:$-1.00, Less Hot:$0.00"
    }
  ]
}
]
}
}
}
```

## UML Class Design Diagram



## Crows Foot ERD Data Model Diagram

