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Milestone 3

Student's Name: Maissae Azaroual, Adnane Ahroum, Selma Habhouba
Supervised by: Dr. Bouchaib Falah

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3.1: Package Diagram

```

    packageDiagram
        package SLAS[Saint Lux App System] {
            Order
            Bill
            Discount
            Menu
        }
        package PC[Pricing Calculation] {
            Price
            LightingType[Lighting Type]
            item
        }
        package L[Lighting] {
            LightingType2[Lighting type]
            Discount2[Discount]
            price
        }
        package DM[Discount Management] {
            Discount3[Discount]
            LightingType3[Lighting type]
        }
        package BS[Billing System] {
            Bill2[Bill]
            Item2[Item]
        }
        package MM[Menu Management] {
            Item3[Item]
            Menu2[Menu]
        }
        package OT[Order tracking] {
            Bill3[Bill]
            Invoice
            Discount4[Discount]
            Item3[Item]
        }
        package C[Customer] {
            Order3[Order]
        }

        SLAS --> PC
        SLAS --> DM
        SLAS --> OT
        PC --> SLAS
        PC --> BS
        L --> SLAS
        L --> PC
        BS --> SLAS
        BS --> OT
        MM --> SLAS
        OT --> SLAS
        OT --> C
    
```

The diagram illustrates the package structure of the Saint Lux App System. It features several packages and their internal components:

- Saint Lux App System** (Main Package): Contains **Order**, **Bill**, **Discount**, and **Menu**.
- Pricing Calculation**: Contains **Price**, **Lighting Type**, and **item**.
- Lighting**: Contains **Lighting type**, **Discount**, and **price**.
- Discount Management**: Contains **Discount** and **Lighting type**.
- Billing System**: Contains **Bill** and **Item**.
- Menu Management**: Contains **Item** and **Menu**.
- Order tracking**: Contains **Bill**, **Invoice**, **Discount**, and **Item**.
- Customer**: Contains **Order**.

Dependencies are shown as follows:

- Saint Lux App System** depends on **Pricing Calculation**, **Discount Management**, and **Order tracking**.
- Pricing Calculation** depends on **Saint Lux App System** and **Billing System**.
- Lighting** depends on **Saint Lux App System** and **Pricing Calculation**.
- Billing System** depends on **Saint Lux App System** and **Order tracking**.
- Menu Management** depends on **Saint Lux App System**.
- Order tracking** depends on **Saint Lux App System** and **Customer**.

3.2: Class Diagram

