**Entities**

**Product** → A type of a product sold by the shop. This entity will hold the attributes:

-productId

-name

-price

-arrivalPrice

-sellingPrice

-{category}

-{itemId}

**Item**→ Entity that contains the stock information of the shop. This entity will hold the attributes:

-itemId

-dateBought

-dateSold

-[age]

-isSold

**Employee** → A person who works for the shop. This entity will hold the attributes:

-employeeId

-name

-surname

-password

-email

-salary

-workEntranceDate

-birthDate

-phoneNumber

-[age]

-{address (country, city, street, houseNumber, zipCode)}

-{education (beginYear, endYear, average)}

**Sales\_Employee** extends **Employee**→ An employee who interacts with customers to sell items. This entity will hold the attributes:

-{itemsSold}

-{printedDocuments}

**Manager** extends **Employee** → An employee who manages other employees. This entity will hold the attributes:

-{employeeId}

**Customer** → A person who is a customer for this shop. This entity will hold the attributes:

-customerId

-name

-surname

-phoneNumber

-{address}

-{receipts}

**Receipt** → Receipt information of a sale. This entity will hold the attributes:

-receiptId

-date

-{itemId}

-[totalPrice]

**Print\_Order →** An order for documents to be printed. This entity will hold attributes:

**-**printOrderId

-{documentId}

-[price] #based on number of documents

**Document** → A document holding text. This entity will hold attributes:

**-**documentId

-content

**BUSINESS PROCESS**

1) Item sale, where customer buys product from salesperson

2) Printer sale, where customer asks for a document(or many) to be printed

3) Customers choose which items they want to buy, or which documents they want to print out.

4) When all items are scanned and all documents are printed out, the cashier will make a receipt.

**BUSINESS RULES/CONSTRAINTS**

1) An employee can’t be both an sales employee or a manager.

2) A salesperson can only sell to one customer at a time, and vice versa

3) A printer can’t print multiple documents at the same time.

4) All items are unique, in their ID, even if they are in the same product type

5) Each document is 1 page

**OTHER REQUIREMENTS**

1) Employee must be over 18 years of age.

2) Each employee and manager who is a member of the shop, have a login system where they login with their ID and password. Login system still in development.