

## **Introduction**

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- Chosen scenario: Scenario 1

## **Entities**

- Order – this entity tracks each order's information
- Product – this entity collects the products' information (including inventory)
- Customer – this entity tracks customers' detail
- Company – this entity used to collect the company's information
- Part – this entity is used to keep track of the parts' description

## **Business Rules**

- A customer may place zero, one or more orders.
- An order must have one and only one customer.
- The company can have zero, one or more orders.
- An order must have one and only one customer.
- An order can have one or more products.
- One product may be included in zero, one or many orders.
- A product may have one or many parts inside.
- A part can be used in zero, one or more products.
- Discount amount is recorded on customer's record.
- Product data is updated accordingly along with the part inventory data.

## **Unknowns**

- Are there other statuses for an order other than new?
- Can a customer record not include an email address?
- Is there any depreciation on products and parts?
- Is the company will open another one?

## **Assumptions**

- An order can have multiple statuses; therefore, an order status table is required.
- An order can have different mailing and shipping addresses.
- The credit limit can change.
- A customer can have different discount in different period.
- The product price can change due to the market.
- Orders that can be filled or partially filled.