# Class Diagram Description

# Supply Chain Domain

## ProductLine

### Description

A ProductLine represents a group of related ProductionUnit sharing the same model type. All the elements of the ProductLine are ProductionUnit assembled using the same parts of the same item category with the same quantifies (process in the same manner).

### Attributes

* ProductLineName : String

Denotes the ProductLine name; example “Civic” can be a productLineType from “Honda” manufacturer

### Associations

* productionUnit : ProductionUnit[1..\*]

A set a ProductionUnit associated with this ProductLine. A ProductionUnit can be a single car or a batch of many. A ProductionUnit has a single ProductLine. A ProductLine can have multiple ProductionUnit. For example, this year, the “civic” ProductLine may have a ProductionUnit of 500 cars this year, and 1000 cars next year. Both ProductionUnit are associated to the same ProductionLine.

* Parts:Item[1..\*]

ProductLine is characterized by a specific set of parts of the same item category, and quantity. For example, a ProductLine can have 2 doors, 4 windows, etc., while another ProductLine can have 4 doors, 6 windows, etc.

### Constraints

No additional constraints

# Utils Domain

# Inventory Domain