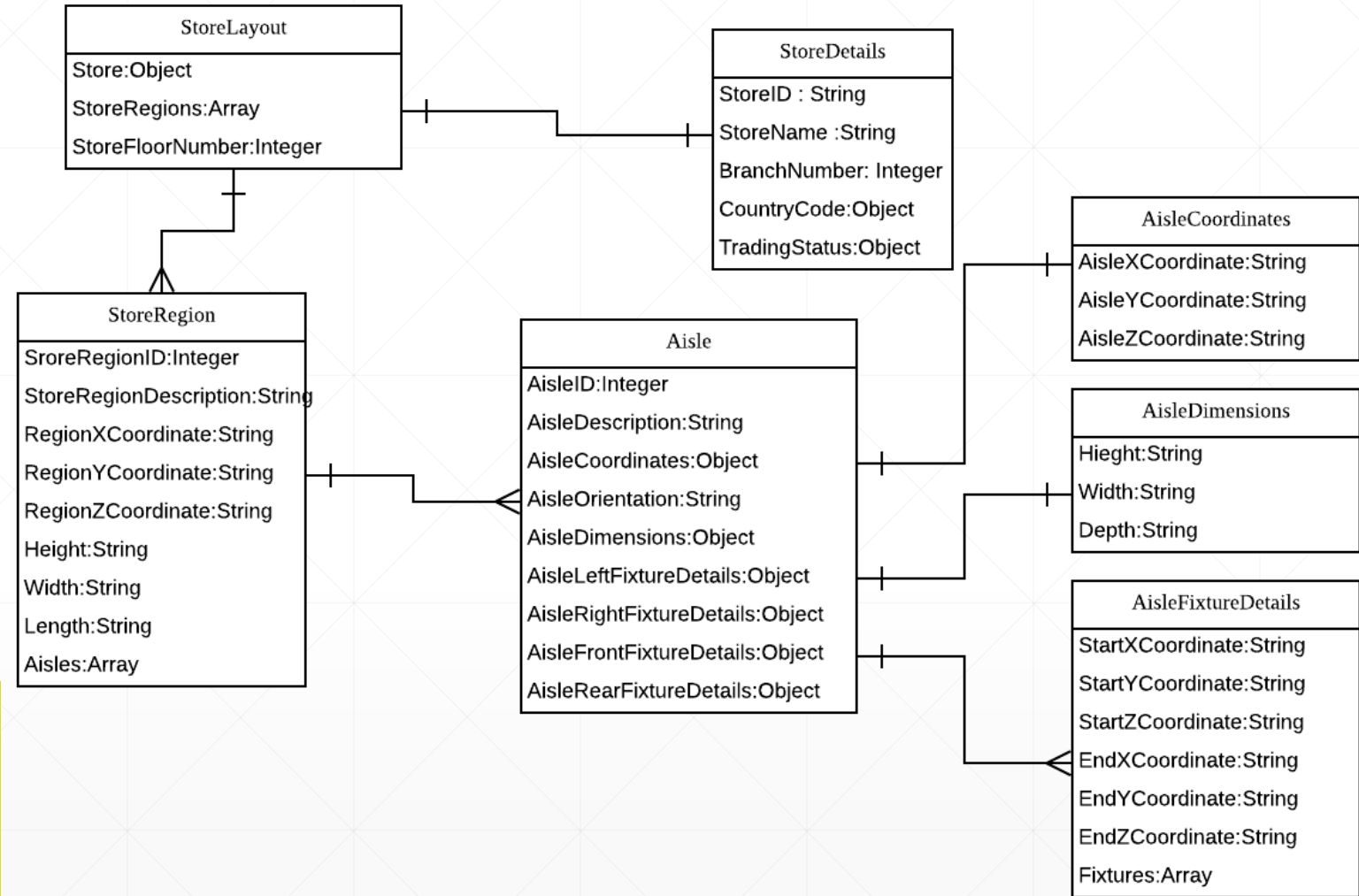


New Planning UI - Data Model

Prelude Notes

- **Each of the data models have an alignment with their respective Micro service**
 - **All the use cases suit document based No-SQL stores**
 - **All data models are structured as JSON documents**
 - **Diagrammatically the models are represented using standard ER notations primarily for readability**
 - **Datatypes of attributes have been limited to JSON supported attributes**
-

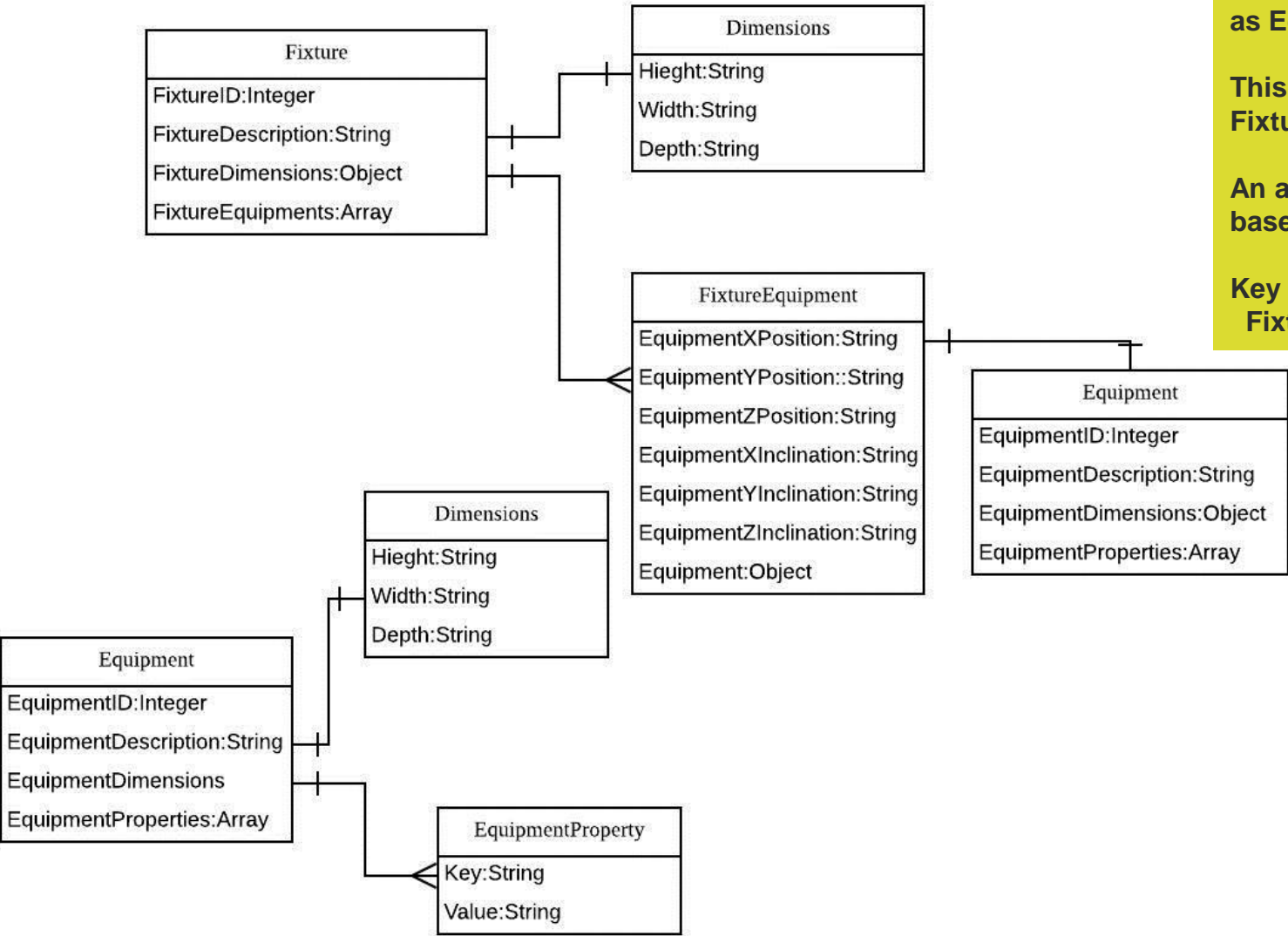
Store Layout



This structure represents a single floor of a store
This is the foundational structure for floor planning

Key query parameters and therefore Indexing candidates are
Composite of StoreID and Floor Number
Composite of AisleID and FixtureID

Fixtures



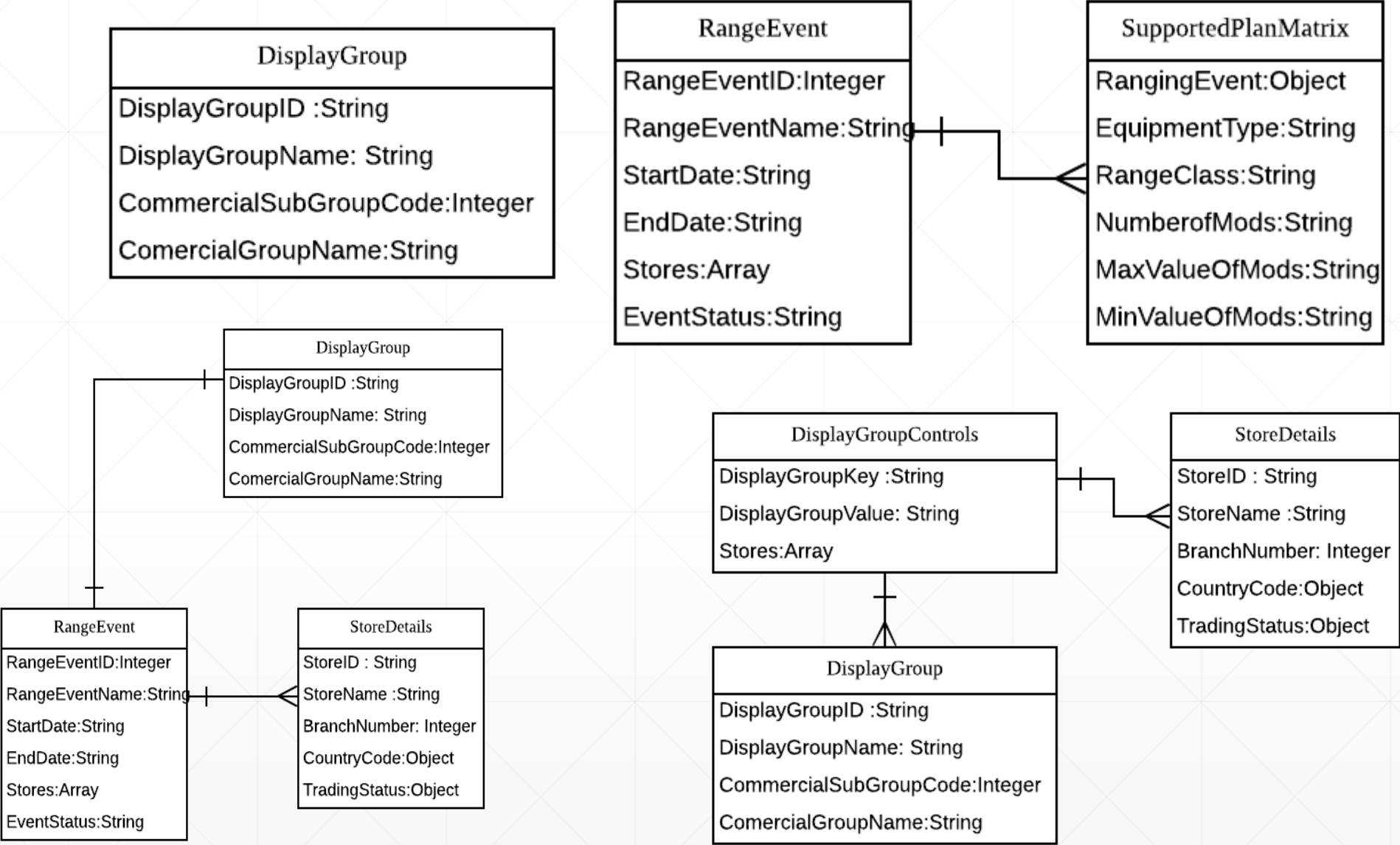
This structure represents a fixture that is the fundamental unit for store equipment. Gondolas are a primary example of this. Gondolas in turn will have multiple Shelves that are represented as Equipment in this data structure

This is the foundational structure for Planograms. Fixture and Equipment will be stored as separate documents

An abstract structure of both these documents will represent a base structure in Fixture Library

Key query parameters and therefore Indexing candidates are `FixtureID`, `EquipmentID`

Ranging Data Infrastructure



Ranging Data Infrastructure

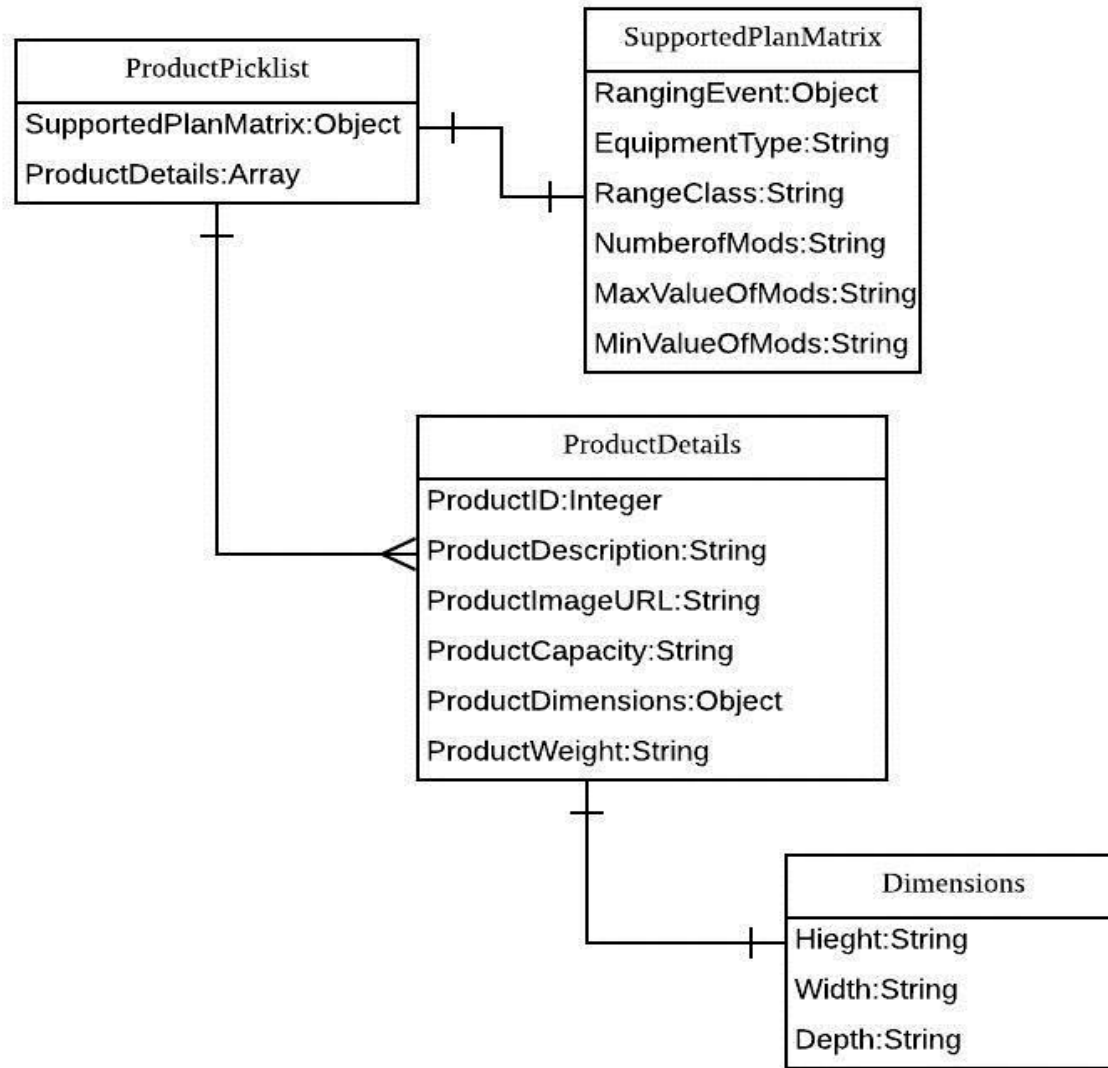
This set of documents represent master data from SRD Administration system (currently RCS) that are pre requisites for planning especially Planograms

These data elements are foundational for managing the plans and proposed to be cached in the system for efficiency and performance

- DisplayGroup(also known as Merchandising group) represents unit at which planograms are generated
- RangingEvent represents the schedule details of range changes for a DisplayGroup
- SupportedPlanMatrix represents the quantum of ranges and equipment for a store assigned to a Range class
- DisplayGroup controls are a grouping of key value attributes controlling plan generation

These set of data structures represent a small volume of frequently used data elements that can be cached in the application

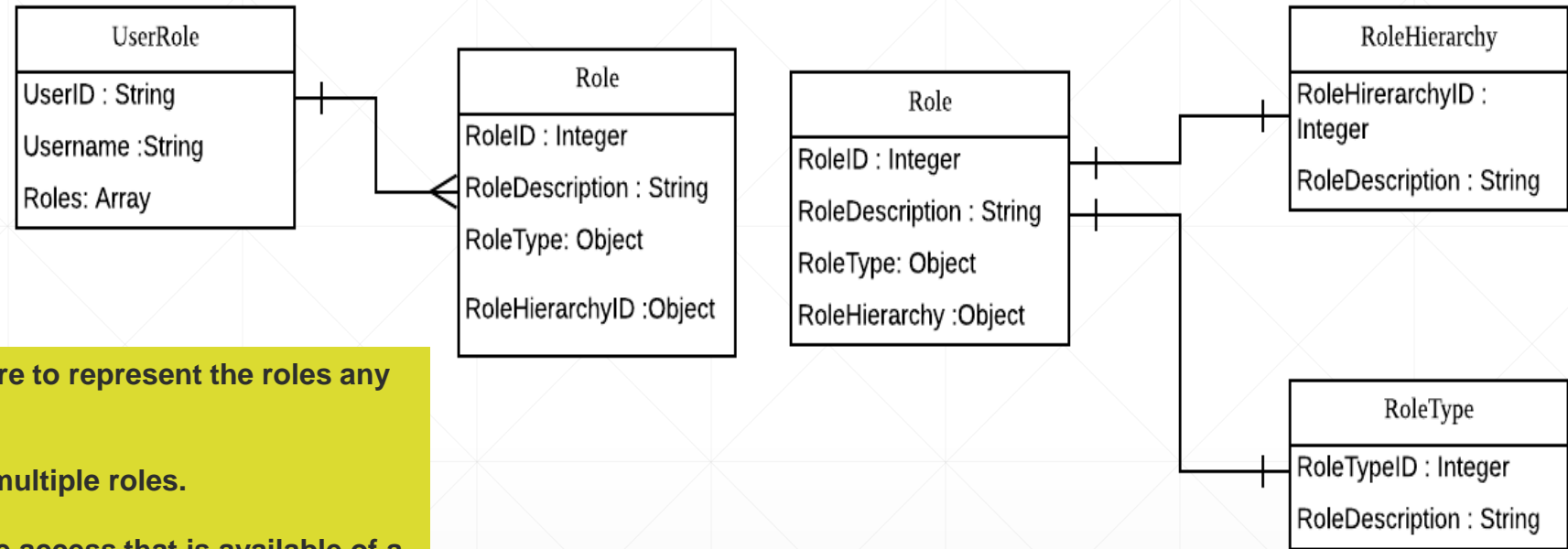
Product Pick List



This structure represents a list of products that needs to be planogrammed for every Range class participating in a given Ranging Event

Key query parameters and therefore Indexing candidates are
Ranging Event ID
RangeClass

User Management



This is a simple structure to represent the roles any user could play

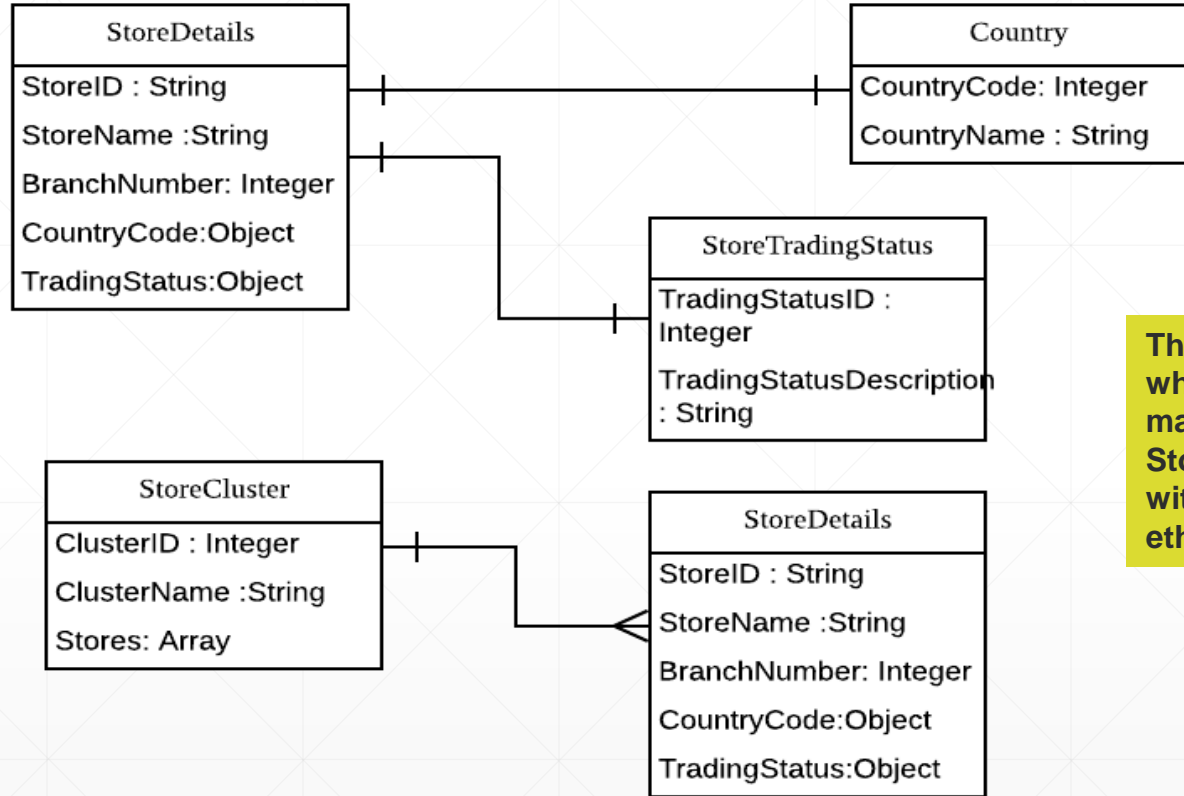
A single user can play multiple roles.

A User will inherit all the access that is available of a lower role hierarchy of a given role type

Key query parameters and therefore Indexing candidates are
UserID

The number of roles are in low double digits and will not any indexing for improving speed of query

Store Data Management



This structure represents a list of stores for which floorplans and planograms are managed
Store Cluster represents a group of Stores with similar attributes like affluence , ethnicity , Geography