# City of Aaron

# Class relationships

## Bryan / Charlot / Angel

## 1. Game and Player - COMPOSITION

A Game can have 1 Player

A Player can only have 1 Game and can't exist without the Game

## 2. Game and Storehouse - COMPOSITION

A Game can have 1 Storehouse

A Storehouse can only have 1 Game and can't exist without the Game

## 3. Game and Map - COMPOSITION

A Game can have 1 Map

A Map can only have 1 Game and can't exist without the Game

## 4. Map and Location - COMPOSITION

A Map can have 1 Location

A Location can only have 1 Map and can't exist without the Map

## 5. Map and Point - AGGREGATION

A Map can have 1 Point

A Point can have 1 Map and can exist outside of the Map

#### 6. Storehouse and Author - AGGREGATION

A Storehouse can have 1 or more Authors

An Author is contained in the Storehouse and can exist outside of the Storehouse

## 7. Storehouse and InventoryItem - AGGREGATION

A Storehouse can have 1 or more InventoryItems

An InventoryItem is contained in the Storehouse and can exist outside of the Storehouse

#### 8. Storehouse and Provision - AGGREGATION

A Storehouse can have 1 or more Authors

An Author is contained in the Storehouse and can exist outside of the Storehouse

## 9. Storehouse and Animal - AGGREGATION

A Storehouse can have 1 or more Animals

An Author is contained in the Storehouse and can exist outside of the Storehouse

### 10. Storehouse and Tool - AGGREGATION

A Storehouse can have 1 or more Tool

#### A Tool is contained in the Storehouse and can exist outside of the Storehouse

## 11. Animal and InventoryItem - INHERITANCE

An Animal is a type of InventoryItem

An InventoryItem can have 1 or more Animals

## 12. Provision and InventoryItem - INHERITANCE

A Provision is a type of InventoryItem

An InventoryItem can have 1 or more Provisions

## 13. Tool and InventoryItem - INHERITANCE

A Tool is a type of InventoryItem

An InventoryItem can have 1 or more Tools

## 14. InventoryItem and ItemType - AGGREGATION

An InventoryItem can have 1 ItemType

An ItemType is contained in InventoryItem and can exist outside of the InventoryItem

## 15. InventoryItem and Condition - AGGREGATION

An InventoryItem and have 1 Condition

A Condition is contained in InventoryItem and can exist outside of the InventoryItem