Project Phase 3

Team: Betrayal

Team Number: 65

Mukund Hebbar [2024101037]

Balasubramanian K [2025121002]

Kaushik Yadala [2024101123]

ER Diagram to 1-NF

- The composite Attribute Recipe has been divided into the two individual attributes called Animal and Food Item.
- Furthermore, as Animal and Food Item are multivalued attributes the have been converted into their own schema as **1-NF** can only have atomic attributes.
- The Description and Inventor attributes are also multi values, hence these were converted into schemas ensuring the atomic nature of the **1-NF.**

1-NF to 2-NF

- The Species_name has been removed from POPULATORY SPECIES as we can get the same information by referring to Species_id.
- The Populatory Species ID has been removed from ANIMAL and FOOD ITEM as a POPULATORY SPECIES can get its Recipe(Animal, Item) by joining on the Species_id.

2-NF to 3-NF

- Our relational model is already in the form of 3-NF and does not require any more modifications.

1-NF

INTRUDERS

Name	User_id	Gender	Height	Weight	Intelligence	Time of Entry	Location id [FK]

MODERATORS

Moderator_id

FOODIMALS SPECIES

Species_id	Species Name

INDIVIDUAL FOODIMAL CREATURES

Creature_id	Species id [FK]	Location id [FK]	Populatory Species id [FK]

ISLAND REGIONS

Region_id	Region Name	Threat to Intruder

LIVECORP COLONY

Colony_id	Region id [FK]

POPULATORY SPECIES

Species_id[FK]	Species Name	Spawn Per Birth

INVENTIONS

Item Owner(FK)	Item Name

LIVECORP CELLS

Cell_id	Colony_id[FK]	Type

WEAKNESS

Species_id [FK]	Item Inventor ID [FK]	Item Name [FK]

SUSPICIOUS ACTIVITY

Intruder_id	Creature_id	Colony_id	Cell_id

COMBAT EVENT

Intruder_id	Creature_id	Item owner ID [FK]	Item Name	Region_id

CREATES

Moderator_id	Creature_id	Species_id

Description

Desc	Item owner [FK]	Item Name

Inventor

Name	Item owner [FK]	Item Name

Animal

Name	Species_id[FK]	Populatory_Species_id[FK]

Food Item

item	Species_id[FK]	Populatory_Species_id[FK]

2-NF

INTRUDERS

Name	User_id	Gender	Height	Weight	Intelligence	Time of Entry	Location id [FK]

MODERATORS

Moderator_id

FOODIMALS SPECIES

Species_id	Species Name

INDIVIDUAL FOODIMAL CREATURES

Creature_id	Species id [FK]	Location id [FK]	Populatory Species id [FK]

ISLAND REGIONS

Region_id	Region Name	Threat to Intruder

LIVECORP COLONY

Colony_id	Region id [FK]

POPULATORY SPECIES

Species_id[FK]	Spawn Per Birth

INVENTIONS

Item Owner(FK)	Item Name

LIVECORP CELLS

Cell_id	Colony_id[FK]	Type

WEAKNESS

Species_id [FK]	Item Inventor ID [FK]	Item Name [FK]

SUSPICIOUS ACTIVITY

Intruder_id	Creature_id	Colony_id	Cell_id

COMBAT EVENT

Intruder_id	Creature_id	Item owner ID [FK]	Region_id	Item Name

CREATES

Moderator_id	Creature_id	Species_id

Description

Desc	Item owner [FK]	Item Name

Inventor

Name	Item owner [FK]	Item Name

Animal

Name	Species_id[FK]

Food Item

item	Species_id[FK]