

"PROJECT-TITLE: FARMING-MANAGEMENT SYSTEM" "ER-DIAGRAM UML WITH BUSINESS RULES"

▪ **REPORT:**

• **INTRODUCTION:**

We are creating this database in order to manage data of farmer. It is a mini project with some tables. Here in this figure of ER-diagram, we just use 9 tables which includes for relationship you can see in this figure.

• **BUSINESS-RULE:**

1. **Farmers and Farms:**

- Each farmer can manage one or more farms.
- Each farm is managed by exactly one farmer.

2. **Farmer and Fields:**

- Each farmer having one or more fields.
- Each field belongs to exactly one farmer.

3. **Fields and Crops:**

- Each field is associated with one crop at a time.
- Each crop grows in one field.

4. **Fields and Fertilizers:**

- Each field uses multiple fertilizer.
- Each fertilizer analysis is associated with exactly one field.

5. **Fields and Irrigation Schedules:**

- Each field having one or more irrigation schedules.
- Each irrigation schedule is associated with exactly one field.

6. **Crops and Harvest Records:**

- Each crop having one or more harvest records.
- Each harvest record belongs to exactly one crop.

7. **Farmers and Financial Transactions:**

- Each financial transaction is linked to one and only one farmer.
- Each farmer can have multiple financial transactions.

8. **Farmers and Input Inventory:**

- One farmer manages one input inventory items.
- One inventory item belongs one and only one farmer.

9. **Farm and Fields:**

- One farm has many fields
- One fields belong to one and only one farm

REPORT DATABASE SYSTEM

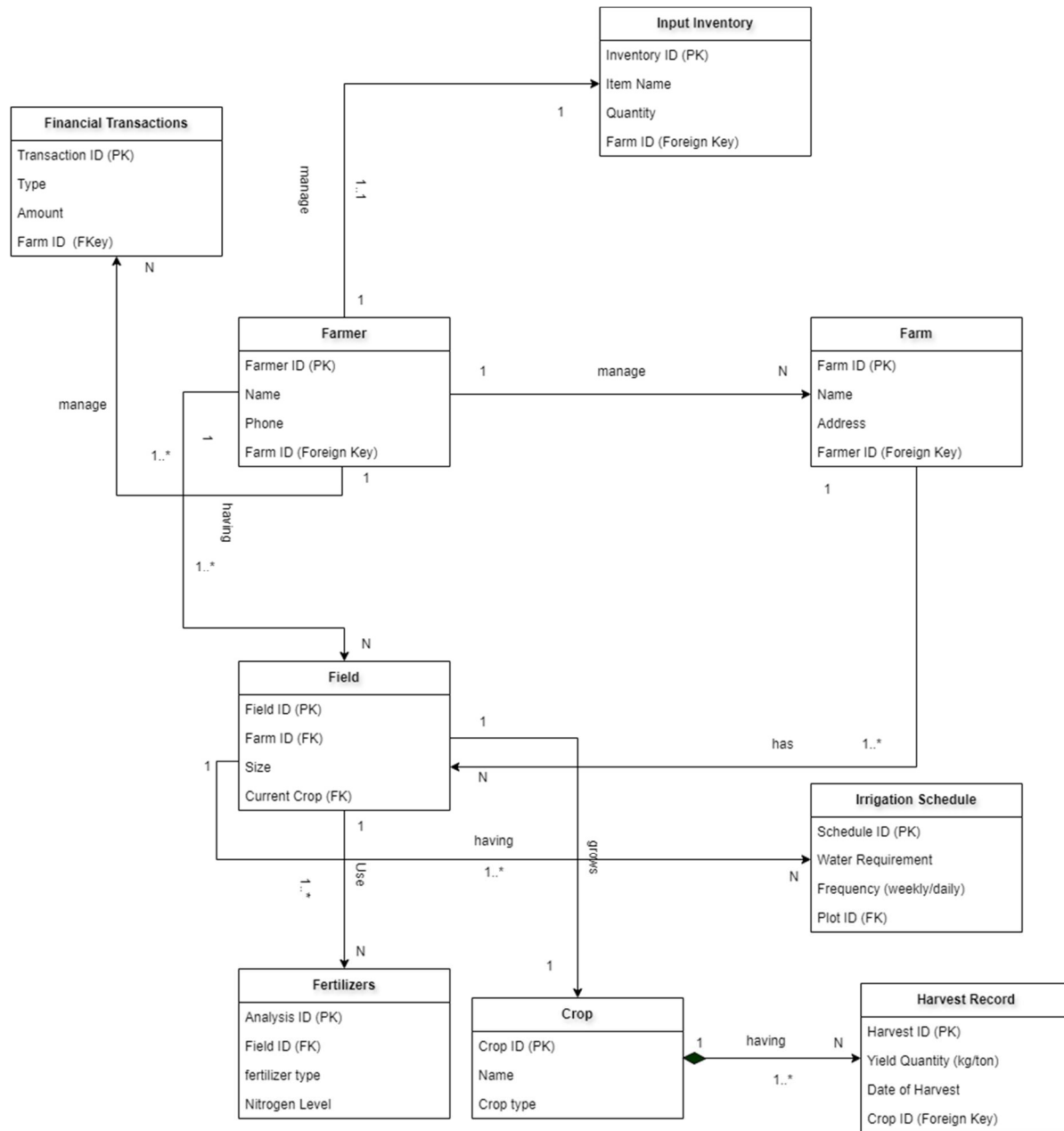


Fig: ER-Diagram