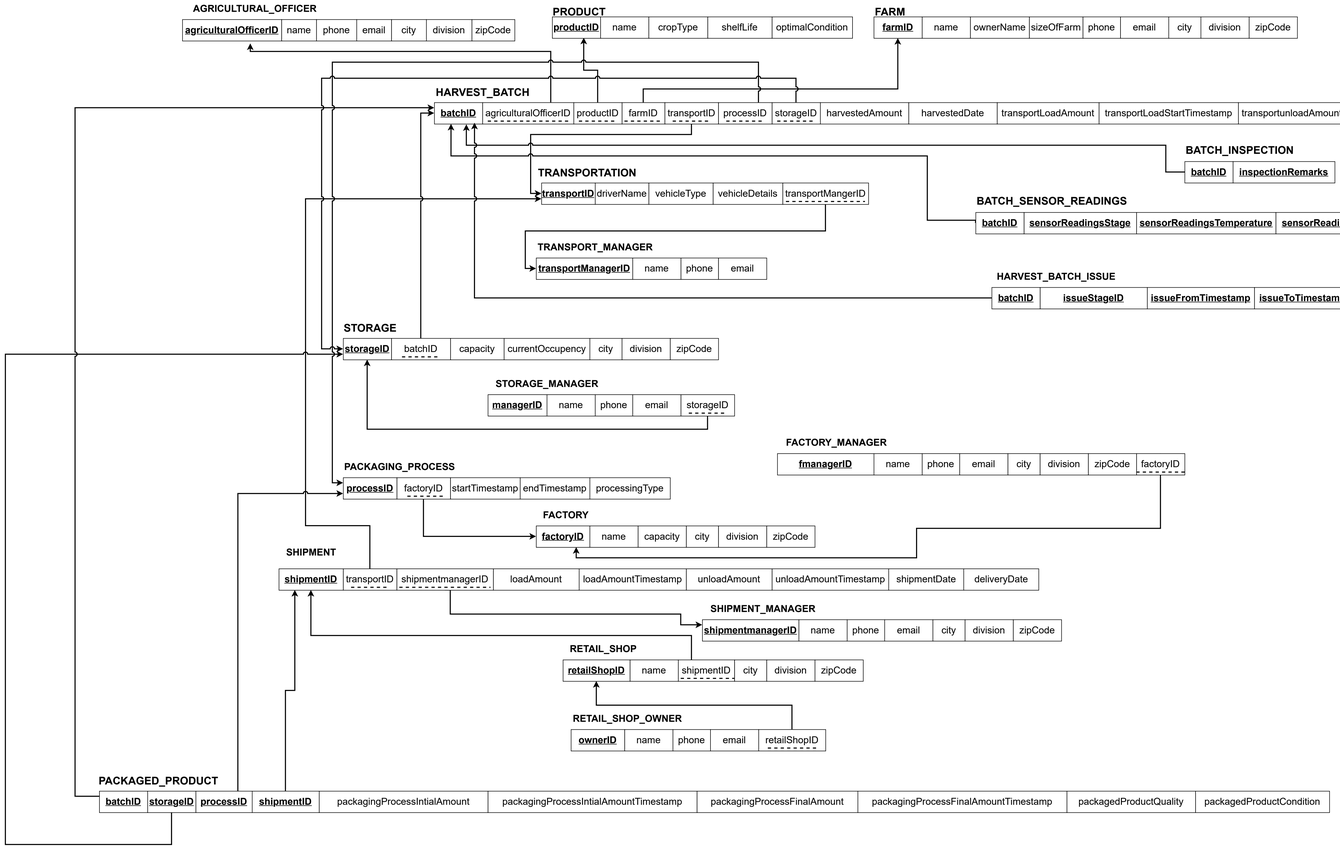

Figure: Schema

1. Farm and Product Management:
The **FARM** entity stores details about farms, such as name, location, and size.
Farms are linked to **PRODUCTS**, which represent the crops being grown, with attributes like crop type and optimal conditions.

2. Agricultural Oversight:
The AGRICULTURAL_OFFICER entity tracks details of officers overseeing farms and harvest operations.

3. Harvest Management:
HARVEST_BATCH captures information about harvested goods, such as batch ID, product, harvest date, and quantities.

4. Batch Quality Control:BATCH_INSPECTION records sensor readings (e.g., temperature, humidity, light, motion) and remarks for quality monitoring.

5. HARVEST_BATCH_ISSUE: logs problems with specific batches, detailing the issue stage, description, and resolution status.

6. Transportation: TRANSPORTATION tracks the movement of goods, including transport IDs, driver details, vehicle information, and timestamps.

7. Storage Management: The **STORAGE** entity handles storage details, such as capacity, location, current occupancy, and timestamps for stored goods.

8. STORAGE_MANAGER: oversees the operations of storage facilities.

9. Processing and Packaging: PACKAGING_PROCESS manages the processing of goods, including start and end timestamps, and the amounts processed.
Processing is carried out at **FACTORIES**, which have details like name, capacity, and location, managed by a **FACTORY_MANAGER.**

10. Shipment and Distribution:SHIPMENT tracks the delivery of goods, including transport details, shipment manager, load amounts, and delivery dates. **SHIPMENT_MANAGER** oversees shipment operations.

11.Retail Distribution: RETAIL_SHOP represents the final destination of goods, including shop details and location.
Shops are owned by **RETAIL_SHOP_OWNERS,** whose details are recorded in the schema.

Lifecycle Tracking: The schema connects all stages of the agricultural product lifecycle, from farm to retail, ensuring traceability, quality control, and efficient management.

Post-Harvest Loss Minimization:
By tracking storage, transportation, and packaging conditions, the system aims to reduce post-harvest losses and maintain product quality throughout the supply chain.