Main Entities for Water System

1. Water Filtration Plant
   - Attributes:
     - plantID
     - location (address or GPS)
     - filtrationType (e.g., sand, membrane, UV)
     - aiMonitorID (links to AI Controller)
     - operationalStatus
2. Water Quality Sensor
   - Attributes:
     - sensorID
     - plantID (FK, links back to Water Filtration Plant)
     - location (intake, outflow)
     - dirtyLevelInput
     - dirtyLevelOutput
     - lastReadTime
3. AI Controller
   - Attributes:
     - aiID
     - monitoredPlantIDs (one or many plantIDs)
     - algorithmsUsed (e.g., anomaly detection, trend analysis)
     - status
     - lastAction
4. Filtration Process
   - Attributes:
     - processID
     - plantID (FK)
     - processType (chemical, mechanical, biological)
     - status
     - lastMaintenanceDate
5. Alert/Notification
   - Attributes:
     - alertID
     - relatedPlantID
     - alertType (water dirty, maintenance needed)
     - alertLevel (critical, warning)
     - alertDate
     - actionTaken