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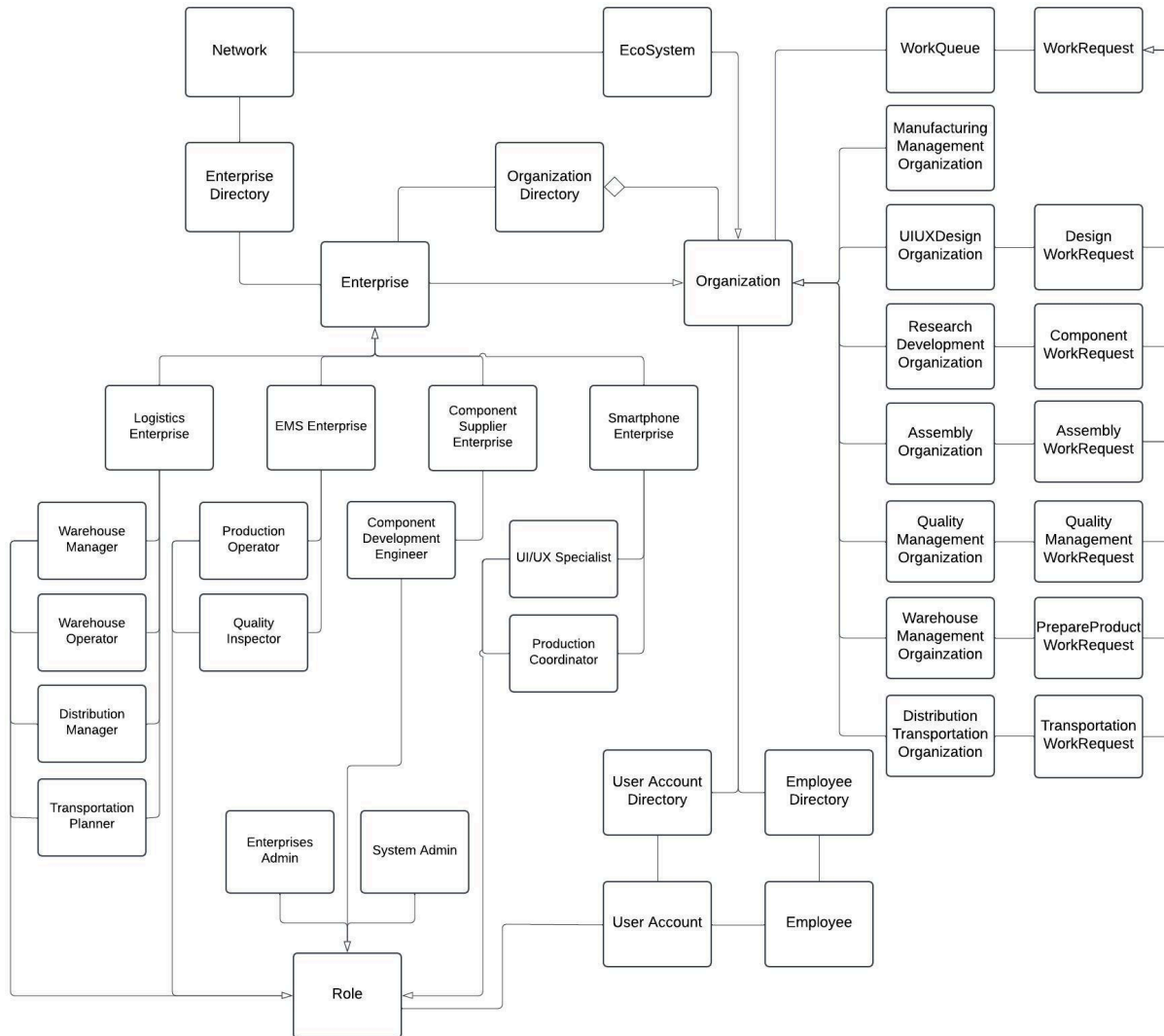
Problem Statement

As global and cross-enterprise collaborations in smartphone manufacturing become more common, the challenge lies in managing the complexities of coordinating multiple stakeholders across different countries and organizations. This can lead to inefficiencies, delays, and higher production costs, ultimately impacting product quality and profitability.

Solution

Implement a streamlined supply chain and communication system through a centralized platform that integrates all stakeholders, including producers, suppliers, manufacturers, and logistics providers. This platform should enable real-time tracking, inventory management, and coordination, reducing delays and costs while improving efficiency and product quality.

High-level Component Diagram



The ecosystem hierarchy

Outline:

Network: Smartphone Product

Enterprise:

1. Smartphone Enterprise
2. Component Supplier Enterprise
3. EMS Enterprise
4. Logistics Enterprise

Organization:

1. UI/UX Organization
2. Manufacturing Management Organization
3. Research and Development Center
4. Assembly Organization
5. Quality Management Organization
6. Warehouse Management Organization
7. Distribution/Transportation Organization

Roles:

1. System Admin
2. Enterprises Admin
3. UI/UX Specialist
4. Production Coordinator
5. Component Development Engineer
6. Production Operator
7. Quality Inspector
8. Warehouse Manager
9. Warehouse Operator
10. Distribution Manager
11. Transportation Planner

1. Network: Smartphone Product Eco System

- Desc: A networking integrating multiple enterprises, aiming to achieve the entire smartphone product process from design and production to sales, and implementing data sharing and resource optimization through the uniform platform.
- Role: System Admin

2. Enterprises

Role: Enterprises Admin

Enterprises 1: Smartphone Enterprise

1. **UI/UX Design Organization**
 - **Role:** UI/UX Specialist
 - Design the user interface and improve the user experience
2. **Manufacturing Management Organization**
 - **Role:** Production Coordinator
 - Delegate UI/UX Specialist to design and improve UI/UX
 - Send orders to other enterprises to produce and sell the smartphone

Enterprises 2: Component Supplier Enterprise

1. Research and Development Organization

- **Duty:** Provide chip, camera, battery, display....
- **Role:** Component Development Engineer
 - Gain orders from smartphone enterprises and provide specific component

Enterprises 3: EMS Enterprise

1. Assembly Organization

- **Duty:** Responsible for component assembly
- **Role:**
 - Production Operator
 - Assembly smartphone

2. Quality Management Organization

- **Duty:** Ensure that the quality of the production process and finished products meets the required standards
- **Role:**
 - Quality Inspector
 - Test the smartphone assembled and return the faulty to the assembly organization

Enterprises 4: Logistics Enterprise

1. Warehouse Management Organization

- **Duty:** Manage the storage and inventory of parts and finished products。
- **Role:**
 - Warehouse Manager
 - Gain orders from smartphone enterprise
 - Delegate warehouse operator to prepare products
 - Warehouse Operator
 - Prepare products

2. Distribution/Transportation Organization

- **Duty:** Coordinating domestic and international transportation and distribution of mobile phones。
- **Role:**
 - Distribution Manager:
 - Gain orders from smartphone enterprise
 - Delegate a transportation planner to plan the transportation
 - Transportation Planner:
 - Decide optimal transportation modes like land, sea, or air based on destination and budgets
 - Select logistic providers like DHL, FedEx