# Asset Tracking System for Warehouses: Initial Design Report

## 1. Intended Functionality (User Perspective)

Our web application aims to streamline asset tracking within warehouses. From a user perspective, here’s what the system will offer:

1. Asset Registration:

Users can register new assets entering the warehouse. They provide asset details (e.g., description, purchase date) and receive a unique identifier (RFID or barcode).

Result: Assets are added to the system, and ready for tracking.

1. Check-In/Check-Out:

When an asset enters or leaves the warehouse: Users scan the asset’s identifier (RFID or barcode) and the system updates the asset’s current location and status.

Result: Accurate records of asset movements.

1. Location Tracking:

Regular scans of the warehouse: Update asset locations and Trigger alerts if an asset is in an unexpected area.

Result: Real-time visibility into asset positions.

1. Reports and Analytics:

Generate reports on Asset utilization, Movement history, and Maintenance schedules.

Result: Insights for better decision-making.

1. User-Friendly Interface:

Intuitive web interface for easy interaction. Clear navigation and straightforward actions.

Result: Efficient asset management.

## 2. User Interaction (General Terms)

Users will:

* **See:** Asset details (description, status, location) And Reports (utilization, movement history).
* **Take Actions:** Register assets, Scan RFID/barcode for check-in/out, and View reports.
* **Get Results:** Accurate asset records, Real-time location updates, and Insights from reports.
* **Illegal Inputs/Actions:** Invalid asset registration data and Unauthorized check-in/out attempts.