

Use Case related to Detect Worker Emergency	
Name	Detect worker entering hazardous area.
Description	The system tracks shop-floor workers and notifies them if they enter a restricted / dangerous area.
Pre-Conditions	(1) The shop floor worker is equipped with location tracking devices. OR the shop floor is equipped with i.e., LIDAR to track workers on the shop floor. (2) The worker enters a restricted area.
Success End Condition	The worker is notified of entering a restricted area. If they do not leave within a specified time period, additional personnel is notified to 'rescue' the worker.
Error Situations	The location tracking is defective.
Failure End Condition	The worker enters a restricted area but is not notified. Since no restricted access was detected, no additional personnel will be notified.
Primary Actor	Shop-Floor Worker
Additional Actors	Location Tracking Devices, Emergency personnel, Other Shop Floor-Workers, Unions, Privacy-Responsibles
Trigger	An Administrator starts the tracking software. / The software continuously tracks workers in an area.
Monitoring...	Shop Floor Worker - Tracking of Position - IoT Device / LIDAR
Property - Component - Device	Dangerous Areas - Geofencing / robot position - Predifined Areas using, e.g., IoT devices / Dynamic Robot Movemevent (gather robot position)

Main Success Scenario	
1	A workers enters an area within the shop-floor with monitoring enabled.
2	The tracking device / LIDAR sensors activate and continiously track the worker.
3	The worker enters a restricted (i.e., dangerous) area
4	The worker gets a notification through a device (smartwatch, audio, phone, etc.) that they entered a dangrous area and must leave within [allowed_time] amount of minutes
5	When the amount of time the worker is within the restricted area goes above [allowed_time], the system notifies emergency personnel to take a look at the situation.
6	The emergency personnel arrives at the scene and 'rescues' the worker.