My project would be a robot that for large warehouses that contain chemicals the robot would be able to Detect spills, along with being able to test area's for high level of dangerous admissions along with blockages that may stop the robot's given path in the area that it is monitoring. For this a sever sending updates how ever often the client wishes along with warning's/updates sent via email and via smart phone app to avoid any unnecessary exposure.

This would be extremely useful not only for reducing the possible harm to human life but allowing for monitoring of spaces 24/7 with the click of button and updating the given information to any user.

This will also allow for more necessary work to be carried out in other places that human interaction is required.

Allowing for more work turnover along with saving money and time as-well as human interaction in places that may be exposed to hazardous gases.

The features of the robot as mentioned are as followed.

Allowing the robot to measure for gases in abnormal ranges, Along with spills of hazardous substances and also warning users of blockages of the robots path for that given area.

The hardware requirements for this project should be relatively straightforward, with a centralised server which has the capability of monitoring continuously and recording of all data.

I think it is important the hardware can have the time intervals between readings changed easily in case the user requires something different in the future. For robustness, any hardware must work on any operating system using MySQL open source code. The software must limit access to the centralised database to the location for security purposes. It is important to encrypt all data recorded to maintain the confidentiality of the locations and monitoring locations that will be clients.

Information repositories such as expected readings for similar plants across the globe could be used in order to quickly identify any anomalies.

A centralized database so that all the information can be stored securely, but this must be limited to location so only authorised personnel are able to view the data. Security is of paramount importance because of the value of the data that is being recorded. To maintain this security, clients will only have read-only access, with authorised staff on your end being able to make any changes necessary.

It may be necessary to change the number of readings the robot makes (should there be a spike recorded, for example), so the database must be robust enough to cope with this. Specific users to get alerts on phone about the robot readings and maintenance status, to ensure the smooth running of the recording.

Security is paramount, so a strict chain of command will be followed when dictating who will have access to the data, and who will be able to make certain changes to the equipment.

Also with extra security module’s purchased because of the importance of the data that is being recorded. Malicious attempts to alter the data could lead to catastrophic consequences, which is why it is very important that only authorised personnel have the ability to make these changes to the system.

The Skill’s required for this project would be a strong team of Database Analyst’s, Database Programmer’s, Database Tester’s and QA officer’s. Allowing for the program to not only be implemented but will critical testing of the database functionality this will ensure that the system never goes down and a great experience for the user’s and customer’s.

Some drawback’s are still possible even with certain thing’s in place

Including the price as-well as sever cost’s and the cost of adding more security and protection but mentioned open source is the best move to lower cost’s , there could as-well be unforeseen robots malfunction’s and issues with hardware with the AI, from replacing small part’s to completely rebuilding or replacing it.

The benefits overall from this AI robot project is to prevent danger of human life allowing user to get accurate readings of substances and gases and allow man hour’s to be used more effectively else where.

Some possible negative out come’s although stated to prevent danger of human life another negative is replacing human life with AI resulting in loss of work, another negative I see if replacing/repairing of the robot’s which could be extremely costly