This project presents an ammonia detection system in poultry farms using an IoT device. Ammonia excreted by poultry animals affects their health adversely. In order to prevent this, an Ammonia Detection System can be employed and monitored.

In order to implement this, the hardware used in this project is NodeMCU, MQ 135 Gas Sensor and DHT11 sensor and the software used is Arduino, IBM Watson Cloud Platform and a UI. The gas sensor used helps check the ammonia level present in the farm area. The DHT11 sensor helps monitor the temperature and humidity in the farm. The IBM Platform is used to store the data in the cloud and using the Node-RED flows one can make a flow of required operations. The UI created helps the supervisor to control and monitor the ammonia, temperature and humidity level changes in the farm. The prototype made can be used in poultry farms to avoid death of birds and better health of animals