Six Element Analysis (Existing):

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| --- | --- | --- | --- | --- | --- | --- |
| **Process** | **System Roles** | | | | | |
| **Human** | **Non-Computing Hardware** | **Computing Hardware** | **Software** | **Database** | **Network & Communication** |
| **Insert AQI Data** | **Bangladesh Meteorological Department:**   1. Sends airpollution data to the ministry   **Weather Station:**   1. Collects and sends raw AQI data to the ministry in hardcopy or softcopy form.   **Ministry:**   1. Receives air pollution data from Bangladesh meteorological department in hardcopy or softcopy form. 2. Receives raw AQI data from the weather station in hardcopy or softcopy form. 3. Sends AQI data once every month from different districts to the representative of CASE in hardcopy or softcopy form.   **Representative of CASE:**   1. Receives   monthly AQI data from the ministry   1. Insert data in CASE. | **Pen and Papers:**   1. To collect and print the AQI data in hardcopy form | **Computer:**   1. All the data are finally stored using a computer. 2. The representative of CASE uploads data to CASE using a computer. | **MS Excel:**   1. Weather station, Bangladesh meteorological department, ministry uses MS Excel to store the AQI data collected. | **No database used.** | **Internet:**   1. CASE is a web-based application and requires internet to access. |
| **Report Generation & Analyzing** | **Representative of CASE:**   1. From the AQI data, they create reports. 2. Post the reports on CASE.   **Municipality:**   1. Receives the monthly report from CASE.   **Ministry:**   1. Receives air pollution report from CASE.   **User:**   1. From the reports, they get monthly information about the air quality of the area. | **Not Applicable** | **Computer:**   1. All the data has to be accessed through a computer. 2. Reports are formed using computer. 3. CASE can be accessed through computer.   **Smartphone:**   1. CASE can be accessed through any smartphone. | **MS Excel:**   1. To model and analyze the data. 2. To generate graphs using the data.   **MS Word:**   1. To create the reports after analyzing the data. | **No database used.** | **Internet:**   1. CASE is a web-based application and requires internet to access. |