



UNIT -4

IOT TECHNOLOGIES, STANDARDS AND TOOLS



HIGH LEVEL REQUIREMENTS OF IOT

- **CONNECTIVITY:** IOT DEVICES AND NETWORKS NEED TO BE HIGHLY CONNECTED.
- **INTEROPERABILITY:** IOT DEVICES CAN GATHER AND SHARE DATA WITH OTHER DEVICES AND NETWORKS.
- **DATA:** IOT SYSTEMS NEED A CONSISTENT AND UNINTERRUPTED DATA FLOW.
- **SCALABILITY:** IOT SYSTEMS NEED TO BE ABLE TO HANDLE THE INCREASING NUMBER OF CONNECTED DEVICES WITHOUT AFFECTING PERFORMANCE



- **EASE OF DEVELOPMENT:** IOT DEVICES NEED TO BE EASY TO DEVELOP SO THEY CAN QUICKLY GET UP AND RUNNING.
- **SECURITY:** IOT SECURITY SOLUTIONS NEED TO INCLUDE DEVICE AND DATA SECURITY, COMPLIANCE REQUIREMENTS, AND PERFORMANCE REQUIREMENTS.
- **DATA STORAGE AND ANALYSIS:** IOT DEVICES GENERATE A LARGE AMOUNT OF UNSTRUCTURED DATA, SO IT'S IMPORTANT TO BE ABLE TO STORE, PROCESS, AND ANALYZE IT.
- **ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING:** IOT EXPERTS NEED TO BE ABLE TO GATHER, ANALYZE, AND GAIN INSIGHTS FROM LARGE AMOUNTS OF DATA.