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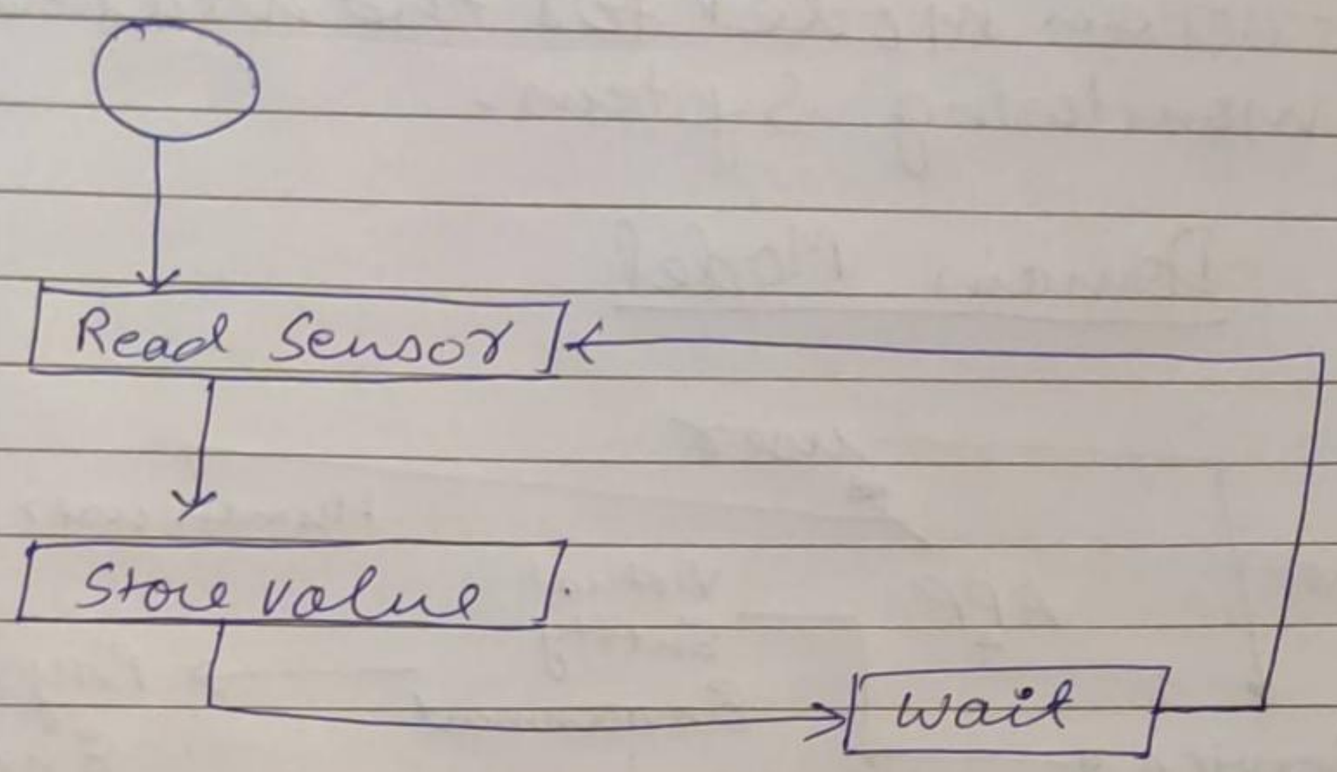
(3) The purpose of the weather monitoring System is to collect data on environment conditions such as temperature, pressure, humidity & light in an area using multiple and nodes.
The end nodes send the data to the cloud where the data is aggre-gated & analyzed.



Above fig. shows the process specification for the weather monitoring System. The process specification shows that the sensors are read after fixed internals & the sensor measurem-ents are stored.

In this domain model the physical entity is the environment which is being monitored.
There is a virtual entity for the environment. Devices include temp sensor, pressure sensor, humidity sensor, light sensor and Single-Board mini computer.
Resources are software components which can be either on-device or network-resources.

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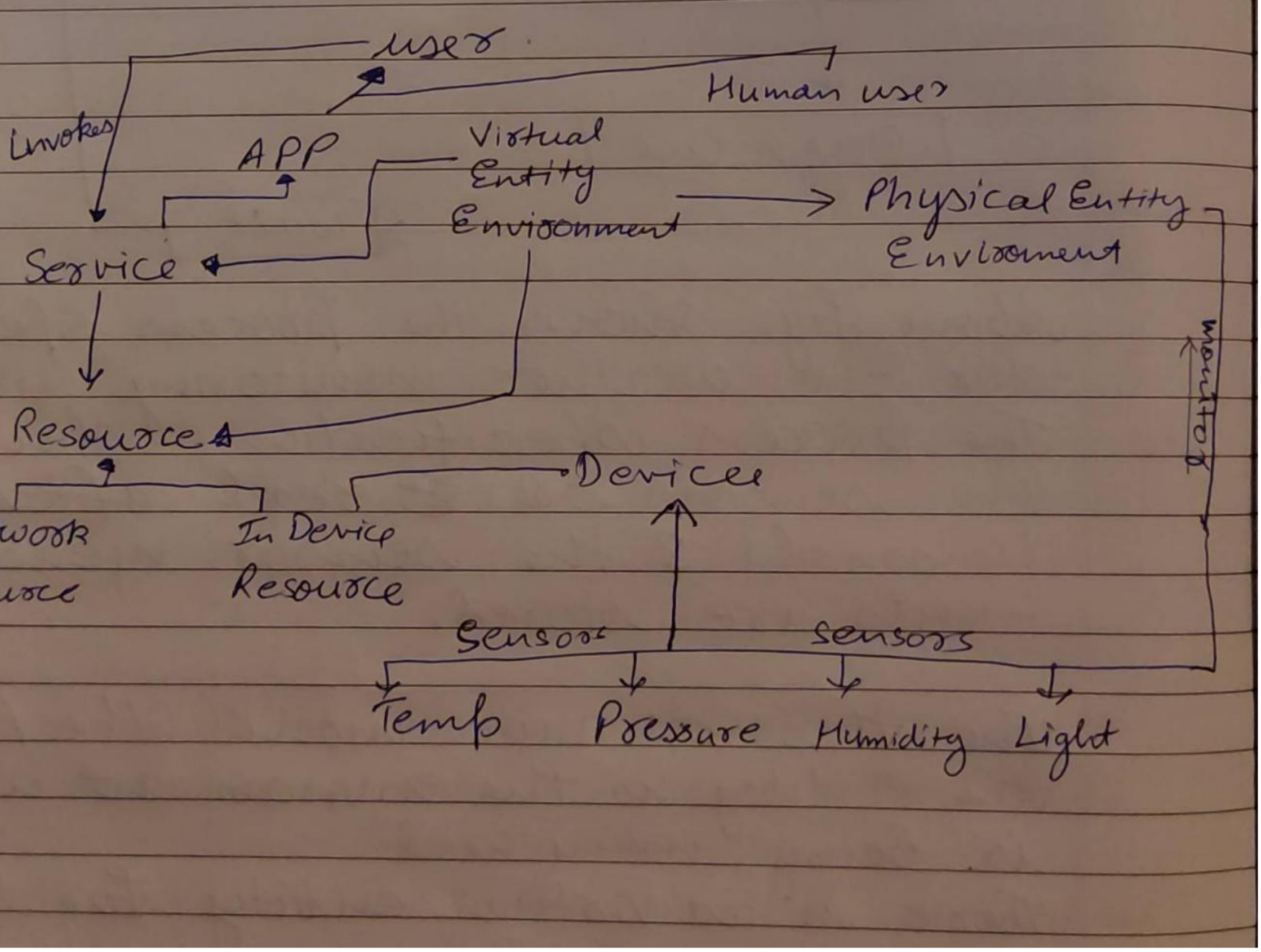
Services include the Controller Service that monitors the temperature, pressure deriving the Services from the process specification and information model for the weather monitoring System, humidity and light and sends the readings to the deriving the services from the process specification and Information model for the weather monitoring System.

Domain Model



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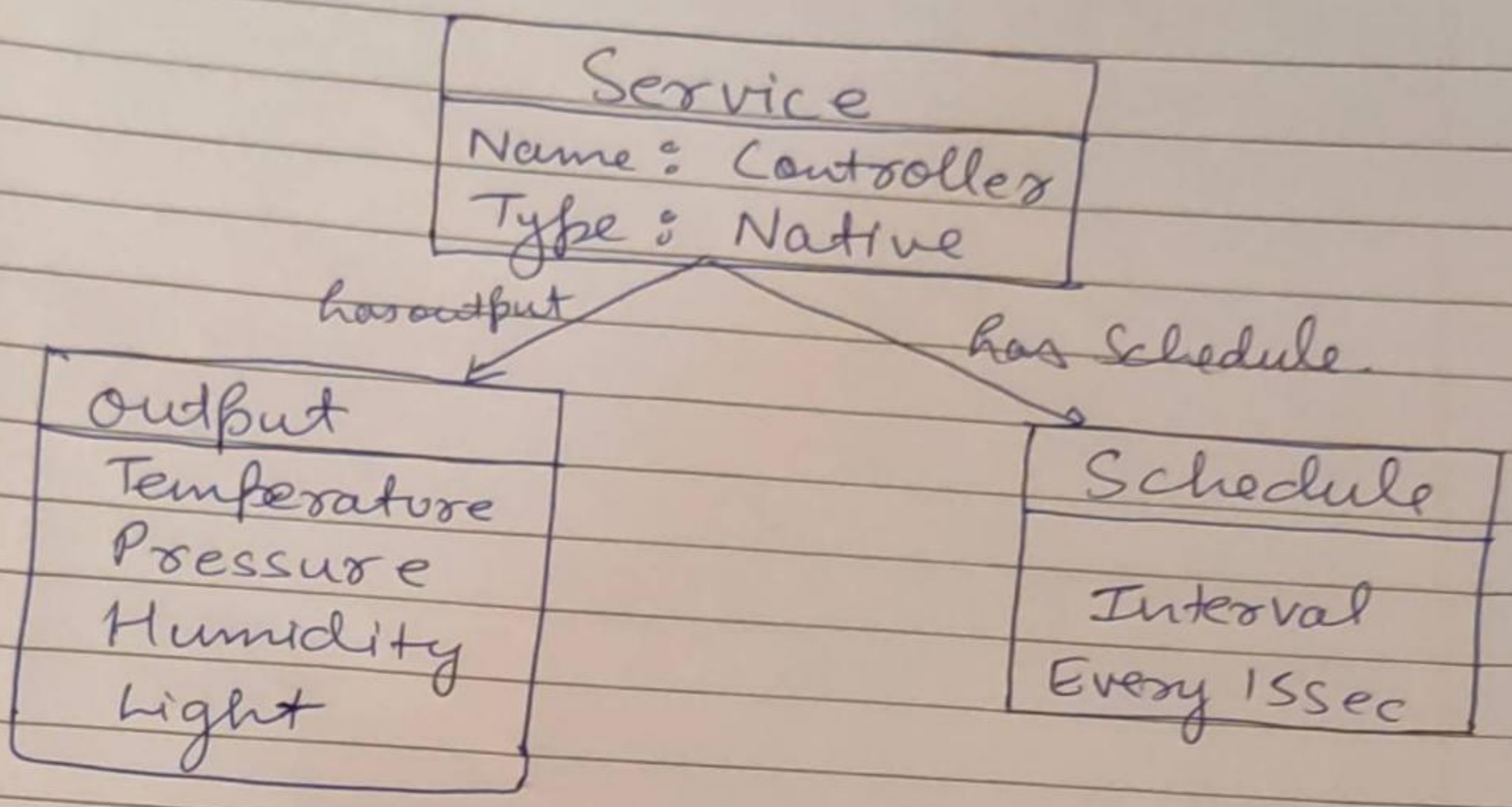
Controller Service



- The Controller Service runs as a native service on the device and monitors temperature, pressure, humidity and light once every 15 seconds.

- The Controller service calls the REST service to store these measurements in the cloud.

- The System consists of multipe nodes placed in different locations for monitoring temp, humidity and pressure in an area.

- The end nodes nodes are equipped with various sensors.

- The end nodes send the data to the cloud and the data is stored in a cloud database.

- The analysis of data is done in the cloud to aggregate the data and make predictions.