

* IOT Design Methodology:

→ IOT platforms design methodology includes Ten steps. They are

Step1: purpose & Requirements Specification

Step2: process Specification

Step3: Domain model Specification

Step4: Information model Specification

Step5: Service Specifications

Step6: IOT Level Specification

Step7: Functional View Specification

Step8: Operational View Specification

Step9: Device & Component Integration

Step10: Application Development

* Step1: purpose & Requirements Specification

→ Data collection, Data analysis, System management, data privacy, Security and user interface requirements.

* Step2: process specification

→ The use cases of the IOT system are formally described based on the Step1. Ex: process diagram for home automation system.

* Step3: Domain model Specification:

→ Describes the main concepts, entities and objects in the domain of IOT system to be designed.

* Step 4: Information model specification.

→ defines the structure of all the information in the IoT system.

* Step 5: Service specifications.

→ Defines the service types, service inputs/output, service endpoints, service schedules, service preconditions and service effects.

* Step 6: IoT-level specification:

→ There are six different levels (IoT level-1 to IoT level-6) based on complexity.

* Step 7: Functional View specification:

→ Defines the functions of the IoT systems grouped into various functional groups.

* Step 8: Operational View specification:

→ Various options are defined. Ex: Service hosting option, storage option, device options, application hosting option. etc.

* Step 9: Data and Component Integration:

→ defines the integration of all components and devices

* Step 10: Application Development:

→ defines the final application.