SNS COLLEGE OF ENGINEERING

Kurumbapalayam(Po), Coimbatore – 641 107
Accredited by NAAC-UGC with 'A' Grade
Approved by AICTE, Recognized by UGC & Affiliated to Anna University, Chennai

Department of Information Technology

Course Name – Internet Of Things & AI

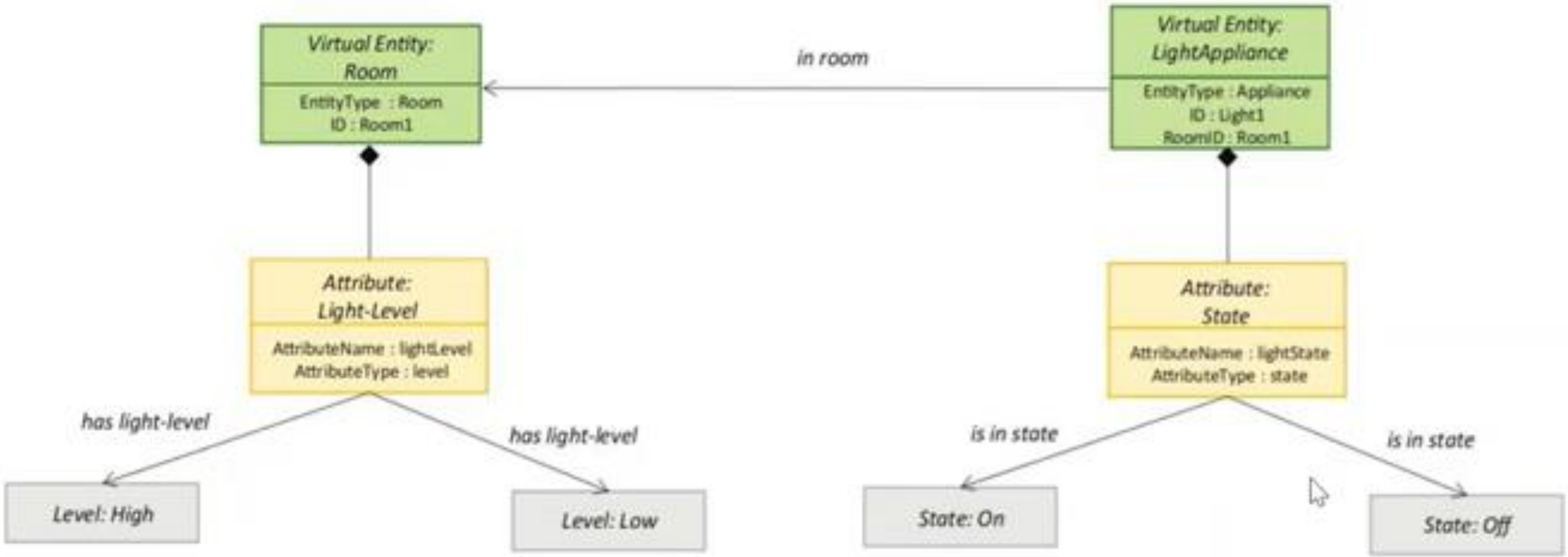
III Year / V Semester

UNIT 2 - DESIGN METHODOLOGY

Information Model Specification

- The fourth step in the IoT design methodology is to define the Information Model.
- Information Model defines the structure of all the information in the IoT system, for example, attributes of Virtual Entities, relations, etc.
- Information model does not describe the specifics of how the information is represented or stored.
- To define the information model, we first list the Virtual Entities defined in the Domain Model.
- Information model adds more details to the Virtual Entities by defining their attributes and relations

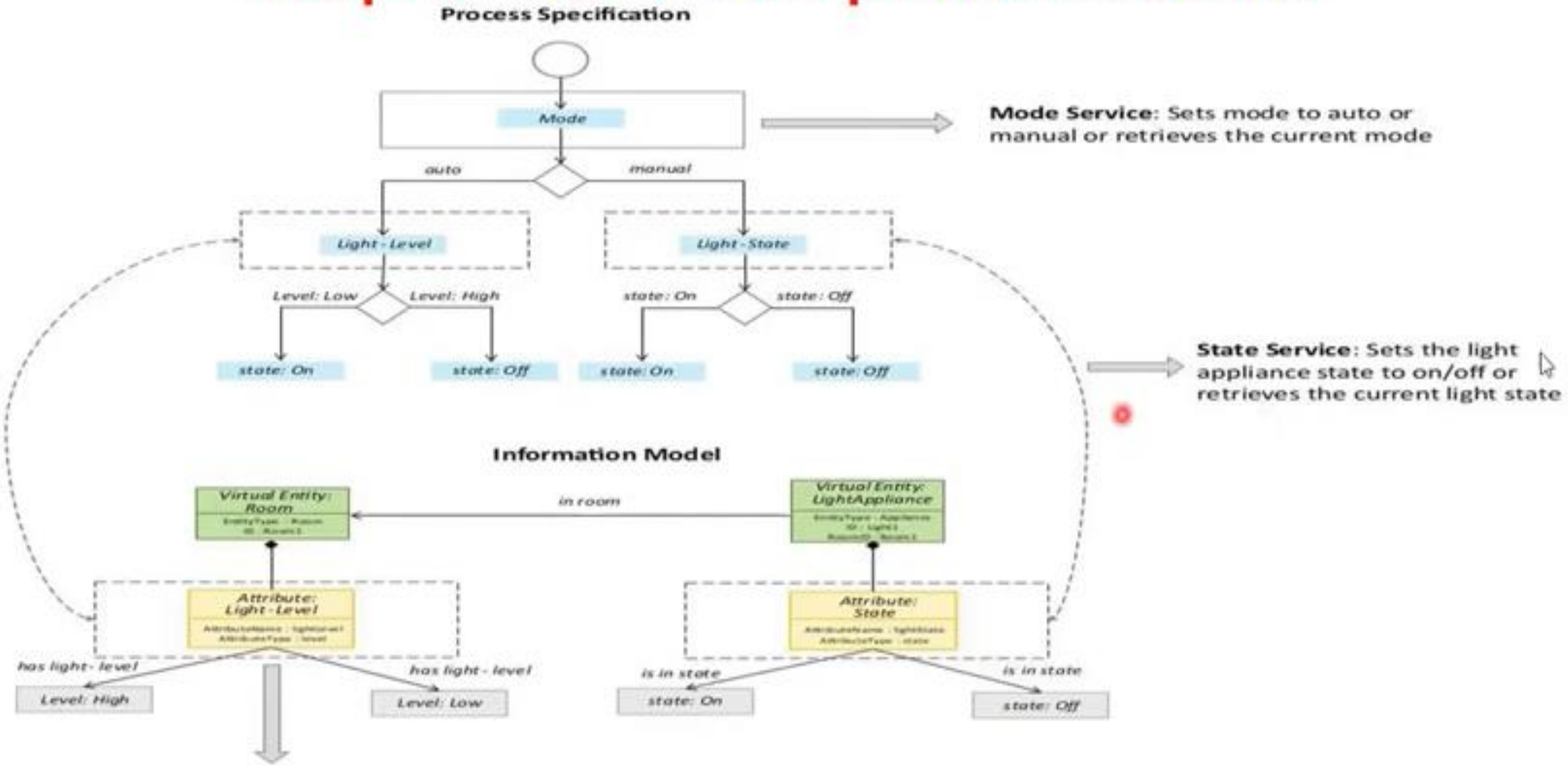
Step 4: Information Model Specification



Service Specification

- The fifth step in the IoT design methodology is to define the service specifications.
- Service specifications define the services in the IoT system, service types, service inputs/output, service endpoints, service schedules, service preconditions and service effects.
- From the process specification and information model, we identify the states and attributes.
- For each state and attribute we define a service.
- These services either change the state or attribute values or retrieve the current values.

Step 5: Service Specifications

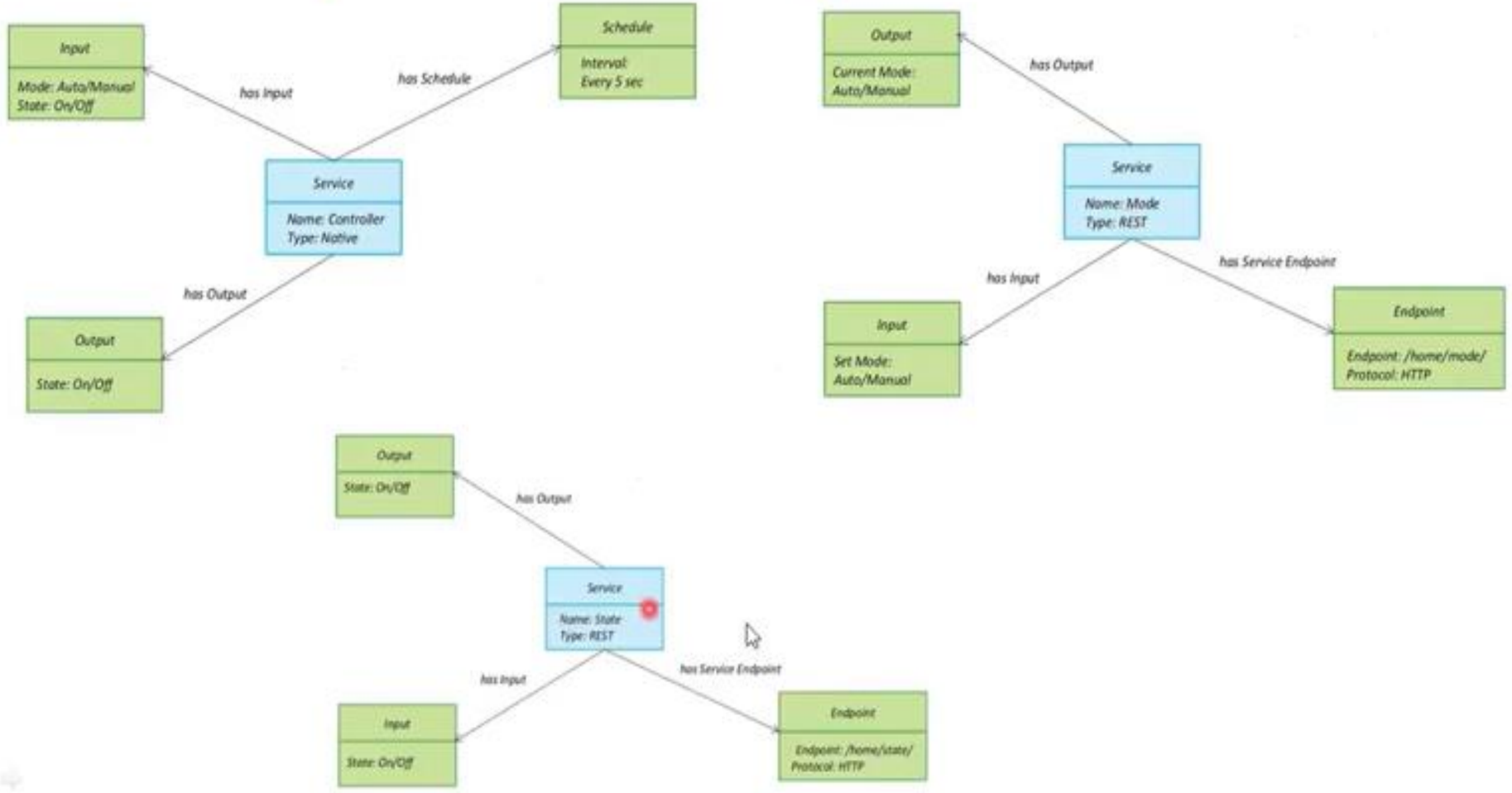


Mode Service: Sets mode to auto or manual or retrieves the current mode

State Service: Sets the light appliance state to on/off or retrieves the current light state

Controller Service: In auto mode, the controller service monitors the light level and switches the light on/off and updates the status in the status database. In manual mode, the controller service, retrieves the current state from the database and switches the light on/off.

Step 5: Service Specifications



THANK YOU