# SNS COLLEGE OF ENGINEERING

## Department of AI & DS

## Course Name – Internet of Things & AI

## III Year / V Semester
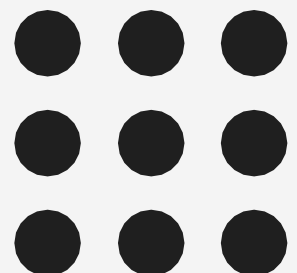
# Functional view Specification

- The Functional View (FV) defines the functions of the IoT systems grouped into various Functional Groups (FGs).
- Each Functional Group either provides functionalities for interacting with instances of concepts defined in the Domain Model or provides information related to these concepts

The functional groups in a functional view include:

Device,

Communication,

Services,

Management,

Security, and

 Application.

 The functional view specification for home automation system is shown in the below figure:.

# Step 7: Functional View Specification

- **Device:** An IoT system comprises of devices that provide sensing, actuation, monitoring and control functions.

- In the home automation system example, the device FG includes a single board mini-computer, a light sensor and a relay switch(actuator)
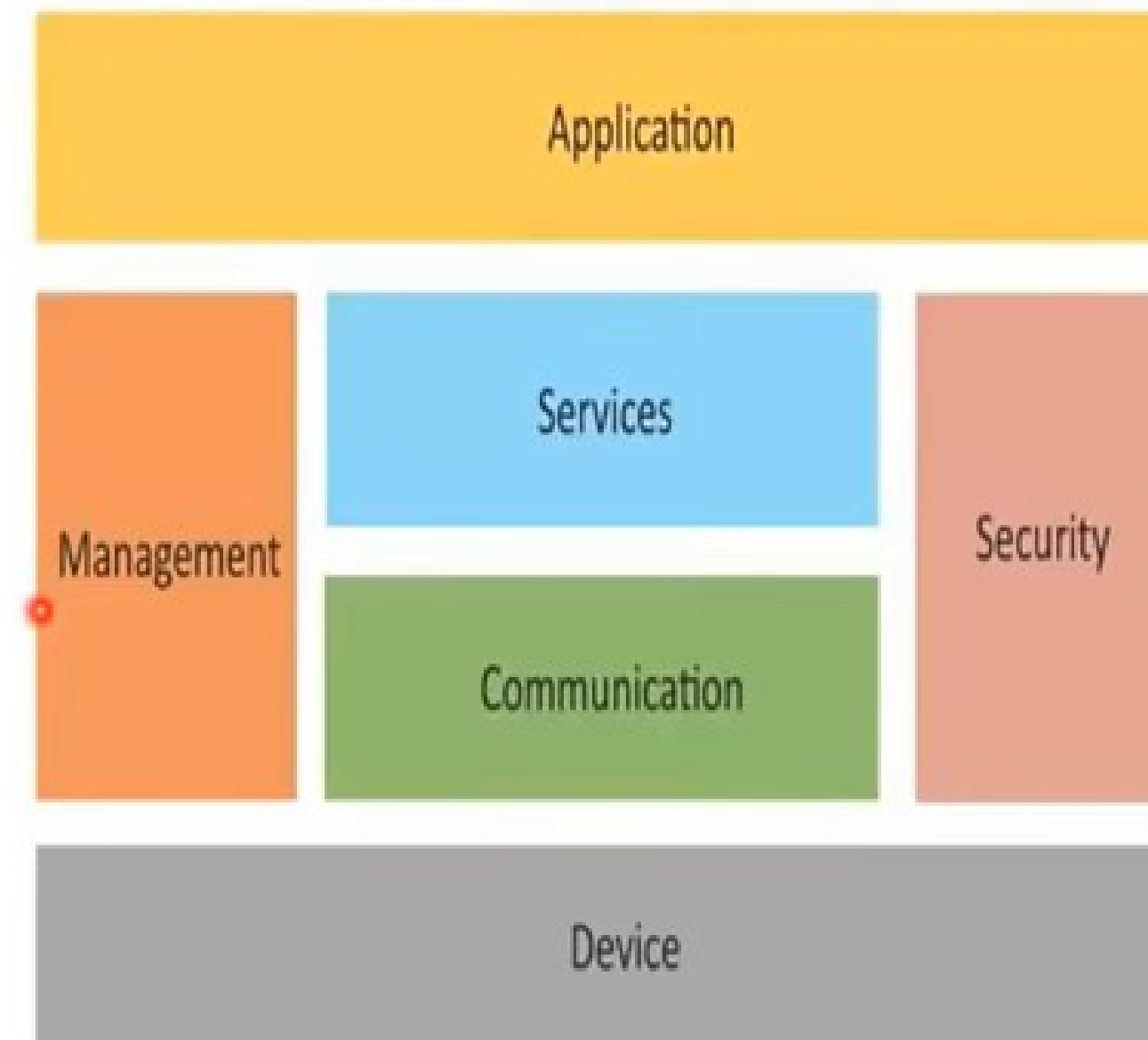
# Functional blocks

- **Services:** services for device monitoring, device control service, data publishing services and services for device discovery.

- In the home automation example, there are two REST services (mode and state service) and one native service (controller service)
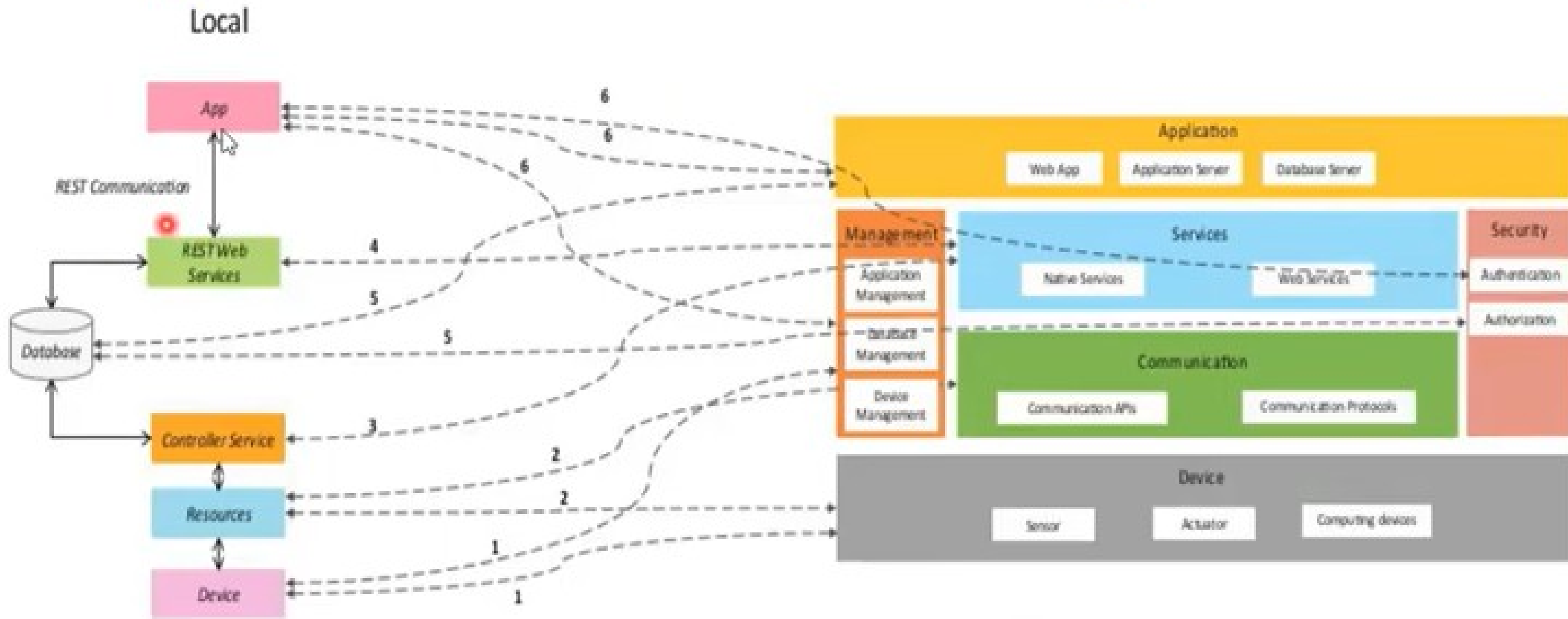
# Functional blocks

- **Management:** this blocks provides various functions to govern the IoT system.

- It includes all functionalities that are needed to configure and manage the IoT System.

# Step 7: Functional View Specification