

1 MARCH 2023

**BUILDING SMART MANAGEMENT SYSTEM**

# **PLAN REPORT**

## Case study

### IOT BOOTCAMP

# SMART BUILDING MANAGEMENT

**T**raditional buildings are of a sturdy construction that needs to take the comprehensive approach to upgrade. We can fully operate in buildings by using IoT devices to extract information about light, indoor air quality, light, PIR (motion), energy consumption, security, etc.

Smart Building management system innovation opens the way for people to store, use and share data from any IoT device. Everything is about obtaining information and automate different processes. It's a simple application, and offers reduced enterprise expenditure. Then, the building become smarter, not hassle.

## SMART BUILDING WITH IOT STRATEGY

Utilize IoT technology to gather data on various aspects within buildings through networked sensors and IoT Cloud. The building will be more efficient, cost-optimization and lowering the high cost impact.



Improve Occupant  
Comfort and health



Connect People  
and Technology



Centralized Control  
of Buildings



### STAKEHOLDERS:

- Commercial buildings
- Home's owner
- Educational campus
- Hospitals

### TEAM MEMBERS :

- Anjad Alattas
- Faris Aljohani
- Kahwah Aldawish
- Renda Alfurayhi

### TASKS

TASK	ASSIGNED TO	DUE DATE
Smart Home	Anjad Alattas	2nd March 2023
Smart Light	Renad Alfurayhi	2nd March 2023
Smart Security	Faris Aljohani	2nd March 2023
Smart Water Management Sys.	Khawlah Aldawish	2nd March 2023

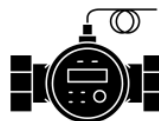
## TOOLS TO BE USED



## HARDWARE TO BE USED



ULTRASONIC SENSOR



WATER FLOW SENSOR

## OUTCOMES:

Currently ,tow systems (smart light and water management) are working.

The system needs advancement to analyze and create ML model for more optimization.

Lighting system : figure out the frequent time of turning-on lights, that can help with analyzing the bill. That will provide a prediction of how to make a power reduction and give bill prediction.

Water management system: figure out the peak-time of water usage. Also, on which days or hours the consumption increased. We can accurately indicate specific point of high consumption. The collected data can be used to build modes for predictions and recommendations