Phase 1: Problem Definition and Design Thinking

In this part you will need to understand the problem statement and create a document on what have you understood and how will you proceed ahead with solving the problem. Please think on a design and present in form of a document.

Problem Definition: The project aims to transform a home into a smart living space using IBM Cloud Functions for IoT data processing. The goal is to collect data from various smart devices, process it in real-time, and automate routines for energy efficiency and home security. This involves designing the smart home setup, implementing data collection and processing, and leveraging IBM Cloud for storage and analysis.

Design Thinking:

Data Integration: Identify and integrate smart devices such as thermostats, motion sensors, and cameras into the smart home ecosystem.

Data Collection: Set up data collection from these devices, utilizing IoT protocols.

Real-time Processing: Implement real-time data processing using IBM Cloud Functions.

Automation: Develop automated routines for energy efficiency (e.g., adjustingthermostat settings) and home security (e.g., sending alerts on motion detection)

Storage and Analysis: Store data in IBM Cloud Object Storage and analyze it to gain insights into energy consumption, security events, and patterns.

Assignment Notebook Submission

File Naming Convention: CAD\_Phase1

After completion upload your file to your private GitHub account. Please give access to your faculty evaluators of your college and industry evaluator [ [IndustryEvaluator@skillup.online](mailto:IndustryEvaluator@skillup.online) ] to your private GitHub repository for evaluation process

* Go to the Project Submission Part 1 section and add your college code, the link of your GitHub in the space provided, upload your documents, and click on submit.