# ECE 575 Group 4 Task Progress Report 7:  14-11-2023

**GROUP MEMBERS**

Collins Kiprop

Mercy Melody

Ibrahim Hukka

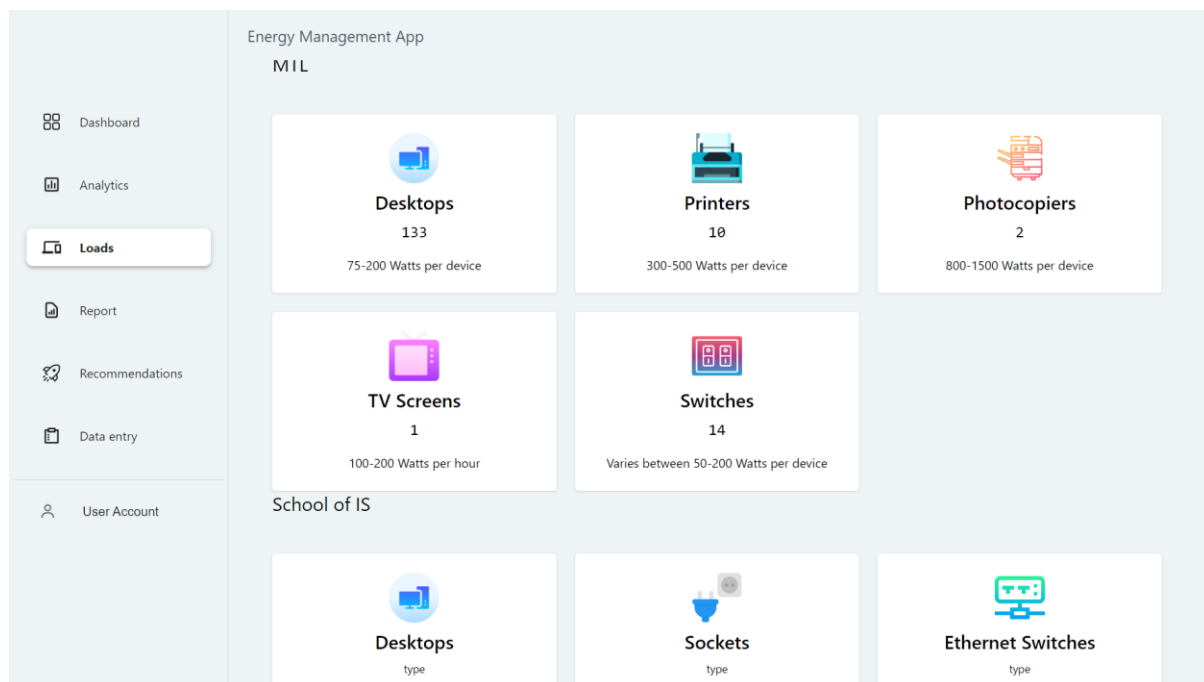Simon Karanja

Glorious Musyoka

Stephen Kite

Erick Karanja

Frank Mungai

Joseph Odialo

## App development progress

We completed the load section that highlights all the devices and equipment in the areas under audit that is, The Margret Thatcher Library and the School of Information Science

Including the load data, in the energy management app is crucial for several reasons.

1. It helps in performing Energy Consumption Analysis:

   - Load data provides insights into the energy consumption patterns of different devices and systems within an organization or facility.

   - Understanding how much energy each device or group of devices consumes helps in identifying areas for optimization and efficiency improvement.


2. It helps to identify Energy Intensive Devices:

   - The detailed information about the number of devices, their power ratings, and consumption patterns helps identify energy-intensive devices and areas.

   - This information is valuable for making informed decisions about equipment upgrades, replacements, or changes in usage patterns.


Load data can also help detect anomalies and irregularities in energy consumption, indicating potential faults or malfunctions in devices. Identifying issues early allows for proactive maintenance, reducing downtime and preventing unnecessary energy waste.

By knowing the energy consumption of various devices and systems, the facilities can allocate resources more effectively. This includes optimizing the use of energy-intensive equipment during specific periods or scheduling maintenance based on usage patterns.

The load data from the application also aids in accurate energy budgeting and cost management. The school can plan and allocate budgets based on actual energy consumption patterns, avoiding unexpected expenses.

Armed with detailed load data, the facilities can implement targeted strategies to improve energy efficiency. This may include equipment upgrades, behavioural changes, or the adoption of energy-saving technologies.