



Smart Campus

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הפקולטה למדעים

מערך פרויקטים ושיתוף פעולה עם התעשייה

Introduction

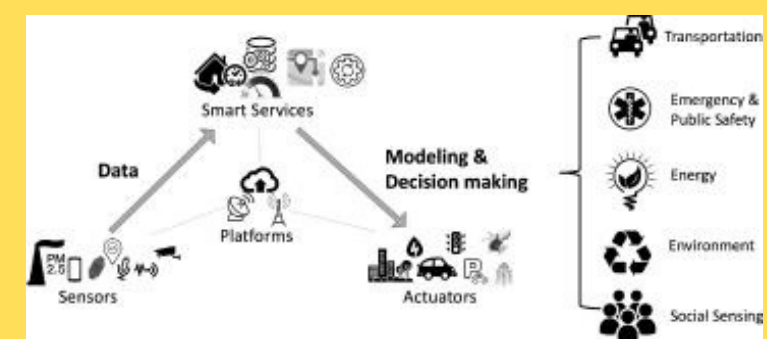
The administration team at the Holon Institute of Technology have experienced difficulty in managing, and making reports for electricity usage at the campus. They did not have a single application for this purpose, so they had to perform the operations on several different systems, which led to difficulties, and inaccurate results.

Smartcity project came to solve this problem by developing a web application system that combines all the electricity usage components for which we would like to check the electricity consumption and puts all the different chiller information in one place. The system enables management of electrical components, presentation of a history of electrical samples and issuance of electrical reports for components.

The solution

The team designed and engineered a web application that connects reads the electricity components samples using thingsboard.

The system saves the samples in a PostgreSQL DB. We made a React JS Frontend web application for managing the components, presentation of a history of electrical samples and producing reports for the different components.



Conclusions

Our implementation of the application was necessary for managing the different electrical components at HIT. It will improve managing the financial aspects of electrical consumption, and the overall daily productivity of administration team. The application will save a lot of the expenses for the HIT campus and staff. The Production reports processes will be short, documented and effective.

Discussions

In the future, the system can be extended with more features, and will be easy to maintain for future generations. For example: Adding AI sub features to our services in order to make predictions of electrical usage, graph statistics, red flags for deviation of electrical consumption for different counter components. All these features will contribute more for the HIT campus staff proficiency.

