SMART METER: SIVIS

Lappeenranta University of Technology. LUT School of Business and Management
Home Automation Code Camp

VISION

- Record the energy consumption of electrical energy.
- Change the source (from source grid to renewable energy)
- Supply unused renewable energy to power grid.
- Manage two-way communication between power source and devices.

FUNCTIONALITY

- Redirect all the extra energy to the power grid
- Suggest user to run the appliance when renewable energy is abundant
- Give statistics of energy usage at appliance level
- Provide user with patterns of his/her energy usage
- Contact different services such as weather station, calendar of the owner and customizes some of its functions.

ARCHITECTURE

GREEN ASPECTS

- No wastage of renewable energy
- No storage of energy in batteries giving no scope for pollution when batteries are to be disposed
- Extra energy being supplied to power grids
- Reports of energy consumption is provided to user which can bring a change in user behavior
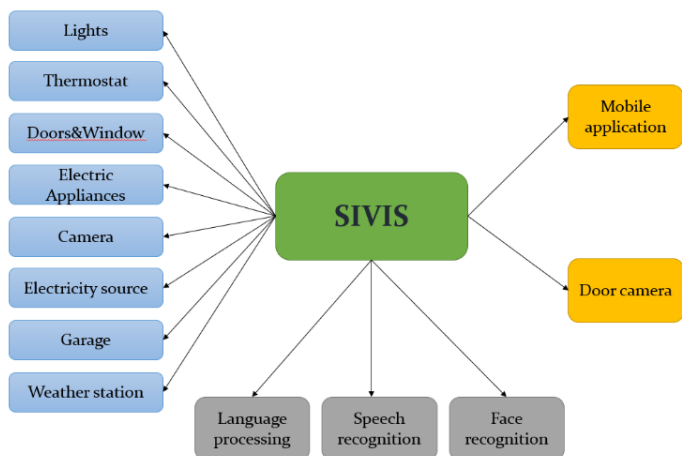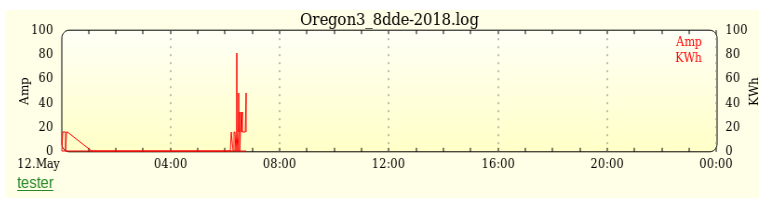- Switch between renewable energy source when necessary

PRODUCT SPECIFICATIONS

- The product is available in 3 variations
- Variation 1 – Controls only light bulbs and fans
- Variation 2 – Controls most of electric equipment
- Variation 3 – Controls appliances along with differentiating between renewable and non-renewable sources of energy
- It is available for pre-order from today and will be shipped by end of 2023

RESULTS

Fig.2. Energy consumption monitoring

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