Project Alfred

Project Specifications Document

Description

To design and develop a control and automation system for the electrical, water and security aspects of a house that operates locally and through the cloud on Android, IOS and web platforms.

Features

This system is designed to work from the home itself without latency and securely whilst requiring minimal dependence on the cloud for remote connections. The system is connected to the internet via the broadband and also houses a backup GPRS module for always being connected

- ❖ Electrical control system

  - Switch board replaced by Capacitive Touch interface with LEDs
  - Internal Voltage regulator (dimming) for bulbs brightness and fan control
  - Scheduled controls and and group settings like night mode

- ❖ Security system

  - Camera surveillance and backup
  - Automatic door lock
  - PIN based and fingerprint entry with Video calling facility at entrances

- ❖ Water Control system

  - Overhead tank and sump water level monitoring, Pump control
  - Electronic water valve control for garden hose

- ❖ Interface - Android, Web, IOs

  - Creatively designed UI and smooth UX to view and control the status of all systems locally and remotely