Internet Data Display Lamp

Objective
Design and implement a Smart Lamp that notifies user based on the selected data trend such as Stock, Weather Forecast or Outdoor Temperature Reading with different kind of lighting animations.

Technology used:
• Wireless Technology
• Internet of Things
• Mobile Application Control

The Raspberry Pi setup a access point for communicating with all the devices and obtain specific API . Google Firebase Database was used to setup a communication between the Android phone and Raspberry Pi. The Arduino (which control the type of lighting animation to be displayed ) was connected to Raspberry Pi Via Serial Communication. The LEDs Stripe was connected to Arduino via pulse width modulation pin on Arduino.

It provides useful real-time information that can be crucial to user. User can control the information to be displayed via Android phone.

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