

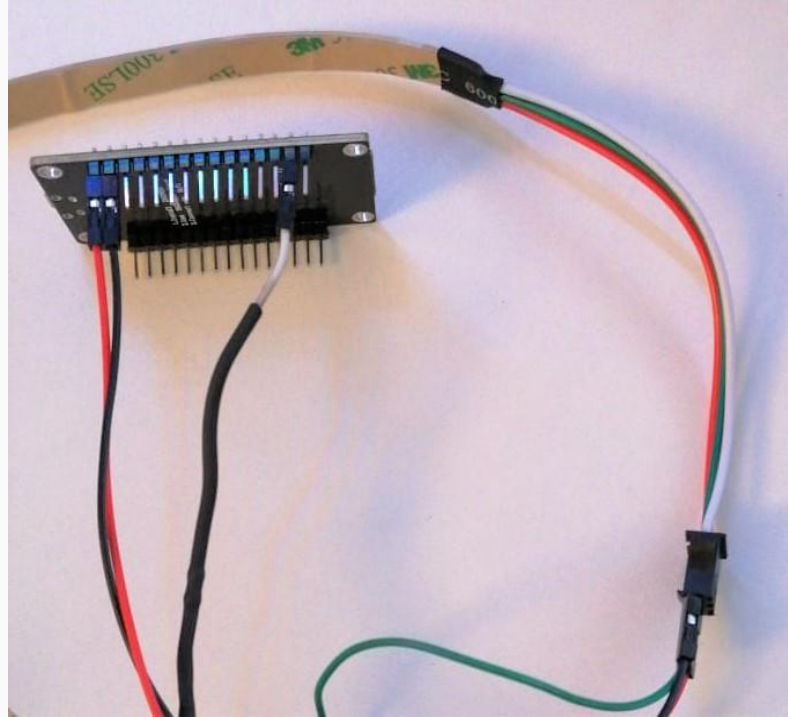
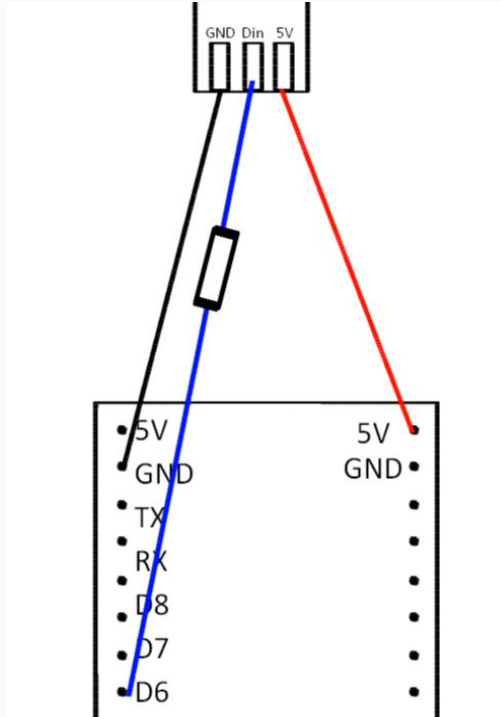
LED Notification Streifen

Beatrice Csiszar-Kappel - Hochschule Augsburg - Interaktion Programmieren - Sommersemester 2021



Projektidee

- Notifications ohne Handy in der Hand erkennbar
- Notifications unterscheiden (Social media post vs Direktnachricht)
- individuell anpassbar für einzelne Apps
- für alle, die ein aktives Online Leben führen und LED Streifen gerne als Deko benutzen



NotiLed

Wake

Blink

Connection

test connection

Settings

NodeMcu Code

AsyncWebServer

```
AsyncWebServer server(80);
void setup (void){
  WiFi.mode(WIFI_STA);
  WiFi.begin(ssid , password);
  server.begin();
  server.on("/switch", HTTP_GET, [](AsyncWebServerRequest *request){
    int paramsNr = request->params();
    for(int i=0;i<paramsNr;i++){
      AsyncWebParameter* p = request->getParam(i);
      if ((p->name()).equals("red")){
        NEW_R = (p->value()).toInt();}
      if ((p->name()).equals("green")){
        NEW_G = (p->value()).toInt();}
      if ((p->name()).equals("blue")){
        NEW_B = (p->value()).toInt();}
    }
    switchColor(NEW_R, NEW_G, NEW_B);
    request->send(200, "text/plain", String("all good")); });}
```

Adafruit_Neopixel

```
Adafruit_NeoPixel pixels = Adafruit_NeoPixel(LED_COUNT, LED_PIN, NEO_GRB + NEO_KHZ800);

void setup{

  pixels.begin();

  pixels.show();}

void switchColor (int r, int g, int b){

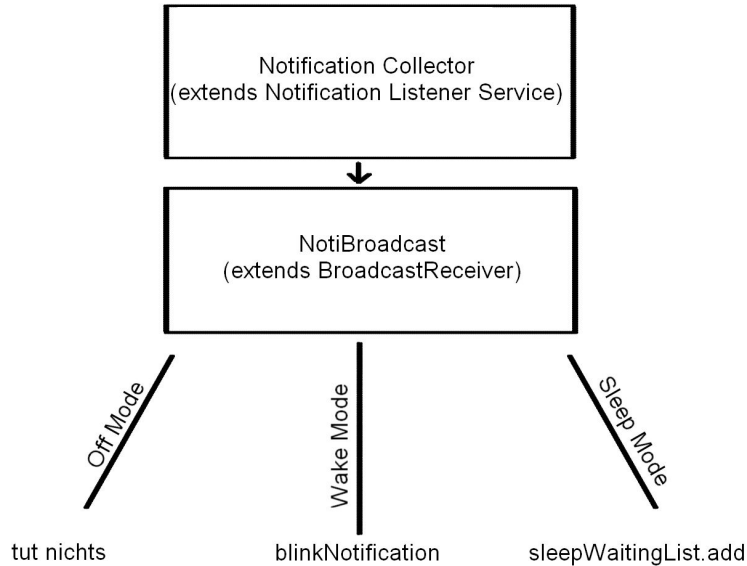
  uint32_t col = pixels.Color(r, g, b);

  pixels.fill

  (col, 0, LED_COUNT-1);

  pixels.show();}
```

Android Studio Code

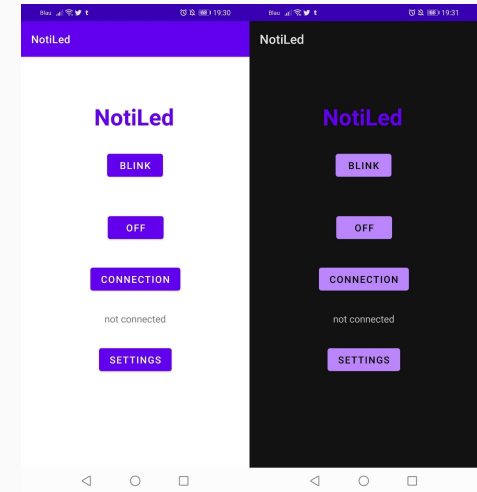


Button 1 - LED Modus
(Blink & Switch)

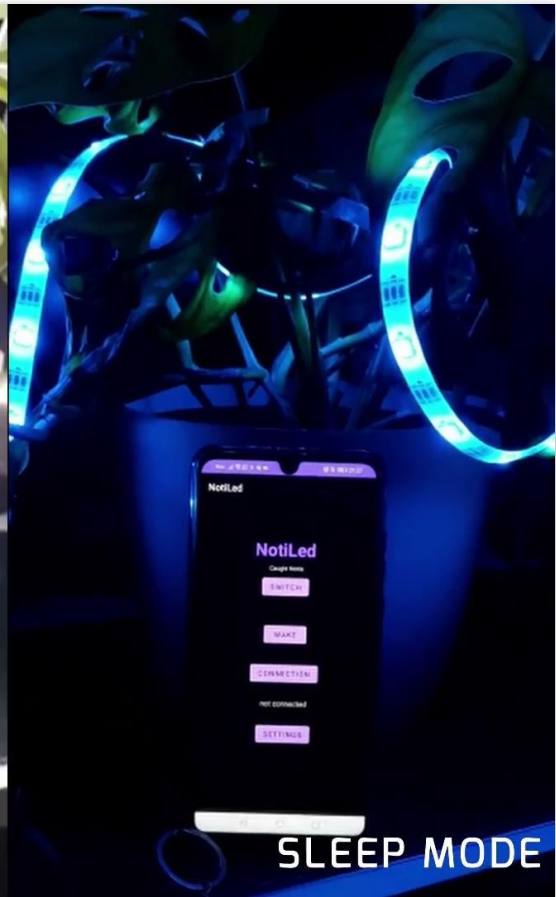
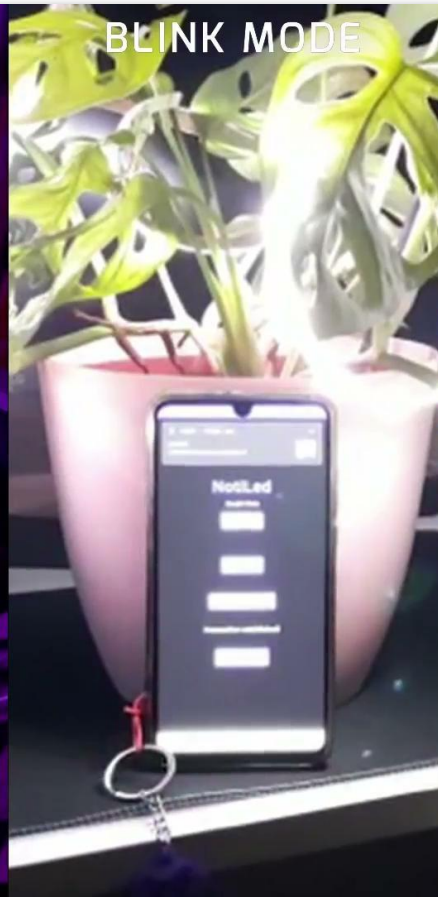
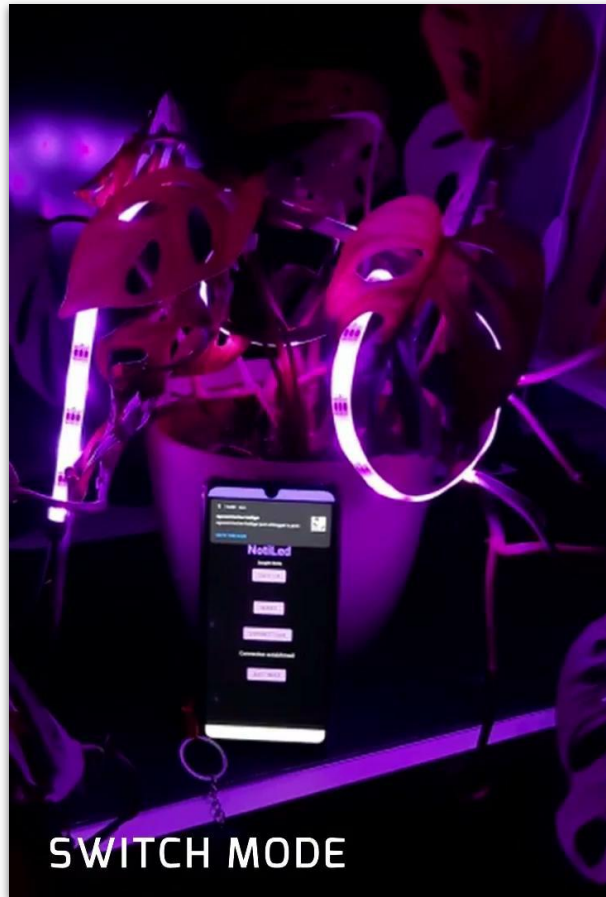
Button 2 - Notification
Modus (Off, Sleep &
Wake)

Button 3 - Connection Test

Button 4 - noch keine
Funktion



Evaluation



Weiterentwicklung

- Settings (Farbwahl für Apps und LED Streifen suche)
- mehr Apps hinzufügen
- Priority Problem lösen
- neuer Stromanschluss

