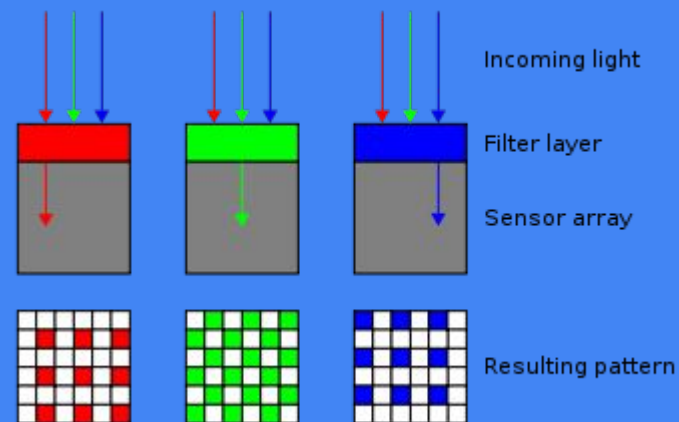
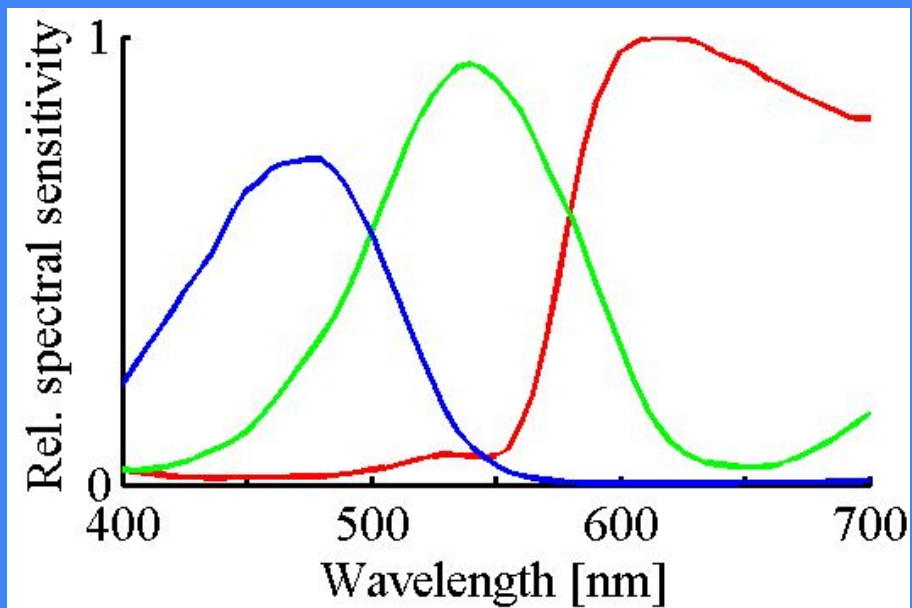


Určenie počasia pomocou RGBW senzoru

Projekt pre predmet SEN - Inteligentné senzory

RGBW sensor



SDA

SCL

3.3V

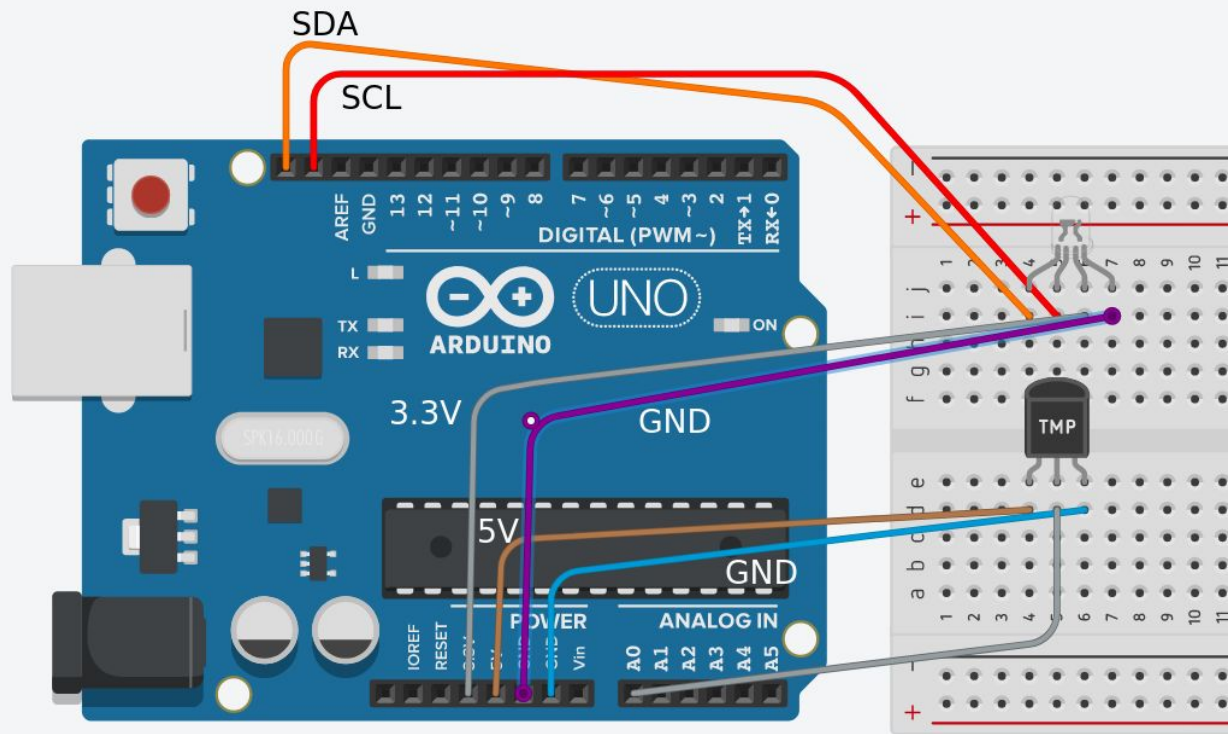
GND

Analog A0

5V

GND

Obvodové prevedenie



Programové prevedenie

Back-End

Arduino IDE

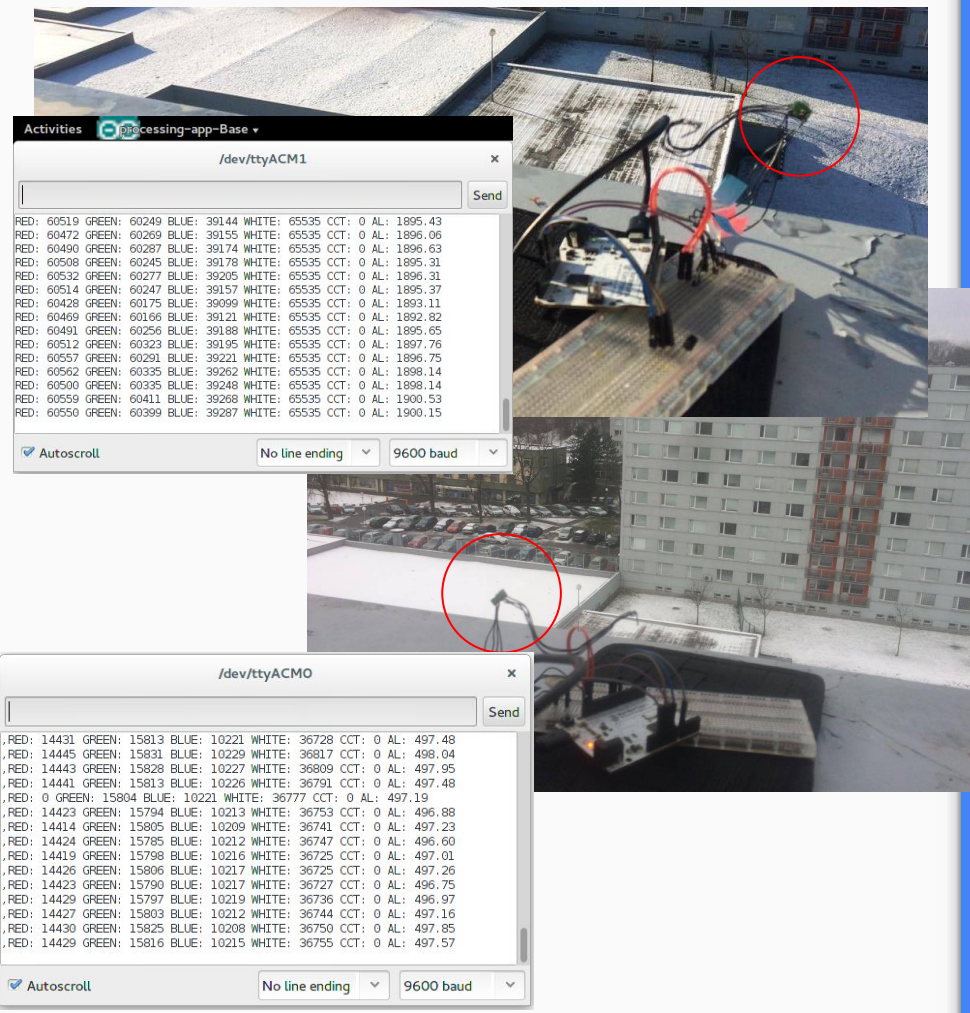
- Komunikácia so senzormi
- Výpočet a spracovanie hodnôt
- Odosielanie dát na front-end

Front-End

Qt Creator

- Formátovanie dát
- Zobrazenie dát v UI

Experimentovanie s RGBW senzorom



The image displays a snowy rooftop environment where a sensor setup is being tested. Two red circles highlight specific sensor locations. Two terminal windows show real-time data from the sensors.

Terminal 1 (/dev/ttyACM1):

```
RED: 60510 GREEN: 60249 BLUE: 39144 WHITE: 65535 CCT: 0 AL: 1895.43  
RED: 60472 GREEN: 60269 BLUE: 39155 WHITE: 65535 CCT: 0 AL: 1896.06  
RED: 60490 GREEN: 60287 BLUE: 39174 WHITE: 65535 CCT: 0 AL: 1896.63  
RED: 60508 GREEN: 60245 BLUE: 39178 WHITE: 65535 CCT: 0 AL: 1895.31  
RED: 60532 GREEN: 60277 BLUE: 39205 WHITE: 65535 CCT: 0 AL: 1896.31  
RED: 60514 GREEN: 60247 BLUE: 39157 WHITE: 65535 CCT: 0 AL: 1895.37  
RED: 60428 GREEN: 60175 BLUE: 39099 WHITE: 65535 CCT: 0 AL: 1893.11  
RED: 60469 GREEN: 60166 BLUE: 39121 WHITE: 65535 CCT: 0 AL: 1892.82  
RED: 60491 GREEN: 60256 BLUE: 39188 WHITE: 65535 CCT: 0 AL: 1895.65  
RED: 60512 GREEN: 60323 BLUE: 39195 WHITE: 65535 CCT: 0 AL: 1897.76  
RED: 60557 GREEN: 60291 BLUE: 39221 WHITE: 65535 CCT: 0 AL: 1896.75  
RED: 60562 GREEN: 60335 BLUE: 39262 WHITE: 65535 CCT: 0 AL: 1898.14  
RED: 60500 GREEN: 60335 BLUE: 39248 WHITE: 65535 CCT: 0 AL: 1898.14  
RED: 60559 GREEN: 60411 BLUE: 39268 WHITE: 65535 CCT: 0 AL: 1900.53  
RED: 60550 GREEN: 60399 BLUE: 39287 WHITE: 65535 CCT: 0 AL: 1900.15
```

Terminal 2 (/dev/ttyACMO):

```
RED: 14431 GREEN: 15813 BLUE: 10221 WHITE: 36728 CCT: 0 AL: 497.48  
RED: 14445 GREEN: 15831 BLUE: 10229 WHITE: 36817 CCT: 0 AL: 498.04  
RED: 14443 GREEN: 15828 BLUE: 10227 WHITE: 36809 CCT: 0 AL: 497.95  
RED: 14441 GREEN: 15813 BLUE: 10226 WHITE: 36791 CCT: 0 AL: 497.48  
RED: 0 GREEN: 15804 BLUE: 10221 WHITE: 36777 CCT: 0 AL: 497.19  
RED: 14423 GREEN: 15794 BLUE: 10213 WHITE: 36753 CCT: 0 AL: 496.88  
RED: 14414 GREEN: 15805 BLUE: 10209 WHITE: 36741 CCT: 0 AL: 497.23  
RED: 14424 GREEN: 15785 BLUE: 10212 WHITE: 36747 CCT: 0 AL: 496.60  
RED: 14419 GREEN: 15798 BLUE: 10216 WHITE: 36725 CCT: 0 AL: 497.01  
RED: 14426 GREEN: 15806 BLUE: 10217 WHITE: 36725 CCT: 0 AL: 497.26  
RED: 14423 GREEN: 15790 BLUE: 10217 WHITE: 36727 CCT: 0 AL: 496.75  
RED: 14429 GREEN: 15797 BLUE: 10219 WHITE: 36736 CCT: 0 AL: 496.97  
RED: 14427 GREEN: 15803 BLUE: 10212 WHITE: 36744 CCT: 0 AL: 497.16  
RED: 14430 GREEN: 15825 BLUE: 10208 WHITE: 36750 CCT: 0 AL: 497.85  
RED: 14429 GREEN: 15816 BLUE: 10215 WHITE: 36755 CCT: 0 AL: 497.57
```

Výsledky a Ďakujem za pozornosť

