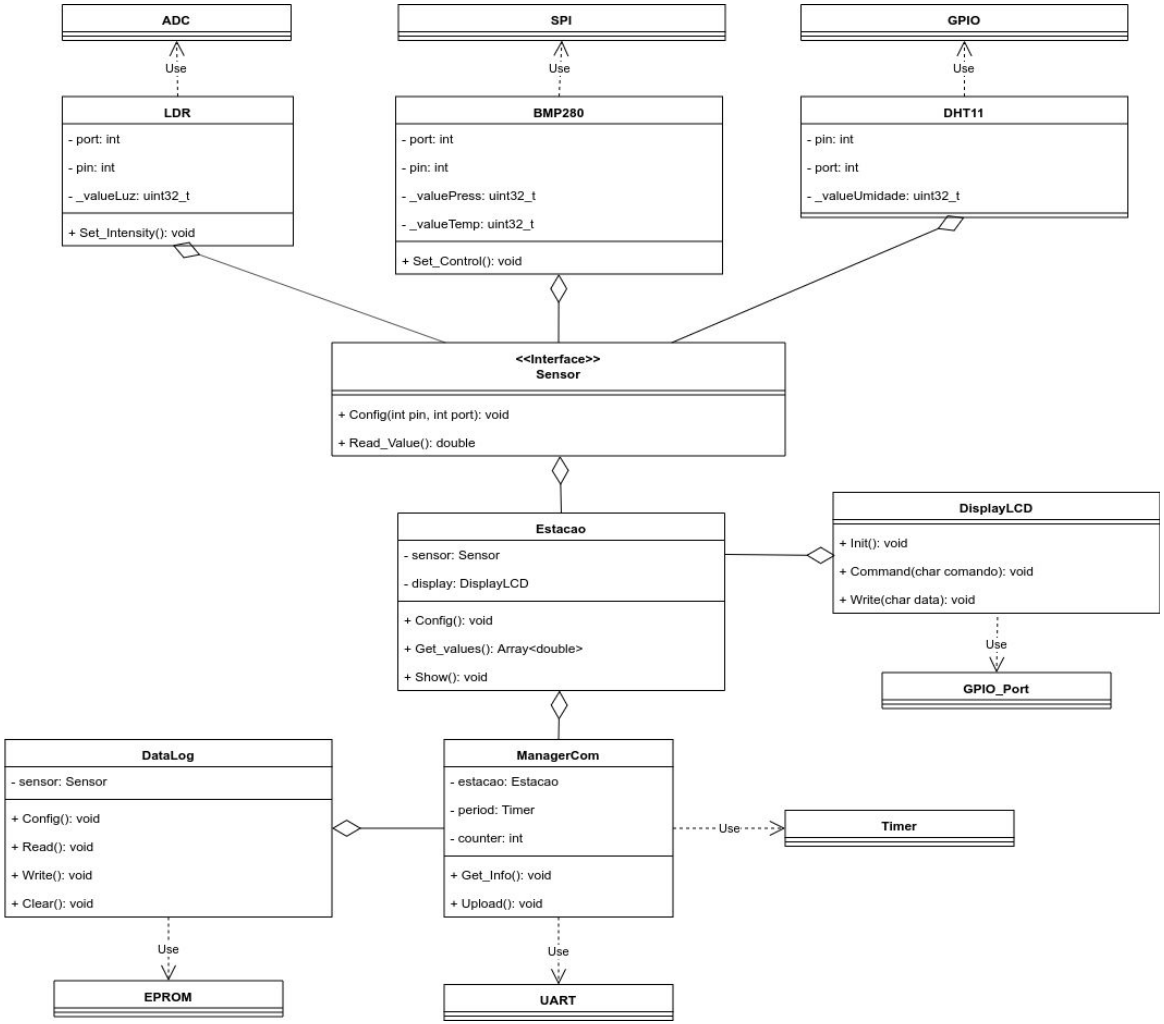
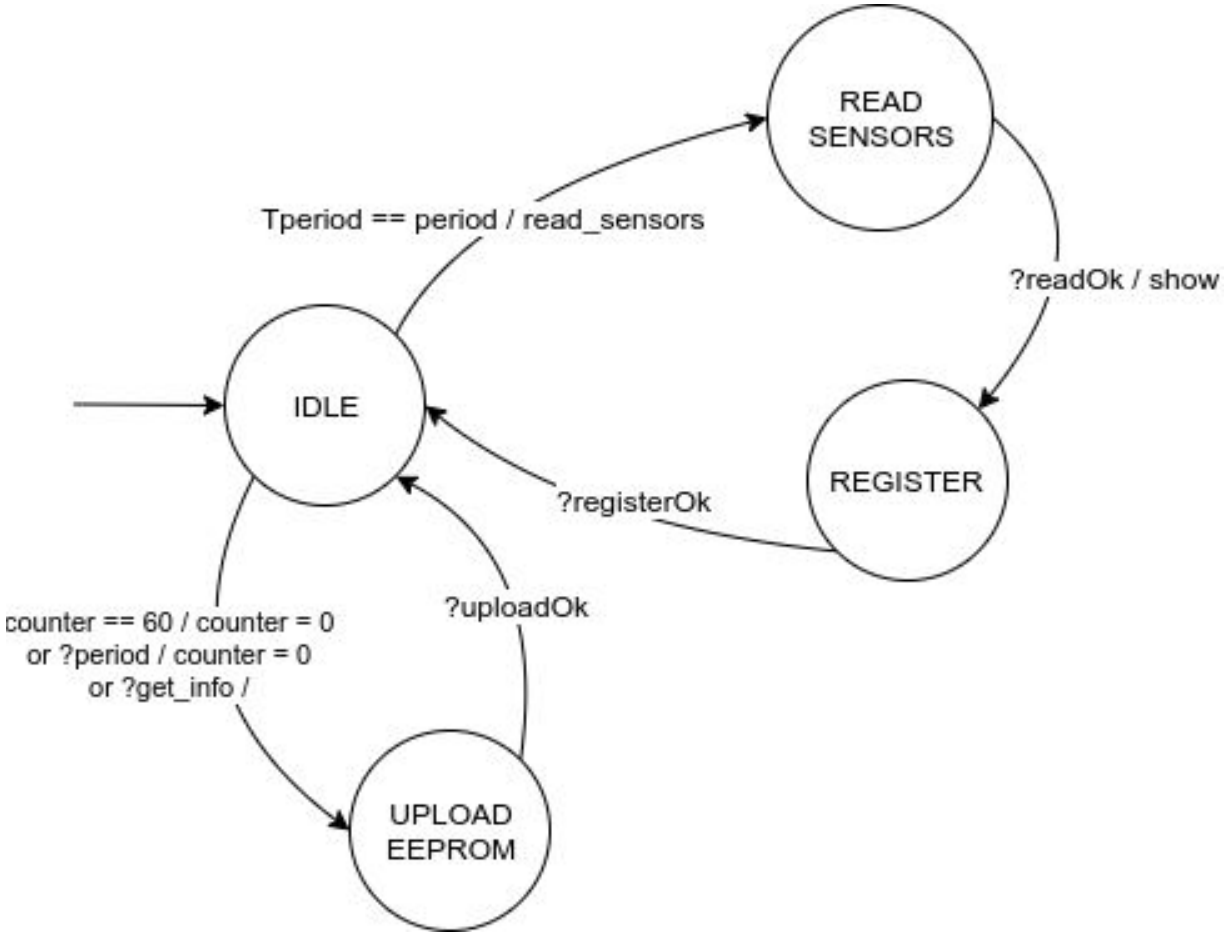
Estação Metereológica

Diagrama de Classe e Máquina de Estado

INSTITUTO FEDERAL
Santa Catarina
Câmpus São José


ADC
SPI
GPIO
Use
Use
Use
LDR
- port: int
- pin: int
- _valueLuz: uint32_t
+ Set_Intensity(): void
BMP280
- port: int
- pin: int
- _valuePress: uint32_t
- _valueTemp: uint32_t
+ Set_Control(): void
DHT11
- pin: int
- port: int
- _valueUmidade: uint32_t
<<Interface>>
Sensor
+ Config(int pin, int port): void
+ Read_Value(): double
Estacao
- sensor: Sensor
- display: DisplayLCD
+ Config(): void
+ Get_values(): Array<double>
+ Show(): void
DisplayLCD
+ Init(): void
+ Command(char comando): void
+ Write(char data): void
Use
GPIO_Port
DataLog
- sensor: Sensor
+ Config(): void
+ Read(): void
+ Write(): void
+ Clear(): void
ManagerCom
- estacao: Estacao
- period: Timer
- counter: int
+ Get_Info(): void
+ Upload(): void
Use
Timer
Use
EPROM
Use
UART


READ
SENSORS
Tperiod == period / read_sensors
?readOk / show
IDLE
REGISTER
?registerOk
?uploadOk
counter == 60 / counter = 0
or ?period / counter = 0
or ?get_info /
UPLOAD
EEPROM