

**BOSCH**

# Weather Station

## TouchGFX Documentation

*A.Asenov*

*E.Karamanliev*

*S.Yordanov*

***BOSCH - Engineering Center Sofia***

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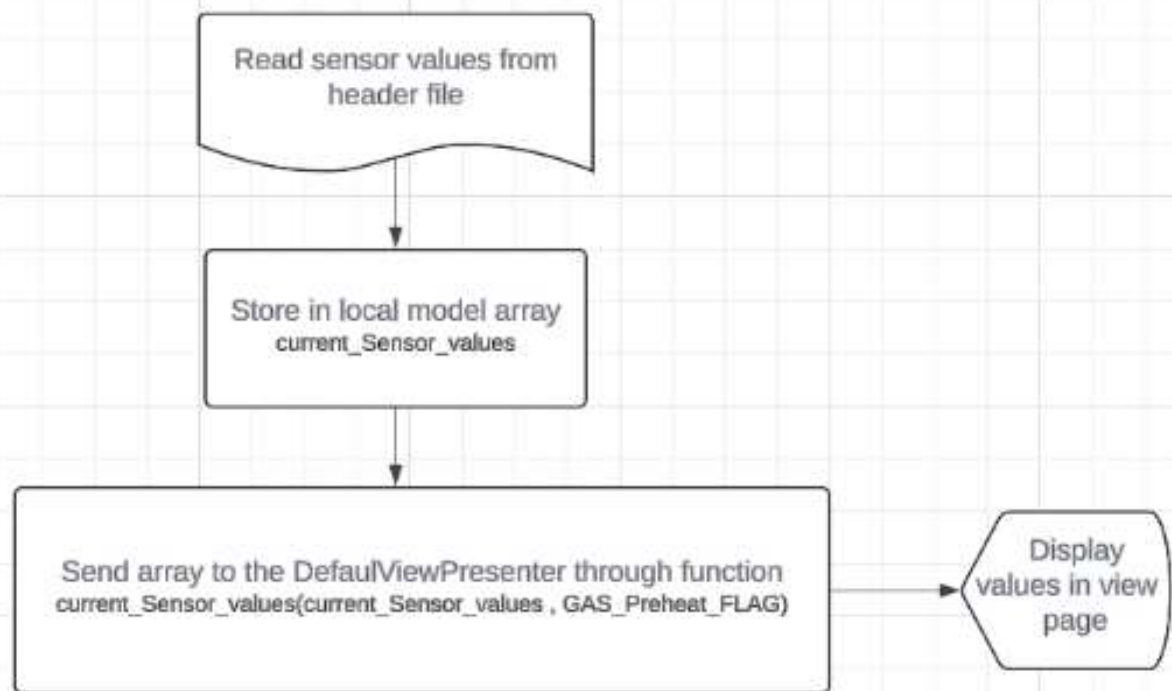
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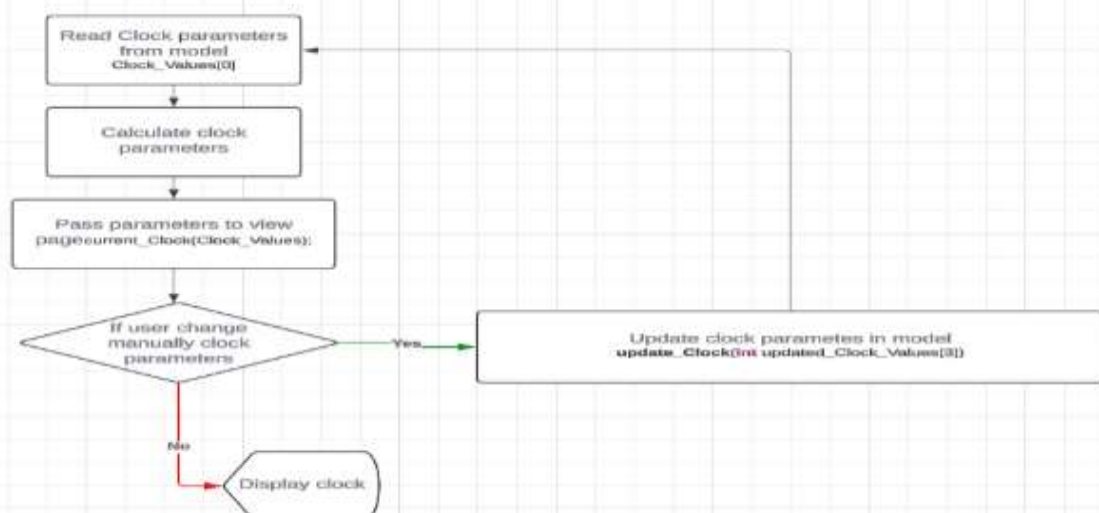
# 1.Sensor measurements



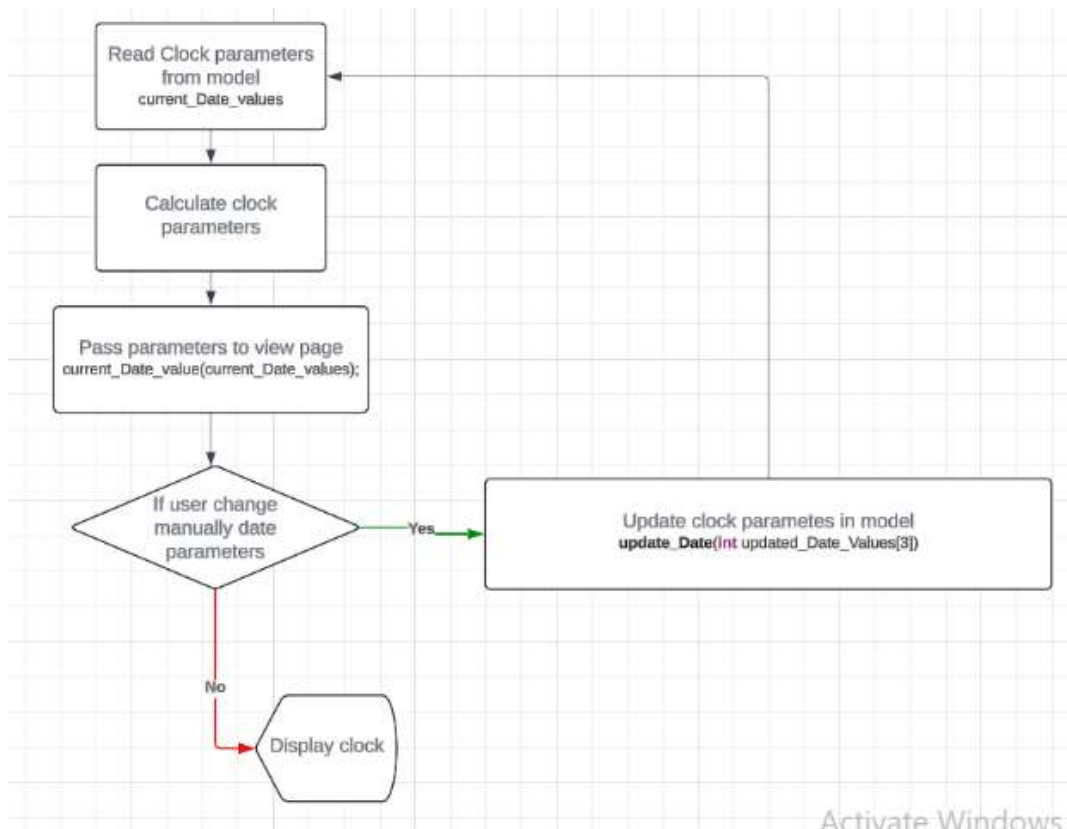
```
//..Passing sensor values to Default page for presenting on screen  
// [0]->TemperatureOut , [1]-> TemperatureIn , [2]-> Humidity , [3]->  
Pressure ,[4]->Ambient light  
// [5]->Gas sensor
```

## 2.Date & Time Setting

### - Date algorithm



## - Time Settings

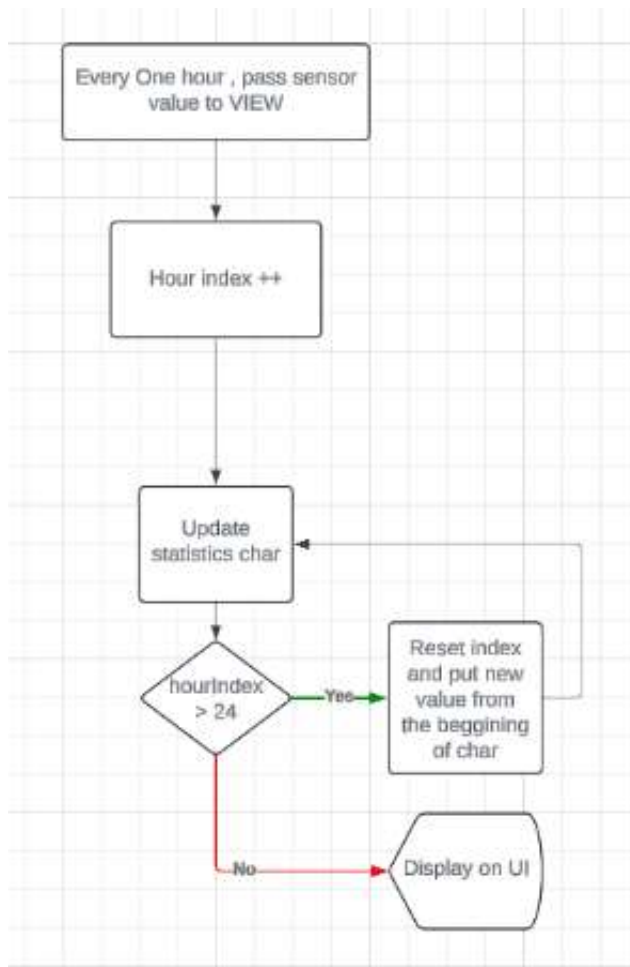


## Update\_Date() -

```

/* Receive data from Data View
 * Date settings can be changed through "DATE" page from the dropdown menu.
 * When user change DATE manually , we receive this change from the view
through Presenter.
 * Values which we receive are updated_Date_value[i]
 * -> updated_Date_Values[0] - Day
 * -> updated_Date_Values[1] - Month
 * -> updated_Date_values[2] - Year
 *
 * In our program , for changing date based on clock setting , we use
 * current_Date_values[i] where :
 *     current_Date_values[0] = current Days
 *     current_Date_values[1] = current Month
 *     current_Date_values[2] = current Year
 *
 * When USER submit new DATE from UI , we get information from
updated_Date_Values and put
 * it in current_Date_values
 */
  
```

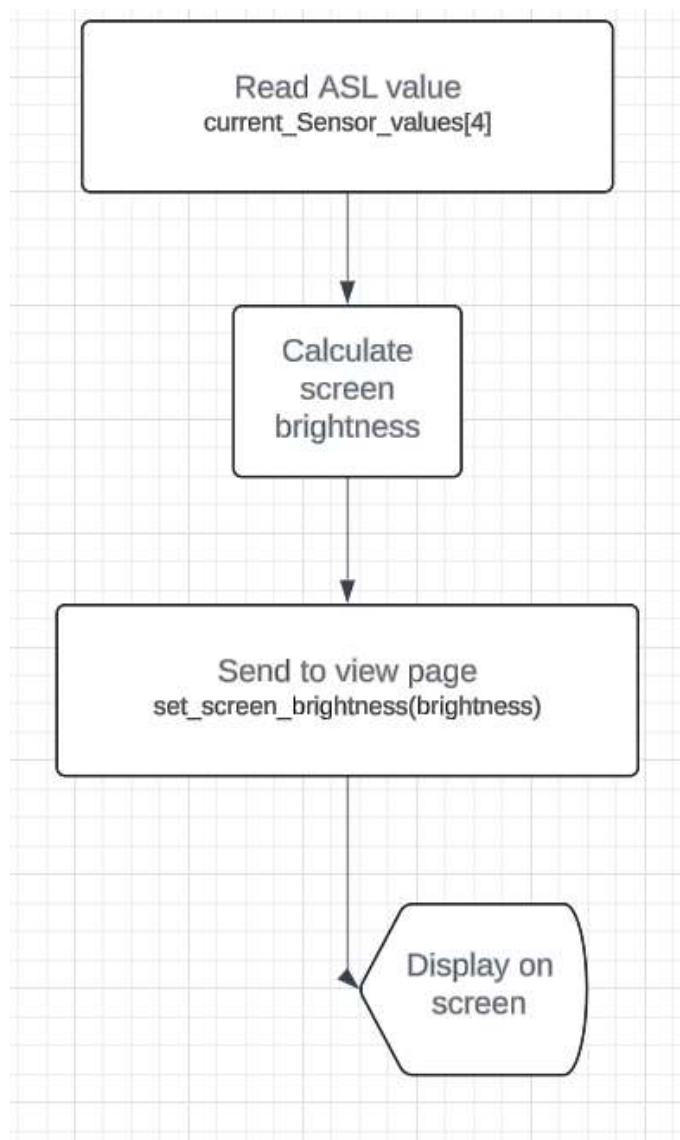
### 3.Statistics algorithm



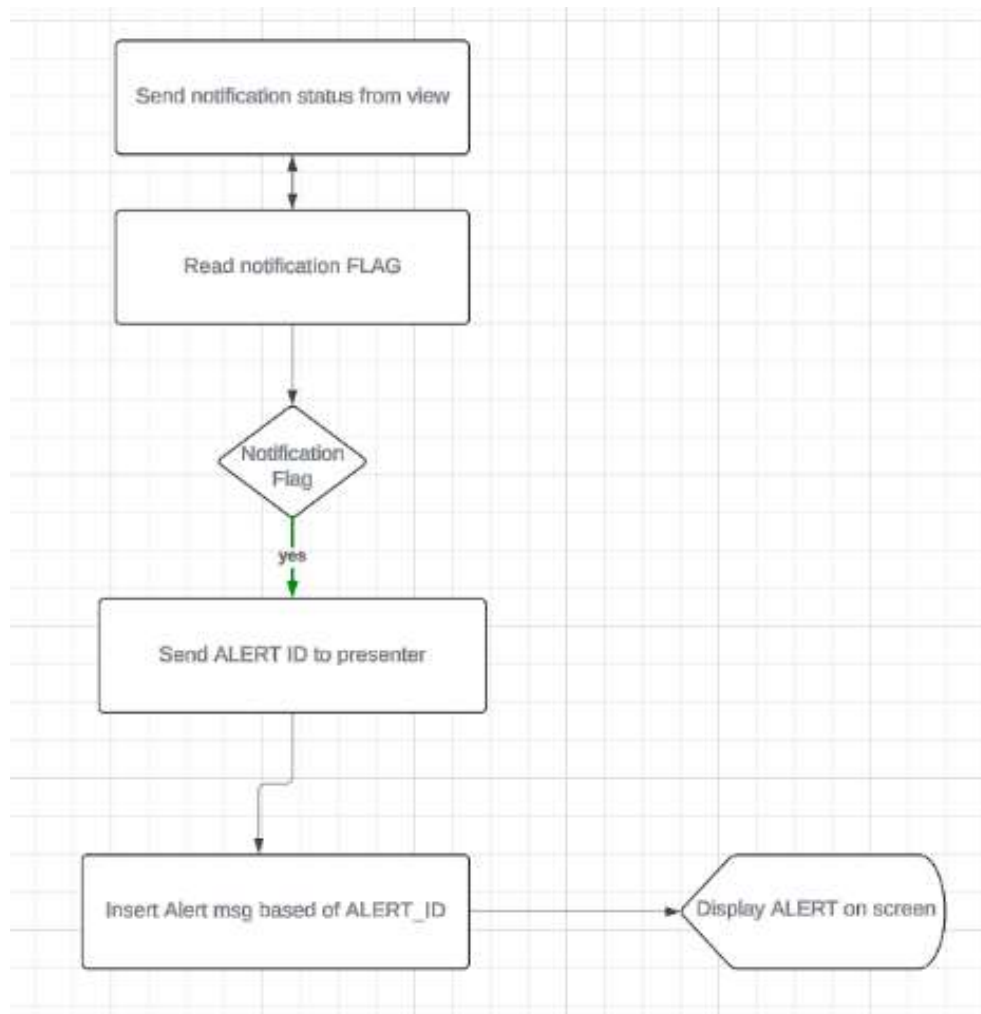
### 4.Average algorithm

```
/*  
 * hourCounter is used for average calculations.  
 * When hourCounter = 24 , we calculate average sensor values for past 24 hours  
 * and increase dayCounter. When dayCounter is = 7 , we calculate average  
 * week value for past 7 days , and increase weekCounter. When weekCounter = 4  
 * we calculate average month value for every sensor.  
 */
```

### 5.Screen brightness adjustment



## 6.Notification permissions



## 7. Alert notification

